



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

JUN 13 2012



MS ANGELA HOUGH  
ONE ACCORD MINISTRIES  
3570 LANCASTER HWY  
RICHBURG SC 29729

Re: QAPP Contractor Addendum Directive for IGWA  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131  
Release Reported March 23, 2009  
Site Check Report received March 23, 2009  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division (Division) of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the referenced report submitted by NESCO Environmental. The report documents BTEX and naphthalene in excess of risk based screening levels from the soil boring at the spill bucket for the 3000 gallon gasoline RUL tank.

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of an Initial Groundwater Assessment (IGWA) as outlined in the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division* is necessary. The IGWA must be conducted in accordance with the QAPP and in compliance with all applicable regulations once the site specific QAPP Contractor Addendum is approved. A copy of the QAPP is available at <http://www.scdhec.gov/environment/lwm/html/ust.htm>. **Your contractor must complete and submit the QAPP Contractor Addendum within thirty (30) days of the date of this letter.** The QAPP Addendum should include sampling of all water supply wells within 250 feet of this facility. **Please note that approval from the Division must be issued before work begins.**

**Please be aware that the release is not currently qualified for funding from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. SUPERB funds cannot be expended for site rehabilitation until a completed SUPERB application is on file with the Division. The SUPERB application form should be completed and sent to this office to the attention of Denise Place. Our records indicate that a site rehabilitation contractor has not been selected for this release. The enclosed form should be completed and returned to my attention within fifteen (15) days of the date of this letter. A list of certified contractors is enclosed for your information.**

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Agency by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.



On all correspondence regarding this site, please reference UST permit number 02131. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6395. I can also be reached by email at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov) or by fax at (803) 896-6245.

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: UST Owner/Operator Selection Form  
List of Certified Contractors

cc: NESCO Environmental, PO Box 78222, Charlotte, NC 28271 (without enc.)  
Technical file (with Owner/Operator Selection Form)

Return to Minda Hornosky

**UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET**

**1. CONTRACTOR OF CHOICE**

As the UST Owner/Operator of the UST Permit #02131, I would like to use the contractor or person(s)\* listed below and request that they represent me for:

- IGWA
- All future assessment scopes. \*\*

Name of Contractor/Person(s) \_\_\_\_\_

Address \_\_\_\_\_

Telephone Number \_\_\_\_\_ Certification # \_\_\_\_\_

Note: After September 20, 1997, rehabilitation activities must be performed by a SC Certified Site Rehabilitation Contractor.

\*indicate if the person listed is your own employee

\*\* if you would like the contractor to perform all future assessment activities at this and/or other UST sites that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below within the context of the letter.

**2. FINANCIAL OR FAMILIAL RELATIONSHIP**

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above?  Yes  No (please initial)

Financial Relationship: A connection or association through a material interest of sources of income, which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancée.

**3. PAYMENT**

The first \$25,000.00 in eligible site rehabilitation costs will be applied against the applicable SUPERB deductible, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

For eligible costs exceeding the \$25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (check one)

For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.

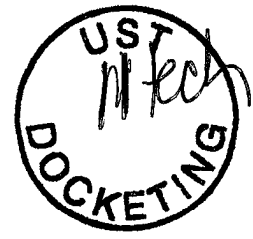
For eligible costs exceeding the deductible, I request that payment be made directly to the contractor.

(Note: all costs must receive prior financial approval from the Department regardless of payment option.)

Underground Storage Tank Owner/Operator Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Date Signed \_\_\_\_\_



Return to Minda Hornosky

UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET

1. CONTRACTOR OF CHOICE

As the UST Owner/Operator of the UST Permit #02131, I would like to use the contractor or person(s) listed below and request that they represent me for:

Name of Contractor/Person(s) Katawba Environmental, Inc Alex "Chip" Amos
Address 4278 Dye Rd Edgewater, SC 29112

Telephone Number 803-327-0469 Certification # VCC-0018

Note: After September 20, 1997, rehabilitation activities must be performed by a SC Certified Site Rehabilitation Contractor.

\*indicate if the person listed is your own employee
\*\* if you would like the contractor to perform all future assessment activities at this and/or other UST sites that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below within the context of the letter.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above? Yes No (please initial)

Financial Relationship: A connection or association through a material interest of sources of income, which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancée.

3. PAYMENT

The first \$25,000.00 in eligible site rehabilitation costs will be applied against the applicable SUPERB deductible, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

For eligible costs exceeding the \$25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (check one)

For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.

For eligible costs exceeding the deductible, I request that payment be made directly to the contractor. (Note: all costs must receive prior financial approval from the Department regardless of payment option.)

Underground Storage Tank Owner/Operator Signature Angela P. Hough
Printed Name Angela P. Hough
Date Signed 6-21-2012



Hornosky, Minda <hornosms@dhec.sc.gov>

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## One Accord 02131

1 message

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
Alex "Chip" Amos, PG <katawba@comporium.net>  
To: "Hornosky, Minda" <hornosms@dhec.sc.gov>

Wed, Aug 8, 2012 at 3:21 PM

Minda: As requested. Please let me know if there are any changes that need to be made.

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### 8 attachments

-  **COC.pdf**  
16K
-  **KATAWBA ENVIRONMENTAL MONITORING WELL INSTALLATION PROTOCOL.pdf**  
45K
-  **Katawba Environmental Sampling SOP.pdf**  
888K
-  **Quapp Sampling Standard Field Cleaning Procedures.pdf**  
69K
-  **One Accord Ministries JULY 2012.pdf**  
37K
-  **Qapp Cost One Accord.pdf**  
229K
-  **Quapp One Accord.pdf**  
1094K
-  **One Accord Cover.pdf**  
73K



**Section A: Project Management**

**A1 Title and Approval Page**

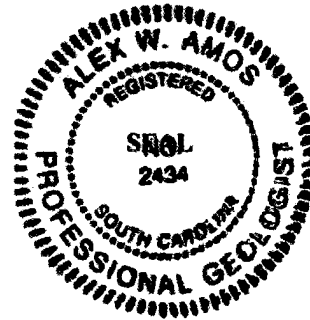
Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
One Accord Ministries, SCDHEC Site ID# 02131

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3570 Lancaster Highway, Richburg, South Carolina

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Prepared by:  
Alex W. Amos  
Professional Geologist  
Katawba Environmental  
(Certified Site Rehabilitation Contractor UCC-0018)  
4278 Dye Road  
Edgemoor, SC 29712  
(803) 417-4568



Date: August 8, 2012

---

Minda Hornosky  
SCDHEC Project Manager

Signature

Date

Alex Amos, Contractor  
Katawba Environmental, Inc.

Signature

Date

8/8/12  
August 8, 2012

Michael Woodrum,  
Laboratory Director  
Shealy Environmental Services, Inc.

Signature

Date

August 8, 2012

Ms. Minda Hornosky, Hydrologist  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Subject: QAPP Contractor Addendum – Revision 0.0  
One Accord Ministries  
Richburg, SC  
SCDHEC Site ID Number 02131,  
Certified Site Rehabilitation Contractor UCC-0018

Dear Ms. Hornosky,

Please find attached the QAPP Contractor Addendum for the referenced site. A pre-inspection of the site was conducted on August 1, 2012. If you have any question or comments please feel free to contact us at 803-417-4568.

Sincerely,  
**Katawba Environmental**

Alex W. Amos  
Professional Geologist

**Section A: Project Management**

**A1 Title and Approval Page**

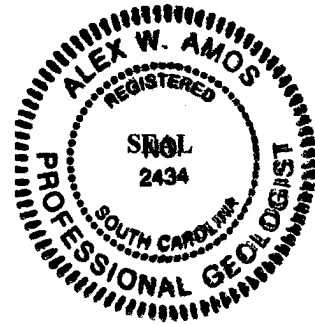
Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
One Accord Ministries, SCDHEC Site ID# 02131

---

3570 Lancaster Highway, Richburg, South Carolina

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*Prepared by:*  
*Alex W. Amos*  
*Professional Geologist*  
Katawba Environmental  
(Certified Site Rehabilitation Contractor UCC-0018)  
4278 Dye Road  
Edgemoor, SC 29712  
(803) 417-4568



---

Date: August 8, 2012

---

Minda Hornosky  
SCDHEC Project Manager

---

Signature

Date

Alex Amos, Contractor  
Katawba Environmental, Inc

---

Signature

Date

Alex W. Amos, PG  
Site Rehabilitation Contractor

A handwritten signature in black ink, appearing to read "Michael Woodrum".

August 8, 2012

Michael Woodrum,  
Laboratory Director  
Shealy Environmental Services, Inc.

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Signature

Date

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### A3 Distribution List

Name	Title	Organization/Address	Telephone	Fax	Email Address
Minda Hornosky	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	homasms@dhec.sc.gov
Alex W. Amos	Site Rehabilitation Contractor	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-417-4568	843-225-1360	katawba@comporium.net
William Morris	Field Manager	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Michael Woodrum	Laboratory Director	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Tommy Bolyard SC# 1846	Well Services/Driller	Environmental Probing and Drilling 15845 Greenhill Road, Charlotte, NC 28278	704-607-7529	704-607-7529	angelrgmt@yahoo.com

**Table 1A Addendum Distribution List**

### A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Minda Hornosky	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	homasms@dhec.sc.gov
Site Rehabilitation Contractor	Alex W. Amos	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-417-4568	843-225-1360	katawba@comporium.net
Field Manager	William Morris	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Analytical Laboratory Director	Michael Woodrum	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Soil Boring and Monitoring Well Driller	Tommy Bolyard SC# 1846	Environmental Probing and Drilling 15845 Greenhill Road, Charlotte, NC 28278	704-607-7529	704-607-7529	angelrgmt@yahoo.com
Waste Disposal Fluids	William Morris	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Waste Disposal Solids	Waste Management	Richland County Landfill 1047 Highway Church Rd. Elgin, SC 29045	803-788-3054	866-904-7194	Unknown

**Table 2A Addendum Role Identification and Contact Information**

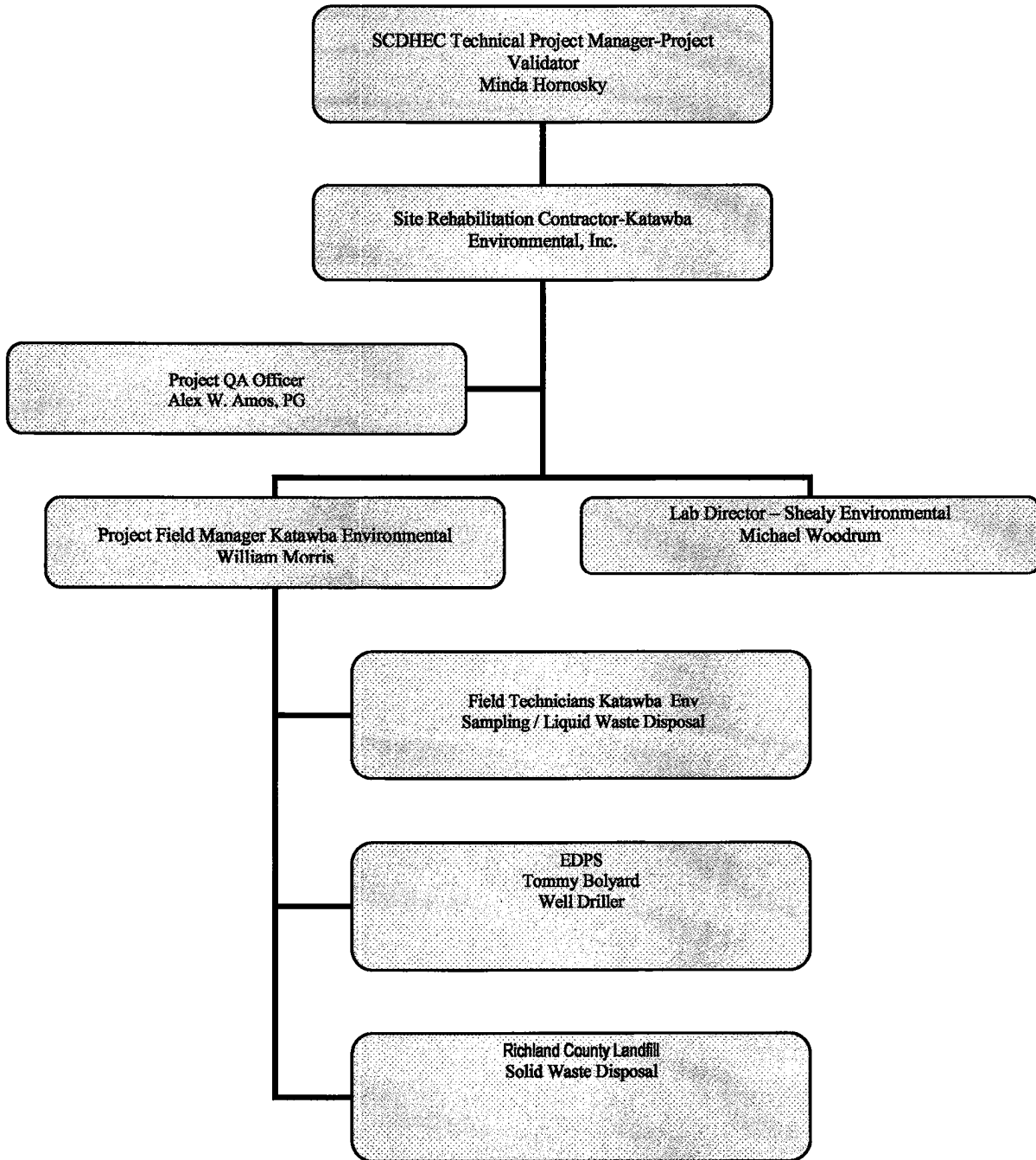


Figure 1A Organizational Chart

## **A5 Problem Definition/Background**

***Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.***

The subject site (One Accord Ministries) is located at 3570 Lancaster Highway, Richburg, Chester County, South Carolina. The subject site currently has one petroleum hydrocarbon release. Release #1 was reported in March 2009 based a soil sample collected from under the spill bucket. Soils analyzed for hydrocarbons confirmed the release.

The USTs formerly located at the subject site were removed in June 2012. Soil samples collected and analyzed indicated the presence of petroleum hydrocarbon contamination.

The site is being sampled in conjunction with QUAPP Contractor Addendum Directive dated June 13, 2012.

***Please answer the following: Does this project fall under UST or Brownfields area?***

Underground Storage Tank Division

## A6 Project/Task Description

- 1. Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).**

The subject site (One Accord Ministries) is located at 3570 Lancaster Highway, Richburg, Chester County, South Carolina will be sampled in conjunction with the SCDHEC QUAPP Contractor Addendum Directive dated June 13, 2012. An Initial Groundwater Assessment (IGWA) will be conducted. During assessment activities one monitoring well will be installed and sampled for petroleum constituents. A report of the findings will be reported in IGWA report format.

- 2. The work will begin within fourteen (14) days of receipt of approved QAPP contractors addendum after cost approval and sampling should be complete by sixty (60) days of receipt of approved QAPP contractors addendum.**
- 3. Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.**

Factors that may prevent schedule work will be, but not limited to current work load, weather conditions, equipment malfunction, and machine failure.

## A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site is located at 3570 Lancaster Highway, Richburg, Chester County, South Carolina. The site is currently a golf course maintenance shed. A detailed map is included as Figure 2.

## A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Alex Amos, P.G.	Professional Geologist		State of South Carolina	2434
		OSHA 40 hr HAZWOPER	1993	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2012	N/A	N/A
Project Scientist	William Morris	OSHA 40 hr HAZWOPER	2001	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2012	N/A	N/A
Field Technician	Josh Morris	OSHA 40 hr HAZWOPER	2004	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2012	N/A	N/A
Well Driller	Tommy Bolyard	SC Well Driller	6/11/12	State of South Carolina	1846

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Lab Manager	Michael Woodrum	***	***	Lab Certification	SC 32010

**Table 3A Required Training and Licenses**

Alex Amos of Katawba Environmental is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location: 4278 Dye Road, Edgemoor, SC 29712

**It is understood that training records will be produced if requested by SC DHEC.**

**The Following Laboratory will be used for this Project:**

**Commercial Lab(s)**

**Full Name of the Laboratory** Shealy Environmental Services, Inc.

**Name of Lab Director** Michael Woodrum

**SC DHEC Certification Number** 32010

**Parameters this Lab will analyze for this project:**

Groundwater: BTEX, Napth, MTBE, 1,2-DCA, Ethanol and 8 Oxygenates(EPA Method 8260-B), PAHs (EPA Method 8270), Lead (EPA Method 6010), EDB (EPA Method 8011)

Soil: BTEX, Napth EPA 8260. PAHs (EPA Method 8270), Lead (EPA Method 6010)

**Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.**

**A9 Documents and Records**

***Personnel will receive the most current version of the QAPP Addendum via Check all that apply)***

US Mail     Courier     Hand delivered

Other (please specify): E-mailed electronic copies

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
QAPP Addendum	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Internal QC record	Alex W. Amos	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Sampling Report	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Correspondence	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Well Logs	Tommy Bolyard	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Invoicing	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Manifests	Field Staff	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Sampling Logs	Field Staff	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Figures	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Disposal Manifests	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

## Section B Measurement/Data Acquisition

### B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	NA	NA	Complete
QAPP preparation	8/8/12	8/8/12	In progress
QAPP approval	9/8/12	9/8/12	Assuming 30 day turnaround
Well Drilling	10/8/12	10/8/12	
Monitoring well Sampling	10/15/12	10/15/12	Sampled within 2 weeks of well installation
Report Preparation	11/15/12	11/15/12	Three weeks to prepare/submit report

Please note: Start date and End dates are tentative

Table 5A Sampling Activities

### B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

**Estimate the number of samples of each matrix that are expected to be collected:**

Soil \_\_\_\_\_1\_\_\_\_\_

Ground Water from monitoring wells \_\_\_\_\_1\_\_\_\_\_

From Drinking/Irrigation water wells \_\_\_\_\_1\_\_\_\_\_

Field Duplicate Collection	_____ 2 _____
Field Blank Collection	_____ 2 _____
Trip Blank	_____ 2 _____
From surface water features	_____ 0 _____
Total number of Water samples	_____ 5 _____
Groundwater sample	_____ 1 _____
Field Blank water	_____ 1 _____
Field Duplicate Collection water	_____ 1 _____
Trip Blank water	_____ 1 _____
Suspected Drinking water well	_____ 1 _____
Total number of Soil samples	_____ 3 _____
Soil sample	_____ 1 _____
Field Duplicate Collection soil	_____ 1 _____
Trip Blank soil	_____ 1 _____
<b>The samples will be (check as many as apply):</b>	_____ <u>X</u> GRAB _____



Notes:

One well will be installed at the subject site by auger drilling. Please refer to Katawba Environmental Well Installation SOP for further details. All monitoring wells and water supply well samples will be analyzed by Shealy Environmental for petroleum based constituents. As directed, if any monitoring well exhibits free phase petroleum product, a sample will be collected beneath the product layer.

***For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.***

Grab samples will be collected using a disposable bailer. Samples will not be homogenized or split.

***Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?***

All equipment, excluding electronic water level indicators, field probes and drilling equipment is disposable. Refer to Katawba Environmental Decontamination SOP for procedures.

***If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.***

Please see Katawba Environmental Decontamination SOP for decontamination procedures.

***Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.***

All samples will be shipped to the lab via Shealy Environmental Staff. Drilling will be done with a Canterra Auger Rig under the supervision SCCWD Tommy Bolyard 1846.

***Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.***

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff
Drill rig non operational	Refer to operational manual	Record working condition in Field log book	Field Staff, Well Driller

Refusal during drilling	Contact SCDHEC Project Manager	Record in Field log book	Field Staff, Well Driller
Destruction of Utilities during drilling	Contact the appropriate utility company	Record in Field log book	Field Staff, Well Driller

**Table 6A Field Corrective Action**

### **B3 Sample Handling and Custody**

**1. How will the samples get from the Site to the Lab to ensure holding requirements are met?**

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the Katawba office. Samples are transported to the Katawba office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the Katawba offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the Katawba office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

**2. How will the contactors cool the samples and keep the samples cool?**

All samples are kept on wet ice, obtained from Katawba office.

**3. How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?**

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

**4. Where will the samples be stored in the Lab once they are received?**

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately form all other samples.

**5. Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.**

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by Katawba and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly

## B4 Analytical Methods

1. Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygenates	S-VO-002	8260B / 8260 OXY	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead, T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	Katawba SOP	*	HANNAH INSTRUMENTS HI 991001	08366812 & 08369830
Conductivity	Katawba SOP	*	YSI PRO 2030	11G100871
Dissolved Oxygen	Katawba SOP	*	YSI PRO 2030	11G100871
Temperature	Katawba SOP	*	HANNA INSTRUMENTS HI 991001	08366812 & 08369830

Table 7A Analytical SOPs and Referenced Methods

- \* This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
KATAWBA SOP	KATAWBA SOP	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry <a href="mailto:kmaberry@shealylab.com">kmaberry@shealylab.com</a>
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a>
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:Jsavje@shealylab.com">Jsavje@shealylab.com</a>
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:Jsavje@shealylab.com">Jsavje@shealylab.com</a>

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE +Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate, Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and	

			disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

**Table 10A Disposal Procedures**

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

**B5 Quality Control Requirements:**

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

**B6 Field Instrument and Equipment Testing, Inspection and Maintenance**

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	Unknown	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass Specc	Unknown	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	Unknown	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	Unknown	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	Unknown	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury	Unknown	Clean GLS, Change	Periodic	Laboratory	Mercury Analyst

Analyzer		Pump tubing, Nafion Dryer, Lamp			
Flow Injection Analysis – Lachat 8000	Unknown	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI PRO 2030 DO, Cond, Temp	11G100871	Replace probe tip	Yearly	Order from YSI	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	Replace batteries	As Needed	In stock at office	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	Check buffer solutions for expiration	Weekly	In stock at office	Field Staff
HANNAH INSTRUMENTS HI 991001 Ph and Temperature Meter	08366812 & 08369830	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
HANNAH INSTRUMENTS HI 93414 Turbidity Meter	08562311	Check buffer solutions for expiration	Weekly	In stock at office	Field Staff
Solinst Electronic Water Level Indicator	Unknown	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff
Solinst Oil/Water Interface probe	Unknown	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff
Canterra Drill Rig	Unknown	Change oil, decontaminate	As needed	Drillers Office	Well Driller

**Table 11A Instrument and Equipment Maintenance**

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented.

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance

Dionex IC	Daily calibration check	Method Requirements	Nitrate Analyst	Recalibration or instrument maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance
YSI PRO 2030 11G100871	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
Hanna Instruments HI 991001 08366812 & 08369830	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
HANNAH INSTRUMENTS HI 93414 Turbidity Meter 08562311	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
Canterra Drill Rig	Daily function check	Unknown	Well Driller	Ship off for service

Table 12A Instrument and Equipment Inspection

## B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.

Please refer to Katawba Environmental Sampling SOP for calibration instructions.

2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.

Please refer to Katawba Environmental Sampling SOP for calibration instructions.

3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
HANNA INSTRUMENTS HI 991001 08366812 & 08369830	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
HANNAH INSTRUMENTS HI 93414 08562311	Turbidity Meter	Daily	+/- 10 %	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip,	Field Staff	Katawba SOP



Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
				recalibrate		
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

**Table 13A Instrument Calibration Criteria and Corrective Action**

\* This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

## B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher, VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Analytical	Custody seal intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Analytical	Custody seal intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Coolers	Shealy Environmental Analytical	Intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
pH Buffer	YSI	Within expiration date	Stored in calibration room	Alex Amos, Field Staff
Conductivity	YSI	Within expiration date	Stored in	Alex Amos, Field Staff

Standard			calibration room	
DO Membranes	YSI	Clean, in box	Stored in calibration room	Alex Amos, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	Alex Amos, Field Staff

Table 14A List of Consumables and Acceptance Criteria

## B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Katawba Environmental UST Closure July 2012	Previous soil sample location	Previously verified by project verifier	

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

## B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the Katawba project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in Katawba files for a minimum of 5 years. Digital copies of the work are stored on the Katawba server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's

Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All Katawba field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. Katawba keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

Katawba keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the Katawba server. This server is backed-up on a weekly basis. Any file stored on the Katawba server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

## **Section C Assessment and Oversight**

### **C1 Assessment and Response Actions**

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. Katawba field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager. The laboratory director has the authority to stop work if problems found are severe.

2. *The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

**The Laboratory Manager has the authority to stop work if problems are severe.**

The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

### **C2 Reports to Management**

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

### **Section D Data Validation and Usability**

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

## Appendix A1 - Figures

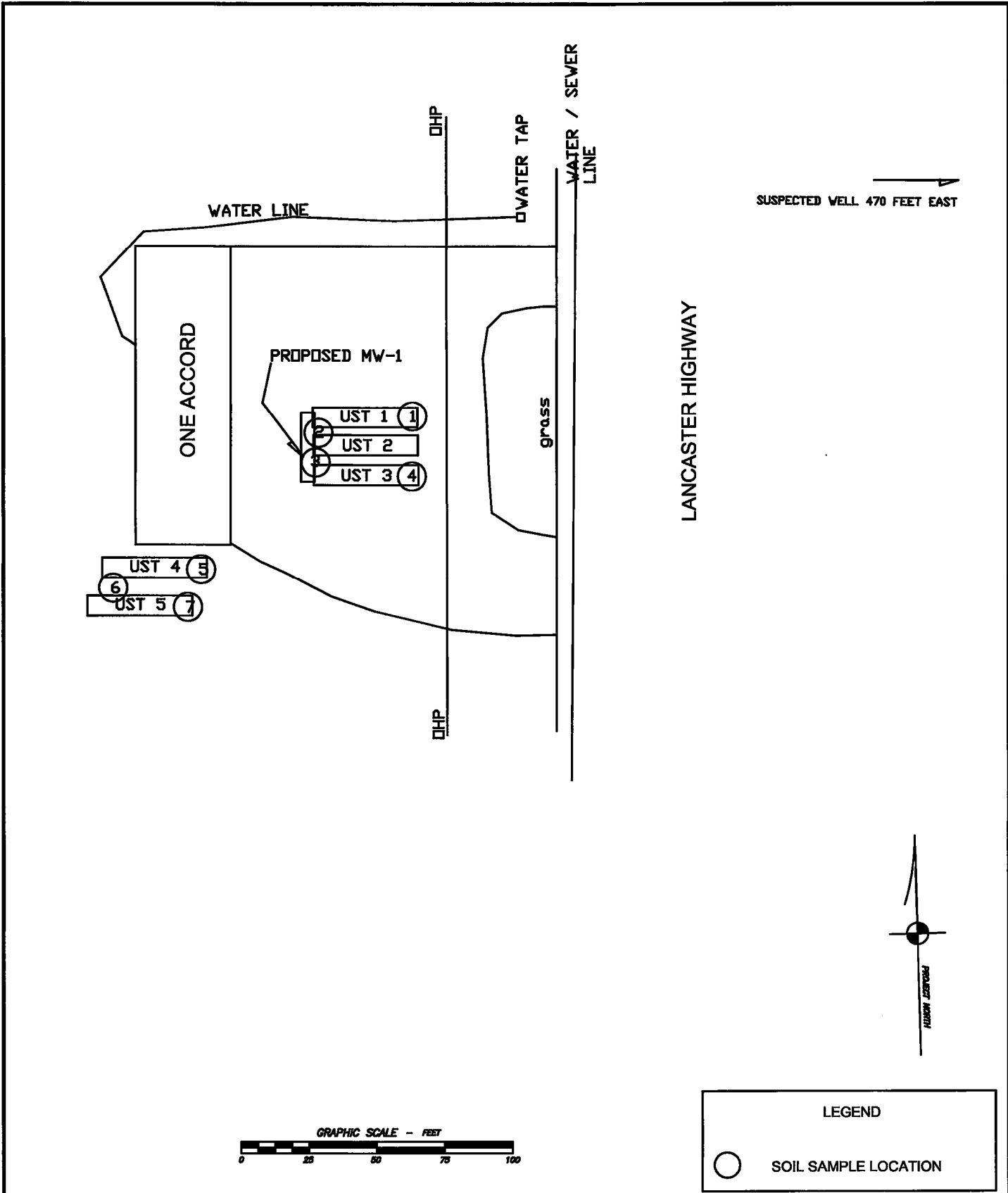




SCALE INCH =1000 FT

KATAWBA ENVIRONMENTAL, INC.  
4278 DYE ROAD  
EDGEMOOR, SC 29712  
(803) 327-0469

SAMPLING REPORT  
ONE ACCORD MINISTRIES ID 02131  
3570 LANCASTER HIGHWAY, RICHBURG, SC  
FIGURE 1 – SITE LOCATION



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18

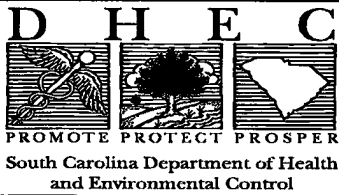
QAPP  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 SITE MAP

DATE: July 2012

FIGURE 2

**Appendix A2 – SCDHEC Cost Agreement**





**ASSESSMENT COMPONENT COST AGREEMENT  
SOUTH CAROLINA**

Department of Health and Environmental Control  
Underground Storage Tank Management Division  
State Underground Petroleum Environmental Response Bank Account

**Facility Name:** One Accord

**UST Permit #:** 02131

**Cost Agreement #:** \_\_\_\_\_

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan*</b>				
B. Tax Map		x	\$50.00	\$0.00
C. Tier II or Comp. Plan /QAPP Appendix B		x	\$525.00	\$0.00
<b>2. Receptor Survey *</b>		x	\$500.00	\$0.00
<b>3. Survey (500 x 500 feet)</b>				
A. Comprehensive Survey		x	\$1,000.00	\$0.00
B. Subsurface Geophysical Survey				
1. < 10 meters below grade		x	\$2,750.00	\$0.00
2. > 10 meters below grade		x	\$3,250.00	\$0.00
C. Geophysical UST or Drum Survey		x	\$1,125.00	\$0.00
<b>4. Mob/Demob (Each)</b>				
A. Equipment		x	\$575.00	\$0.00
B. Personnel		x	\$290.00	\$0.00
C. Adverse Terrain Vehicle to install wells		x	\$575.00	\$0.00
<b>5. Soil Borings (hand auger)* (Feet)</b>		feet x	\$14.00	\$0.00
<b>6. Soil Borings (drilled) &amp; Field Screening *</b>				
Rate includes collection of water sample or soil sample, and lab or other analyses				
A. Standard		feet x	\$17.00	\$0.00
C. Fractured Rock		feet x	\$27.50	\$0.00
<b>7. Soil Leachability Model (Each)</b>		each x	\$200.00	\$0.00
<b>8. Abandonment* (per foot)</b>				
A. 2" diameter or less		feet x	\$5.00	\$0.00
B. Greater than 2" to 6" diameter		feet x	\$5.50	\$0.00
C. Dug/Bored well (up to 6 foot diameter)		feet x	\$18.00	\$0.00
<b>9. Well Installation* (per foot)</b>				
A. Water Table (hand augered)		feet x	\$20.00	\$0.00
B. Water Table (drill rig)		feet x	\$38.00	\$0.00
C. Telescoping/ Pit Cased		feet x	\$58.00	\$0.00
D. Rock Drilling		feet x	\$58.00	\$0.00
E. 2" Rock Coring		feet x	\$45.00	\$0.00
G. Rock Multi-sampling ports/screens		feet x	\$47.20	\$0.00
H. Recovery Well (4 inch diameter)		each x	\$45.00	\$0.00
I. Pushed Pre-packed screen (1.25 diameter)		each x	\$18.50	\$0.00
J. Rotasonic (2 inch diameter)		each x	\$45.00	\$0.00
<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product (Each)</b>				
A. Groundwater Purge		wells x	\$55.00	\$0.00
B. Air or Vapors		samples x	\$90.00	\$0.00
C. Water Supply	1	samples x	\$30.00	\$30.00
D. Groundwater No Purge or Duplicate		samples x	\$35.00	\$0.00
E. Gauge Well only		per well x	\$20.00	\$0.00
F. Sample Below Product		wells x	\$50.00	\$0.00
G. Pasive Diffusion Bag		each x	\$40.00	\$0.00
H. Field Blank		each x	\$5.00	\$0.00

<b>11. Laboratory Analyses-Groundwater (Each Sample)</b>					
A1. BTEX+Naphth.+ Oxyg's+ 1,2 DCA + Ethanol	1	samples x	\$100.00		\$100.00
AA. Lead, Filtered		samples x	\$46.00		\$0.00
B1. Rush EPA Method 8260B (All of item A.)		samples x	\$143.00		\$0.00
C1. Trimethyl, Butyl, and Isopropyl Benzenes		samples x	\$40.00		\$0.00
D. PAH's	1	samples x	\$120.00		\$120.00
E. Lead, Unfiltered		samples x	\$20.00		\$0.00
F. EDB by EPA 8011	1	samples x	\$55.00		\$55.00
FF. EDB by EPA Method 8011 Rush		samples x	\$75.00		\$0.00
G. 8 RCRA Metals		samples x	\$140.00		\$0.00
H. TPH (9070)		samples x	\$55.00		\$0.00
I. pH		samples x	\$10.00		\$0.00
J. BOD		samples x	\$40.00		\$0.00
P1. Ethanol		samples x	\$21.50		\$0.00
<b>11. Analyses-Soil (Each Sample)</b>					
Q. BTEX + Naphth.		samples x	\$100.00		\$0.00
R. PAH's		samples x	\$120.00		\$0.00
S. 8 RCRA Metals		samples x	\$150.00		\$0.00
T. Oil & Grease (9071)		samples x	\$60.00		\$0.00
U. TPH-DRO (3550B/8015B)		samples x	\$65.00		\$0.00
V. TPH- GRO (5030B/8015B)		samples x	\$65.00		\$0.00
W. Grain size/hydrometer		samples x	\$99.00		\$0.00
X. Total Organic Carbon		samples x	\$35.00		\$0.00
<b>11. Analyses-Air (Each Sample)</b>					
Y. BTEX + Naphthalene		samples x	\$247.50		\$0.00
<b>11. Analyses-Free Phase Product (Each Sample)</b>					
Z. Hydrocarbon Fuel Identification		samples x	\$620.00		\$0.00
<b>12. Aquifer Characterization*</b>					
A. Pumping Test		hours x	\$120.00		\$0.00
B. Slug Test*		tests x	\$150.00		\$0.00
C. Fractured Rock		tests x	\$500.00		\$0.00
<b>13. Free Product Recovery Rate Test* (Each)</b>					
		tests x	\$120.00		\$0.00
<b>14. Fate/Transport Modeling</b>					
A. Mathematical Model		each x	\$300.00		\$0.00
B. Computer Model		each x	\$500.00		\$0.00
<b>15. Risk Evaluation</b>					
A. Tier I Risk Evaluation		x	\$300.00		\$0.00
B. Tier II Risk Evaluation		x	\$500.00		\$0.00
<b>16. Subsequent Survey*</b>					
		x	\$300.00		\$0.00
<b>17. Disposal* (gallons or tons)</b>					
A. Wastewater		gallons x	\$0.80		\$0.00
B1. Free Product		gallons x	\$0.85		\$0.00
C. Soil Treatment/Disposal		tons x	\$72.50		\$0.00
D. Drilling fluids		gallons x	\$0.80		\$0.00
<b>18. Miscellaneous (attach receipts)</b>					
		x			\$0.00
		x			\$0.00
		x			\$0.00
<b>20. Tier I Assessment (Use DHEC 3665 form)</b>					\$0.00
<b>21. IGWA (Use DHEC 3666 form)</b>		1	x	\$3,760.00	\$3,760.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>			x		\$0.00

<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>					
A. 8-hour Event*		each	x	\$3,000.00	\$0.00
B. AFVR per-hour Continuance		per hour	x	\$204.00	\$0.00
C. Off-gas treatment per-hour Continuance		per hour	x	\$35.00	\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>					
A. New GAC System Installation*		each	x	\$2,500.00	\$0.00
B1. Refurbished GAC Sys. Install*		each	x	\$1,180.00	\$0.00
C. Filter replacement/removal*		each	x	\$450.00	\$0.00
D1. GAC System removal, cleaning, & refurbishment*		each	x	\$720.00	\$0.00
E. GAC System housing		each	x	\$450.00	\$0.00
F. In-line particulate filter		each	x	\$150.00	\$0.00
G. Additional piping & fittings		feet	x	\$4.00	\$0.00
<b>25. Well Repair</b>					
A. Additional Copies of the Report Delivered		each	x	\$32.50	\$0.00
B. Repair 2x2 MW pad		each	x	\$100.00	\$0.00
C. Repair 4x4 MW pad		each	x	\$150.00	\$0.00
D. Repair well vault		each	x	\$225.00	\$0.00
F. Replace well cover bolts		each	x	\$10.00	\$0.00
G. Replace locking well cap & lock		each	x	\$15.00	\$0.00
H. Replace/Repair stick-up		each	x	\$137.50	\$0.00
I. Convert Flush-mount to Stick-up		each	x	\$175.00	\$0.00
J. Convert Stick-up to Flush-mount		each	x	\$125.00	\$0.00
K. Replace missing/illegible well ID plate		each	x	\$22.50	\$0.00
<b>Report Prep &amp; Project Management</b>	0%		x	\$4,065.00	\$0.00
<b>TOTAL</b>					<b>\$4,065.00</b>

\*The appropriate mobilization cost can be added to complete these tasks, as necessary

**Appendix A3 – Chain of Custody Record**



Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number

Form containing fields for Client, Report to Contact, Telephone No., Quote No., Address, Sampler's Signature, Waybill No., Page 1 of 1, City, State, Zip Code, Project Name, Project Number, P.O Number, Matrix, No. of Containers by Preservation Type, Sample ID / Description, Date, Time, Possible Hazard Identification, Sample Disposal, Turn Around Time Required, QC Requirements, and Relinquished by/Received by sections.

**Appendix A4 – Katawba Environmental Sample SOP**

## **KATAWBA ENVIRONMENTAL SAMPLING SOP**

### **Water Level Measurements**

All non-disposable sampling equipment will be decontaminated and cleaned with a phosphate free laboratory detergent (alconox) water mixture removing dirt, scale and dissolved solids that may be present. Previously cleaned sampling equipment will be wrapped in plastic or foil and stored in decontaminated storage bins for delivery to the job site. Devices used to measure groundwater levels will be calibrated to 0.01 foot per 10 feet length. Before each use the water level indicator will be checked for obvious damage. These devices will be decontaminated according to the procedures specified Decontamination Procedures prior to use at the next well. All calibration and maintenance data will be recorded in a log book.

Water level measurements will be conducted with an electronic water level indicator prior to sampling. Once the water level is recorded a total depth of well reading will be recorded with an electronic water level indicator. Total well depth and groundwater level measurements will be used to determine the volume of water in the well casing prior to purging the well for sampling purposes. Water levels at the job site will be recorded to the nearest 0.01 foot. Wells that contain free product will be measured with an electronic oil/water interface probe. Measurements made will be recorded to the nearest 0.01 foot. Water level measuring equipment will be decontaminated between each well measurement.

### **Monitoring Well Purging**

Purging will be conducted from the least contaminated well to the most contaminated well. Prior to handling any purging or sampling equipment, clean disposable, powderless nitrile gloves will be worn. In order to determine when a well has been adequately purged, Katawba Environmental will: 1) monitor the pH, specific conductance, temperature, turbidity and dissolved oxygen of the groundwater removed during purging; and/or 2) observe and record the volume of water removed.

The depth of water and depth of the well will be determined before purging. The top of casing will be marked as a point of reference where the water level measurement is consistently made. Prior to initiating the purge, the amount of water standing in the water column will be determined. The water level will be subtracted from the total depth, providing the length of the water column. The volume to be removed will be determined using the using a casing volume per foot factor for the appropriate diameter well.

For wells that require purging of three or more volumes an adequate purge is achieved when the pH, specific conductance, and temperature of the groundwater have stabilized and the turbidity has either stabilized or is below 10 Nephelometric Turbidity Units (NTUs). Stabilization occurs when pH measurements remain constant within 0.1 Standard Unit (SU), or reproducible to within 0.1 (SU), specific conductance varies no more that 10 percent, and the temperature are all-constant for at least three consecutive readings.

If, after three well volumes have been removed, the chemical parameters have not stabilized according to the above criteria, additional well volumes will be removed. If the parameters have not stabilized within five volumes, it is at the discretion of Katawba Environmental project leader whether or not to collect a sample or to continue purging. The conditions of sampling will be

noted in the field log. If a well has not purged to dryness, samples will be collected immediately after purging the well.

In some situations, even with slow purge rates, a well may be pumped or bailed dry (evacuated). In these situations, dryness generally constitutes an adequate purge and the well should be sampled immediately following sufficient recovery (enough volume to allow filling of all sample containers). For wells that are purged to dryness the pH, specific conductance, temperature, and turbidity will be measured, during collection of the sample from the recovered volume as the measurements of record for the sampling event.

Deep wells will be purged with a submersible turbine pump. The decontaminated pump will be lowered into the water column and purged at a rate that does not cause recharge water to be excessively agitated. No more than three to five feet of hose be lowered into the water column. If the recovery rate of the well is faster than the pumping rate, and no observable draw down occurs, the pump will be raised until the intake is within one foot of the top of the water column for the duration of purging. If the pump rate exceeds the recovery rate of the well, the pump will have to be lowered, as needed, to accommodate the draw down. After the pump is removed from the well, all wetted portions of the hose and the pump will be decontaminated.

Shallow wells will be purged utilizing a new disposable bailer attached to a new colorless nylon rope and slowly lowered into the top of the water column, allowed to fill, and slowly removed.

New plastic sheeting will be placed on the ground surface around the well casing to prevent contamination of the pumps, hoses, ropes, etc., in the event they need to be placed on the ground during the purging or they accidentally come into contact with the ground surface. Sample bottles, pH meters, conductivity meters, and associated field equipment will be placed on plastic to prevent contact with the ground surface. The sampler will not step on the plastic sheeting.

### **Purge Water Management**

Purge water will either discarded approximately 20 feet downgradient of the well or contained and managed as investigation derived waste, depending on contaminant levels in the water to be determined on a site specific basis.

### **Sampling**

New plastic sheeting will be placed on the ground around each well to provide a clean working area. The colorless nylon rope will be attached to the bailer. The bailer will be gently immersed in the top of the water column until just filled. The bailer will then be carefully removed and the contents emptied into the appropriate sample containers.

Immediately following purging, samples will be collected for laboratory analysis. Samples collected for trace organic compounds will be collected at a rate slow enough to eliminate generation of excessive bubbles and aeration of the water as it enters the bottle.



### Direct Push Sampling

Direct push sampling may be used when an investigation centers around constituents that are not affected by sample turbidity. Direct push sampling will not be used for sampling of metals or PCBs. Groundwater will be collected with a vacuum pump. All direct push well screens will be cleaned in accordance with Katawba Environmental decontamination procedures between sample locations and before usage. For vacuum pump sampling, new tubing will be used at each sample location.

### No Purge Sampling

Based on prior approval by the Department certain wells will be sampled without purging. Wells that may be approved for no-purge sampling will meet the following criteria.

- The water level in the well is within the screened interval;
- The primary chemicals of concern are petroleum chemicals;
- There is no non-aqueous phase liquid present; and,
- The well has been previously sampled within the past 12 months.

Prior to sample collection, the water level will be gauged and recorded to ensure that it is within the screened interval and no free-phase product exists. Indicator parameters to be measured in the field should be measured after sample collection.

### Sample Preservation

Immediately after collection, all samples requiring preservation will be preserved with the appropriate preservative, unless the laboratory has already placed the preservative in the sample bottles. Samples requiring cooling will be placed on ice immediately after collection.

### **Special Sample Collection Procedures**

#### Volatile Organic Compounds and Metals

VOC samples will be collected first. The VOC samples will be collected so that no air bubbles remain in the sample container. These samples will be collected by slowly pouring the sample contents into the vial until a convex meniscus is seen on the surface of the vial. A Teflon lined septum cap will be carefully placed on the vial until finger tight. The sample bottle should then be inverted to verify that no air bubbles have been trapped inside.

#### **Specific Sampling Equipment Quality Assurance Techniques:**

All equipment used to collect groundwater samples will be cleaned as outlined in the Katawba Environmental Decontamination SOP and repaired, if necessary, before being stored at the conclusion of field studies. Cleaning procedures utilized in the field or field repairs shall be thoroughly documented in field records.

### Field Documentation:

During groundwater sample collection water level well volume, pumping rates, turbidity and well depth information will be documented in field records. Miscellaneous information that will be included in the field notes include, but is not limited to, the weather conditions, type of equipment used for purging and sampling, time of sample collection, and any problems with the monitoring well casing, pad, lock and other problems at the location of the well such as overgrown vegetation.

### **Sample Handling & Custody**

Chain of Custody Forms will contain, at minimum, the following information:

1. Collection date and time for each sample.
2. Printed name and Signature of sample collector(s).
3. Unique sample identification number. One sample will be entered on each line or column and a sample should not be split among multiple lines or columns.
4. Sampling location and description (if necessary).
5. Sample type - grab or composite.
6. Analyses required, specified for each sample.
7. Preservatives used (H<sub>2</sub>SO<sub>4</sub>, NaOH, ice, etc.) for each sample. This includes any dechlorination agents or other chemicals added to the bottle prior to sampling.
8. Program area – This will be listed as UST Management Division.
9. Sample matrix – drinking water, groundwater, waste, soil, free product, etc.
10. Transfer signatures with dates and times for both relinquishment and laboratory receipt (the laboratory should indicate courier, FEDEX, UPS, etc. in the "relinquished to" space if applicable).
11. Receipts maintained when shipped by common carrier (FEDEX, UPS, etc.). These receipts should be attached to the pertinent chain-of-custody records.
12. The number and type of container used.

Monitoring wells will be designated with the 5-digit permit number and the well id (e.g. 12345-MW1). Water supply wells should be designated with the 5-digit permit number and the well id (e.g. 12345- WSW1). Surface water sampling locations will be designated with the 5-digit permit number and the location ID (e.g. 12345-SW1). Soil borings will be designated with the 5-digit permit number and the location ID (e.g. 12345-SB1).

All samples will be taken directly to the laboratory by laboratory staff. Samples delivered to laboratories will be received below 6°C but above 0°C (unless analytical method requires lower temperature). Temperature blanks may be used. Alternative methods for measuring temperature, such as an infrared thermometer, may also be used. The temperature at receipt (arrival) will be documented on the chain of custody form. Temperature blank or cooler environment will be documented; sample container will not be used.

## **Quality Control Requirements**

In the case of QC failure, the sample will be reanalyzed. In the event that additional sample is not available or cannot be recollected, Katawba Environmental will notify the UST Project Manager within 24 hours. Katawba Environmental is responsible for necessary corrective action.

**Trip blanks** will be submitted for each sampling event. The blanks are prepared by the analyzing laboratory using distilled or de-ionized water that is analyte-free and which is shipped with the other sample bottles to the field and then returned to the analyzing laboratory with the samples for analysis. The trip blanks are not separated from other samples. They will be packaged with the environmental samples collected during the sampling event. They are collected to check sample contamination from on-site conditions. One trip blank will be included in each sample cooler. The trip blank will be analyzed for VOCs.

**Field blanks** will be collected for each site survey. Field blanks for VOCs and metals will be collected using the same sample collection procedures. Field blanks are used to assess potential contamination of samples from the site environment.

**Field duplicates** will be collected. One duplicate will be collected for every batch of twenty samples or less. Field duplicate samples are taken within five minutes of collecting the original samples and include all the sub-samples. A new sample is collected from the sampling point for the field duplicate. The samples are shipped back with the other sample bottles for analysis. The precision resulting from field duplicates is a function of the variance of sample composition, the variance of the sampling technique, and the variance of laboratory sample. One duplicate sample will be collected for each twenty samples, or subset thereof.

An analytical laboratory certified for required parameters through the SCDHEC's Office of Environmental Laboratory Certification program will perform all analytical methods.

## **Instrument/Equipment Calibration and Frequency**

All field equipment needed for sampling, as well as safety equipment, will be calibrated prior to and during continued use to assure that all measurements are as accurate as possible. Personnel will follow the manufacturer's instructions to determine if the instruments are functioning within their established operation ranges. The calibration will be recorded in the field logbook as well as the field data sheet. The field analyst will specify the identification of the field instrument by serial number in the field logbook as well as the field data sheet so that the calibrations are traceable to a specific piece of equipment.

To be acceptable, a field test will be bracketed between acceptable calibration results.

1. The first check may be an initial calibration, but the second check will be a continuing verification check.
2. Each field instrument will be calibrated prior to use.
3. Verify the calibration at the beginning of each work shift, during use, and at the end of the use.
4. All initial calibration and verification checks will meet the acceptance criteria in the table below.
5. If an initial calibration or verification check fails to meet the acceptance criteria, immediately recalibrate the instrument or remove it from service.
6. If a verification check fails to meet the acceptance criteria and it is not possible to reanalyze the samples, the following actions will be taken:
  - a. Report all results between the last acceptable verification check and the failed check as 'estimated' (qualified with a "J");
  - b. Include a narrative of the problem; and
  - c. Shorten the time period or frequency between verification checks or repair/replace the instrument.
7. All acceptable field data will be bracketed by acceptable checks or the data will be qualified.

<b>Field Parameter</b>	<b>Acceptance Criteria</b>
Temperature	±1°C against an NIST-traceable thermometer
Specific Conductance	10% of each standard used
pH	±0.1 pH units of stated buffer value
Turbidity	10% of each standard used

Any sampling equipment or field measurement instrument determined to be malfunctioning in any way will be repaired and recalibrated or removed from service. This corrective action will be documented in the records.

### **Inspection/Acceptance of Supplies and Consumables**

Katawba Environmental will provide a list in the QAPP addendum concerning items for field sampling and the analyzing laboratory shall have written procedures for inspecting and accepting supplies and consumables. Katawba Environmental shall maintain documentation of the acceptability of all analytical consumables.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Nitrile gloves	All	No holes; will be nitrile NOT latex	1 box of appropriate size per vehicle; also	Contractor
Bailers	All	Polyethylene	1 box of appropriate size	Contractor
Calibration standards for pH, conductivity,	All	Must be within expiration data and acceptable for the allowable method.	Office prep area-room temperature	Contractor
Insulated container	All	Used only for sample transportation, in good condition, no damage	Office prep area-room temperature	Contractor

## Data Management

### Field Data

All field data and observations will be recorded and maintained by Katawba Environmental. After field data has been reviewed for accuracy, it will be produced in tabular form for inclusion in the final report.

Any problems encountered through direct observation or through review of field data will be identified to the DHEC Project Manager and documented in the final report. The report shall include documentation of any corrective measures taken and discussion of any potential effect on field data objectives.

Katawba Environmental and laboratories will be required to maintain a copy of all information submitted to the UST Management Division for a minimum of five years, unless otherwise specified.

## Calibration of YSI Ph100

### pH Calibration

The pH100 uses a 2-point calibration. The first point must be a 6.86/7.00 buffer, and the second either a 4.00/4.01 or 9.18/10.01. These buffers can be purchased from a YSI representative.

1. Turn the unit on. Connect the pH electrode to the BNC connector and the ATC/Temp probe to the ATC/Temp connector of the unit; "ATC" displays. Press **MODE** until "pH" displays. Autolock may be on or off as desired.
2. Place the pH and ATC/temp probes into the first buffer solution (either 7.00 or 6.86). Allow temperature readings to stabilize, then press and hold "STAND" for 3 seconds to calibrate. If **AUTOLOCK** is off, the first point has been calibrated. If **AUTOLOCK** is on, "WAIT" flashes until the unit detects a stable reading. Once the unit calibrates the first point, "SLOPE" flashes.

**NOTE:** If no temperature probe is connected, adjust the temperature reading to that of the first buffer using the  $\Delta$  or  $\nabla$  keys (0.0 to 60°C) **BEFORE** pressing "STAND".

3. Rinse the pH and ATC/temp probes in distilled water, then place into the second buffer solution (either 4.01/4.00 or 10.01/9.18). Allow temperature readings to stabilize, then press "SLOPE" to calibrate. If **AUTOLOCK** is off, the second point has been calibrated. If **AUTOLOCK** is on, "WAIT" flashes until the unit detects a stable reading. Once the unit calibrates the second point, the unit beeps twice and both "STAND" and "SLOPE" display steadily.

**NOTE:** If no temperature probe is connected, adjust the temperature reading to that of the first buffer using the  $\Delta$  or  $\nabla$  keys (0.0 to 60°C) **BEFORE** pressing "SLOPE".

4. The unit calculates and compensates for the pH electrode slope deviation corresponding to the values of the two calibration buffers. The unit is now dual-point calibrated and ready for measurements. After calibration, press and hold **MEA. /EFF.** for about 5 seconds to display the new electrode efficiency.

## Calibration of YSI Pro 2030

Perform this calibration procedure when Quick DO Calibration is enabled in the System Setup menu. Ensure the DO sensor has a good membrane with electrolyte installed. 1. A good membrane is free of wrinkles, tears, fouling and air bubbles. Install the sensor guard onto the probe. Moisten the sponge in the grey calibration/storage sleeve with a small 2. amount of clean water and install it over the sensor guard. The sponge should only be moistened and the calibration/storage sleeve should not have excess water in it that could cause water droplets to get on the membrane. The storage sleeve ensures venting to the atmosphere.

Power the instrument on and, if using a Polarographic sensor, wait 3. approximately 5 to 15 minutes for the storage chamber to become completely saturated and for the sensor to stabilize. If using a Galvanic sensor, wait approximately 5 to 10 minutes for the chamber to become completely saturated. Auto Shutoff should be disabled or set to at least 20 minutes. See System Setup menu for more information on adjusting the Auto Shutoff.

Ensure the barometer is reading accurately. If necessary, perform a 4. barometer calibration.

Press and hold the Calibrate key for 3 seconds. Using the up or down 5. arrow key, highlight Dissolved Oxygen and press enter. The Pro2030 will indicate 'Calibrating %DO' on the display. The instrument will automatically calibrate the sensor to the current barometric pressure. If DO Local% is enabled, the sensor will calibrate to 100%. This may take up to 2 minutes depending on the age of the sensor and membrane. You can press the Cal key at this time to cancel the calibration.

'Calibration Successful' will display for a few seconds to indicate a 6. successful calibration and then the instrument will return to the Run screen.

If the calibration is unsuccessful, an error message will display on the 7. screen. Press the Cal key to exit the error message and return to the Run screen. See the Troubleshooting guide for possible solutions.

### Calibrating in Percent( DO%)

Perform this calibration procedure when Quick DO Cal is disabled in the System Setup menu. Perform steps 1-4 of the Quick DO Calibration procedure. 1. Press and hold the Calibrate key for 3 seconds. Highlight Dissolved 2. Oxygen and press enter. Next, highlight % and press enter. The Pro2030 will display the current DO% and temperature readings 3. along with the % calibration value. The % calibration value is based on the barometer reading. Wait at least 3 seconds, then, once the DO% and temperature readings 4. are stable, press enter to complete the calibration. Or, press the Cal key to cancel the calibration. 'Calibration Successful' will display for a few seconds to indicate a 5. successful calibration and then the instrument will return to the Run screen. If the calibration is unsuccessful, an error message will display on the 6. screen. Press the Cal key to exit the calibration error message and return to the Run screen. See the Troubleshooting guide for possible solutions.

**Appendix A5 – Katawba Environmental Decontamination SOP**



## **KATAWBA ENVIRONMENTAL STANDARD FIELD CLEANING PROCEDURES**

### **FIELD EQUIPMENT**

All field equipment will be cleaned utilizing the following methods.

#### **Specifications for Cleaning Materials:**

Specifications for standard cleaning materials referred to in this appendix are as follows:

- Soap will be a standard brand of phosphate-free laboratory detergent such as Liquinox.
- Tap water will be used from any municipal water treatment system.
- Analyte free water (deionized water) will be utilized as a final rinse.
- Soap will be kept in clean plastic, metal, or glass containers until used. It will be poured directly from the container during use.
- Solvent will be stored in the unopened original containers until used. They will be applied using a Teflon® squeeze bottles.
- Tap water will be kept in clean tanks, squeeze bottles, or applied directly from a hose.
- Analyte free water will be stored in clean glass, stainless steel, or plastic containers that will be closed prior to use. It will be applied from plastic squeeze bottles.

#### **Disposal of Solvent Cleaning Solutions:**

Disposal of investigation derived waste (IDW), including used wash water, rinse water, and spent solvents will be taken to a registered disposal facility.

- Safety glasses with splash shields or goggles, and nitrile gloves should be worn during all cleaning operations.
- Solvent rinsing operations will be conducted in the open (never in a closed room).
- No eating, smoking, drinking, chewing, or any hand to mouth contact will be permitted during cleaning operations.

#### **Handling of Cleaned Equipment:**

After field cleaning, equipment should be handled only by personnel wearing clean gloves to prevent re-contamination. In addition, the equipment will be moved away (preferably upwind) from the cleaning area to prevent recontamination. If the equipment is not to be immediately re-used it will be covered with plastic sheeting or wrapped in aluminum foil to prevent re-contamination. The area where the equipment is kept prior to re-use will be free of contaminants.

## **DRILLING EQUIPMENT**

### **Field Equipment Cleaning Procedures**

Sufficient clean equipment will be transported to the field so that an entire study will be conducted without the need for field cleaning.

### **Specifications for Decontamination Pads**

If in the event drilling equipment will require onsite decontamination a decontamination pad will be constructed. Decontamination pads constructed for field cleaning of sampling and drilling equipment will meet the following minimum specifications:

- The pad will be constructed in an area known or believed to be free of surface contamination.
- The pad should not leak excessively.
- If possible, the pad will be constructed on a level, paved surface and should facilitate the removal of wastewater. This will be accomplished by either constructing the pad with one corner lower than the rest, or by creating a sump or pit in one corner or along one side. Any sump or pit should also be lined.
- Sawhorses or racks constructed to hold equipment while being cleaned will be high enough above ground to prevent equipment from being splashed.
- Water will be removed from the decontamination pad frequently.
- A temporary pad will be lined with a water impermeable material with no seams within the pad. This material will be either easily replaced (disposable) or repairable.

At the completion of site activities, the decontamination pad will be deactivated. The pit or sump will be backfilled with the appropriate material designated by the site project leader, but only after all waste/rinse water has been pumped into containers for disposal. No solvent rinsates will be placed in the pit. Solvent rinsates will be collected in separate containers for proper disposal. If the decontamination pad has leaked excessively, soil sampling will be conducted.

### **Sampling Equipment used for the Collection of Trace Organic and Inorganic Compounds:**

The following procedures are to be used for all sampling equipment used to collect routine samples undergoing trace organic or inorganic constituent analyses:

1. Clean with tap water and soap using a brush if necessary to remove particulate matter and surface films. Equipment will be steam cleaned (soap and high pressure hot water) as an alternative to brushing. Sampling equipment that is steam cleaned will be placed on racks or saw horses at least two feet above the floor of the decontamination pad. PVC or plastic items should not be steam cleaned.
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with analyte free water.
4. Rinse thoroughly with solvent. Do not solvent rinse PVC or plastic items.
5. Remove the equipment from the decontamination area and cover with plastic. Equipment stored overnight should be wrapped in aluminum foil and covered with clean, unused plastic., or hermetically seal in an appropriately sized polyethylene bag.

Well Sounders or Tapes:

1. Wash with soap and tap water.
2. Rinse with tap water.
3. Rinse with analyte free water. (Do not solvent rinse PVC or plastic items.)

Peristaltic Pump Cleaning Procedure:

The peristaltic pump will be cleaned prior to use and as necessary between each use. The following procedure is required:

1. Using a brush, scrub the exterior of the contaminated hose and pump with soap and tap water.
2. Rinse the soap from the outside of the pump and hose with tap water.
3. Rinse the tap water residue from the outside of pump and hose with analyte-free water.
4. Allow the pump to dry prior to use.

Purge Pump:

The purge pump will be cleaned prior to use and between each monitoring well. The following procedure is required:

1. Using a brush, scrub the exterior of the pump, electrical cord and garden hose with soap and tap water. Do not wet the electrical plug.
2. Rinse with tap water.
3. Rinse with analyte free water.
4. Place the equipment in a clean plastic bag. To clean the purge pump ball check valve:
  1. Completely dismantle ball check valve. Check for wear and/or corrosion, and replace as needed.
  2. Using a brush, scrub all components with soap and tap water.
  3. Rinse with analyte free water.
  4. Reassemble and re-attach the ball check valve to the purge pump head.

Automatic Sampler Tubing:

The Silastic and Tygon tubing previously used in the automatic samplers may not be reused. All tubing will be replaced with new tubing.

**Downhole Drilling Equipment**

Tap water (potable) brought on the site for drilling and cleaning purposes will be contained in a pre-cleaned tank of sufficient size so that drilling activities can proceed without having to stop and obtain additional water. A steam cleaner and/or high pressure hot water washer capable of generating a pressure of at least 2500 PSI and producing hot water and/or steam (200°F plus), with a soap compartment, will be obtained.

Preliminary Cleaning and Inspection:

The drill rig will be clean of any contaminants that may have been transported from another site, to minimize the potential for cross-contamination. In addition, associated drilling and decontamination equipment, well construction materials, and equipment handling procedures should meet these minimum specified criteria:

- All downhole augering, drilling, and sampling equipment will be sandblasted before use if painted, and/or there is a buildup of rust, hard or caked matter, etc., that cannot be removed by steam cleaning (soap and high pressure hot water), or wire brushing. Sandblasting will be performed prior to arrival on site, or well away from the decontamination pad and areas to be sampled.
- Any portion of the drill rig, backhoe, etc., that is over the borehole (kelly bar or mast, backhoe buckets, drilling platform, hoist or chain pulldowns, spindles, cathead, etc.) will be steam cleaned (soap and high pressure hot water) and wire brushed (as needed) to remove all rust, soil, and other material which may have come from other hazardous waste sites before being brought on site.
- Printing and/or writing on well casing, tremie tubing, etc., will be removed before use. Emery cloth or sand paper will be used to remove the printing and/or writing. Most well material suppliers can supply materials without the printing and/or writing if specified when ordered.
- The drill rig and other equipment associated with the drilling and sampling activities will be inspected to insure that all oils, greases, hydraulic fluids, etc., have been removed, and all seals and gaskets are intact with no fluid leaks.
- PVC or plastic materials such as tremie tubes will be inspected. Items that cannot be cleaned are not acceptable and will be discarded.

#### Drill Rig Field Cleaning Procedure:

Any portion of the drill rig, backhoe, etc., that is over the borehole (kelly bar or mast, backhoe buckets, drilling platform, hoist or chain pulldowns, spindles, cathead, etc.) will be steam cleaned or cleaned with soap and high pressure water between boreholes.

#### Field Cleaning Procedure for Drilling Equipment:

The following is the standard procedure for field cleaning augers, drill stems, rods, tools, and associated equipment.

1. Clean with tap water and soap, using a brush if necessary, to remove particulate matter and surface films. Steam cleaning or cleaning with high pressure water with soap will be necessary to remove matter that is difficult to remove with the brush. Drilling equipment that is steam cleaned will be placed on racks or saw horses above the ground. Hollow-stem augers, drill rods, etc., that are hollow or have holes that transmit water or drilling fluids, will be cleaned on the inside with vigorous brushing.
2. Rinse thoroughly with tap water.
3. Remove from the decontamination pad and cover with clean, unused plastic. If stored overnight, the plastic will be secured to ensure that it stays in place.

**Appendix A6 – Katawba Environmental Well Installation SOP**

## **KATAWBA ENVIRONMENTAL MONITORING WELL INSTALLATION SOP**

Prior to the construction of the monitoring wells onsite the following information shall be provided and/or approved by the Department and shall be submitted to the Department: Proposed well locations on a scaled map or plat; Proposed well construction details; Intended purpose of the wells; Well owner's name and mailing address; Property owner's name and mailing address, if different from the well owner; Mailing address and county of location where monitoring wells are to be installed, if different from the well owner's or property owner's address; Proposed parameters to be analyzed; and Proposed drilling date.

The monitoring wells installed at the subject site will be installed utilizing an auger rig equipped with 6 ¼ inch diameter augers. A 2 inch diameter pvc screen slotted 0.010 inches 10 feet in length will be installed into the annulus. 2 inch diameter PVC riser in 10 foot sections will be utilized to complete the internal well piping. Coarse grain #2 filter sand will be utilized as a filter pack opposite the well screen. A properly hydrated bentonite seal with a minimum thickness of twelve inches directly above the filter pack will be utilized as a seal. shall be used, if the well has a filter pack. Neat cement grout composed of Class A, Type I Portland Cement mixed with not more than seven (7) gallons of clean water per bag (one cubic foot or 94 pounds) of cement with a density of 15 to 16 pounds per gallon will be inserted into the annulus opposite the bentonite seal to the surface. A locking cap will be placed on the top of the riser. A steel 8 inch traffic rated well head cover will be placed on top of the well riser. A cement or aggregate reinforced concrete pad will be constructed at the ground surface of that extends six inches beyond the borehole diameter and six inches below ground surface. The pad will be capable of preventing infiltration between the surface casing and the borehole to the subsurface.

The well owner will submit all analytical data and water levels obtained from each monitoring well to the Department within 60 days of receipt of laboratory results. A Water Well Record Form 1903 or other form provided and/or approved by the Department shall be completed and submitted to the Department within 60 days after well completion that will include at a minimum the following information: Name and address of facility/owner; Surveyed or global positioning system location, in latitude and longitude or Universal Transverse Mercator coordinates, of monitoring well(s) on a scaled map or plat; Driller and certification number; Date drilled; Driller's or Geologist's log; Total depth; Screened interval; Diameter and construction details; Depth to groundwater with date and time measured; Surveyed elevation of measuring point with respect to an established benchmark; Monitoring well approval number issued by the Department.

A well tag identification plate will be installed immediately upon well completion. The identification plate will be constructed of a durable, weatherproof, rustproof, material. The identification plate will be permanently secured to the well casing or enclosure floor around the casing where it is readily visible. The identification plate shall be permanently marked to show: Company name and certification number of the driller who installed the well; Date well was completed; Total depth (feet); Casing depth (feet); Screened interval; Designator and/or identification number. The well will be developed by removing enough drilling fluids to facilitate groundwater sampling. Investigation Derived Waste (IDW) that includes drill cuttings and well development fluids will be contained onsite awaiting approval for the appropriate disposal location.

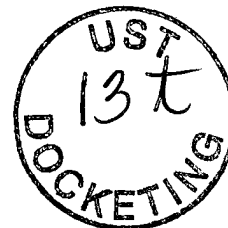


Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

SEP 07 2012



Re: IGWA Directive  
One Accord Ministries, 3570 Lancaster Highway, SC  
UST Permit #02131; Cost Agreement #44471; MWA #UMW-24732  
Release reported March 23, 2009  
Site Check Report received March 23, 2009  
Site Specific Quality Assurance Project Plan Contractor Addendum received August 8, 2012  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Division of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the referenced report and site specific Quality Assurance Project Plan Contractor Addendum. The report indicates that chemicals of concern are present in the soil at concentrations that exceed risk-based screening levels. To determine what risk the chemicals may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of an Initial Groundwater Assessment (IGWA) as outlined in the *Quality Assurance Program Plan for the Underground Storage Tank Management Division, Revision 1*, February 2011, (QAPP) is necessary. A copy of the QAPP is available at <http://www.scdhec.gov/environment/lwm/html/ust.htm>. The IGWA should be conducted in accordance with the QAPP and in compliance with all applicable regulations and the submitted site specific QAPP Contractor Addendum. All shallow wells are to be installed with screen intervals that bracket the water table. Groundwater samples will include duplicate samples, field and trip blanks. The IGWA well should be installed in the vicinity of the spill bucket for the 3000 gallon regular gasoline UST as proposed in the submitted QAPP.

According to Division records, the release at the facility was reported to the Agency on March 23, 2009. In accordance with Section 44-2-40(D) of the SUPERB Act, you are responsible for the first \$25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the \$25,000 deductible, the Division has pre-approved costs for implementing the IGWA and assigned a cost agreement number (CA# 44471) for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Division has pre-approved a total of \$3945.00 for implementation of the IGWA. The total includes costs for completion of up to 25 feet of permanent monitoring well footage. A groundwater sample should be collected for each water supply wells within 250 feet of the facility and analyzed for BTEX, naphthalene, 8 oxygenates, 1,2 DCA, ethanol, and EDB. Additional monitoring well footage can be billed at the SUPERB allowable rate of \$38 per foot as well as collection and laboratory analyses of groundwater from water supply wells provided that the cost is pre-approved by the Division. Upon receipt of a report of findings and a completed IGWA invoice with all necessary supporting

documentation, up to \$3945.00 will be applied toward the \$25,000 deductible. **The report, contractor checklist, and invoice should be submitted to the Division within sixty (60) days of the date of this correspondence.**

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the IGWA may proceed immediately upon receipt of this correspondence. Approval of the site specific QAPP contractor addendum and installation of one permanent monitoring well is enclosed. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by an Agency-certified site rehabilitation contractor as required by R.61-98.

The Agency grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations based on laboratory analysis is below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #02131. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6395, fax me at (803) 896-6245, or e-mail me at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov).

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)  
Monitoring Well Approval (MWA)  
Signed Site Specific QAPP Contractor Addendum Title and Approval Page

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (with enc).  
Technical file (with enc.)





Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

### **Monitoring Well Approval**

**Approval is hereby granted to: Katawba Environmental, Inc**

**On Behalf Of: Angela Hough**

**Facility: One Accord Ministries**

**3570 Lancaster Highway**

**Richburg, SC**

**UST Permit Number: 02131**

**County: Chester**

This approval is for the installation of 1 shallow permanent ground water monitoring well. The monitoring well is to be installed in the approved location. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents.

**Minimum forty-eight hour notice prior to drilling activities shall be provided to the project manager.**

**Please note that R.61-71 requires the following:**

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Agency shall be completed and submitted to the Agency within 30 days after well completion or abandonment unless another schedule has been approved by the Agency. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Agency within 30 days of receipt of laboratory results unless another schedule has been approved by the Division as required by R.61-71.H.1.d.
5. If any of the information provided to the Agency changes, notification to Minda Hornosky, the project manager (tel: (803) 896-6395 or e-mail: hornosms@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Agency approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

**Date of Issuance: August 28, 2012**

**Approval #:UMW-24732**

  
Minda Hornosky, Hydrogeologist

Assessment Section

Division of UST Management

Bureau of Land and Waste Management

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

2600 Bull Street • Columbia, SC 29201 • Phone: (803) 898-3432 • www.scdhec.gov

**Section A: Project Management**

**A1 Title and Approval Page**

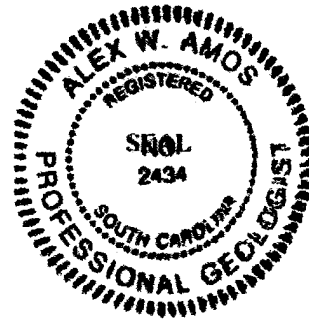
Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
One Accord Ministries, SCDHEC Site ID# 02131

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3570 Lancaster Highway, Richburg, South Carolina

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Prepared by:  
Alex W. Amos  
Professional Geologist  
Katawba Environmental  
(Certified Site Rehabilitation Contractor UCC-0018)  
4278 Dye Road  
Edgemoor, SC 29712  
(803) 417-4568



Date: August 8, 2012

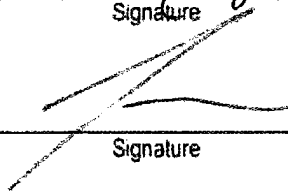
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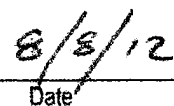
Minda Hornosky  
SCDHEC Project Manager

  
Signature

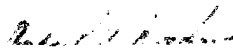
  
Date

Alex Amos, Contractor  
Katawba Environmental, Inc

  
Signature

  
Date

Michael Woodrum,  
Laboratory Director  
Shealy Environmental Services, Inc

  
Signature

August 8, 2012

Date

# Approved Cost Agreement 44471

Facility: 02131 ONE ACCORD MINISTRIES

HORNOSMS

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
10 SAMPLE COLLECTION		C WATER SUPPLY	1.0000	30.00	30.00
11 ANALYSES	GW GROUNDWATER	A1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	1.0000	100.00	100.00
		F EDB	1.0000	55.00	55.00
21 INITIAL GROUNDWATER ASSESSMENT		IGWA	1.0000	3,760.00	3,760.00
<b>Total Amount</b>					<b>3,945.00</b>

 **Midlands  
Environmental  
Consultants, Inc.**

September 19, 2012



Ms. Minda Hornosky, Hydrogeologist  
Assessment Section  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

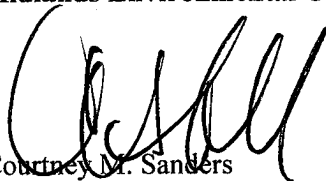
**Subject:** Site Reconnaissance and QAPPA Preparation  
Fireball Service Station  
Richburg, South Carolina  
SCDHEC Site ID # 02131; CA # 35857  
MECI Project Number 12-3839

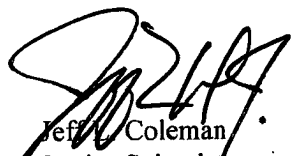
Dear Ms. Hornosky,

Midlands Environmental Consultants, Inc. (MECI) conducted a site reconnaissance on February 27, 2012 at Fireball Service Station to contact property owners, check proposed monitoring well location accessibility, and to collect current tax map data (if necessary). On February 29, 2012, MECI submitted a QAPP Contractor Addendum to SCDHEC for approval to conduct an Initial Groundwater Assessment (IGWA). In attempts to acquire property access, MECI discussed the proposed scope of work with the current property owner, Ms. Angela Hough in which she stressed concerns over the financial responsibility she may incur. After consultation with SCDHEC regarding Ms. Hough's concerns, SCDHEC deemed that Ms. Hough was responsible for cost for assessment activities. SCDHEC project manager informed MECI that Ms. Hough has decided to move forward with her own selected contractor to perform the IGWA. Please find the attached invoice for the preparation of the QAPP Contractor Addendum for the referenced site.

Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,  
**Midlands Environmental Consultants, Inc.**

  
Courtney M. Sanders  
Staff Biologist

  
Jeff Coleman  
Senior Scientist

Attachments:



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

91 7199 9991 7031 3719 2616

JAN 23 2013

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220



**Re: Notice of Alleged Violation**  
One Accord Ministries, 3570 Lancaster Highway, SC  
UST Permit #02131  
Release Reported March 23, 2009  
Directive for IGWA dated September 29, 2012  
Williamsburg County

Dear Mr. Rishmawi:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) directed you in September 2012 to submit a Quality Assurance Project Plan (QAPP) for an Initial Groundwater Assessment (IGWA) on September 7, 2012, with the report due 60 days after the QAPP is approved. To date the required QAPP Contractor Addendum has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the Initial Groundwater Assessment Report on or before February 28, 2013. Should you not submit the QAPP Contractor Addendum and the report on or before these dates, this office will initiate further enforcement action.**

On all correspondence regarding this site, please reference UST Permit #02131. If you have any questions concerning this correspondence, please call me at (803) 896-6395.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Contractor Certification File  
Technical File



# Katawba Environmental, Inc.

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February 5, 2013

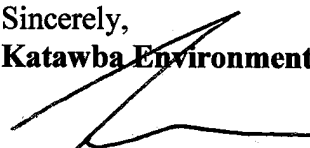
Ms. Minda Hornosky, Hydrologist  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

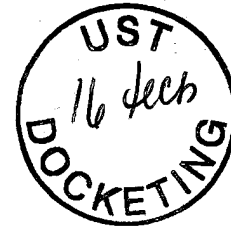
Subject: IGWA  
One Accord Ministries  
Richburg, SC  
SCDHEC Site ID Number 02131,  
Certified Site Rehabilitation Contractor UCC-0018

Dear Ms. Hornosky,

Please find attached the IGWA for the referenced site. If you have any question or comments please feel free to contact us at 803-417-4568.

Sincerely,  
**Katawba Environmental**

  
Alex W. Amos  
Professional Geologist



INITIAL GROUND-WATER ASSESSMENT REPORT  
DIVISION OF UNDERGROUND STORAGE TANK MANAGEMENT

Facility Name: One Accord

UST Permit Number: 02131

Address: 3570 Lancaster Highway, Richburg, South Carolina

Phone Number: 803-804-0253

Property Owner (if different than UST owner/operator): Angela Hough

Address: PO Box 220, Richburg, SC 29729

Phone Number: 803-804-0253

Contractor: Katawba Environmental, Inc. Cert. # 18

Address: 4278 Dye Road, Edgemoor, South Carolina, 29712

Phone Number: (803) 417-4568

Well Driller: EDPS Tommy Bolyard 1846

Address: 17538 Greenhill Road, Charlotte, NC 28278

Phone Number: (803) 548-2233

**Receptor and Site Data**

**Please place a check in the appropriate answer block for each question:**

Receptor Survey Questions	No	Yes *
Is there a drinking water supply well (public or private) or surface water supply intake within 1000 feet of the UST?		X
Are irrigation or other non-drinking water wells located within 1000 feet of the UST?	X	
Are there other potential receptors (i.e., utilities, surface waters, wetlands, less than 500 feet from the UST?)		X

\* If "yes" provide additional in formation:

A natural gas line and water line are located 45 feet from the release point. DWW-1 is located 470 feet east.

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SCDHEC UST Permit #: 02131

Were any water wells within 250-foot radius sampled? Yes  No

Is a public water supply line in the area?  Yes No

Is the current use of the site and surrounding properties commercial, residential, agricultural or industrial?

Site: Commercial Adjacent Properties: Residential

See Appendix F for Chain of Custody Form and Laboratory Data.

**Soil and Boring/Monitoring Well Data**

Primary Soil Type: Clay with sand

Well Installation Method and Date: Drill rig, 10/22/12

Development Method: Hand bailed

Soil Sample obtained at 15 feet.

**SOIL ANALYTICAL DATA**

Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	Naphthalene (ug/kg)
<5.1	<5.1	<5.1	<5.1	4.7

Benzo(a)- anthracene (ug/kg)	Benzo(b)- Fluoranthene (ug/kg)	Benzo(k)- fluoranthene (ug/kg)	Chrysene (ug/kg)	Dibenz(a,h) Anthracene (ug/kg)
<390	<390	<390	<390	<390

Total PAH (ug/kg)	Lead (mg/kg)	MTBE (ug/kg)
197	10	120

**SOIL ANALYTICAL DATA TRIP BLANK**

Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Naphthalene (ug/L)
<1.0	<1.0	<1.0	<1.0	<1.0

MTBE (ug/L)
<1.0



**Ground-Water Data**Depth to Ground Water: 23.51Well Purging/Sampling Method: Hand BailedDate Sampled: 10/26/12Free Product Thickness: None

Equilibrated values:

Temperature: 20.4 pH: 6.66Dissolved Oxygen: 2.75 Specific Conductance: 106Soil/Water Disposal Method: Waste Management**GROUND-WATER ANALYTICAL DATA**

Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
9000	27000	3400	19000	34000	800 / 960

Benzo(a) anthracene (ug/l)	Benzo(b)-fluoranthene (ug/l)	Benzo(k)-fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h) anthracene (ug/l)
<5.4	<5.4	<5.4	<5.4	<5.4

EDB (ug/L)	Total PAH (ug/L)	Lead (ug/L)
<0.019	960	3.5

IPE (ug/l)	Ethanol (ug/l)	3,3 Dimethyl-1 (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
<1000	<100000	<20000	<1000	<20000	2800	<20000	<5000

**DRINKING WATER WELL ANALYTICAL DATA**

Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
<1	<1	<1	<1	<1	<1

Benzo(a) anthracene (ug/l)	Benzo(b)-fluoranthene (ug/l)	Benzo(k)-fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h) anthracene (ug/l)
<5.1	<5.1	<5.1	<5.1	<5.1

EDB (ug/L)	Total PAH (ug/L)	Lead (ug/L)
<0.020	<5.1	NA

IPE (ug/l)	Ethanol (ug/l)	3,3 Dimethyl-1 (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
<1	<100	<20	<1	<20	<10	<20	<5

**GROUND-WATER ANALYTICAL DATA DUP**

Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
9100	27000	3500	19000	34000	880 / 980

Benzo(a) anthracene (ug/l)	Benzo(b)-fluoranthene (ug/l)	Benzo(k)-fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h) anthracene (ug/l)
<25	<25	<25	<25	<25

EDB (ug/L)	Total PAH (ug/L)	Lead (ug/L)
<0.019	<25	3.1

IPE (ug/l)	Ethanol (ug/l)	3,3 Dimethyl-1 (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
<1000	<100000	<20000	<1000	<20000	2800	<20000	<5000

**GROUND-WATER ANALYTICAL DATA FIELD BLANK**

Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
<1	<1	<1	<1	<1	<1

Benzo(a) anthracene (ug/l)	Benzo(b)-fluoranthene (ug/l)	Benzo(k)-fluoranthene (ug/l)	Chrysene (ug/l)	Dibenz(a,h) anthracene (ug/l)
<5.1	<5.1	<5.1	<5.1	<5.1

EDB (ug/L)	Total PAH (ug/L)	Lead (ug/L)
<0.019	<5.1	<10

IPE (ug/l)	Ethanol (ug/l)	3,3 Dimethyl-1 (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
<1	<100	<20	<1	<20	<10	<20	<5

**GROUND-WATER ANALYTICAL DATA TRIP BLANK**

Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)
<1	<1	<1	<1	<1	<1

IPE (ug/l)	Ethanol (ug/l)	3,3 Dimethyl-1 (ug/l)	ETBE (ug/l)	TAA (ug/l)	TAME (ug/l)	TBA (ug/l)	TBF (ug/l)
<1	<100	<20	<1	<20	<10	<20	<5

**Appendices**

The appendices required for this report are as follows:

- Appendix A. Well Construction Log
- Appendix B. Laboratory Data
- Appendix C. Topographic map with site location marked
- Appendix D. Site Base Map
- Appendix E. Disposal Manifest(s)

Appendix F. Additional Data (Sampling Results of Existing Ground-Water Wells)  
Appendix G. QAPP Checklist

Report Completed By: \_\_\_\_\_ (signature) \_\_\_\_\_ Cert. # 18

Date: 2/4/13

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>10/26/12</u>          Field Personnel <u>Billy May</u>          General Weather Condition <u>CLEAR</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <table style="width:100%; border: none;"> <tr> <td style="width:50%;">pH Meter _____</td> <td style="width:50%;">Conductivity Meter: _____</td> </tr> <tr> <td>serial no. _____</td> <td>serial no. _____</td> </tr> <tr> <td>pH=4.0 <u>4.1</u></td> <td>Standard <u>10 / 9.9</u></td> </tr> <tr> <td>pH=7.0 <u>7.1</u></td> <td>Standard <u>100 / 99</u></td> </tr> <tr> <td>pH=10.0 <u>10.0</u></td> <td>Standard <u>1000 / 993</u></td> </tr> </table> <p align="center"><b>Chain of Custody</b></p> <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> </table>	pH Meter _____	Conductivity Meter: _____	serial no. _____	serial no. _____	pH=4.0 <u>4.1</u>	Standard <u>10 / 9.9</u>	pH=7.0 <u>7.1</u>	Standard <u>100 / 99</u>	pH=10.0 <u>10.0</u>	Standard <u>1000 / 993</u>	Relinquished by	Date/Time	Received by	Date/Time	<p><b>Well # <u>MW- 1</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>23.51</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>5.49</u> ft.</p> <p>1 Csg. Volume (LWC*C) = <u>5.49</u> X <u>0.163</u> = <u>0.89</u> gals.          3 Csg. Volumes = 3 X <u>0.89</u> = <u>2.68</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Samplin<u>2.75</u> gals.</p> <p><b>Used purge pump to evacuate</b></p>
pH Meter _____	Conductivity Meter: _____														
serial no. _____	serial no. _____														
pH=4.0 <u>4.1</u>	Standard <u>10 / 9.9</u>														
pH=7.0 <u>7.1</u>	Standard <u>100 / 99</u>														
pH=10.0 <u>10.0</u>	Standard <u>1000 / 993</u>														
Relinquished by	Date/Time	Received by	Date/Time												
	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling							
<b>Volume Purged (gallons)</b>	0	1.0	2.0	2.75											
<b>Time (military)</b>	1017	1020	1024	1030											
<b>pH (s.u.)</b>	6.84	6.79	6.68	6.66											
<b>Specific Cond. (umhos/cm)</b>	106	43	106	106											
<b>Water Temp (°C)</b>	20.4	20.6	20.5	20.4											
<b>Turbidity (*)</b>	273	470	474	476											
<b>OVA Readings</b>															
<b>Dissolved Oxygen</b>	6.42	3.98	2.77	2.75											



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 10/22/12
29 ft. Date Completed: 10/22/12

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized Steel Other
2 in. to 19 ft. depth
Height: Above Surface Below
Surface 4 inches ft.
Weight lb./ft.
Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
MW-1

11. SCREEN:
Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 29 ft. and 19 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 23.51 ft. below land surface after 24 hours

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Brown Red Dry, CLAY Tan Brown Dry, CLAY Tan Brown Sandy Moist.

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 29 ft. to 18 ft.
Effective size 3 Uniformity Coefficient Coarse

16. WELL GROUDED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 17 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2255 Fax No.:

5. REMARKS:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 11/9/12
Well Driller

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool Other

If D Level Driller, provide supervising driller's name:

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Billy Morris	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	1 <b>Of</b> 1
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	56	<b>Surface Elev.</b>	600 ft
<b>Drill Rig</b>	Canterra	<b>Hole Depth</b>	29 FT	<b>Date</b>	10/22/12
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Brown Red Dry	0
10					58
15				CLAY Tan Brown Dry	147
20					110
25					98
30				CLAY Tan Brown Sandy Moist	115
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

**Note: 1) VOCs reported in parts per million (PPM)**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **NJ26065**  
Date Completed: **11/05/2012**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

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# SHEALY ENVIRONMENTAL SERVICES, INC.

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SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

---

## Case Narrative Katawba Environmental, Inc.

Lot Number: NJ26065

---

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.



# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Sample Summary Katawba Environmental, Inc. Lot Number: NJ26065

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131-MW1	Solid	10/22/2012 1510	10/26/2012

---

(1 sample)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: NJ26065

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-MW1	Solid	Methyl tertiary butyl ether (MTBE)	8260B	120		ug/kg	5
001	02131-MW1	Solid	Naphthalene	8260B	4.7	J	ug/kg	5
001	02131-MW1	Solid	Fluoranthene	8270D	29	J	ug/kg	6
001	02131-MW1	Solid	Fluorene	8270D	27	J	ug/kg	6
001	02131-MW1	Solid	Phenanthrene	8270D	86	J	ug/kg	6
001	02131-MW1	Solid	Pyrene	8270D	55	J	ug/kg	6
001	02131-MW1	Solid	Lead	6010C	10		mg/kg	6

(7 detections)

Client: **Katawba Environmental, Inc.**Laboratory ID: **NJ26065-001**Description: **02131-MW1**Matrix: **Solid**Date Sampled: **10/22/2012 1510**% Solids: **83.9 10/26/2012 1854**Date Received: **10/26/2012****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/01/2012 1959	AAC		96735	5.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.1	1.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.1	1.7	ug/kg	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>120</b>		<b>5.1</b>	<b>0.41</b>	<b>ug/kg</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>4.7</b>	<b>J</b>	<b>5.1</b>	<b>1.7</b>	<b>ug/kg</b>	<b>1</b>
Toluene	108-88-3	8260B	ND		5.1	1.7	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.1	2.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	53-142
Bromofluorobenzene		96	47-138
Toluene-d8		100	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	10/30/2012 0715	JRG	10/29/2012 1116	96367

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		390	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		390	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		390	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		390	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		390	28	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		390	26	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		390	26	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		390	32	ug/kg	1
Chrysene	218-01-9	8270D	ND		390	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		390	26	ug/kg	1
<b>Fluoranthene</b>	<b>206-44-0</b>	<b>8270D</b>	<b>29</b>	<b>J</b>	<b>390</b>	<b>12</b>	<b>ug/kg</b>	<b>1</b>
<b>Fluorene</b>	<b>86-73-7</b>	<b>8270D</b>	<b>27</b>	<b>J</b>	<b>390</b>	<b>15</b>	<b>ug/kg</b>	<b>1</b>
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		390	35	ug/kg	1
Naphthalene	91-20-3	8270D	ND		390	16	ug/kg	1
<b>Phenanthrene</b>	<b>85-01-8</b>	<b>8270D</b>	<b>86</b>	<b>J</b>	<b>390</b>	<b>16</b>	<b>ug/kg</b>	<b>1</b>
<b>Pyrene</b>	<b>129-00-0</b>	<b>8270D</b>	<b>55</b>	<b>J</b>	<b>390</b>	<b>17</b>	<b>ug/kg</b>	<b>1</b>

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Q = Surrogate failure

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

L = LCS/LCSD failure

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

\* = Reportable result (only when report all runs)

S = MS/MSD failure

Shealy Environmental Services, Inc.

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

**Page: 5 of 6**

Level 1 Report v2.1

Client: **Katawba Environmental, Inc.**

Laboratory ID: **NJ26065-001**

Description: **02131-MW1**

Matrix: **Solid**

Date Sampled: **10/22/2012 1510**

% Solids: **83.9 10/26/2012 1854**

Date Received: **10/26/2012**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		64	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		85	41-120

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	10/31/2012 2026	CDF	10/30/2012 1501	96507

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	10		0.58	0.11	mg/kg	1

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    \* = Reportable result (only when report all runs)    S = MS/MSD failure

# SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.  
 106 Vantage Point Drive  
 West Columbia, South Carolina 29174  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9114

Number 111016

## SHEALY Chain of Custody Record

Client	Ketchikan		Project No.	111016	
Project Name	Alex Arce		Client Name	Ketchikan	
Address	425 Dyckal		Project Address	Ketchikan	
City	Ketchikan		Project City	Ketchikan	
State	AK		Project State	AK	
County	Ketchikan		Project County	Ketchikan	
Site	P. 117 M. 117		Project Site	P. 117 M. 117	
Sample Description	Groundwater		Sample Description	Groundwater	
Sample Location	P. 117 M. 117		Sample Location	P. 117 M. 117	
Sample Date	10/17/11		Sample Date	10/17/11	
Sample Time	11:45		Sample Time	11:45	
Sample Volume	1.0 L		Sample Volume	1.0 L	
Sample Container	1.0 L		Sample Container	1.0 L	
Sample Preservation	4°C		Sample Preservation	4°C	
Sample Handling	None		Sample Handling	None	
Sample Storage	None		Sample Storage	None	
Sample Transport	None		Sample Transport	None	
Sample Receipt	None		Sample Receipt	None	
Sample Analysis	None		Sample Analysis	None	
Sample Results	None		Sample Results	None	
Sample Report	None		Sample Report	None	
Sample Archival	None		Sample Archival	None	
Sample Disposal	None		Sample Disposal	None	
Sample Return	None		Sample Return	None	
Sample Comments	None		Sample Comments	None	
Sample Notes	None		Sample Notes	None	
Sample Attachments	None		Sample Attachments	None	
Sample Signatures	None		Sample Signatures	None	
Sample Dates	None		Sample Dates	None	
Sample Initials	None		Sample Initials	None	
Sample ID	None		Sample ID	None	
Sample Tracking	None		Sample Tracking	None	
Sample Verification	None		Sample Verification	None	
Sample Approval	None		Sample Approval	None	
Sample Release	None		Sample Release	None	
Sample Distribution	None		Sample Distribution	None	
Sample Retention	None		Sample Retention	None	
Sample Archiving	None		Sample Archiving	None	
Sample Destruction	None		Sample Destruction	None	

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **NJ26066**  
Date Completed: **02/04/2013**  
Date Revised: **01/31/2013**

  
Lucas Odom  
Project Manager



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# SHEALY ENVIRONMENTAL SERVICES, INC.

---

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

---

**Case Narrative**  
**Katawba Environmental, Inc.**  
**Lot Number: NJ26066**

---

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

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If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

# SHEALY ENVIRONMENTAL SERVICES, INC.

---

## Sample Summary Katawba Environmental, Inc. Lot Number: NJ26066

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131-MW1	Aqueous	10/26/2012 1030	10/26/2012
002	02131-DUP MW1	Aqueous	10/26/2012 1032	10/26/2012
003	02131-FB	Aqueous	10/26/2012 1040	10/26/2012
004	02131-TB	Aqueous	10/26/2012 1041	10/26/2012

(4 samples)



# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: NJ26066

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-MW1	Aqueous	Benzene	8260B	9000		ug/L	5
001	02131-MW1	Aqueous	Ethylbenzene	8260B	3400		ug/L	5
001	02131-MW1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	34000		ug/L	5
001	02131-MW1	Aqueous	Naphthalene	8260B	800	J	ug/L	5
001	02131-MW1	Aqueous	Toluene	8260B	27000		ug/L	5
001	02131-MW1	Aqueous	Xylenes (total)	8260B	19000		ug/L	5
001	02131-MW1	Aqueous	tert-Amyl methyl ether (TAME)	8260B	2800	J	ug/L	5
001	02131-MW1	Aqueous	Naphthalene	8270D	960		ug/L	6
001	02131-MW1	Aqueous	Lead	6010C	0.0035	J	mg/L	7
002	02131-DUP MW1	Aqueous	Benzene	8260B	9100		ug/L	8
002	02131-DUP MW1	Aqueous	Ethylbenzene	8260B	3500		ug/L	8
002	02131-DUP MW1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	34000		ug/L	8
002	02131-DUP MW1	Aqueous	Naphthalene	8260B	880	J	ug/L	8
002	02131-DUP MW1	Aqueous	Toluene	8260B	27000		ug/L	8
002	02131-DUP MW1	Aqueous	Xylenes (total)	8260B	19000		ug/L	8
002	02131-DUP MW1	Aqueous	tert-Amyl methyl ether (TAME)	8260B	2800	J	ug/L	8
002	02131-DUP MW1	Aqueous	Naphthalene	8270D	980		ug/L	9
002	02131-DUP MW1	Aqueous	Lead	6010C	0.0031	J	mg/L	10

(18 detections)

Description: 02131-MW1

Matrix: Aqueous

Date Sampled: 10/26/2012 1030

Date Received: 10/26/2012

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1000	11/09/2012 0014	DD		97241			
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run		
Benzene	71-43-2	8260B	9000		1000	130	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		1000	150	ug/L	1		
Ethylbenzene	100-41-4	8260B	3400		1000	330	ug/L	1		
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	34000		1000	400	ug/L	1		
Naphthalene	91-20-3	8260B	800	J	1000	400	ug/L	1		
Toluene	108-88-3	8260B	27000		1000	330	ug/L	1		
Xylenes (total)	1330-20-7	8260B	19000		1000	330	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		101	70-130							
Bromofluorobenzene		103	70-130							
Toluene-d8		100	70-130							

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1000	11/09/2012 0014	JHD		13218			
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run		
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1000	400	ug/L	1		
Ethanol	64-17-5	8260B	ND		100000	33000	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	1000	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1000	200	ug/L	1		
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20000	6700	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	2800	J	10000	200	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20000	6700	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5000	1000	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		101	70-130							
Bromofluorobenzene		103	70-130							
Toluene-d8		100	70-130							

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MS/MSD failure

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	10/31/2012 1544	JRG	10/29/2012 1258	96382
2	3520C	8270D	5	10/31/2012 1720	JRG	10/29/2012 1258	96382

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.4	1.3	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.4	1.3	ug/L	1
Anthracene	120-12-7	8270D	ND		5.4	1.2	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.4	0.65	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.4	0.54	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.4	0.65	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.4	0.87	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.4	1.1	ug/L	1
Chrysene	218-01-9	8270D	ND		5.4	0.76	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.4	1.4	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.4	1.5	ug/L	1
Fluorene	86-73-7	8270D	ND		5.4	1.5	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.4	2.5	ug/L	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>960</b>		<b>27</b>	<b>7.1</b>	<b>ug/L</b>	<b>2</b>
Phenanthrene	85-01-8	8270D	ND		5.4	1.3	ug/L	1
Pyrene	129-00-0	8270D	ND		5.4	3.4	ug/L	1

Surrogate	Run 1 Acceptance		Run 2 Acceptance	
	Q	% Recovery	Q	% Recovery
2-Fluorobiphenyl	98	37-129	104	37-129
Nitrobenzene-d5	92	38-127	82	38-127
Terphenyl-d14	64	10-148	71	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	10/31/2012 2332	RDR	10/30/2012 1130	98474

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0058	ug/L	1

Surrogate	Run 1 Acceptance	
	Q	% Recovery
1,1,1,2-Tetrachloroethane	107	57-137

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MS/MSD failure

Client: **Katawba Environmental, Inc.**

Laboratory ID: **NJ26066-001**

Description: **02131-MW1**

Matrix: **Aqueous**

Date Sampled: **10/26/2012 1030**

Date Received: **10/26/2012**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	10/30/2012 0808	CDF	10/29/2012 1020	96355

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0035	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
ND = Not detected at or above the MDL    J = Estimated result < PQL and  $\geq$  MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MSMSD failure

Description: **02131-DUP MW1**Matrix: **Aqueous**Date Sampled: **10/26/2012 1032**Date Received: **10/26/2012****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1000	11/09/2012 0036	DD		97241

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	9100		1000	130	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1000	150	ug/L	1
Ethylbenzene	100-41-4	8260B	3500		1000	330	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	34000		1000	400	ug/L	1
Naphthalene	91-20-3	8260B	880	J	1000	400	ug/L	1
Toluene	108-88-3	8260B	27000		1000	330	ug/L	1
Xylenes (total)	1330-20-7	8260B	19000		1000	330	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		100	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1000	11/09/2012 0036	JHD		13218

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1000	400	ug/L	1
Ethanol	64-17-5	8260B	ND		100000	33000	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	1000	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1000	200	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20000	6700	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	2800	J	10000	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20000	6700	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5000	1000	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	5	10/31/2012 1745	JRG	10/30/2012 1042	96459

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
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PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MS/MSD failure

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3520C	8270D	5	10/31/2012 1745	JRG	10/30/2012 1042	96459		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Acenaphthene	83-32-9	8270D	ND		25	6.1	ug/L	1	
Acenaphthylene	208-96-8	8270D	ND		25	6.1	ug/L	1	
Anthracene	120-12-7	8270D	ND		25	5.6	ug/L	1	
Benzo(a)anthracene	56-55-3	8270D	ND		25	3.0	ug/L	1	
Benzo(a)pyrene	50-32-8	8270D	ND		25	2.5	ug/L	1	
Benzo(b)fluoranthene	205-99-2	8270D	ND		25	3.0	ug/L	1	
Benzo(g,h,i)perylene	191-24-2	8270D	ND		25	4.0	ug/L	1	
Benzo(k)fluoranthene	207-08-9	8270D	ND		25	5.1	ug/L	1	
Chrysene	218-01-9	8270D	ND		25	3.5	ug/L	1	
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		25	6.6	ug/L	1	
Fluoranthene	206-44-0	8270D	ND		25	7.1	ug/L	1	
Fluorene	86-73-7	8270D	ND		25	7.1	ug/L	1	
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		25	12	ug/L	1	
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>980</b>		<b>25</b>	<b>6.6</b>	<b>ug/L</b>	<b>1</b>	
Phenanthrene	85-01-8	8270D	ND		25	6.1	ug/L	1	
Pyrene	129-00-0	8270D	ND		25	16	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		100	37-129						
Nitrobenzene-d5		97	38-127						
Terphenyl-d14		60	10-148						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	10/31/2012 2353	RDR	10/30/2012 1130	96474		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0060	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		105	57-137						

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010C	1	10/30/2012 0812	CDF	10/29/2012 1020	96355		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MS/MSD failure

Client: **Katawba Environmental, Inc.**

Laboratory ID: **NJ26066-002**

Description: **02131-DUP MW1**

Matrix: **Aqueous**

Date Sampled: **10/26/2012 1032**

Date Received: **10/26/2012**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	10/30/2012 0812	CDF	10/29/2012 1020	96355

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0031	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time      Q = Surrogate failure  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      S = MS/MSD failure

Description: **02131-FB**Matrix: **Aqueous**Date Sampled: **10/26/2012 1040**Date Received: **10/26/2012****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/08/2012 1959	JJG		97250

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/08/2012 1959	JHD		13221

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	10/31/2012 1609	JRG	10/29/2012 1258	96382

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
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PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = MS/MSD failure



Description: 02131-FB

Matrix: Aqueous

Date Sampled: 10/26/2012 1040

Date Received: 10/26/2012

## Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	10/31/2012 1609	JRG	10/29/2012 1258	96382

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		88	38-127
Terphenyl-d14		100	10-148

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	11/01/2012 0013	RDR	10/30/2012 1130	96474

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0060	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		101	57-137

## ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	10/30/2012 0815	GDF	10/29/2012 1020	96355

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
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PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time    Q = Surrogate failure  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria    L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"    S = M3/MSD failure

Client: **Katawba Environmental, Inc.**

Laboratory ID: **NJ26066-003**

Description: **02131-FB**

Matrix: **Aqueous**

Date Sampled: **10/26/2012 1040**

Date Received: **10/26/2012**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	3005A	6010C	1	10/30/2012 0815	CDF	10/29/2012 1020	96355			

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	ND		0.010	0.0019	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time      Q = Surrogate failure  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      S = MS/MSD failure

Description: **02131-TB**Matrix: **Aqueous**Date Sampled: **10/26/2012 1041**Date Received: **10/26/2012****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/08/2012 2022	JJG		97250

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/08/2012 2022	JHD		13221

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		95	70-130

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time      Q = Surrogate failure  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria      L = LCS/LCSD failure  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"      S = MS/MSD failure

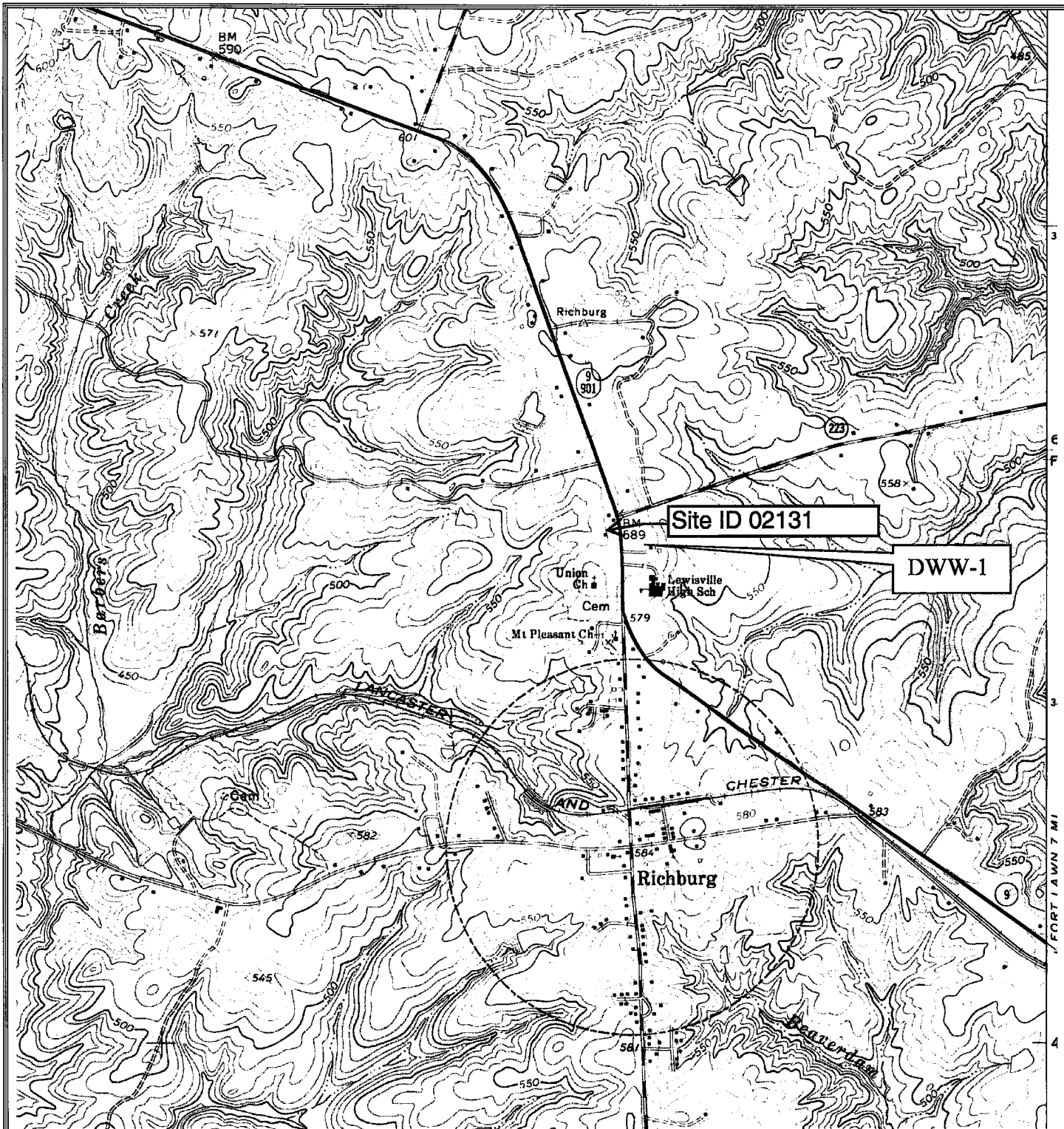
# SHEALY ENVIRONMENTAL SERVICES, INC.

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive  
 West Columbia, South Carolina 29172  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111

**Number 111018**

## Chain of Custody Record

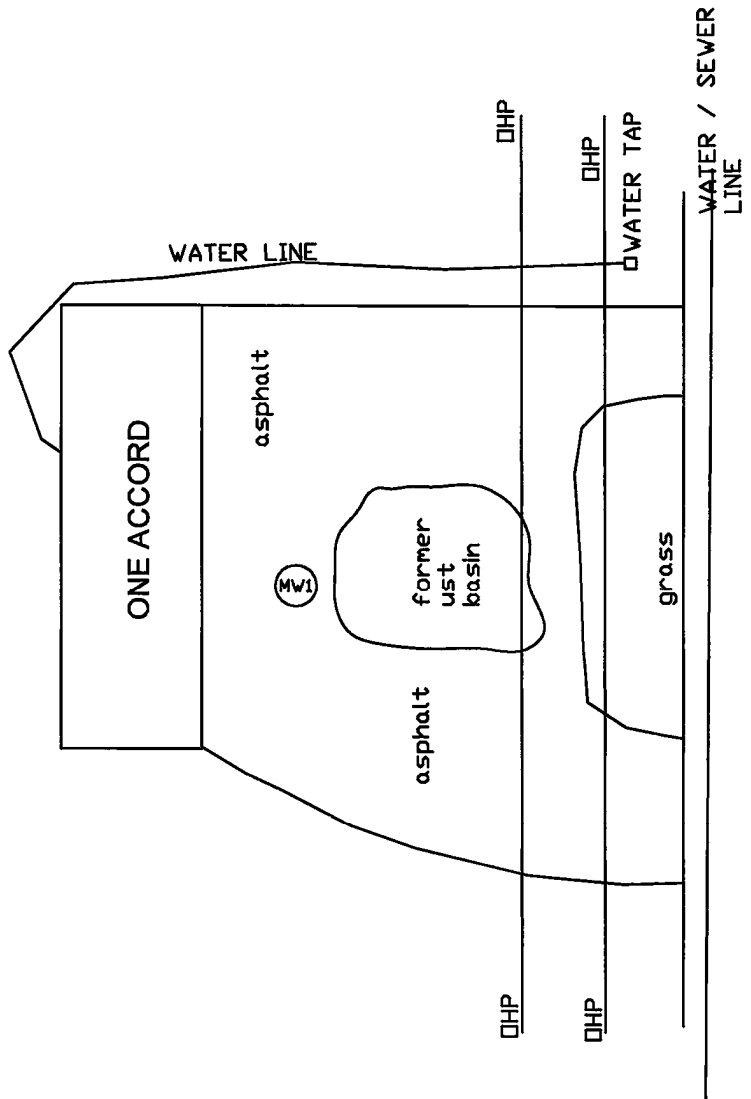
Report to Contract: <b>Ally Acres</b> Sample's Signature: <b>Billy Adams</b> Printed Name: <b>Billy Adams</b>		Telephone No. / Fax No.: <b>803/791-9700 / 803/791-9111</b> Date: <b>10/24/12</b>	
Customer: <b>Metcable</b> Address: <b>41278 Dyer Rd</b> City: <b>Edgewater</b> Project No.: <b>Dye Accord</b>	State: <b>SC</b> Zip Code: <b>29712</b>	Analytical Method: <b>EDIS Lead</b> Method: <b>1254</b> Matrix: <b>Soils</b> Sample ID: <b>1030</b> Sample ID Description: <b>1032</b> Sample ID Description: <b>1040</b> Sample ID Description: <b>1041</b>	
Date of Receipt: <b>10/24/12</b> Date of Release: <b>10/24/12</b>		Date of Analysis: <b>10/24/12</b> Date of Report: <b>10/24/12</b>	
Name of Analytical Lab: <b>Shealy Environmental Services, Inc.</b> Address: <b>106 Vantage Point Drive, West Columbia, SC 29172</b> Phone: <b>(803) 791-9700</b>		Name of Client: <b>Ally Acres</b> Address: <b>41278 Dyer Rd, Edgewater, SC 29712</b> Phone: <b>(803) 791-9700</b>	
Signature of Client Representative: <b>Billy Adams</b> Title: <b>Site Manager</b> Date: <b>10/24/12</b>		Signature of Lab Representative: <b>Mike Chapin</b> Title: <b>Lab Director</b> Date: <b>10/24/12</b>	
Signature of Transporter: <b>Mike Chapin</b> Title: <b>Lab Director</b> Date: <b>10/24/12</b>		Signature of Receiver: <b>Mike Chapin</b> Title: <b>Lab Director</b> Date: <b>10/24/12</b>	



SCALE 1 INCH=1000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803) 327-0469 UCC#18

IGWA  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HIGHWAY  
 RICHBURG, SOUTH CAROLINA  
 FIGURE 1 - SITE LOCATION



SUSPECTED WELL 470 FEET EAST



LEGEND	
	MONITORING WELL LOCATION

KATAWBA ENVIRONMENTAL, INC. 4278 DYE ROAD EDGEMOOR, SC 29712 (803)327-0469 UCC#18	QAPP ONE ACCORD (SITE ID 02131) 3570 LANCASTER HWY, RICHBURG, SC	DATE: JAN 2013
	SITE MAP	FIGURE 2

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on 8 1/2" (12 pitch) typewriter)

**NON-HAZARDOUS WASTE**

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>KATAWHA ENVIRONMENTAL, INC. 4278 DYE ROAD EDGEWOOD, SC 29712</i>		4. Generator's Phone ( )		
5. Transporter 1 Company Name <i>KATAWHA ENVIRONMENTAL</i>	6. US EPA ID Number	A. State Transporter's ID		
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter 1 Phone		
9. Designated Facility Name and Site Address <i>HAL MAR 221 DALTON AVE CHARLOTTE, NC 28204</i>	10. US EPA ID Number	C. State Transporter's ID		
		D. Transporter 2 Phone		
		E. State Facility's ID		
		F. Facility's Phone		

11. WASTE DESCRIPTION	12. Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
a. <i>MAR 6 122, Hwy 9 BENNETTSVILLE, SC</i>	1	Dm	25	GAL
b. <i>ONE ACCORD, HIGHWAY 9, RICHLAND, SC</i>	1	Dm	18	GAL
c. <i>SUPER C, Hwy 278, WILMINGTON, SC</i>	1	Dm	23	GAL
d. <i>601/903, FEAR CREEK RD, LANCASTER, SC</i>	2	Dm	76	GAL
e. <i>Additional Descriptions for Materials Listed Above WARREN SHOPP, HIGHWAY 521, INDIAN LAND, SC</i>	4	Dm	185	GAL
H. Handling Codes for Wastes Listed Above				


15. Special Handling Instructions and Additional Information  
*NO HAZ PUNCH WATER UST SITE*

**16. GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name <i>Billy May</i>	Signature <i>Billy May</i>	Date Month Day Year <i>01/26/12</i>
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date Month Day Year
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name <i>Billy May</i>	Signature <i>Billy May</i>	Date Month Day Year <i>11/26/12</i>
18. Discrepancy Indication Space		
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.		
Printed/Typed Name <i>Mike Hinds</i>	Signature <i>Mike Hinds</i>	Date Month Day Year <i>11/26/12</i>



# SPECIAL WASTE MANIFEST

WASTE ID NUMBER <b>VA1052</b>	<b>Richland Landfill</b> 1047 Highway Church Road Elgin, SC 29045   Special Waste Phone: 803-744-3346 Fax: 866-904-7194
EXPIRATION DATE <b>August 13, 2013</b>	
Prepared by: <b>Shafonte Burrell</b>	
GENERATOR OF WASTE: <b>KATAWBA ENVIRONMENTAL, INC</b>	ACCOUNT NUMBER: <b>820-156</b>
CUSTOMER: <b>EZ PAY - CREDIT CARD ACCT</b>	
LOCATION OF WASTE:	
CITY: <b>EDGEMOOR, SC 29712</b>	COUNTY: <b>CHESTER</b>
PHONE NUMBER: <b>803-417-4568</b>	CONTACT: <b>ALEX AMOS</b>
FAX NUMBER: <b>843-225-1360</b>	
GENERATOR'S SIGNATURE <i>Beth May</i>	DATE: <b>11/21/12</b>
TRANSPORTER OF WAST <i>KATAWBA ENVIRONMENTAL, INC.</i>	
DATE: <b>11-21-12</b>	TRUCK NUMBER: <b>1</b>
DRIVER'S SIGNATURE <i>Beth Morris</i>	
**** TO BE COMPLETED BY RICHLAND LANDFILL*****	
DISPOSAL SITE: <b>RICHLAND LANDFILL ELGIN, SC</b>	Waste Class:
DESCRIPTION OF WASTE <b>SOIL W/VIRGIN PETROLEUM</b>	<b>SOIL 3.26</b>
TICKET NUMBER: <b>12-26418</b>	TONNAGE: <b>3.26</b>
RECEIVED BY: <i>[Signature]</i>	





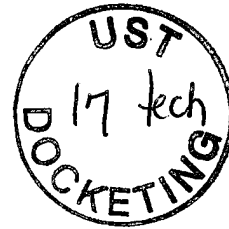
Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

MAR 01 2013

Re: QAPP Contractor Addendum Directive for Tier I  
One Accord Ministries, 3570 Lancaster Highway, SC  
UST Permit #02131  
Release reported March 23, 2009  
IGWA Report received February 8, 2013  
Chester County



Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division has reviewed the referenced report submitted by Katawba Environmental, Inc., on your behalf. The report indicates that groundwater concentrations of benzene, toluene, ethylbenzene, xylenes, methyl tert butyl ether, and are above risk-based screening levels (RBSLs).

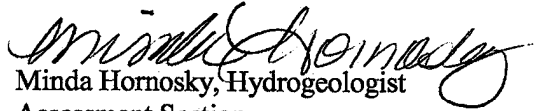
To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, completion of a Tier I Assessment as outlined in the UST Quality Assurance Program Plan (QAPP) is necessary. The Tier I must be conducted in accordance with the UST QAPP and must be conducted in compliance with all applicable regulations once the site specific QAPP Contractor Addendum is approved. A copy of the UST QAPP is available at <http://www.scdhec.gov/environment/lwm/usthome/Qapp.htm>. **Your contractor must complete and submit the QAPP Contractor Addendum within thirty (30) days of the date of this letter.** A cost agreement is not required unless your contractor thinks the total monitoring well footage will exceed 75 feet or there are any water supply wells within 500 feet of this facility. **Please note that approval from the Agency must be issued before work begins.**

According to Division records, the release at the facility was reported to the Agency on March 23, 2009. In accordance with Section 44-2-40(D) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act, you are responsible for the first \$25,000 of site rehabilitation costs. To insure that expenditures for the Tier I apply to the \$25,000 deductible, costs must be preapproved and a cost agreement provided once the site specific QAPP contractor addendum is approved.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

On all correspondence regarding this site, please reference UST Permit #02131. If you have any questions concerning this correspondence, please call at (803) 896-6395. I can also be reached by email at hornosms@dhec.sc.gov or by fax at (803) 896-6245.

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section

Underground Storage Tank Management Division  
Bureau of Land and Waste Management

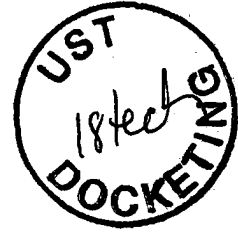
cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
✓ Technical file



# Katawba Environmental, Inc.

March 22, 2013

Ms. Minda Hornosky, Hydrologist  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201



Subject: QAPP Contractor Addendum – Revision 0.0  
One Accord  
3570 Lancaster Highway  
Richburg, SC  
SCDHEC Site ID Number 02131  
Certified Site Rehabilitation Contractor UCC-0018

Dear Ms. Hornosky,

Please find attached the QAPP Contractor Addendum for the referenced site. If you have any question or comments please feel free to contact us at 803-417-4568.

Sincerely,  
**Katawba Environmental**

Alex W. Amos  
Professional Geologist



**Section A: Project Management**

**A1 Title and Approval Page**

Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
One Accord, SCDHEC Site ID# 02131

---

3570 Lancaster Highway, Richburg, South Carolina

---

Prepared by:  
Alex W. Amos  
Professional Geologist  
Katawba Environmental  
(Certified Site Rehabilitation Contractor UCC-0018)  
4278 Dye Road  
Edgemoor, SC 29712  
(803) 417-4568



Date: March 22, 2013

**Approvals**

---

Minda Homosky  
SCDHEC Project Manager

Signature

Date

---

Alex W. Amos, PG  
Site Rehabilitation Contractor  
Katawba Environmental, Inc.

March 22, 2013

---

Billy Morris  
QA/QC Manager  
Katawba Environmental, Inc.

Signature

Date

---

Dan Wright,  
Laboratory Director  
Shealy Environmental Services, Inc.

Signature

March 22, 2013

Date

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### A3 Distribution List

Name	Title	Organization/Address	Telephone	Fax	Email Address
Minda Hornosky	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	hornosms@dhec.sc.gov
Alex W. Amos	Site Rehabilitation Contractor	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-417-4568	843-225-1360	katawba@comporium.net
William Morris	QA Manager	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Dan Wright	Laboratory Director	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
Tommy Bolyard SC# 1846	Well Services/Driller	Environmental Probing and Drilling 15845 Greenhill Road, Charlotte, NC 28278	704-607-7529	704-607-7529	angelrgmt@yahoo.com

**Table 1A Addendum Distribution List**

### A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Minda Hornosky	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	hornosms@dhec.sc.gov
Site Rehabilitation Contractor	Alex W. Amos	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-417-4568	843-225-1360	katawba@comporium.net
QA Manager	William Morris	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Analytical Laboratory Director	Dan Wright	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	dwright@shealylab.com
Soil Boring and Monitoring Well Driller	Tommy Bolyard SC# 1846	Environmental Probing and Drilling 15845 Greenhill Road, Charlotte, NC 28278	704-607-7529	704-607-7529	angelrgmt@yahoo.com
Waste Disposal Fluids	William Morris	Katawba Environmental Inc. 4278 Dye Road Edgemoor, SC 29712	803-327-0469	843-225-1360	katawbaenvironmental@gmail.com
Waste Disposal Solids	Waste Management	Richland County Landfill 1047 Highway Church Rd Elgin, SC 29045	803-788-3054	866-904-7194	Unknown

**Table 2A Addendum Role Identification and Contact Information**

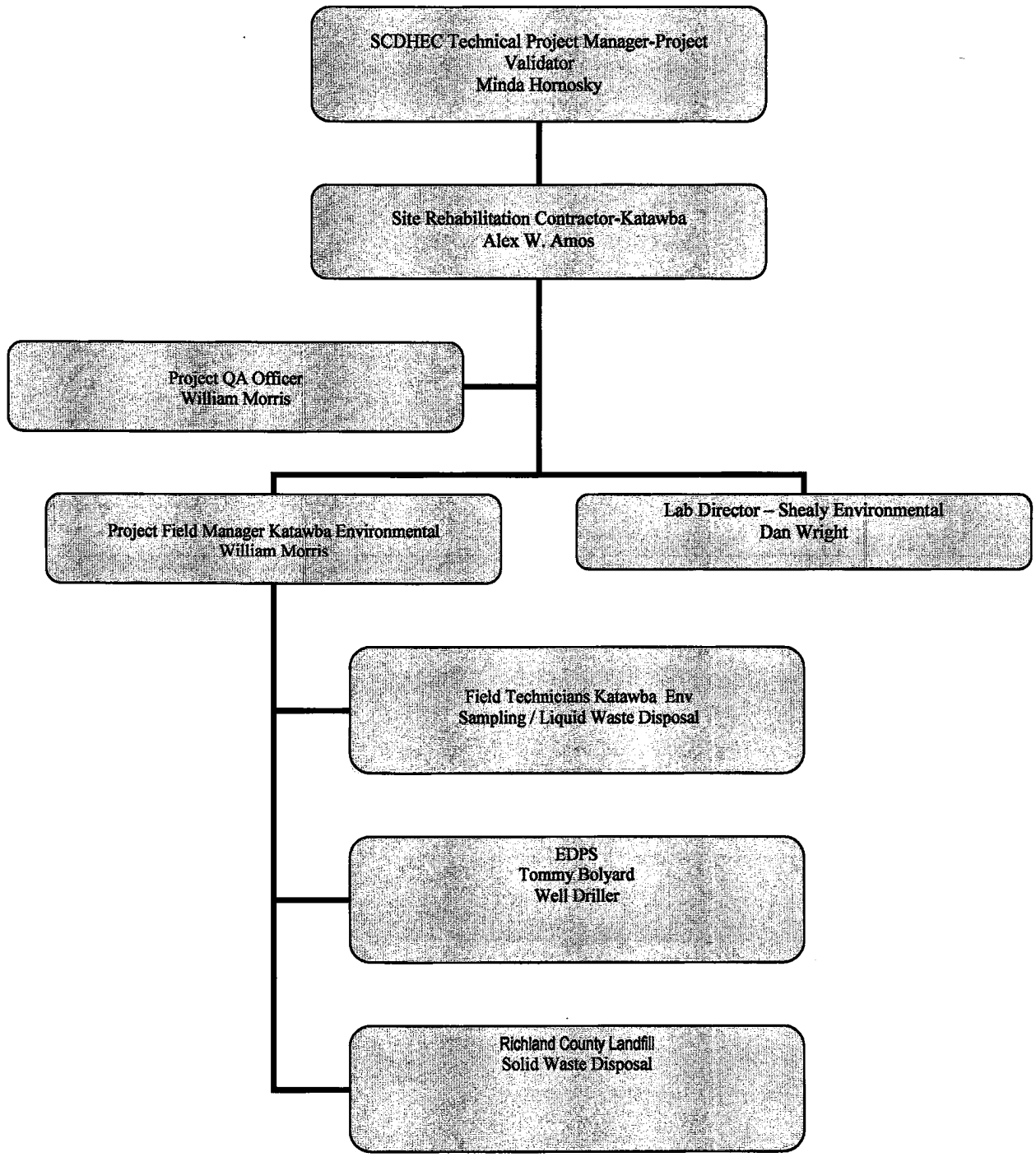


Figure 1A Organizational Chart

Project QA Officer / Verifier: Responsible for project management and coordinating field and office activities needed for assessments or cleanup. In charge of interpreting analytical data received from the analytical laboratory. Project QA Officer / Verifier will receive and interpret data from Field Manager and prepare reports for submittal and review by SCDHEC Project Manager. Responsible for maintaining approved QAPP. Project QA Officer is responsible for conducting site audits.

Project Field Manager: Responsible for coordination of field sampling activities. Insures compliance of field activities with the site specific QAPP. The Project Field Manager submits field data to Project QA Officer / Verifier for review.

Project Field Technicians: Responsible for sampling of monitoring wells and recording field data. The field technicians are responsible for proper disposal of purge water and drilling waste. All decontamination of field instruments will be conducted by field technicians. Clearing and recording the location of all underground utilities is the responsibility of the field technicians.

Well Driller: The well driller is responsible for installing all monitoring wells. Well logs will be completed in the field and 1903s will be signed by a certified well driller. Well driller will be responsible for installing all well tags in monitoring wells.

Analytical Laboratory: The Analytical Laboratory receives the soil and water samples from the site rehabilitation contractor, performs the requested analyses, and provides analytical reports. Analytical laboratory submits data to Project QA Officer / Verifier for review and inclusion to sampling report.

Surveying: Surveyor responsible for establishing a site benchmark. Project surveyor surveys in the elevation of the top of each well riser with respect to established site benchmark. Buildings, paved portions of the site, roads, receptors, utilities and underground storage tank components are plotted on the site map.



## **A5 Problem Definition/Background**

***Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.***

The subject site (One Accord) is located at 3570 Lancaster Hwy., Richburg, Chester County, South Carolina. The subject site does not currently maintain any registered USTs.

The subject site currently has one petroleum hydrocarbon release. Release #1 was reported in March 2009. An IGWA Report was received in February 2013. The site is being sampled in conjunction with QUAPP Contractor Addendum Directive dated March 1, 2013.

***Please answer the following: Does this project fall under UST or Brownfields area?***

Underground Storage Tank Division

## A6 Project/Task Description

- 1. Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).**

The subject site (One Accord) is located at 3570 Lancaster Hwy., Richburg, Chester County, South Carolina will be sampled in conjunction with the SCDHEC QUAPP Contractor Addendum Directive. A Tier I Addendum will be conducted. During assessment activities, it is proposed that three additional wells be installed into the monitoring well network. A report of the findings will be reported in Tier I report format.

The first task conducted for the Tier I will be utility clearance for the entire work area. All utility lines will be documented for incorporation into site maps. A Geoprobe Rig with auger capabilities will be mobilized to the site to install the field screen borings. 5 shallow soil borings will be installed in the former area of the lines at a maximum depth of 10 feet. Two deeper borings will be installed in the former UST basin to a depth of 25 feet or to the top of the aquifer (lesser of the two). One additional background boring will be installed in an area greater than 30 feet from the UST system. The background boring will be installed to a depth of 25 feet or to the top of the aquifer (lesser of the two). The locations of the three wells will be based on the findings of the field screen borings. One well will be placed in the location of the background boring, one well will be placed at the highest concentration field screen boring and the last well will be placed in a location so that groundwater flow direction can be determined. Please refer to Katawba Environmental Monitoring Well Installation Protocol for a complete description of well installation procedures.

Monitoring wells installed will be marked, surveyed and mapped by the project surveyor. All previously installed monitoring wells in addition to wells currently installed will be gauged and sampled for petroleum hydrocarbon constituents. Please see Katawba Environmental Sampling SOP for a complete description of well sampling procedures. A drinking water well survey and receptor survey will be conducted for this scope of work. All drinking water wells within 1000 feet of the release point will be sampled and analyzed for petroleum hydrocarbon constituents. Drinking water wells and receptors will be included on the site map located in the figures section of the Tier I Report.

Once the data has been derived from the field technicians it will be reviewed by the QA Officer / Verifier. Based on analytical results all drilling fluids and soil will be removed from the site and disposed of at a proper facility. Site surveyor will submit drawings to QA Officer / Verifier for review. All project data will be reviewed and incorporated into Tier I format and submitted to SCDHEC Project Manager for review.

- 2. The work will begin within fourteen (14) days of receipt of approved QAPP contractors addendum after cost approval and sampling should be complete by sixty (60) days of receipt of approved QAPP contractors addendum.**
- 3. Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.**

Factors that may prevent schedule work will be, but not limited to current work load, weather conditions, equipment malfunction, and machine failure.

## A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)

The subject site is located at 3570 Lancaster Hwy., Richburg, Chester County, South Carolina. The site is currently used as a church activities center. A detailed map is included as Figure 2.

## A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Alex Amos, P.G.	Professional Geologist		State of South Carolina	2434
		OSHA 40 hr HAZWOPER	1993	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2013	N/A	N/A
Project Scientist	William Morris	OSHA 40 hr HAZWOPER	2001	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2013	N/A	N/A
Field Technician	Billy May	OSHA 40 hr HAZWOPER	2004	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	1/2013	N/A	N/A
Well Driller	Tommy Bolyard	SC Well Driller	6/11/12	State of South Carolina	1846
Lab Manager	Dan Wright	***	***	Lab Certification	SC 32010

Table 3A Required Training and Licenses

Alex Amos of Katawba Environmental is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location: 4278 Dye Road, Edgemoor, SC 29712

**It is understood that training records will be produced if requested by SC DHEC.**

The Following Laboratory will be used for this Project:

### Commercial Lab(s)

Full Name of the Laboratory Shealy Environmental Services, Inc.

Name of Lab Director Dan Wright

SC DHEC Certification Number 32010

Parameters this Lab will analyze for this project:

Groundwater: BTEX, Napth, MTBE, 1,2-DCA, Ethanol and 8 Oxygenates(EPA Method 8260-B), PAH (EPA Method 8270) Total and dissolved Lead (EPA Method 6010), EDB (EPA Method 8011)

Soil BTEX, Napth, MTBE, 1,2-DCA, Ethanol and 8 Oxygenates(EPA Method 8260-B), PAH (EPA Method 8270) Total Lead (EPA Method 6010) The background soil sample will be analyzed for TOC. The highest concentration sample will be analyzed for TPH GRO.

**Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.**

## A9 Documents and Records

**Personnel will receive the most current version of the QAPP Addendum via Check all that apply)**

US Mail     Courier     Hand delivered

Other (please specify): E-mailed electronic copies

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
QAPP Addendum	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Internal QC record	Alex W. Amos	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Sampling Report	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Correspondence	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Well Logs	Tommy Bolyard	Hardcopy	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Invoicing	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Manifests	Field Staff	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Sampling Logs	Field Staff	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Figures	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes
Disposal Manifests	Alex W. Amos	Hardcopy & Electronic	KEI Office : 4278 Dye Road/ Min. 5 years	Yes

**Table 4A Record Identification, Storage, and Disposal**

## Section B Measurement/Data Acquisition

### B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance			NA
QAPP preparation	3/22/13	3/22/13	In progress
QAPP approval	3/28/13	4/28/13	Assuming 30 day turnaround
Well Drilling	5/15/13	5/16/13	
Monitoring well Sampling	5/18/13	5/19/13	Sampled within 2 weeks of well installation
Report Preparation	6/9/13	6/12/13	Three weeks to prepare/submit report
<b>Please note: Start date and End dates are tentative</b>			

Table 5A Sampling Activities

### B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

**Estimate the number of samples of each matrix that are expected to be collected:**

Soil	_____9_____
Ground Water from monitoring wells	_____4_____
From Drinking/Irrigation water wells	_____0_____
Field Duplicate Collection Water	_____1_____
Field Blank Collection Water	_____1_____
Trip Blank Water	_____1_____
From surface water features	_____0_____
Total number of Water samples	_____7_____
Total number of Soil samples	_____9_____
Soil sample	_____8_____
Field Blank soil	_____
Field Duplicate Collection soil	_____1_____

Trip Blank soil \_\_\_\_\_

Field Screen Samples \_\_\_\_\_

The samples will be (check as many as apply):   X   GRAB

Notes:

Please refer to Katawba Environmental Well Installation SOP for further details. All monitoring wells and water supply well samples will be analyzed by Shealy Environmental for petroleum based constituents. As directed, if any monitoring well exhibits free phase petroleum product, a sample will be collected beneath the product layer.

**For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.**

Grab samples will be collected using a disposable bailer. Samples will not be homogenized or split.

**Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?**

All equipment, excluding electronic water level indicators, field probes and drilling equipment is disposable. Refer to Katawba Environmental Decontamination SOP for procedures.

**If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.**

Please see Katawba Environmental Decontamination SOP for decontamination procedures.

**Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.**

All samples will be shipped to the lab via Shealy Environmental Staff. Drilling will be done with a Canterra Auger Rig under the supervision SCCWD Tommy Bolyard 1846.

**Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.**

Failure	Response	Documentation	Individual Responsible
Water level indicator not working properly	Attempt to clean probe, change battery, use back-up indicator if need be.	Record on field sheets, notify office staff. Take indicator out of rotation until problem identified and corrected.	Field Staff, Field Manager
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
Wells not located	Use metal detector, measure from known points, contact project manager for additional information.	Record method used to attempt to locate the well on field sheets, and possibly reasoning for the well to be missing	Field Staff
Drill rig non operational	Refer to operational manual	Record working condition in Field log book	Field Staff, Well Driller

Refusal during drilling	Contact SCDHEC Project Manager	Record in Field log book	Field Staff, Well Driller
Destruction of Utilities during drilling	Contact the appropriate utility company	Record in Field log book	Field Staff, Well Driller

Table 6A Field Corrective Action

### B3 Sample Handling and Custody

**1. How will the samples get from the Site to the Lab to ensure holding requirements are met?**

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the Katawba office. Samples are transported to the Katawba office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the Katawba offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the Katawba office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

**2. How will the contractors cool the samples and keep the samples cool?**

All samples are kept on wet ice, obtained from Katawba office.

**3. How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?**

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

**4. Where will the samples be stored in the Lab once they are received?**

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or – 2 degrees. Volatile organic samples are stored separately from all other samples.

**5. Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.**

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by Katawba and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly



## B4 Analytical Methods

1. Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygenates	S-VO-002	8260B / 8260 OXY	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead, T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	Katawba SOP	*	HANNAH INSTRUMENTS HI 991001	08366812 & 08369830
Conductivity	Katawba SOP	*	YSI PRO 2030	11G100871
Dissolved Oxygen	Katawba SOP	*	YSI PRO 2030	11G100871
Temperature	Katawba SOP	*	HANNA INSTRUMENTS HI 991001	08366812 & 08369830

Table 7A Analytical SOPs and Referenced Methods

- This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A
S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
KATAWBA SOP	KATAWBA SOP	Sampling Standard operating procedures

Table 8A SOP Abbreviation Key

2. Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry <a href="mailto:kmaberry@shealylab.com">kmaberry@shealylab.com</a>
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Dan Wright <a href="mailto:dwright@shealylab.com">dwright@shealylab.com</a>
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Dan Wright <a href="mailto:dwright@shealylab.com">dwright@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:jsavje@shealylab.com">jsavje@shealylab.com</a>
On time delivery	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Dan Wright <a href="mailto:dwright@shealylab.com">dwright@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:jsavje@shealylab.com">jsavje@shealylab.com</a>

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE +Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Nitrate, Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-	

			Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

**Table 10A Disposal Procedures**

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

**B5 Quality Control Requirements:**

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

**B6 Field Instrument and Equipment Testing, Inspection and Maintenance**

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	Unknown	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatile Mass Specc	Unknown	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	Unknown	Injection port maintenance, column replacement	Periodic	Laboratory	GC Analyst
Dionex IC	Unknown	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	Unknown	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	Unknown	Clean GLS, Change Pump tubing, Nafion	Periodic	Laboratory	Mercury Analyst

		Dryer, Lamp			
Flow Injection Analysis – Lachat 8000	Unknown	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI PRO 2030 DO, Cond, Temp	11G100871	Replace probe tip	Yearly	Order from YSI	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	Replace batteries	As Needed	In stock at office	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI PRO 2030 DO, Cond, Temp	11G100871	Check buffer solutions for expiration	Weekly	In stock at office	Field Staff
HANNAH INSTRUMENTS HI 991001 Ph and Temperature Meter	08366812 & 08369830	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
HANNAH INSTRUMENTS HI 93414 Turbidity Meter	08562311	Check buffer solutions for expiration	Weekly	In stock at office	Field Staff
Solinst Electronic Water Level Indicator	Unknown	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff
Solinst Oil/Water Interface probe	Unknown	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff
Canterra Drill Rig	Unknown	Change oil, decontaminate	As needed	Drillers Office	Well Driller

Table 11A Instrument and Equipment Maintenance

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented.

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC	Daily calibration check	Method Requirements	Nitrate Analyst	Recalibration or instrument

				maintenance
ICP	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000	Daily and continuing calibration check	See calibration criteria	INM Analyst	Recalibration or instrument maintenance
YSI PRO 2030 11G100871	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
Hanna Instruments HI 991001 08366812 & 08369830	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
HANNAH INSTRUMENTS HI 93414 Turbidity Meter 08562311	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
Canterra Drill Rig	Daily function check	Unknown	Well Driller	Ship off for service

Table 12A Instrument and Equipment Inspection

## B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.

Please refer to Katawba Environmental Sampling SOP for calibration instructions.

2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.

Please refer to Katawba Environmental Sampling SOP for calibration instructions.

3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass	Minimum of 5	When indicated by	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Spec	calibration standards for all compounds	continuous calibration verification standard				
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042
HANNA INSTRUMENTS HI 991001 08366812 & 08369830	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
HANNAH INSTRUMENTS HI 93414 08562311	Turbidity Meter	Daily	+/- 10 %	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
YSI PRO 2030 11G100871	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	Katawba SOP
Electronic	Checked vs.	Monthly	+/- 0.01 foot per	Replace probe	Field Staff	***

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Water Level Indicator	Standard		10 foot length	tape		
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

\* This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

## B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher, VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
40 mL HCL preserved amber vials	Shealy Environmental Analytical	Custody seal intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
250 mL HNO3 preserved metals vials	Shealy Environmental Analytical	Custody seal intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
Coolers	Shealy Environmental Analytical	Intact	Stored in Vehicle Bay, Off of the ground	Alex Amos, Field Staff
pH Buffer	YSI	Within expiration date	Stored in calibration room	Alex Amos, Field Staff
Conductivity Standard	YSI	Within expiration date	Stored in calibration room	Alex Amos, Field Staff
DO Membranes	YSI	Clean, in box	Stored in	Alex Amos, Field Staff

			calibration room	
Batteries	Any Store	Not previously used	Stored in calibration room	Alex Amos, Field Staff

**Table 14A List of Consumables and Acceptance Criteria**

### **B9 Data Acquisition Requirements (Non-Direct Measurements)**

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Katawba Environmental IGWA 3/13	Location of well(s), historical analytical data	Previously verified by project verifier	

**Table 15A Non-Direct Measurements**

4. Identify key resources/support facilities needed.

There are no non-direct measurements in this project

### **B10 Data Management**

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the Katawba project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in Katawba files for a minimum of 5 years. Digital copies of the work are stored on the Katawba server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.



All Katawba field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. Katawba keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures.”

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

Katawba keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the Katawba server. This server is backed-up on a weekly basis. Any file stored on the Katawba server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.

## **Section C Assessment and Oversight**

### **C1 Assessment and Response Actions**

1. *The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. Katawba field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager. The laboratory director has the authority to stop work if problems found are severe.

- 2. The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

**The Laboratory Manager has the authority to stop work if problems are severe.**

The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

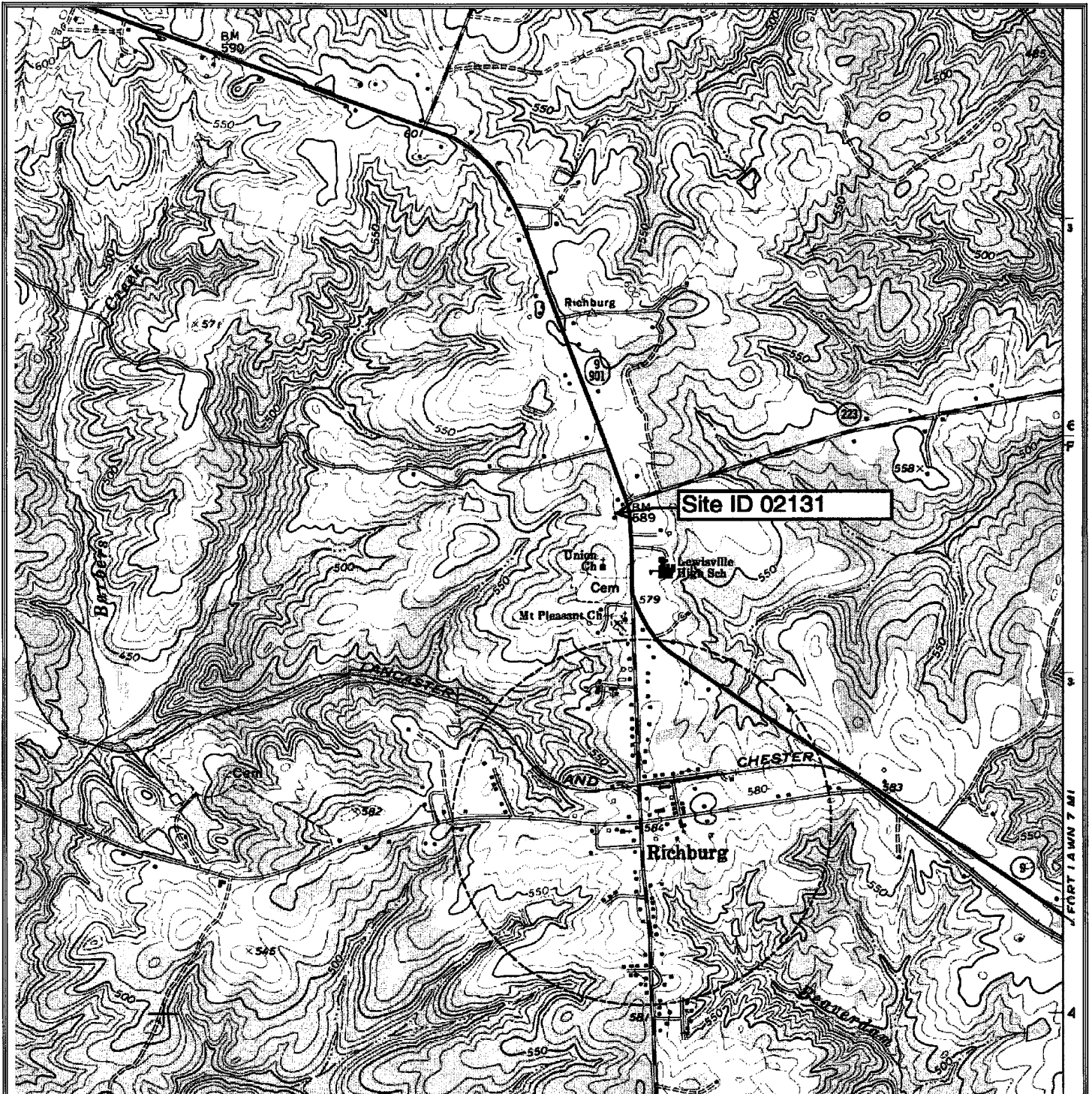
### **C2 Reports to Management**

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

## **Section D Data Validation and Usability**

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

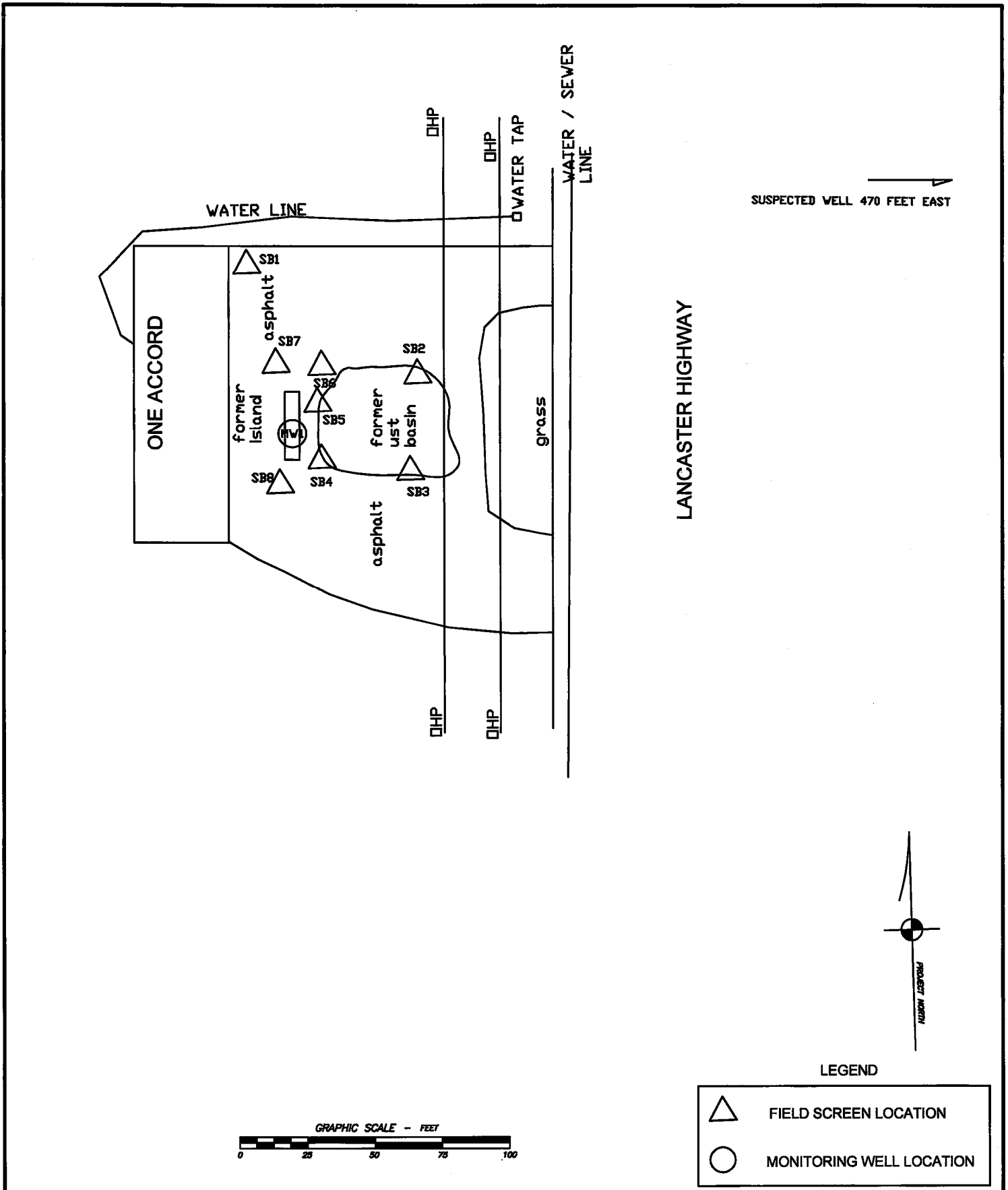
## Appendix A1 - Figures



SCALE INCH = 1000 FT

**KATAWBA ENVIRONMENTAL, INC.**  
4278 DYE ROAD  
EDGEMOOR, SC 29712  
(803) 327-0469

**QAPP**  
ONE ACCORD, SITE ID 02131  
3570 LANCASTER Hwy., RICHBURG, SC  
FIGURE 1 - SITE LOCATION



<b>KATAWBA ENVIRONMENTAL, INC.</b> 4278 DYE ROAD EDGEMOOR, SC 29712 (803)327-0469 UCC#18	<b>QAPP</b> <b>ONE ACCORD (SITE ID 02131)</b> <b>3570 LANCASTER HWY, RICHBURG, SC</b>	<b>DATE: JAN 2013</b>
	<b>SITE MAP</b>	<b>FIGURE 2</b>

**Appendix A2 – SCDHEC Cost Agreement**



**ASSESSMENT COMPONENT COST AGREEMENT  
SOUTH CAROLINA**

Department of Health and Environmental Control  
Underground Storage Tank Management Division  
State Underground Petroleum Environmental Response Bank Account

One Accord

UST Permit #: 02131

Cost Agreement #: \_\_\_\_\_

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan*</b>				
B. Tax Map		x	\$50.00	\$0.00
C. Tier II or Comp. Plan /QAPP Appendix B		x	\$525.00	\$0.00
<b>2. Receptor Survey *</b>				
		x	\$500.00	\$0.00
<b>3. Survey (500 x 500 feet)</b>				
A. Comprehensive Survey		x	\$1,000.00	\$0.00
B. Subsurface Geophysical Survey				
1. < 10 meters below grade		x	\$2,750.00	\$0.00
2. > 10 meters below grade		x	\$3,250.00	\$0.00
C. Geophysical UST or Drum Survey		x	\$1,125.00	\$0.00
<b>4. Mob/Demob (Each)</b>				
A. Equipment		x	\$575.00	\$0.00
B. Personnel		x	\$290.00	\$0.00
C. Adverse Terrain Vehicle to install wells		x	\$575.00	\$0.00
<b>5. Soil Borings (hand auger)* (Feet)</b>				
		feet x	\$14.00	\$0.00
<b>6. Soil Borings (drilled) &amp; Field Screening *</b>				
Rate includes collection of water sample or soil sample, and lab or other analyses				
A. Standard		feet x	\$17.00	\$0.00
C. Fractured Rock		feet x	\$27.50	\$0.00
<b>7. Soil Leachability Model (Each)</b>				
		each x	\$200.00	\$0.00
<b>8. Abandonment* (per foot)</b>				
A. 2" diameter or less		feet x	\$5.00	\$0.00
B. Greater than 2" to 6" diameter		feet x	\$5.50	\$0.00
C. Dug/Bored well (up to 6 foot diameter)		feet x	\$18.00	\$0.00
<b>9. Well Installation* (per foot)</b>				
A. Water Table (hand augered)		feet x	\$20.00	\$0.00
B. Water Table (drill rig)	12	feet x	\$38.00	\$456.00
C. Telescoping/ Pit Cased		feet x	\$58.00	\$0.00
D. Rock Drilling		feet x	\$58.00	\$0.00
E. 2" Rock Coring		feet x	\$45.00	\$0.00
G. Rock Multi-sampling ports/screens		feet x	\$47.20	\$0.00
H. Recovery Well (4 inch diameter)		each x	\$45.00	\$0.00
I. Pushed Pre-packed screen (1.25 diameter)		each x	\$18.50	\$0.00
J. Rotasonic (2 inch diameter)		each x	\$45.00	\$0.00
<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product (Each)</b>				
A. Groundwater Purge		wells x	\$55.00	\$0.00
B. Air or Vapors		samples x	\$90.00	\$0.00
C. Water Supply	1	samples x	\$30.00	\$30.00
D. Groundwater No Purge or Duplicate	1	samples x	\$35.00	\$35.00
E. Gauge Well only		per well x	\$20.00	\$0.00
F. Sample Below Product		wells x	\$50.00	\$0.00
G. Pasive Diffusion Bag		each x	\$40.00	\$0.00
H. Field Blank		each x	\$5.00	\$0.00

<b>11. Laboratory Analyses-Groundwater (Each Sample)</b>					
A1. BTEX+Naphth.+ Oxyg's+ 1,2 DCA + Ethanol	2	samples x	\$100.00		\$200.00
AA. Lead, Filtered		samples x	\$46.00		\$0.00
B1. Rush EPA Method 8260B (All of item A.)		samples x	\$143.00		\$0.00
C1. Trimethyl, Butyl, and Isopropyl Benzenes		samples x	\$40.00		\$0.00
D. PAH's	1	samples x	\$120.00		\$120.00
E. Lead, Unfiltered		samples x	\$20.00		\$0.00
F. EDB by EPA 8011	2	samples x	\$55.00		\$110.00
FF. EDB by EPA Method 8011 Rush		samples x	\$75.00		\$0.00
G. 8 RCRA Metals		samples x	\$140.00		\$0.00
H. TPH (9070)		samples x	\$55.00		\$0.00
I. pH		samples x	\$10.00		\$0.00
J. BOD		samples x	\$40.00		\$0.00
P1. Ethanol		samples x	\$21.50		\$0.00
<b>11. Analyses-Soil (Each Sample)</b>					
Q. BTEX + Naphth.		samples x	\$100.00		\$0.00
R. PAH's		samples x	\$120.00		\$0.00
S. 8 RCRA Metals		samples x	\$150.00		\$0.00
T. Oil & Grease (9071)		samples x	\$60.00		\$0.00
U. TPH-DRO (3550B/8015B)		samples x	\$65.00		\$0.00
V. TPH- GRO (5030B/8015B)		samples x	\$65.00		\$0.00
W. Grain size/hydrometer		samples x	\$99.00		\$0.00
X. Total Organic Carbon		samples x	\$35.00		\$0.00
<b>11. Analyses-Air (Each Sample)</b>					
Y. BTEX + Naphthalene		samples x	\$247.50		\$0.00
<b>11. Analyses-Free Phase Product (Each Sample)</b>					
Z. Hydrocarbon Fuel Identification		samples x	\$620.00		\$0.00
<b>12. Aquifer Characterization*</b>					
A. Pumping Test		hours x	\$120.00		\$0.00
B. Slug Test*		tests x	\$150.00		\$0.00
C. Fractured Rock		tests x	\$500.00		\$0.00
<b>13. Free Product Recovery Rate Test* (Each)</b>					
		tests x	\$120.00		\$0.00
<b>14. Fate/Transport Modeling</b>					
A. Mathematical Model		each x	\$300.00		\$0.00
B. Computer Model		each x	\$500.00		\$0.00
<b>15. Risk Evaluation</b>					
A. Tier I Risk Evaluation		x	\$300.00		\$0.00
B. Tier II Risk Evaluation		x	\$500.00		\$0.00
<b>16. Subsequent Survey*</b>					
		x	\$300.00		\$0.00
<b>17. Disposal* (gallons or tons)</b>					
A. Wastewater		gallons x	\$0.80		\$0.00
B1. Free Product		gallons x	\$0.85		\$0.00
C. Soil Treatment/Disposal		tons x	\$72.50		\$0.00
D. Drilling fluids		gallons x	\$0.80		\$0.00
<b>18. Miscellaneous (attach receipts)</b>					
		x			\$0.00
		x			\$0.00
		x			\$0.00
<b>20. Tier I Assessment (Use DHEC 3665 form)</b>	1	x	\$11,230.00		\$11,230.00
<b>21. IGWA (Use DHEC 3666 form)</b>		x			\$0.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>		x			\$0.00



<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>					
A. 8-hour Event*		each	x	\$3,000.00	\$0.00
B. AFVR per-hour Continuance		per hour	x	\$204.00	\$0.00
C. Off-gas treatment per-hour Continuance		per hour	x	\$35.00	\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>					
A. New GAC System Installation*		each	x	\$2,500.00	\$0.00
B1. Refurbished GAC Sys. Install*		each	x	\$1,180.00	\$0.00
C. Filter replacement/removal*		each	x	\$450.00	\$0.00
D1. GAC System removal, cleaning, & refurbishment*		each	x	\$720.00	\$0.00
E. GAC System housing		each	x	\$450.00	\$0.00
F. In-line particulate filter		each	x	\$150.00	\$0.00
G. Additional piping & fittings		feet	x	\$4.00	\$0.00
<b>25. Well Repair</b>					
A. Additional Copies of the Report Delivered		each	x	\$32.50	\$0.00
B. Repair 2x2 MW pad		each	x	\$100.00	\$0.00
C. Repair 4x4 MW pad		each	x	\$150.00	\$0.00
D. Repair well vault		each	x	\$225.00	\$0.00
F. Replace well cover bolts		each	x	\$10.00	\$0.00
G. Replace locking well cap & lock		each	x	\$15.00	\$0.00
H. Replace/Repair stick-up		each	x	\$137.50	\$0.00
I. Convert Flush-mount to Stick-up		each	x	\$175.00	\$0.00
J. Convert Stick-up to Flush-mount		each	x	\$125.00	\$0.00
K. Replace missing/illegible well ID plate		each	x	\$22.50	\$0.00
<b>Report Prep &amp; Project Management</b>	0%		x	\$12,181.00	\$0.00
<b>TOTAL</b>					<b>\$12,181.00</b>

\*The appropriate mobilization cost can be added to complete these tasks, as necessary

**Appendix A3 – Chain of Custody Record**



Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number

Form containing fields for Client, Address, Project Name, Matrix, No. of Containers by Preservation Type, and a table for sample tracking. Includes sections for Hazard Identification, Sample Disposal, and Turn Around Time.

**Appendix A4 – Katawba Environmental Sample SOP**

## **KATAWBA ENVIRONMENTAL SAMPLING SOP**

### **Water Level Measurements**

All non-disposable sampling equipment will be decontaminated and cleaned with a phosphate free laboratory detergent (alconox) water mixture removing dirt, scale and dissolved solids that may be present. Previously cleaned sampling equipment will be wrapped in plastic or foil and stored in decontaminated storage bins for delivery to the job site. Devices used to measure groundwater levels will be calibrated to 0.01 foot per 10 feet length. Before each use the water level indicator will be checked for obvious damage. These devices will be decontaminated according to the procedures specified Decontamination Procedures prior to use at the next well. All calibration and maintenance data will be recorded in a log book.

Water level measurements will be conducted with an electronic water level indicator prior to sampling. Once the water level is recorded a total depth of well reading will be recorded with an electronic water level indicator. Total well depth and groundwater level measurements will be used to determine the volume of water in the well casing prior to purging the well for sampling purposes. Water levels at the job site will be recorded to the nearest 0.01 foot. Wells that contain free product will be measured with an electronic oil/water interface probe. Measurements made will be recorded to the nearest 0.01 foot. Water level measuring equipment will be decontaminated between each well measurement.

### **Monitoring Well Purging**

Purging will be conducted from the least contaminated well to the most contaminated well. Prior to handling any purging or sampling equipment, clean disposable, powderless nitrile gloves will be worn. In order to determine when a well has been adequately purged, Katawba Environmental will: 1) monitor the pH, specific conductance, temperature, turbidity and dissolved oxygen of the groundwater removed during purging; and/or 2) observe and record the volume of water removed.

The depth of water and depth of the well will be determined before purging. The top of casing will be marked as a point of reference where the water level measurement is consistently made. Prior to initiating the purge, the amount of water standing in the water column will be determined. The water level will be subtracted from the total depth, providing the length of the water column. The volume to be removed will be determined using the using a casing volume per foot factor for the appropriate diameter well.

For wells that require purging of three or more volumes an adequate purge is achieved when the pH, specific conductance, and temperature of the groundwater have stabilized and the turbidity has either stabilized or is below 10 Nephelometric Turbidity Units (NTUs). Stabilization occurs when pH measurements remain constant within 0.1 Standard Unit (SU), or reproducible to within 0.1 (SU), specific conductance varies no more that 10 percent, and the temperature are all-constant for at least three consecutive readings.

If, after three well volumes have been removed, the chemical parameters have not stabilized according to the above criteria, additional well volumes will be removed. If the parameters have not stabilized within five volumes, it is at the discretion of Katawba Environmental project leader whether or not to collect a sample or to continue purging. The conditions of sampling will be

noted in the field log. If a well has not purged to dryness, samples will be collected immediately after purging the well.

In some situations, even with slow purge rates, a well may be pumped or bailed dry (evacuated). In these situations, dryness generally constitutes an adequate purge and the well should be sampled immediately following sufficient recovery (enough volume to allow filling of all sample containers). For wells that are purged to dryness the pH, specific conductance, temperature, and turbidity will be measured, during collection of the sample from the recovered volume as the measurements of record for the sampling event.

Deep wells will be purged with a submersible turbine pump. The decontaminated pump will be lowered into the water column and purged at a rate that does not cause recharge water to be excessively agitated. No more than three to five feet of hose be lowered into the water column. If the recovery rate of the well is faster than the pumping rate, and no observable draw down occurs, the pump will be raised until the intake is within one foot of the top of the water column for the duration of purging. If the pump rate exceeds the recovery rate of the well, the pump will have to be lowered, as needed, to accommodate the draw down. After the pump is removed from the well, all wetted portions of the hose and the pump will be decontaminated.

Shallow wells will be purged utilizing a new disposable bailer attached to a new colorless nylon rope and slowly lowered into the top of the water column, allowed to fill, and slowly removed.

New plastic sheeting will be placed on the ground surface around the well casing to prevent contamination of the pumps, hoses, ropes, etc., in the event they need to be placed on the ground during the purging or they accidentally come into contact with the ground surface. Sample bottles, pH meters, conductivity meters, and associated field equipment will be placed on plastic to prevent contact with the ground surface. The sampler will not step on the plastic sheeting.

### **Purge Water Management**

Purge water will either discarded approximately 20 feet downgradient of the well or contained and managed as investigation derived waste, depending on contaminant levels in the water to be determined on a site specific basis.

### **Sampling**

New plastic sheeting will be placed on the ground around each well to provide a clean working area. The colorless nylon rope will be attached to the bailer. The bailer will be gently immersed in the top of the water column until just filled. The bailer will then be carefully removed and the contents emptied into the appropriate sample containers.

Immediately following purging, samples will be collected for laboratory analysis. Samples collected for trace organic compounds will be collected at a rate slow enough to eliminate generation of excessive bubbles and aeration of the water as it enters the bottle.

### Direct Push Sampling

Direct push sampling may be used when an investigation centers around constituents that are not affected by sample turbidity. Direct push sampling will not be used for sampling of metals or PCBs. Groundwater will be collected with a vacuum pump. All direct push well screens will be cleaned in accordance with Katawba Environmental decontamination procedures between sample locations and before usage. For vacuum pump sampling, new tubing will be used at each sample location.

### No Purge Sampling

Based on prior approval by the Department certain wells will be sampled without purging. Wells that may be approved for no-purge sampling will meet the following criteria.

- The water level in the well is within the screened interval;
- The primary chemicals of concern are petroleum chemicals;
- There is no non-aqueous phase liquid present; and,
- The well has been previously sampled within the past 12 months.

Prior to sample collection, the water level will be gauged and recorded to ensure that it is within the screened interval and no free-phase product exists. Indicator parameters to be measured in the field should be measured after sample collection.

### Sample Preservation

Immediately after collection, all samples requiring preservation will be preserved with the appropriate preservative, unless the laboratory has already placed the preservative in the sample bottles. Samples requiring cooling will be placed on ice immediately after collection.

### **Special Sample Collection Procedures**

#### Volatile Organic Compounds and Metals

VOC samples will be collected first. The VOC samples will be collected so that no air bubbles remain in the sample container. These samples will be collected by slowly pouring the sample contents into the vial until a convex meniscus is seen on the surface of the vial. A Teflon lined septum cap will be carefully placed on the vial until finger tight. The sample bottle should then be inverted to verify that no air bubbles have been trapped inside.

#### **Specific Sampling Equipment Quality Assurance Techniques:**

All equipment used to collect groundwater samples will be cleaned as outlined in the Katawba Environmental Decontamination SOP and repaired, if necessary, before being stored at the conclusion of field studies. Cleaning procedures utilized in the field or field repairs shall be thoroughly documented in field records.

### Field Documentation:

During groundwater sample collection water level well volume, pumping rates, turbidity and well depth information will be documented in field records. Miscellaneous information that will be included in the field notes include, but is not limited to, the weather conditions, type of equipment used for purging and sampling, time of sample collection, and any problems with the monitoring well casing, pad, lock and other problems at the location of the well such as overgrown vegetation.

### **Sample Handling & Custody**

Chain of Custody Forms will contain, at minimum, the following information:

1. Collection date and time for each sample.
2. Printed name and Signature of sample collector(s).
3. Unique sample identification number. One sample will be entered on each line or column and a sample should not be split among multiple lines or columns.
4. Sampling location and description (if necessary).
5. Sample type - grab or composite.
6. Analyses required, specified for each sample.
7. Preservatives used (H<sub>2</sub>SO<sub>4</sub>, NaOH, ice, etc.) for each sample. This includes any dechlorination agents or other chemicals added to the bottle prior to sampling.
8. Program area – This will be listed as UST Management Division.
9. Sample matrix – drinking water, groundwater, waste, soil, free product, etc.
10. Transfer signatures with dates and times for both relinquishment and laboratory receipt (the laboratory should indicate courier, FEDEX, UPS, etc. in the "relinquished to" space if applicable).
11. Receipts maintained when shipped by common carrier (FEDEX, UPS, etc.). These receipts should be attached to the pertinent chain-of-custody records.
12. The number and type of container used.

Monitoring wells will be designated with the 5-digit permit number and the well id (e.g. 12345-MW1). Water supply wells should be designated with the 5-digit permit number and the well id (e.g. 12345-WSW1). Surface water sampling locations will be designated with the 5-digit permit number and the location ID (e.g. 12345-SW1). Soil borings will be designated with the 5-digit permit number and the location ID (e.g. 12345-SB1).

All samples will be taken directly to the laboratory by laboratory staff. Samples delivered to laboratories will be received below 6°C but above 0°C (unless analytical method requires lower temperature). Temperature blanks may be used. Alternative methods for measuring temperature, such as an infrared thermometer, may also be used. The temperature at receipt (arrival) will be documented on the chain of custody form. Temperature blank or cooler environment will be documented; sample container will not be used.



## **Quality Control Requirements**

In the case of QC failure, the sample will be reanalyzed. In the event that additional sample is not available or cannot be recollected, Katawba Environmental will notify the UST Project Manager within 24 hours. Katawba Environmental is responsible for necessary corrective action.

**Trip blanks** will be submitted for each sampling event. The blanks are prepared by the analyzing laboratory using distilled or de-ionized water that is analyte-free and which is shipped with the other sample bottles to the field and then returned to the analyzing laboratory with the samples for analysis. The trip blanks are not separated from other samples. They will be packaged with the environmental samples collected during the sampling event. They are collected to check sample contamination from on-site conditions. One trip blank will be included in each sample cooler. The trip blank will be analyzed for VOCs.

**Field blanks** will be collected for each site survey. Field blanks for VOCs and metals will be collected using the same sample collection procedures. Field blanks are used to assess potential contamination of samples from the site environment.

**Field duplicates** will be collected. One duplicate will be collected for every batch of twenty samples or less. Field duplicate samples are taken within five minutes of collecting the original samples and include all the sub-samples. A new sample is collected from the sampling point for the field duplicate. The samples are shipped back with the other sample bottles for analysis. The precision resulting from field duplicates is a function of the variance of sample composition, the variance of the sampling technique, and the variance of laboratory sample. One duplicate sample will be collected for each twenty samples, or subset thereof.

An analytical laboratory certified for required parameters through the SCDHEC's Office of Environmental Laboratory Certification program will perform all analytical methods.

## **Instrument/Equipment Calibration and Frequency**

All field equipment needed for sampling, as well as safety equipment, will be calibrated prior to and during continued use to assure that all measurements are as accurate as possible. Personnel will follow the manufacturer's instructions to determine if the instruments are functioning within their established operation ranges. The calibration will be recorded in the field logbook as well as the field data sheet. The field analyst will specify the identification of the field instrument by serial number in the field logbook as well as the field data sheet so that the calibrations are traceable to a specific piece of equipment.

To be acceptable, a field test will be bracketed between acceptable calibration results.

1. The first check may be an initial calibration, but the second check will be a continuing verification check.
2. Each field instrument will be calibrated prior to use.
3. Verify the calibration at the beginning of each work shift, during use, and at the end of the use.
4. All initial calibration and verification checks will meet the acceptance criteria in the table below.
5. If an initial calibration or verification check fails to meet the acceptance criteria, immediately recalibrate the instrument or remove it from service.
6. If a verification check fails to meet the acceptance criteria and it is not possible to reanalyze the samples, the following actions will be taken:
  - a. Report all results between the last acceptable verification check and the failed check as 'estimated' (qualified with a "J");
  - b. Include a narrative of the problem; and
  - c. Shorten the time period or frequency between verification checks or repair/replace the instrument.
7. All acceptable field data will be bracketed by acceptable checks or the data will be qualified.

<b>Field Parameter</b>	<b>Acceptance Criteria</b>
Temperature	±1°C against an NIST-traceable thermometer
Specific Conductance	10% of each standard used
pH	±0.1 pH units of stated buffer value
Turbidity	10% of each standard used

Any sampling equipment or field measurement instrument determined to be malfunctioning in any way will be repaired and recalibrated or removed from service. This corrective action will be documented in the records.

### **Inspection/Acceptance of Supplies and Consumables**

Katawba Environmental will provide a list in the QAPP addendum concerning items for field sampling and the analyzing laboratory shall have written procedures for inspecting and accepting supplies and consumables. Katawba Environmental shall maintain documentation of the acceptability of all analytical consumables.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Nitrile gloves	All	No holes; will be nitrile NOT latex	1 box of appropriate size per vehicle; also	Contractor
Bailers	All	Polyethylene	1 box of appropriate size	Contractor
Calibration standards for pH, conductivity,	All	Must be within expiration data and acceptable for the allowable method.	Office prep area-room temperature	Contractor
Insulated container	All	Used only for sample transportation, in good condition, no damage	Office prep area-room temperature	Contractor

## Data Management

### Field Data

All field data and observations will be recorded and maintained by Katawba Environmental. After field data has been reviewed for accuracy, it will be produced in tabular form for inclusion in the final report.

Any problems encountered through direct observation or through review of field data will be identified to the DHEC Project Manager and documented in the final report. The report shall include documentation of any corrective measures taken and discussion of any potential effect on field data objectives.

Katawba Environmental and laboratories will be required to maintain a copy of all information submitted to the UST Management Division for a minimum of five years, unless otherwise specified.

## Calibration of YSI Ph100

### pH Calibration

The pH100 uses a 2-point calibration. The first point must be a 6.86/7.00 buffer, and the second either a 4.00/4.01 or 9.18/10.01. These buffers can be purchased from a YSI representative.

1. Turn the unit on. Connect the pH electrode to the BNC connector and the ATC/Temp probe to the ATC/Temp connector of the unit; "ATC" displays. Press **MODE** until "pH" displays. Autolock may be on or off as desired.
2. Place the pH and ATC/temp probes into the first buffer solution (either 7.00 or 6.86). Allow temperature readings to stabilize, then press and hold "STAND" for 3 seconds to calibrate. If **AUTOLOCK** is off, the first point has been calibrated. If **AUTOLOCK** is on, "WAIT" flashes until the unit detects a stable reading. Once the unit calibrates the first point, "SLOPE" flashes.

**NOTE:** If no temperature probe is connected, adjust the temperature reading to that of the first buffer using the  $\Delta$  or  $\nabla$  keys (0.0 to 60°C) **BEFORE** pressing "STAND".

3. Rinse the pH and ATC/temp probes in distilled water, then place into the second buffer solution (either 4.01/4.00 or 10.01/9.18). Allow temperature readings to stabilize, then press "SLOPE" to calibrate. If **AUTOLOCK** is off, the second point has been calibrated. If **AUTOLOCK** is on, "WAIT" flashes until the unit detects a stable reading. Once the unit calibrates the second point, the unit beeps twice and both "STAND" and "SLOPE" display steadily.

**NOTE:** If no temperature probe is connected, adjust the temperature reading to that of the first buffer using the  $\Delta$  or  $\nabla$  keys (0.0 to 60°C) **BEFORE** pressing "SLOPE".

4. The unit calculates and compensates for the pH electrode slope deviation corresponding to the values of the two calibration buffers. The unit is now dual-point calibrated and ready for measurements. After calibration, press and hold **MEA. /EFF.** for about 5 seconds to display the new electrode efficiency.

## Calibration of YSI Pro 2030

Perform this calibration procedure when Quick DO Calibration is enabled in the System Setup menu. Ensure the DO sensor has a good membrane with electrolyte installed. 1. A good membrane is free of wrinkles, tears, fouling and air bubbles. Install the sensor guard onto the probe. Moisten the sponge in the grey calibration/storage sleeve with a small 2. amount of clean water and install it over the sensor guard. The sponge should only be moistened and the calibration/storage sleeve should not have excess water in it that could cause water droplets to get on the membrane. The storage sleeve ensures venting to the atmosphere.

Power the instrument on and, if using a Polarographic sensor, wait 3. approximately 5 to 15 minutes for the storage chamber to become completely saturated and for the sensor to stabilize. If using a Galvanic sensor, wait approximately 5 to 10 minutes for the chamber to become completely saturated. Auto Shutoff should be disabled or set to at least 20 minutes. See System Setup menu for more information on adjusting the Auto Shutoff.

Ensure the barometer is reading accurately. If necessary, perform a 4. barometer calibration.

Press and hold the Calibrate key for 3 seconds. Using the up or down 5. arrow key, highlight Dissolved Oxygen and press enter. The Pro2030 will indicate 'Calibrating %DO' on the display. The instrument will automatically calibrate the sensor to the current barometric pressure. If DO Local% is enabled, the sensor will calibrate to 100%. This may take up to 2 minutes depending on the age of the sensor and membrane. You can press the Cal key at this time to cancel the calibration.

'Calibration Successful' will display for a few seconds to indicate a 6. successful calibration and then the instrument will return to the Run screen.

If the calibration is unsuccessful, an error message will display on the 7. screen. Press the Cal key to exit the error message and return to the Run screen. See the Troubleshooting guide for possible solutions.

### Calibrating in Percent( DO%)

Perform this calibration procedure when Quick DO Cal is disabled in the System Setup menu. Perform steps 1-4 of the Quick DO Calibration procedure. 1. Press and hold the Calibrate key for 3 seconds. Highlight Dissolved 2. Oxygen and press enter. Next, highlight % and press enter. The Pro2030 will display the current DO% and temperature readings 3. along with the % calibration value. The % calibration value is based on the barometer reading. Wait at least 3 seconds, then, once the DO% and temperature readings 4. are stable, press enter to complete the calibration. Or, press the Cal key to cancel the calibration. 'Calibration Successful' will display for a few seconds to indicate a 5. successful calibration and then the instrument will return to the Run screen. If the calibration is unsuccessful, an error message will display on the 6. screen. Press the Cal key to exit the calibration error message and return to the Run screen. See the Troubleshooting guide for possible solutions.

**Appendix A5 – Katawba Environmental Decontamination SOP**

## KATAWBA ENVIRONMENTAL DECONTAMINATION SOP

### FIELD EQUIPMENT

All field equipment will be cleaned utilizing the following methods.

#### Specifications for Cleaning Materials:

Specifications for standard cleaning materials referred to in this appendix are as follows:

- Soap will be a standard brand of phosphate-free laboratory detergent such as Liquinox.
- Tap water will be used from any municipal water treatment system.
- Analyte free water (deionized water) will be utilized as a final rinse.
- Soap will be kept in clean plastic, metal, or glass containers until used. It will be poured directly from the container during use.
- Solvent will be stored in the unopened original containers until used. They will be applied using a Teflon® squeeze bottles.
- Tap water will be kept in clean tanks, squeeze bottles, or applied directly from a hose.
- Analyte free water will be stored in clean glass, stainless steel, or plastic containers that will be closed prior to use. It will be applied from plastic squeeze bottles.

#### Disposal of Solvent Cleaning Solutions:

Disposal of investigation derived waste (IDW), including used wash water, rinse water, and spent solvents will be taken to a registered disposal facility.

- Safety glasses with splash shields or goggles, and nitrile gloves should be worn during all cleaning operations.
- Solvent rinsing operations will be conducted in the open (never in a closed room).
- No eating, smoking, drinking, chewing, or any hand to mouth contact will be permitted during cleaning operations.

#### Handling of Cleaned Equipment:

After field cleaning, equipment should be handled only by personnel wearing clean gloves to prevent re-contamination. In addition, the equipment will be moved away (preferably upwind) from the cleaning area to prevent recontamination. If the equipment is not to be immediately re-used it will be covered with plastic sheeting or wrapped in aluminum foil to prevent re-contamination. The area where the equipment is kept prior to re-use will be free of contaminants.

## **DRILLING EQUIPMENT**

### **Field Equipment Cleaning Procedures**

Sufficient clean equipment will be transported to the field so that an entire study will be conducted without the need for field cleaning.

### **Specifications for Decontamination Pads**

If in the event drilling equipment will require onsite decontamination a decontamination pad will be constructed. Decontamination pads constructed for field cleaning of sampling and drilling equipment will meet the following minimum specifications:

- The pad will be constructed in an area known or believed to be free of surface contamination.
- The pad should not leak excessively.
- If possible, the pad will be constructed on a level, paved surface and should facilitate the removal of wastewater. This will be accomplished by either constructing the pad with one corner lower than the rest, or by creating a sump or pit in one corner or along one side. Any sump or pit should also be lined.
- Sawhorses or racks constructed to hold equipment while being cleaned will be high enough above ground to prevent equipment from being splashed.
- Water will be removed from the decontamination pad frequently.
- A temporary pad will be lined with a water impermeable material with no seams within the pad. This material will be either easily replaced (disposable) or repairable.

At the completion of site activities, the decontamination pad will be deactivated. The pit or sump will be backfilled with the appropriate material designated by the site project leader, but only after all waste/rinse water has been pumped into containers for disposal. No solvent rinsates will be placed in the pit. Solvent rinsates will be collected in separate containers for proper disposal. If the decontamination pad has leaked excessively, soil sampling will be conducted.

### **Sampling Equipment used for the Collection of Trace Organic and Inorganic Compounds:**

The following procedures are to be used for all sampling equipment used to collect routine samples undergoing trace organic or inorganic constituent analyses:

1. Clean with tap water and soap using a brush if necessary to remove particulate matter and surface films. Equipment will be steam cleaned (soap and high pressure hot water) as an alternative to brushing. Sampling equipment that is steam cleaned will be placed on racks or saw horses at least two feet above the floor of the decontamination pad. PVC or plastic items should not be steam cleaned.
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with analyte free water.
4. Rinse thoroughly with solvent. Do not solvent rinse PVC or plastic items.
5. Remove the equipment from the decontamination area and cover with plastic. Equipment stored overnight should be wrapped in aluminum foil and covered with clean, unused plastic., or hermetically seal in an appropriately sized polyethylene bag.



Well Sounders or Tapes:

1. Wash with soap and tap water.
2. Rinse with tap water.
3. Rinse with analyte free water. (Do not solvent rinse PVC or plastic items.)

Peristaltic Pump Cleaning Procedure:

The peristaltic pump will be cleaned prior to use and as necessary between each use. The following procedure is required:

1. Using a brush, scrub the exterior of the contaminated hose and pump with soap and tap water.
2. Rinse the soap from the outside of the pump and hose with tap water.
3. Rinse the tap water residue from the outside of pump and hose with analyte-free water.
4. Allow the pump to dry prior to use.

Redi-Flo2 Pump:

The Redi-Flo2 pump will be cleaned prior to use and between each monitoring well. The following procedure is required:

1. Using a brush, scrub the exterior of the pump, electrical cord and garden hose with soap and tap water. Do not wet the electrical plug.
2. Rinse with tap water.
3. Rinse with analyte free water.
4. Place the equipment in a clean plastic bag. To clean the Redi-Flo2 ball check valve:
  1. Completely dismantle ball check valve. Check for wear and/or corrosion, and replace as needed.
  2. Using a brush, scrub all components with soap and tap water.
  3. Rinse with analyte free water.
  4. Reassemble and re-attach the ball check valve to the Redi-Flo2 pump head.

Automatic Sampler Tubing:

The Silastic and Tygon tubing previously used in the automatic samplers may not be reused. All tubing will be replaced with new tubing.

**Downhole Drilling Equipment**

Tap water (potable) brought on the site for drilling and cleaning purposes will be contained in a pre-cleaned tank of sufficient size so that drilling activities can proceed without having to stop and obtain additional water. A steam cleaner and/or high pressure hot water washer capable of generating a pressure of at least 2500 PSI and producing hot water and/or steam (200°F plus), with a soap compartment, will be obtained.

Preliminary Cleaning and Inspection:

The drill rig will be clean of any contaminants that may have been transported from another site, to minimize the potential for cross-contamination. In addition, associated drilling and decontamination equipment, well construction materials, and equipment handling procedures should meet these minimum specified criteria:

- All downhole augering, drilling, and sampling equipment will be sandblasted before use if painted, and/or there is a buildup of rust, hard or caked matter, etc., that cannot be removed by steam cleaning (soap and high pressure hot water), or wire brushing. Sandblasting will be performed prior to arrival on site, or well away from the decontamination pad and areas to be sampled.
- Any portion of the drill rig, backhoe, etc., that is over the borehole (kelly bar or mast, backhoe buckets, drilling platform, hoist or chain pulldowns, spindles, cathead, etc.) will be steam cleaned (soap and high pressure hot water) and wire brushed (as needed) to remove all rust, soil, and other material which may have come from other hazardous waste sites before being brought on site.
- Printing and/or writing on well casing, tremie tubing, etc., will be removed before use. Emery cloth or sand paper will be used to remove the printing and/or writing. Most well material suppliers can supply materials without the printing and/or writing if specified when ordered.
- The drill rig and other equipment associated with the drilling and sampling activities will be inspected to insure that all oils, greases, hydraulic fluids, etc., have been removed, and all seals and gaskets are intact with no fluid leaks.
- PVC or plastic materials such as tremie tubes will be inspected. Items that cannot be cleaned are not acceptable and will be discarded.

**Drill Rig Field Cleaning Procedure:**

Any portion of the drill rig, backhoe, etc., that is over the borehole (kelly bar or mast, backhoe buckets, drilling platform, hoist or chain pulldowns, spindles, cathead, etc.) will be steam cleaned or cleaned with soap and high pressure water between boreholes.

**Field Cleaning Procedure for Drilling Equipment:**

The following is the standard procedure for field cleaning augers, drill stems, rods, tools, and associated equipment.

1. Clean with tap water and soap, using a brush if necessary, to remove particulate matter and surface films. Steam cleaning or cleaning with high pressure water with soap will be necessary to remove matter that is difficult to remove with the brush. Drilling equipment that is steam cleaned will be placed on racks or saw horses above the ground. Hollow-stem augers, drill rods, etc., that are hollow or have holes that transmit water or drilling fluids, will be cleaned on the inside with vigorous brushing.
2. Rinse thoroughly with tap water.
3. Remove from the decontamination pad and cover with clean, unused plastic. If stored overnight, the plastic will be secured to ensure that it stays in place.

**Appendix A6 – Katawba Environmental Well Installation SOP**

## **KATAWBA ENVIRONMENTAL MONITORING WELL INSTALLATION SOP**

Prior to the construction of the monitoring wells onsite the following information shall be provided and/or approved by the Department and shall be submitted to the Department: Proposed well locations on a scaled map or plat; Proposed well construction details; Intended purpose of the wells; Well owner's name and mailing address; Property owner's name and mailing address, if different from the well owner; Mailing address and county of location where monitoring wells are to be installed, if different from the well owner's or property owner's address; Proposed parameters to be analyzed; and Proposed drilling date.

The monitoring wells installed at the subject site will be installed utilizing an auger rig equipped with 6 ¼ inch diameter augers. A 2 inch diameter pvc screen slotted 0.010 inches 10 feet in length will be installed into the annulus. 2 inch diameter PVC riser in 10 foot sections will be utilized to complete the internal well piping. Coarse grain #2 filter sand will be utilized as a filter pack opposite the well screen. A properly hydrated bentonite seal with a minimum thickness of twelve inches directly above the filter pack will be utilized as a seal. shall be used, if the well has a filter pack. Neat cement grout composed of Class A, Type I Portland Cement mixed with not more than seven (7) gallons of clean water per bag (one cubic foot or 94 pounds) of cement with a density of 15 to 16 pounds per gallon will be inserted into the annulus opposite the bentonite seal to the surface. A locking cap will be placed on the top of the riser. A steel 8 inch traffic rated well head cover will be placed on top of the well riser. A cement or aggregate reinforced concrete pad will be constructed at the ground surface of that extends six inches beyond the borehole diameter and six inches below ground surface. The pad will be capable of preventing infiltration between the surface casing and the borehole to the subsurface.

The well owner will submit all analytical data and water levels obtained from each monitoring well to the Department within 60 days of receipt of laboratory results. A Water Well Record Form 1903 or other form provided and/or approved by the Department shall be completed and submitted to the Department within 60 days after well completion that will include at a minimum the following information: Name and address of facility/owner; Surveyed or global positioning system location, in latitude and longitude or Universal Transverse Mercator coordinates, of monitoring well(s) on a scaled map or plat; Driller and certification number; Date drilled; Driller's or Geologist's log; Total depth; Screened interval; Diameter and construction details; Depth to groundwater with date and time measured; Surveyed elevation of measuring point with respect to an established benchmark; Monitoring well approval number issued by the Department.

A well tag identification plate will be installed immediately upon well completion. The identification plate will be constructed of a durable, weatherproof, rustproof, material. The identification plate will be permanently secured to the well casing or enclosure floor around the casing where it is readily visible. The identification plate shall be permanently marked to show: Company name and certification number of the driller who installed the well; Date well was completed; Total depth (feet); Casing depth (feet); Screened interval; Designator and/or identification number. The well will be developed by removing enough drilling fluids to facilitate groundwater sampling. Investigation Derived Waste (IDW) that includes drill cuttings and well development fluids will be contained onsite awaiting approval for the appropriate disposal location.



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

APR 15 2013



Re: Tier I Directive  
One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131; CA #45341; MWA #UMW-25009  
Release reported March 23, 2009  
Initial Groundwater Assessment Report received February 8, 2013  
Site Specific QAPP Contractor Addendum received March 25, 2013  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the referenced report and site specific Quality Assurance Project Plan (QAPP) Contractor Addendum. The report indicates that chemicals of concern are present in the soil and groundwater at concentrations that exceed risk-based screening levels. To determine what risk the chemicals may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina UST Control Regulations, implementation of a Tier I Assessment as outlined in the UST Quality Assurance Program Plan (QAPP) is necessary. The Tier I should be conducted in accordance with the UST Management Division QAPP and in compliance with all applicable regulations and the submitted site specific QAPP Contractor Addendum. A copy of UTS QAPP is available on our website at <http://www.scdhec.gov/environment/lwm/usthome/Qapp.htm>. All shallow wells are to be installed with screen intervals that bracket the water table. Groundwater samples will include duplicate samples, field and trip blanks.

According to Division records, the release at the facility was reported to the Agency on March 23, 2009. In accordance with Section 44-2-40(D) of the SUPERB Act, you are responsible for the first \$25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the \$25,000 deductible, the Division has pre-approved costs for implementing the Tier I and assigned a cost agreement (CA) number for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Division has pre-approved a total of \$12,081.00 for implementation of the Tier I. The total includes costs for completion of up to 87 feet of permanent monitoring well footage. A groundwater sample should be collected from each water supply well within 500 feet of the facility and analyzed for BTEX, naphthalene, 8 oxygenates, 1,2 DCA, ethanol, and EDB. Additional monitoring well footage can be billed at the SUPERB allowable rate of \$38 per foot as well as collection and laboratory analyses of groundwater from water supply wells provided that the cost is pre-approved by the Division. Upon receipt of a report of findings and a completed Tier I invoice with all necessary supporting documentation, up to \$12,081.00 will be applied towards the \$25,000 deductible. **The report and invoice should be submitted to the Division within sixty (60) days of the date of this correspondence.**

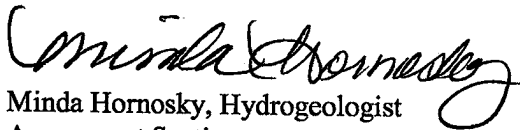
Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the Tier I may proceed immediately upon receipt of this correspondence. Approval to install three permanent monitoring wells and for the site specific QAPP contractor addendum is enclosed. A copy has been provided to your site rehabilitation contractor. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by a UST certified site rehabilitation contractor as required by R.61-98.

The Agency grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations based on laboratory analysis is below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #02131. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6395.

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)  
Monitoring Well Approval (MWA)  
Signed Site Specific QAPP Contractor Addendum Title and Approval Page

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (with enc).  
Technical file (with enc.)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

### Monitoring Well Approval

**Approval is hereby granted to: Katawba Environmental, Inc**  
**On Behalf Of: Angela Hough**  
**Facility: One Accord Ministries**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit Number: 02131**  
**County: Chester**

This approval is for the installation of 3 shallow permanent ground water monitoring wells. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents. **Minimum forty-eight hour notice prior to drilling activities shall be provided to the project manager.**

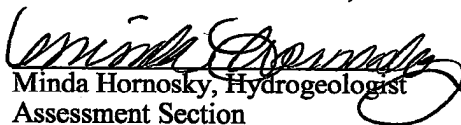
**Please note that R.61-71 requires the following:**

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Agency shall be completed and submitted to the Agency within 30 days after well completion or abandonment unless another schedule has been approved by the Agency. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Agency within 30 days of receipt of laboratory results unless another schedule has been approved by the Division as required by R.61-71.H.1.d.
5. If any of the information provided to the Agency changes, notification to Mindã Hornosky, the project manager (tel: (803) 896-6395 or e-mail: hornosms@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Agency approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

**Date of Issuance: March 4, 2013**

**Approval #:UMW-25009**

  
Mindã Hornosky, Hydrogeologist  
Assessment Section  
Division of UST Management  
Bureau of Land and Waste Management

**Section A: Project Management**

**A1 Title and Approval Page**

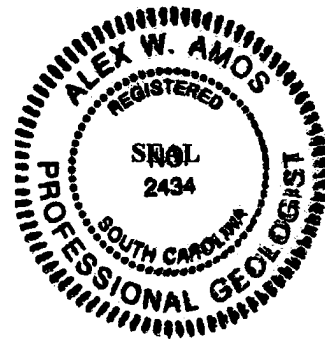
Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
One Accord, SCDHEC Site ID# 02131

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3570 Lancaster Highway, Richburg, South Carolina

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Prepared by:  
Alex W. Amos  
Professional Geologist  
Katawba Environmental  
(Certified Site Rehabilitation Contractor UCC-0018)  
4278 Dye Road  
Edgemoor, SC 29712  
(803) 417-4568



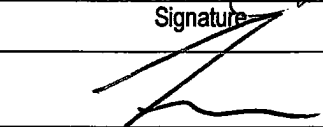
Date: March 22, 2013

Approvals

Minda Hornosky  
SCDHEC Project Manager

  
Signature Date 3/19/13

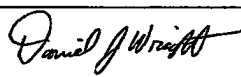
Alex W. Amos, PG  
Site Rehabilitation Contractor  
Katawba Environmental, Inc.

  
Signature Date March 22, 2013

Billy Morris  
QA/QC Manager  
Katawba Environmental, Inc.

  
Signature Date March 22, 2013

Dan Wright,  
Laboratory Director  
Shealy Environmental Services, Inc.

  
Signature Date March 22, 2013



# Approved Cost Agreement 45341

Facility: 02131 ONE ACCORD MINISTRIES

HORNOSMS

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
09 WELL INSTALLATION		B WATER TABLE (DRILLED)	12.0000	38.00	456.00
10 SAMPLE COLLECTION		C WATER SUPPLY	1.0000	30.00	30.00
		D GROUNDWATER NO-PURGE	1.0000	35.00	35.00
11 ANALYSES	GW GROUNDWATER	A1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	2.0000	100.00	200.00
		E LEAD	1.0000	20.00	20.00
		F EDB	2.0000	55.00	110.00
20 TIER I		TIER I	1.0000	11,230.00	11,230.00
				<b>Total Amount</b>	<b>12,081.00</b>



Hornosky, Minda <hornosms@dhec.sc.gov>



**One Accord Site ID 02131**

1 message

**Alex "Chip" Amos, PG** <katawba@comporium.net>  
To: "Hornosky, Minda" <hornosms@dhec.sc.gov>

Mon, May 13, 2013 at 2:54 PM

Minda: I hope that you are doing well. I received a call from One Accord Ministries on Friday. All parties have received the April 15, 2013 Tier I Directive. Katawba Environmental, Inc. has been told not to do the Tier I until the ministry can get their finances in order. It is highly unlikely that the report will be submitted to your attention by the department deadline. Should you have any questions do not hesitate to contact me at 803-417-4568.

Alex Amos

**SCANNED** 7/6  
\*\*\*\*\*



Hornosky, Minda <hornosms@dhec.sc.gov>

**Re: Invitation to connect on LinkedIn**

1 message

**Angel Hough** <angel.hough@gmail.com>  
To: "Hornosky, Minda" <hornosms@dhec.sc.gov>

Tue, May 28, 2013 at 12:15 PM



OK Mindy, I made a mistake the letter I got back was from the Department of the Treasury IRS and not for you guys. It stated they were unable to provide the items that requested. I never got anything back from you guys.

My application for financial help was sent in on 6/24/2012 which was around the same time we did the close out and removed the tanks.

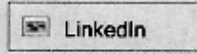
I got a letter from you guys on Aug 9 2012 but it was only pertaining to the closure report. I never received anything back on the application.

I hope this helps.

Thanks you

On Tue, May 28, 2013 at 12:00 PM, Hornosky, Minda <hornosms@dhec.sc.gov> wrote:  
this is my e-mail address

On Tue, Mar 26, 2013 at 3:05 PM, Angel Hough <angel.hough@gmail.com> wrote:



**From Angel Hough**

Office Manager/Co-Owner at Carolina General Contractors, LLC  
Charlotte, North Carolina Area

I'd like to add you to my professional network on LinkedIn.

- Angel

**Confirm that you know Angel**

You are receiving Invitation to Connect emails. [Unsubscribe](#)  
© 2012, LinkedIn Corporation. 2029 Stierlin Ct. Mountain View, CA 94043, USA

Angel D. Hough  
Love Never Fails!!





# Katawba Environmental, Inc.

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1/3/2018

Mr. Ed Mendenhall, Hydrogeologist  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE: SITE SPECIFIC WORK PLAN  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**

Dear Mr. Mendenhall:

Katawba Environmental, Inc. (Katawba) has prepared this Site Specific Work Plan for the above-referenced facility for your review. This plan was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated October 27, 2017. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC.**

  
Alex "Chip" Amos, PG  
Principal





**Site-Specific Work Plan for Approved ACQAP  
Underground Storage Tank Management Division**

To: Ed Mendenhall (SCDHEC Project Manager)  
 From: Alex Amos, PG (Contractor Project Manager)  
 Contractor: Katawba Environmental, Inc. UST Contractor Certification Number: 18

Facility Name: One Accord Ministries UST Permit #: 02131  
 Facility Address: 3570 Lancaster Highway, Richburg, SC 29729  
 Responsible Party Angela Hough One Accord Ministries Phone: 803-804-0253  
 RP Address: Same  
 Property Owner (if different): Same  
 Property Owner Address: Same  
 Current Use of Property: Church Youth Group Ministries

**Scope of Work** (Please check all that apply)

IGWA                       Tier II                       Groundwater Sampling                       GAC  
 Tier I                       Monitoring Well Installation                       Other \_\_\_\_\_

**Analyses** (Please check all that apply)

Groundwater/Surface Water:

BTEXNMDCA (8260B)                       Lead                       BOD                       Methane  
 Oxygenates (8260B)                       8 RCRA Metals                       Nitrate                       Ethanol  
 EDB (8011)                       TPH                       Sulfate                       Dissolved Iron  
 PAH (8270D)                       pH                       Other \_\_\_\_\_

Drinking Water Supply Wells:

BTEXNMDCA (524.2)                       Mercury (200.8 245.1 or 245.2)                       EDB (504.1)  
 Oxygenates & Ethanol (8260B)                       RCRA Metals (200.8)

Soil:

BTEXNM                       Lead                       RCRA Metals                       TPH-DRO (3550B/8015B)                       Grain Size  
 PAH                       Oil & Grease (9071)                       TPH-GRO (5030B/8015B)                       TOC

Air:

BTEXN

**Sample Collection** (Estimate the number of samples of each matrix that are expected to be collected.)

\_\_\_\_\_ Soil                      6 Water Supply Wells                      \_\_\_\_\_ Air                      2 Field Blank  
53 Monitoring Wells                      \_\_\_\_\_ Surface Water                      4 Duplicate                      2 Trip Blank

**Field Screening Methodology**

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of deep points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 Field Screening Methodology: \_\_\_\_\_

**Permanent Monitoring Wells**

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: 2 Estimated Footage: 36/59 feet per point  
 # of deep wells: 1 Estimated Footage: 150 feet per point  
 # of recovery wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point

Comments, if warranted:  
Paired shallow, intermediate and deep well cluster

UST Permit # 02131 Facility Name: One Accord Ministries

**Implementation Schedule** (Number of calendar days from approval)  
Field Work Start-Up: 30 Days Field Work Completion: 60 days  
Report Submittal: 90 Days # of Copies Provided to Property Owners: 1

**Aquifer Characterization**  
Pump Test:  Slug Test:  (Check one and provide explanation below for choice)  
\_\_\_\_\_  
\_\_\_\_\_

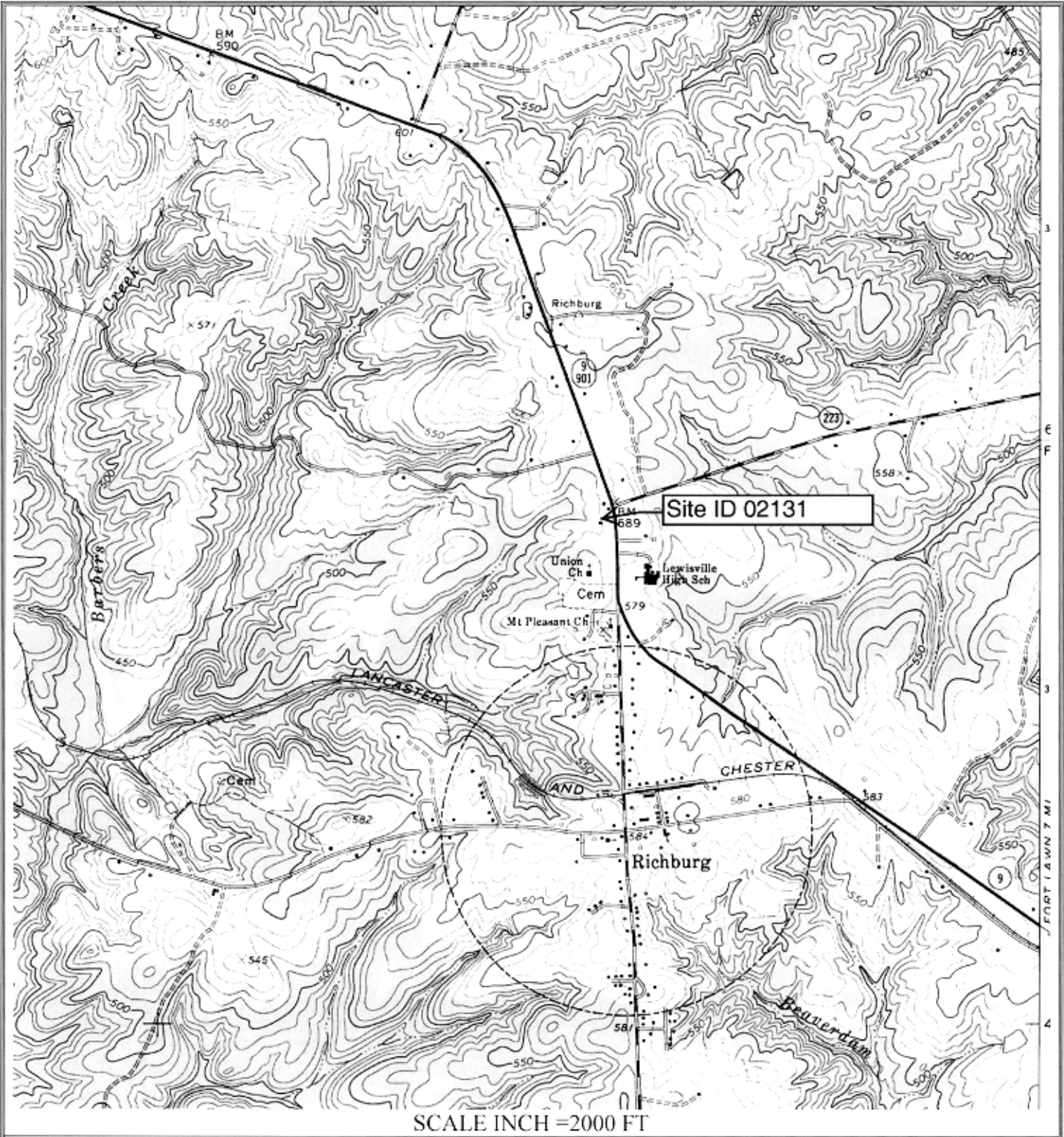
**Investigation Derived Waste Disposal**  
Soil: \_\_\_\_\_ Tons Purge Water: 150 Gallons  
Drilling Fluids: \_\_\_\_\_ Gallons Free-Phase Product: \_\_\_\_\_ Gallons

**Additional Details For This Scope of Work**  
For example, list wells to be sampled, wells to be abandoned/repared, well pads/bolts/caps to replace, details of AFVR event, etc.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**  
Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.  
Name of Laboratory: \_\_\_\_\_  
SCDHEC Certification Number: \_\_\_\_\_  
Name of Laboratory Director: \_\_\_\_\_  
  
Yes Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.  
Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_  
  
No Other variations from ACQAP. Please describe below.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Attachments**

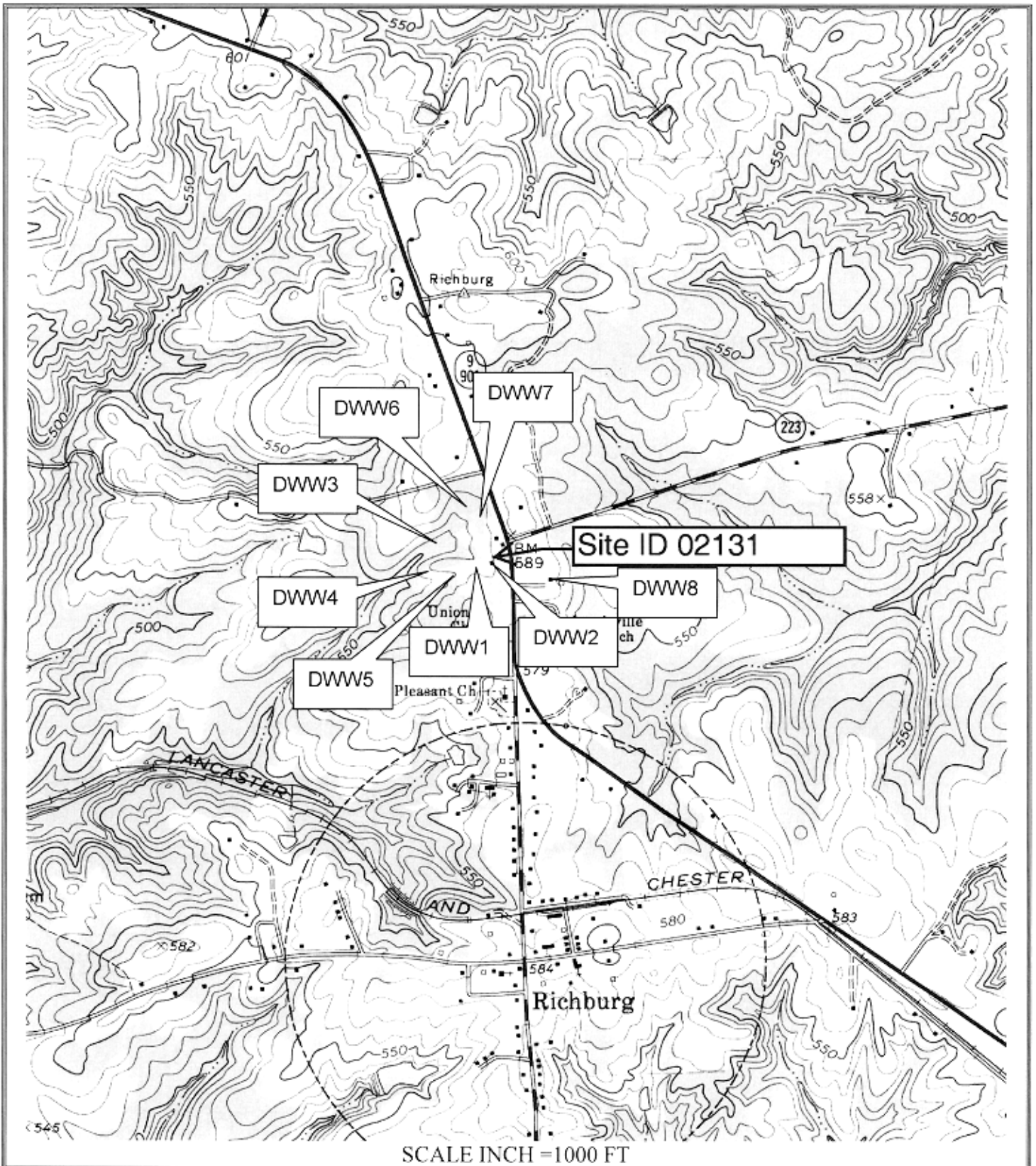
1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:  
North Arrow Proposed monitoring well locations  
Location of property lines Legend with facility name and address, UST permit number, and bar scale  
Location of buildings Streets or highways (indicate names and numbers)  
Previous soil sampling locations Location of all present and former ASTs and USTs  
Previous monitoring well locations Location of all potential receptors  
Proposed soil boring locations
3. Assessment Component Cost Agreement, SCDHEC Form D-3664



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION

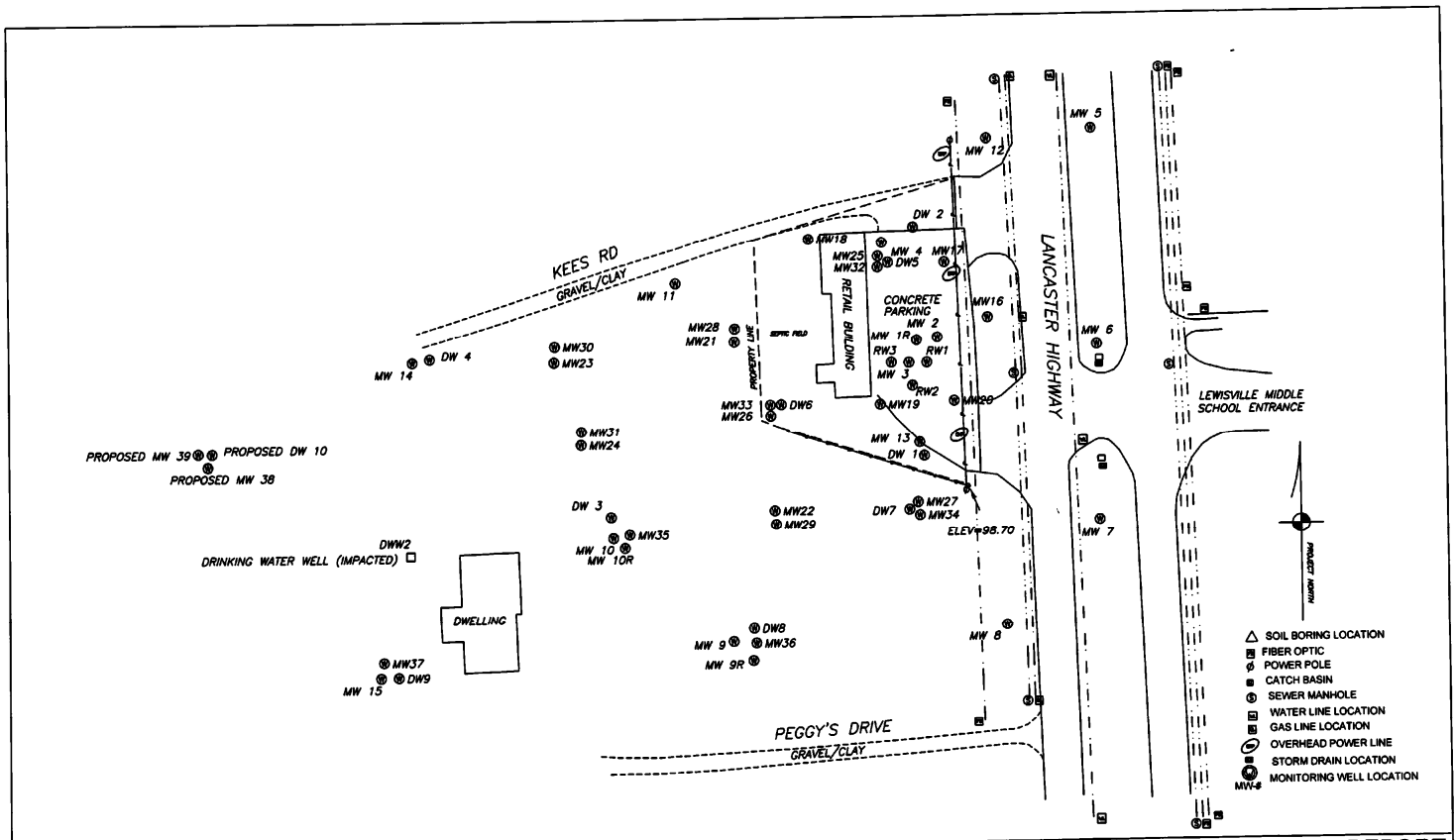




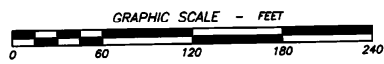
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP





KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



**ASSESSMENT COMPONENT COST AGREEMENT**

**SOUTH CAROLINA**

Department of Health and Environmental Control

Underground Storage Tank Management Division

State Underground Petroleum Environmental Response Bank Account

August 16, 2016

Facility Name: One Accord

UST Permit #: 02131

Cost Agreement #:

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan Preparation</b>				
A1. Site-specific Work Plan	1	each	\$150.00	\$150.00
B1. Tax Map		each	\$70.00	\$0.00
C1. Tier II or Comp. Plan /QAPP Appendix B		each	\$250.00	\$0.00
<b>2. A1. Receptor Survey *</b>				
		each	\$551.00	\$0.00
<b>3. Survey (500 ft x 500 ft)</b>				
A1. Comprehensive Survey		each	\$1,040.00	\$0.00
<b>B. Subsurface Geophysical Survey</b>				
1B. < 10 meters below grade		each	\$1,300.00	\$0.00
2B. > 10 meters below grade		each	\$2,310.00	\$0.00
C1. Geophysical UST or Drum Survey		each	\$910.00	\$0.00
<b>4. Mob/Demob</b>				
A1. Equipment	1	each	\$1,020.00	\$1,020.00
B1. Personnel	4	each	\$423.00	\$1,692.00
C1. Adverse Terrain Vehicle		each	\$500.00	\$0.00
<b>5. A1. Soil Borings (hand auger)*</b>				
		foot	\$5.00	\$0.00
<b>6. Soil Borings (requiring equipment, push technology, etc)* or Field Screening (including water sample, soil sample, soil gas sample, etc.)*</b>				
AA. Standard		per foot	\$15.00	\$0.00
C1. Fractured Rock		per foot	\$20.20	\$0.00
<b>7. A1. Soil Leachability Model</b>				
		each	\$60.00	\$0.00
<b>8. Abandonment (per foot)*</b>				
A1. 2" diameter or less	60	per foot	\$3.10	\$186.00
B1. Greater than 2" to 6" diameter		per foot	\$4.50	\$0.00
C1. Dug/Bored well (up to 6 feet diameter)		per foot	\$15.00	\$0.00
<b>9. Well Installation (per foot)*</b>				
A1. Water Table (hand augered)		per foot	\$10.60	\$0.00
B1. Water Table (drill rig)	95	per foot	\$38.00	\$3,610.00
CC. Telescoping	150	per foot	\$50.00	\$7,500.00
DD. Rock Drilling		per foot	\$58.00	\$0.00
E1. 2" Rock Coring		per foot	\$30.90	\$0.00
G1. Rock Multi-sampling ports/screens		per foot	\$33.40	\$0.00
HH. Recovery Well (4" diameter)		per foot	\$45.00	\$0.00
II. Pushed Pre-packed screen (1.25" dia)		per foot	\$15.00	\$0.00
J1. Rotasonic (2" diameter)		per foot	\$44.00	\$0.00
K. Re-develop Existing Well		per foot	\$11.00	\$0.00
<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product *</b>				
A1. Groundwater Purge	13	per well/recept	\$60.00	\$780.00
B1. Air or Vapors		per recepto	\$12.00	\$0.00
C1. Water Supply	6	per well/recept	\$22.00	\$132.00
D1. Groundwater No Purge or Duplicate	42	per well/recept	\$28.00	\$1,176.00
E1. Gauge Well only		per well	\$7.00	\$0.00
F1. Sample Below Product		per well	\$12.00	\$0.00
G1. Passive Diffusion Bag		each	\$26.00	\$0.00
H1. Field Blank	2	each	\$24.60	\$49.20

<b>11. Laboratory Analyses-Groundwater</b>					
A2. BTEXNM+Oxyg's+1,2 DCA+Eth(82)	56	per sample	\$122.00		\$6,832.00
AA1. Lead, Filtered		per sample	\$13.80		\$0.00
B2. Rush EPA Method 8260B (All of item A.)		per sample	\$153.60		\$0.00
C2. Trimethal, Butyl, and Isopropyl Benzenes		per sample	\$36.40		\$0.00
D1. PAH's		per sample	\$60.60		\$0.00
E1. Lead		per sample	\$16.00		\$0.00
F1. EDB by EPA 8011	55	per sample	\$45.20		\$2,486.00
FF1. EDB by EPA Method 8011 Rush		per sample	\$68.20		\$0.00
G1. 8 RCRA Metals		per sample	\$63.40		\$0.00
H1. TPH (9070)		per sample	\$41.00		\$0.00
II. pH		per sample	\$5.20		\$0.00
J1. BOD		per sample	\$20.00		\$0.00
PP. Ethanol		per sample	\$14.80		\$0.00
<b>11. Analyses-Drinking Water</b>					
L. BTEXNM+1,2 DCA (524.2)	8	per sample	\$124.05		\$992.40
M. 7-OXYGENATES & ETHANOL (8260B)	8	per sample	\$91.75		\$734.00
N. EDB (504.1)	8	per sample	\$79.50		\$636.00
O. RCRA METALS (200.8)		per sample	\$100.00		\$0.00
<b>11. Analyses-Soil</b>					
Q1. BTEX + Naphth.		per sample	\$64.00		\$0.00
R1. PAH's		per sample	\$64.04		\$0.00
S1. 8 RCRA Metals		per sample	\$56.40		\$0.00
U1. TPH-DRO (3550C/8015C)		per sample	\$40.00		\$0.00
V1. TPH- GRO (5030B/8015C)		per sample	\$35.96		\$0.00
W1. Grain size/hydrometer	1	per sample	\$104.00		\$104.00
X1. Total Organic Carbon		per sample	\$30.60		\$0.00
<b>11. Analyses-Air</b>					
Y1. BTEX + Naphthalene		per sample	\$216.00		\$0.00
<b>11. Analyses-Free Phase Product</b>					
Z1. Hydrocarbon Fuel Identification		per sample	\$357.00		\$0.00
<b>12. Aquifer Characterization</b>					
A1. Pumping Test*		per hour	\$23.00		\$0.00
B1. Slug Test*		per test	\$191.00		\$0.00
C1. Fractured Rock		per test	\$100.00		\$0.00
<b>13. A1. Free Product Recovery Rate Test*</b>					
		each	\$38.00		\$0.00
<b>14. Fate/Transport Modeling</b>					
A1. Mathematical Model		each	\$100.00		\$0.00
B1. Computer Model		each	\$100.00		\$0.00
<b>15. Risk Evaluation</b>					
A. Tier I Risk Evaluation		each	\$300.00		\$0.00
B1. Tier II Risk Evaluation		each	\$100.00		\$0.00
<b>16. A1. Subsequent Survey*</b>					
	1	each	\$260.00		\$260.00
<b>17. Disposal (gallons or tons)*</b>					
AA. Wastewater	150	gallon	\$0.56		\$84.00
BB. Free Product		gallon	\$0.50		\$0.00
C1. Soil Treatment/Disposal		ton	\$60.00		\$0.00
D1. Drilling fluids		gallon	\$0.42		\$0.00
<b>18. Miscellaneous (attach receipts)</b>					
		each	\$0.00		\$0.00

		each	\$0.00	\$0.00
		each	\$0.00	\$0.00
<b>20. Tier I Assessment (Use DHEC 3665 form)</b>		standard		\$0.00
<b>21. IGWA (Use DHEC 3666 form)</b>		standard		\$0.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>		PFP Bid		\$0.00
<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>				
A1. 8-hour Event*		each	\$1,375.00	\$0.00
AA. 24-hour Event*		each	\$3,825.00	\$0.00
A3. 48-hour Event*		each	\$6,265.00	\$0.00
A4. 96-hour Event*		each	\$12,567.50	\$0.00
C1. Off-gas Treatment 8 hour		per event	\$122.50	\$0.00
C2. Off-gas Treatment 24 hour		per event	\$241.50	\$0.00
C3. Off-gas Treatment 48 hour		per event	\$327.00	\$0.00
C4. Off-gas Treatment 96 hour		per event	\$780.00	\$0.00
D. Site Reconnaissance		each	\$203.25	\$0.00
E1. Additional Hook-ups		each	\$25.75	\$0.00
F1. Effluent Disposal		gallon	\$0.44	\$0.00
G. AFVR Mobilization/Demobilization		each	\$391.50	\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>				
A1. New GAC System Installation*		each	\$1,900.00	\$0.00
BB. Refurbished GAC Sys. Install*		each	\$900.00	\$0.00
C1. Filter replacement/removal*		each	\$350.00	\$0.00
DD. GAC System removal, cleaning, & refurbishment*		each	\$275.00	\$0.00
E1. GAC System housing*		each	\$250.00	\$0.00
F. In-line particulate filter		each	\$150.00	\$0.00
G1. Additional piping & fittings		foot	\$1.50	\$0.00
<b>25. Well Repair</b>				
A1. Additional Copies of the Report Delivered		each	\$50.00	\$0.00
B1. Repair 2x2 MW pad*		each	\$50.00	\$0.00
C1. Repair 4x4 MW pad*		each	\$88.00	\$0.00
D1. Repair well vault*		each	\$118.00	\$0.00
F1. Replace well cover bolts		each	\$2.60	\$0.00
G. Replace locking well cap & lock		each	\$15.00	\$0.00
H1. Replace/Repair stick-up*		each	\$134.00	\$0.00
II. Convert Flush-mount to Stick-up*		each	\$150.00	\$0.00
J1. Convert Stick-up to Flush-mount*		each	\$130.00	\$0.00
K1. Replace missing/illegible well ID plate		each	\$12.00	\$0.00
<b>Report Prep &amp; Project Management</b>	12%	percent	\$28,423.60	\$3,410.83
<b>TOTAL</b>				\$31,834.43



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

MR LARRY TERRY  
FIREBALL SERVICE STATION  
3570 LANCASTER HIGHWAY  
RICHBURG SC 29729

APR 30 2009

Re: Letter of Concern  
Fireball Service Station, 3570 Lancaster Highway, Richburg, SC  
UST Permit # 02131  
Release reported March 23, 2009  
Chester County

Dear Mr. Terry:

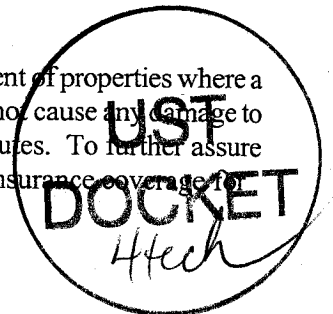
You requested that this office provide you with an update on the environmental conditions and financial status at the above referenced facility.

Our records document five Underground Storage Tanks (USTs) were registered with the Department by Fireball Service Station. Four of the registered USTs are still in operation. One is in extended out of use. In response to the initial report of contamination, we directed you, as the party responsible for performing this activity under state and federal law, to assess the extent and severity of the contamination. An Initial Groundwater Assessment Report is due in July 2009.

This release of petroleum products from the USTs is qualified to receive funding under the conditions of the State Underground Petroleum Environmental Response Bank (SUPERB) Act after the \$25,000 deductible is met. This means that reasonable costs up to \$1,000,000 can be paid by the SUPERB account for site rehabilitation actions associated with this release.

In 1997, the General Assembly amended Section 80 (B) of the SUPERB Act to clarify that persons who hold "indicia of ownership" primarily to protect a security interest in property impacted by a release from a UST are exempt from the requirements to conduct site rehabilitation activities other than necessary abatement actions to eliminate any imminent threat to human health or the environment. The "indicia of ownership" exemption includes those persons who acquire title to property through foreclosure or other means necessary to protect their security interest, provided that person does not participate in the management of the UST and is not otherwise engaged in petroleum production, marketing, or refining. This applies equally to subsequent lenders who acquire the USTs and property through foreclosure in the future.

The Program is not aware of any laws or regulations that prohibit the use or development of properties where a petroleum release has occurred. Any future work required by the Department should not cause any damage to the building, disrupt deliveries, prevent access to customers, or block main access routes. To further assure you, a SC Certified Site Rehabilitation Contractor who maintains specific levels of insurance coverage for



General and Professional Liability and Pollution/Property Damage would perform any required activities associated with the petroleum release. Section IV of the SUPERB Site Rehabilitation and Fund Access Regulations R. 61-98 requires such coverage.

If you have any questions, please do not hesitate to call me at (803) 896-6395.

Sincerely,

A handwritten signature in cursive script, appearing to read "Minda Johnson".

Minda Johnson, Hydrogeologist  
Assessment Section  
UST Management Division  
Bureau of Land & Waste Management

cc: Technical File



MS ANGELA HOUGH  
ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729-0220

FEB 26 2018

Re: **Additional Assessment Directive**  
One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
Chester County  
UST Permit #02131; CA #55779; MWA #UMW-26885  
Release reported March 23, 2009  
Tier II Assessment report received September 28, 2017  
Site-Specific Work Plan received January 8, 2018

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report and the Site-Specific Work Plan (SSWP) submitted by Katawba Environmental, Inc. The report documents concentrations of petroleum chemicals of concern in excess of Risk-Based Screening Levels (RBSLs) in groundwater samples.

The Additional Assessment with the following change to the cost proposal:

- Item 4B Personnel Mob has been increased from 4 to 5 for the soil disposal.
- Item 17C Soil Disposal has been increased from 0 to 3 tons for the installation of the 3 new monitoring wells.

Assessment activities may proceed immediately upon receipt of this correspondence and must be conducted in accordance with your contractor's Annual Contractor's Quality Assurance Plan (ACQAP), all applicable regulations, and the SSWP. **The assessment report and invoice are due within ninety (90) days from the date of this letter.**

Approval to install three permanent monitoring wells is enclosed. All municipal wells within 1,000 feet of the facility and all water supply wells and surface water bodies within 1000 feet of the facility must be sampled and analyzed for BTEX, naphthalene, 8 oxygenates, 1,2-DCA, ethanol, and EDB. Analyses should be in accordance with the UST QAPP Appendix F.

Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a DHEC certified site rehabilitation contractor as required by R.61-98.

**In accordance with the UST QAPP, a weekly status report of the project should be provided via e-mail. If any quality assurance problems arise, you must contact me within 24 hours via phone or e-mail. In addition, a discussion of the problem(s) encountered, including quality assurance problems, the actions taken, and the results must be included in the final report submitted to the UST Management Division.**

Katawba Environmental can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs. The Division has pre-approved a total of \$32,223.30 for implementation of the Additional Assessment.

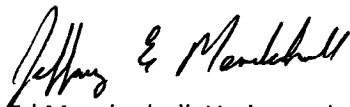
The total includes costs for completion of up to 245 feet of permanent monitoring well footage. Additional monitoring well footage can be billed at the SUPERB allowable rate per foot as well as collection and laboratory analyses of groundwater from water supply wells provided that the cost is pre-approved by the Division.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from the DHEC is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated costs must be pre-approved by the DHEC in order for the costs to be paid. Failure to obtain pre-approval of additional costs will result in the denial of any and all such costs. The DHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, the DHEC reserves the right to question and/or reject costs if deemed unreasonable and to audit project records at any time during the project or after completion of work.

The DHEC grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If, based on laboratory analysis, the CoC concentrations are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #02131. Should you have any questions regarding this correspondence, you may contact me at (803) 898-7542, fax me at (803) 898-0673, or e-mail me at [mendenje@dhec.sc.gov](mailto:mendenje@dhec.sc.gov).

Sincerely,



Ed Mendenhall, Hydrogeologist  
Assessment & Unregulated Petroleum Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)  
Monitoring Well Approval (MWA)

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (w/enc)  
Technical File (w/enc)





### Monitoring Well Approval Form

**Approval is hereby granted to:** Katawba Environmental, Inc.  
**(on behalf of):** One Accord Ministries  
**Facility:** One Accord Ministries, 3570 Lancaster Hwy,  
Richburg, SC  
**UST Permit Number:** 02131  
**County:** Chester

This approval is for the installation of 3 permanent monitoring wells. The wells are to be installed in the approved locations following the South Carolina Well Standards, R.61-71, and the applicable guidance documents.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the DHEC shall be completed and submitted to the DHEC within 30 days after well completion or abandonment unless another schedule has been approved by the DHEC. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the DHEC within 30 days of receipt of laboratory results unless another schedule has been approved by the DHEC as required by R.61-71.H.1.d.
5. If any of the information provided to the DHEC changes, notification to Ed Mendenhall (tel: (803) 898-7542 or e-mail: mendenje@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. DHEC approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina well standards and regulations, dated May 27, 2016. A copy of this approval should be on the site during well installation.

**Date of Issuance:** February 15, 2018

**Approval #: UMW-26885**

Ed Mendenhall, Hydrogeologist  
Assessment and Unregulated Petroleum Section  
UST Management Division  
Bureau of Land and Waste Management

# Approved Cost Agreement

55779

Facility: 02131 ONE ACCORD MINISTRIES

MENDENJE

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
01 PLAN		A1 SITE SPECIFIC WORK PLAN	1.0000	\$150.000	150.00
04 MOB/DEMOB		A1 EQUIPMENT	1.0000	\$1,020.000	1,020.00
		B1 PERSONNEL	4.0000	\$423.000	1,692.00
08 ABANDONMENT		A1 ABANDONMENT 2" DIA OR LESS	60.0000	\$3.100	186.00
09 WELL INSTALLATION		B1 WATER TABLE (DRILL RIG)	95.0000	\$38.000	3,610.00
		CC TELESCOPING	150.0000	\$50.000	7,500.00
10 SAMPLE COLLECTION		A1 GROUNDWATER (PURGE)	13.0000	\$60.000	780.00
		C1 WATER SUPPLY	6.0000	\$22.000	132.00
		D1 GROUNDWATER NO PURGE/DUPLICATE	42.0000	\$28.000	1,176.00
		H1 FIELD BLANK	2.0000	\$24.600	49.20
11 ANALYSES					
	GW GROUNDWATER	A2 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	57.0000	\$122.000	6,954.00
		F1 EDB BY 8011	56.0000	\$45.200	2,531.20
	SOIL SOIL	W1 GRAIN SIZE / HYDROMETER	1.0000	\$104.000	104.00
	WATER DRINKING WATER	L BTEXNM+1,2 DCA (524.2)	8.0000	\$124.050	992.40
		M 7-OXYGENATES & ETHANOL (8260B)	8.0000	\$91.750	734.00
		N EDB (504.1)	8.0000	\$79.500	636.00
16 SUBSEQUENT SURVEY		A1 SUBSEQUENT SURVEY	1.0000	\$260.000	260.00
17 DISPOSAL		AA WASTEWATER	150.0000	\$0.560	84.00
		C1 SOIL TREATMENT DISPOSAL	3.0000	\$60.000	180.00
19 RPT/PROJECT MNGT & COORDINATIO		PRT REPORT PREPARATION	0.1200	\$28,770.800	3,452.50
<b>Total Amount</b>					<b>32,223.30</b>





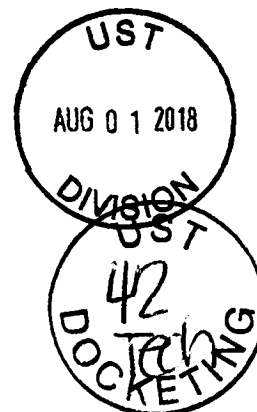


# Katawba Environmental, Inc.

July 28, 2018

Mr. Ed Mendenhall  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

RE: **Sampling Report**  
**One Accord Ministries**  
**UST Permit #02131 CA #55779**  
**3570 Lancaster Highway**  
**Richburg, South Carolina**



Dear Mr. Mendenhall:

Katawba Environmental, Inc. (Katawba) has prepared this Sampling Report for the above-referenced facility for your review. This Assessment was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated February 26, 2018.

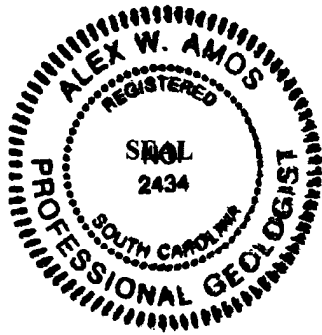
It is recommended that multiple AFVR Events be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

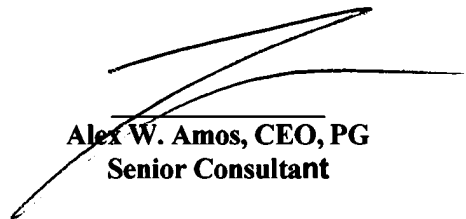
Sincerely,  
**KATAWBA ENVIRONMENTAL, INC. #18**

  
Alex W. Amos, CEO, PG  
Senior Consultant



*Sampling Report*  
**One Accord**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit #02131**



  
Alex W. Amos, CEO, PG  
Senior Consultant

July 28, 2018

Mr. Ed Mendenhall  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE:    Sampling Report  
      One Accord Ministries  
      UST Permit #02131 CA #55779  
      3570 Lancaster Highway  
      Richburg, South Carolina**

Dear Mr. Mendenhall:

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It is recommended that multiple AFVR Events be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

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## **1.0 INTRODUCTION**

Katawba Environmental, Inc. has been contracted by Ms. Angel Hough to complete a Sampling Report for One Accord Ministries. The Subject Site (Site ID 02131) is located at 3570 Lancaster Highway in Richburg, South Carolina (Appendix A, Figure 1). The subject site currently operates as youth ministry for Union ARP Church. The facility no longer retails petroleum products.

The surrounding area is mixed residential and commercial development. The subject site is abutted by residential structures to the north, south, east and west. First Citizens Bank is located approximately 421 feet northeast, the entrance for Lewisville Middle school is located approximately 260 feet east and Union ARP Church is located approximately 560 feet southwest. The nearest permitted UST site appears to be in excess of 2500 feet from the subject site.

The release at the subject site was reported March 23, 2009. An Initial Groundwater Assessment was conducted in November 2012. A Tier I was conducted in March 2014. The findings of the Tier I indicated further assessment was warranted to delineate the vertical and horizontal extent of the petroleum hydrocarbon release. Findings of the Tier II Assessment indicated that the plume extends approximately 420 feet from the source in a west southwestern direction. Findings of this assessment scope of work are as follows.

- This project included the installation of MW38, MW39 and DW10.
- Monitoring wells MW1R, MW2, MW3, MW22, MW29, MW33, DW1, DW3, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Drinking water wells DWW1, DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.

## **1.1 Site Information**

The responsible party for the subject site is One Accord Ministries, PO Box 220, Richburg, South Carolina 29729. Angel Hough is the contact for One Accord Ministries and can be communicated with via mail or phone at (803) 804-0253. According to Chester County Tax Assessor records the parcel is currently owned by owned by Angela D. Hough and Melvin E. Hugh Sr. Survivorship, PO Box 220, Richburg, South Carolina 29729. The subject site is a square shaped parcel that is occupied by one primary structure and a storage unit in the rear of the facility. The subject site is listed with the Chester County Assessor's Office as TM 125-00-00-059-000.

## **2.0 ASSESSMENT INFORMATION**

One Accord Ministries is located at an elevation of 585 feet above mean sea level. Topographically overland flow is to the south. Groundwater levels varied over the investigation site from 16.13 feet BLS to 38.23 feet BLS. Groundwater flow at the site was calculated to be to the west southwest.

### **2.1 Piezometric Data**

Figure 2 in Appendix A serves as the comprehensive site map showing the locations of the 52 monitoring wells located at the subject site. Monitoring wells MW2 through MW4 were installed during previous scopes of work. Monitoring wells MW1R, MW9R, MW10R, MW5 to MW37, DW1 to DW9 and recovery wells RW1, RW2 and RW3 were installed during the Tier II Assessment in September 2017. MW38, MW39 and DW10 were installed for this scope of work by Environmental Probing and Drilling Service (EDPS) of Charlotte, NC (SC Driller # 1846B). Mr. Tommy Bolyard of EDPS can be contacted at 17538 Greenhill Road, Charlotte, NC 28278 or via phone at (704) 607-7529. These wells were installed on various dates from May 7 to May 9, 2018.

The well logs for this well installation event can be found in Appendix C. The monitoring wells were constructed at varying depths utilizing 2 inch diameter riser with 2 inch diameter screen slotted 0.010. Coarse grain filter pack was placed into the annulus to an approximate elevation of 1 foot above the screen followed by a bentonite seal and grouted to the surface with neat cement. All monitoring wells are outfitted with an 8 inch steel traffic rated manhole cover encapsulated within an exterior concrete pad. Well tags for each well were cemented in place upon completion of the well vault. Newly installed wells were developed utilizing a purge pump to remove all drilling fluids from the well annulus. Removal of fluids was conducted until the process was completed. Development of all onsite wells occurred on 5/12/18. All well development fluids were disposed of at Haz Mat, Inc. in Charlotte, North Carolina.

Piezometric data for all monitoring wells associated with the release at the One Accord Ministries site can be found in Table 1. Water levels were measured on July 6 and July 7, 2018. A piezometric map was created utilizing groundwater elevations measured during this scope of work is included as Figure 3 in Appendix A.

Depths to fluid measurements were collected relative to the top of casing for each well with the accuracy of measurements being within 0.01 foot or 1/8 inch. A hydrocarbon interface probe capable of detecting and measuring a hydrocarbon product thickness of 0.01 foot or 1/8 inch was used for depth to fluid measurements.

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 1R	7/7/18	99.20	24-14	--	21.98	77.22
MW 2	7/7/18	99.04	28-18	--	21.86	77.18
MW 3	7/7/18	98.95	28-18	--	21.84	77.11
MW 4	7/7/18	99.30	28-18	--	21.93	77.37
MW 5	7/7/18	100.13	25-15	--	19.17	80.96
MW 6	7/7/18	98.09	24-14	--	17.18	80.91
MW 7	7/7/18	96.98	23-13	--	16.13	80.85
MW 8	7/7/18	95.83	23-13	--	19.87	75.96
MW 9R	7/7/18	103.90	37-27	--	30.33	73.57
MW 10 R	7/7/18	104.51	40-30	--	31.84	72.67
MW 11	7/7/18	99.24	29-19	--	26.57	72.67
MW 12	7/7/18	98.96	29-19	--	20.73	78.23
MW 13	7/7/18	98.51	26-16	--	24.26	74.25
MW 14	7/7/18	99.77	36-26	--	27.84	71.93
MW 15	7/6/18	105.72	40-30	--	37.89	67.83
MW 16	7/7/18	94.17	30-20	--	21.73	72.44
MW 17	7/7/18	98.62	30-20	--	21.06	77.56
MW 18	7/7/18	100.03	32-22	--	26.80	73.23
MW 19	7/7/18	99.24	32-22	--	22.77	76.47
MW 20	7/7/18	98.22	28-18	--	21.64	76.58
MW 21	7/7/18	98.84	35-25	--	26.77	72.07
MW 22	7/7/18	101.55	30-20	--	28.20	73.35
MW 23	7/7/18	99.18	35-25	--	26.43	72.75
MW 24	7/7/18	101.20	35-25	--	28.13	73.07
MW 25	7/7/18	99.37	30-20	--	21.77	77.60
MW 26	7/7/18	99.24	28-18	--	27.17	72.07

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 27	7/7/18	99.35	28-18	--	22.42	76.93
MW 28	7/7/18	99.25	59-49	--	26.75	72.50
MW 29	7/7/18	101.64	64-54	--	28.32	73.32
MW 30	7/7/18	99.41	59-49	--	25.35	74.06
MW 31	7/7/18	101.24	57-47	--	38.23	63.01
MW 32	7/7/18	99.18	56-46	--	22.12	77.06
MW 33	7/7/18	98.90	58-48	--	27.21	71.69
MW 34	7/7/18	99.28	56-46	--	21.94	77.34
MW 35	7/7/18	104.25	50-40	--	31.00	73.25
MW 36	7/7/18	103.59	59-49	--	30.26	73.33
MW 37	7/6/18	105.69	64-54	--	38.90	66.79
MW 38	7/6/18	99.63	40-30	--	28.16	71.47
MW 39	7/6/18	99.52	80-75	--	28.83	70.69
DW 1	7/6/18	98.42	75-70	--	17.43	80.99
DW 2	7/6/18	99.59	75-70	--	17.64	81.95
DW 3	7/6/18	104.30	75-70	--	31.34	72.96
DW 4	7/6/18	99.81	120-115	--	28.26	71.55
DW 5	7/6/18	99.52	150-145	--	22.83	76.69
DW 6	7/6/18	98.54	150-145	--	27.10	71.44
DW 7	7/6/18	99.32	150-145	--	21.58	77.74
DW 8	7/6/18	103.97	150-145	--	38.99	64.98
DW 9	7/6/18	105.79	150-145	--	37.41	68.38
DW 10	7/6/18	99.44	150-145	--	29.94	69.50
RW 1	7/6/18	98.90	29-19	--	21.33	77.57
RW 2	7/6/18	98.87	29-19	--	21.67	77.20
RW 3	7/6/18	99.01	29-19	--	21.73	77.28

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	7/7/18	99.20	24-14	--	21.98	77.22
	9/1/17			--	16.59	82.61
	3/13/17			--	21.93	77.27
	1/31/17			--	21.83	77.37
MW 1	12/18/13	UNK	29-19	--	NL	NL
	10/26/12			--	23.51	UNK
MW 2	7/7/18	99.04	28-18	--	21.86	77.18
	9/1/17			--	21.39	77.65
	3/13/17			--	21.74	77.30
	1/31/17			--	21.69	77.35
	12/18/13			--	18.48	80.56
MW 3	7/7/18	98.95	28-18	--	21.84	77.11
	9/1/17			--	22.17	76.78
	3/13/17			21.67	21.73	77.19
	1/31/17			21.70	21.76	77.19
	12/18/13			--	18.85	80.10
MW 4	7/7/18	99.30	28-18	--	21.93	77.37
	9/1/17			--	21.42	77.88
	3/13/17			--	21.32	77.98
	1/31/17			--	21.94	77.36
	12/18/13			--	19.48	79.82
MW 5	7/7/18	100.13	25-15	--	19.17	80.96
	9/1/17			--	18.10	82.03
	3/13/17			--	22.09	78.04
	1/31/17			--	22.71	77.42
MW 6	7/7/18	98.09	24-14	--	17.18	80.91
	3/13/17			--	20.44	77.65
	9/1/17			--	16.29	81.80
	1/31/17			--	20.79	77.30
MW 7	7/7/18	96.98	23-13	--	16.13	80.85
	9/1/17			--	16.07	80.91
	1/31/17			--	19.86	77.12
	3/13/17			--	19.66	77.32
MW 8	7/7/18	95.83	23-13	--	19.87	75.96
	9/1/17			--	30.07	75.76
	1/31/17			--	19.16	76.67
	3/13/17			--	19.20	76.63

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 9R	7/7/18	103.90	37-27	--	30.33	73.57
	9/1/17			--	24.97	73.58
	3/13/17			--	29.23	74.67
	3/3/17			--	29.37	74.53
MW 9	1/31/17	103.75	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 10 R	7/7/18	104.51	40-30	--	31.84	72.67
	9/1/17			--	30.89	73.62
	3/13/17			--	31.73	72.78
	3/3/17			--	31.58	72.93
MW 10	1/31/17	104.68	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 11	7/7/18	99.24	29-19	--	26.57	72.67
	9/1/17			--	17.49	72.85
	3/13/17			--	25.63	73.61
	1/31/17			--	26.31	72.93
MW 12	7/7/18	98.96	29-19	--	20.73	78.23
	9/1/17			--	17.57	81.39
	3/13/17			--	20.59	78.37
	1/31/17			--	21.62	77.34
MW 13	7/7/18	98.51	26-16	--	24.26	74.25
	9/1/17			--	24.71	73.80
	3/13/17			--	21.20	77.31
	1/31/17			--	20.52	77.99
MW 14	7/7/18	99.77	36-26	--	27.84	71.93
	9/1/17			--	28.16	71.61
	3/13/17			--	27.24	72.53
	3/3/17			--	28.02	71.75
MW 15	7/6/18	105.72	40-30	--	37.89	67.83
	9/1/17			--	37.19	68.53
	3/13/17			--	36.72	69.00
	3/3/17			--	37.12	68.60
MW 16	7/7/18	94.17	30-20	--	21.73	72.44
	9/1/17			--	21.42	77.72



<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 17	7/7/18	98.62	30-20	--	21.06	77.56
	9/1/17			--	21.57	77.05
MW 18	7/7/18	100.03	32-22	--	26.80	73.23
	9/1/17			--	25.61	74.42
MW 19	7/7/18	99.24	32-22	--	22.77	76.47
	9/1/17			--	23.25	75.99
MW 20	7/7/18	98.22	28-18	--	21.64	76.58
	9/1/17			--	21.59	76.63
MW 21	7/7/18	98.84	35-25	--	26.77	72.07
	9/1/17			--	27.03	71.81
MW 22	7/7/18	101.55	30-20	--	28.20	73.35
	9/1/17			--	28.15	73.40
MW 23	7/7/18	99.18	35-25	--	26.43	72.75
	9/1/17			--	27.00	72.18
MW 24	7/7/18	101.20	35-25	--	28.13	73.07
	9/1/17			--	28.43	72.77
MW 25	7/7/18	99.37	30-20	--	21.77	77.60
	9/1/17			--	21.59	77.78
MW 26	7/7/18	99.24	28-18	--	27.17	72.07
	9/1/17			--	26.93	72.31
MW 27	7/7/18	99.35	28-18	--	22.42	76.93
	9/1/17			--	18.21	81.14
MW 28	7/7/18	99.25	59-49	--	26.75	72.50
	9/1/17			--	27.18	72.07
MW 29	7/7/18	101.64	64-54	--	28.32	73.32
	9/1/17			--	28.49	73.15
MW 30	7/7/18	99.41	59-49	--	25.35	74.06
	9/1/17			--	26.85	72.56

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 31	7/7/18	101.24	57-47	--	38.23	63.01
	9/1/17			--	28.40	72.84
MW 32	7/7/18	99.18	56-46	--	22.12	77.06
	9/1/17			--	21.60	77.58
MW 33	7/7/18	98.90	58-48	--	27.21	71.69
	9/1/17			--	27.13	71.77
MW 34	7/7/18	99.28	56-46	--	21.94	77.34
	9/1/17			--	21.84	77.44
MW 35	7/7/18	104.25	50-40	--	31.00	73.25
	9/1/17			--	31.25	73.00
MW 36	7/7/18	103.59	59-49	--	30.26	73.33
	9/1/17			--	29.90	73.69
MW 37	7/6/18	105.69	64-54	--	38.90	66.79
	9/1/17			--	37.22	68.47
MW 38	7/6/18	99.63	40-30	--	28.16	71.47
MW 39	7/6/18	99.52	80-75	--	28.83	70.69
DW 1	7/6/18	98.42	75-70	--	17.43	80.99
	9/1/17			--	17.32	81.10
	3/13/17			--	21.36	77.06
	1/31/17			--	21.53	76.89
DW 2	7/6/18	99.59	75-70	--	17.64	81.95
	9/1/17			--	17.59	82.00
	3/13/17			--	21.70	77.89
	1/31/17			--	22.29	77.30
DW 3	7/6/18	104.30	75-70	--	31.34	72.96
	9/1/17			--	26.10	78.20
	3/13/17			--	32.47	71.83
	1/31/17			--	31.29	73.01

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
DW 4	7/6/18	99.81	120-115	--	28.26	71.55
	9/1/17			--	28.30	71.51
	3/13/17			--	27.63	72.18
	1/31/17			--	28.05	71.76
DW 5	7/6/18	99.52	150-145	--	22.83	76.69
	9/1/17			--	21.61	77.91
DW 6	7/6/18	98.54	150-145	--	27.10	71.44
	9/1/17			--	27.17	71.37
DW 7	7/6/18	99.32	150-145	--	21.58	77.74
	9/1/17			--	21.40	77.92
DW 8	7/6/18	103.97	150-145	--	38.99	64.98
	9/1/17			--	30.51	73.46
DW 9	7/6/18	105.79	150-145	--	37.41	68.38
	9/1/17			--	37.12	68.67
DW 10	7/6/18	99.44	150-145	--	29.94	69.50
RW 1	7/6/18	98.90	29-19	--	21.33	77.57
	9/1/17			--	21.12	77.78
RW 2	7/6/18	98.87	29-19	--	21.67	77.20
	9/1/17			--	21.10	77.77
RW 3	7/6/18	99.01	29-19	--	21.73	77.28
	9/1/17			--	21.14	77.87

## **2.2 Groundwater Sampling**

Samples were collected from monitoring wells installed during this and prior rounds of assessment. Prior to sampling each well, depths to groundwater were measured utilizing an oil/water interface probe. These measurements were used to construct a piezometric map which is located in Appendix A, as Figure 3. Groundwater was evacuated from each well utilizing a battery operated Monsoon purge pump. As directed by SCDHEC all wells were purged three volumes prior to sampling. Sampling of wells located at the site was completed by utilizing a disposable bailer attached to a new non colored nylon line. Groundwater samples collected were placed into laboratory supplied containers and stored on ice for same day transport for analysis. Katawba personnel submitted all groundwater samples to Shealy Environmental, 106 Vantage Point Drive, Cayce, SC 29033 to the attention of laboratory director Dan Wright who can be contacted at 803-791-9700. The results for the groundwater sampling analysis are as follows.

**TABLE 2 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	7/7/18	20000	30000	96000	39000	38000	<5000	0.15JP	NA	NA	<5000
MW 2	7/7/18	11000	44000	4000	24000	1400	2000	<0.20	NA	NA	<500
MW 3	7/7/18	11000	43000	3300	21000	1500	1700	0.78 P	NA	NA	<500
MW 4	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
MW 5	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 7	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	7/7/18	<1	<1	<1	0.67 J	<1	0.72 J	<0.020	NA	NA	<1
MW 9R	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10R	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 11	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	7/7/18	2.6	2.3	1	6.8	<1	3	0.047	NA	NA	<1
MW 14	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW15	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 16	7/7/18	<1	<1	<1	<1	<1	<1	0.006JP	NA	NA	<1
MW 17	7/7/18	<1	<1	<1	<1	<1	<1	0.006JP	NA	NA	<1
MW 18	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 19	7/7/18	1.7	1.7	0.72 J	5.3	<1	2.3	<0.020	NA	NA	<1
MW 20	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 21	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 22	7/7/18	<1	<1	<1	<1	<1	57	<0.024	NA	NA	<1
MW 23	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 24	7/7/18	0.42 J	<1	<1	0.75 J	<1	0.80 J	<0.020	NA	NA	<1
MW 25	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 26	7/7/18	<1	<1	<1	<1	<1	4.1	<0.020	NA	NA	<1
MW 27	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 28	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 29	7/7/18	<1	<1	<1	<1	<1	56	<0.019	NA	NA	<1
MW 30	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
MW 31	7/7/18	0.41 J	<1	<1	0.71 J	<1	0.80 J	<0.020	NA	NA	<1
MW 32	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 33	7/7/18	<10	<10	<10	<10	<10	820	<0.020	NA	NA	<10
MW 34	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 35	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 36	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 37	7/8/18	<1	<1	<1	<1	<1	0.77 J	<0.019	NA	NA	<1
MW 38	7/8/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 39	7/6/18	<1	<1	<1	<1	<1	16	<0.019	NA	NA	<1
DW 1	7/6/18	290	79	27	630	33	340	<0.020	NA	NA	<10
DW 2	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	7/6/18	<1	<1	<1	<1	<1	280	<0.020	NA	NA	<1
DW 4	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 5	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 6	7/6/18	2.9	<1	<1	<1	<1	18	<0.020	NA	NA	<1
DW 7	7/6/18	<1	<1	<1	<1	<1	1.9	<0.019	NA	NA	<1
DW 8	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
DUP	7/6/18	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
DW 9	7/6/18	<1	<1	<1	<1	<1	32	<0.019	NA	NA	<1
DW 10	7/6/18	<1	<1	<1	<1	<1	9.5	<0.020	NA	NA	<1
RW 1	7/6/18	<b>10000</b>	<b>33000</b>	<b>3000</b>	<b>19000</b>	430 J	<b>6700</b>	<b>0.072 P</b>	NA	NA	<500
RW 2	7/6/18	<b>10000</b>	<b>32000</b>	<b>2900</b>	<b>19000</b>	430 J	<b>6600</b>	<b>0.077P</b>	NA	NA	<500
RW 3	7/6/18	<b>10000</b>	<b>32000</b>	<b>3100</b>	<b>20000</b>	490	<b>7000</b>	<b>0.14 P</b>	NA	NA	<200
DWW1	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	<0.020	NA	NA	<0.50
DWW2	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<b>73</b>	<0.019	NA	NA	<0.50
DWW3	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	0.77	<0.020	NA	NA	<0.50
DWW4	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.020	NA	NA	<0.50
DUP	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	<0.020	NA	NA	<0.50
DWW5	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	<0.019	NA	NA	<0.50
DWW6	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
FB	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB2	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
TB	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50
TB	7/6/18	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1

**TABLE 2 Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	7/7/18	<5000	<500000	<100000	<5000	<100000	<50000	<100000	<25000
MW 2	7/7/18	760	<50000	<10000	<500	24000	370 J	<10000	<2500
MW 3	7/7/18	750	<50000	<10000	<500	24000	330 J	<10000	<2500
MW 4	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 9R	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 10R	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DUP	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	7/7/18	<1	<100	<20	<1	29	<10	14 J	<5



Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether (ETBE) µg/L	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 14	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DUP	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 16	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 17	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	7/7/18	<1	<100	<20	<1	25	<10	13 J	<5
MW 20	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 21	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	7/7/18	2.2	<100	<20	<1	<20	2.9 J	<20	<5
MW 23	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 27	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	7/7/18	2.2	<100	<20	<1	<20	2.7 J	<20	<5
MW 30	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	7/7/18	21	<1000	<200	<10	180 J	190	91 J	<50
MW 34	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 38	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	7/6/18	34	<1000	<200	<10	850	41 J	240	<50
DW 2	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	7/6/18	5.8	<100	<20	<1	<20	6.3 J	9.5 J	<5
DW 4	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 6	7/6/18	<1	<100	<20	<1	<20	1.5 J	<20	<5
DW 7	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 8	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DUP	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 10	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RW 1	7/6/18	660	<50000	<10000	<500	8100 J	1600 J	<10000	<2500
RW 2	7/6/18	640	<50000	<10000	<500	7700 J	1500 J	<10000	<2500
RW 3	7/6/18	610	<20000	<4000	<200	8400	1700 J	<4000	<1000
DWW 1	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	7/6/18	<1	<100	<20	<1	<20	0.63 J	<20	<5
DWW 3	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DUP	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
FB	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
FB 2	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
TB	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5

**TABLE 2A Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	7/7/18	20000	30000	96000	39000	38000	<5000	0.15JP	NA	NA	<5000
	1/31/17	11000	42000	2800	20000	750	5700	0.010 J	NA	NA	<500
MW 2	7/7/18	11000	44000	4000	24000	1400	2000	<0.20	NA	NA	<500
	1/31/17	13000	41000	3200	20000	760	1800	<0.020	NA	NA	<500
	12/18/13	13000	44000	4200	22000	<500	3100	<0.020	16	780	<500
MW 3	7/7/18	11000	43000	3300	21000	1500	1700	0.78 P	NA	NA	<500
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP	FP	FP
	12/18/13	15000	44000	4600	23000	1400	31000	0.074	7.2	860	<1000
MW 4	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	12/18/13	<1	1	4600	23000	1400	31000	<0.020	9.7	<5	1
MW 5	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	7/7/18	<1	<1	<1	0.67 J	<1	0.72 J	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	7/7/18	2.6	2.3	1	6.8	<1	3	0.047	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
MW15	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
MW 16	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	<b>1400</b>	<b>5500</b>	290	3700	<50	<b>79</b>	<0.020	<10	NA	<50
MW 17	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	2.4	9.3	<100	7.7	<1	<1	<0.019	12	NA	<1
MW 18	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	0.6	NA	<1
MW 19	7/7/18	1.7	1.7	0.72	5.3	<1	2.3	<0.020	NA	NA	<1
	9/1/17	<b>980</b>	65	73	580	13	<b>930</b>	<0.019	<10	NA	<5
MW 20	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<b>160</b>	410	63	280	4.6 J	<b>97</b>	<0.020	<10	NA	<5
MW 21	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	17	NA	<1
MW 22	7/7/18	<1	<1	<1	<1	<1	<b>57</b>	<0.024	NA	NA	<1
	9/1/17	<b>55 J</b>	<10	<10	<10	<10	<b>950</b>	<0.019	67	NA	<10

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 23	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	11	NA	<1
MW 24	7/7/18	0.42 J	<1	<1	0.75 J	<1	0.80 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	70	<0.019	6.4	NA	<1
MW 25	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	1.7	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 26	7/7/18	<1	<1	<1	<1	<1	4.1	<0.020	NA	NA	<1
	9/1/17	110	<20	<20	57	<20	1800	<0.019	38	NA	<20
MW 27	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 28	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	0.87 J	<1	<1	<1	<1	0.85 J	<0.019	<10	NA	<1
MW 29	7/7/18	<1	<1	<1	<1	<1	56	<0.020	NA	NA	<1
	9/1/17	<10	<10	<10	<10	<10	1100	<0.019	<10	NA	<10
MW 30	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	11	<0.019	<10	NA	<1
MW 31	7/7/18	0.41 J	<1	<1	0.71 J	<1	0.80J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	7.2	<1	740	<0.019	<10	NA	<1
MW 32	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 33	7/7/18	<10	<10	<10	<10	<10	820	<0.020	NA	NA	<10
	9/1/17	140	<20	<20	47	<20	2300	<0.019	<10	NA	<20

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 34	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 35	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	0.90 J	<0.019	<10	NA	<1
MW 36	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 37	7/6/18	<1	<1	<1	<1	<1	0.77 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.020	6.5	NA	<1
MW 38	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 39	7/7/18	<1	<1	<1	<1	<1	16	<0.020	NA	NA	<1
DW 1	7/6/18	<b>290</b>	79	27	630	33	<b>340</b>	<0.020	NA	NA	<10
	1/31/17	<b>990</b>	200	100	1600	<b>37</b>	<b>1000</b>	<0.020	NA	NA	<10
DW 2	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	7/7/18	<1	<1	<1	<1	<1	<b>280</b>	<0.020	NA	NA	<1
	1/31/17	<5	4.2 J	<5	<5	<5	<b>190</b>	<0.020	NA	NA	<5
DW 4	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DW 5	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<b>26</b>	4.7 J	5	46	30	<b>330</b>	<0.020	NA	NA	<5
DW 6	7/6/18	2.9	<1	<1	<1	<1	18	<0.019	NA	NA	<1
	9/1/17	<b>22</b>	<5	<5	28	18	<b>400</b>	<0.020	NA	NA	<5
DW 7	7/6/18	<1	<1	<1	<1	<1	1.9	<0.019	NA	NA	<1
	9/1/17	3.5	0.91 J	0.93 J	7.8	5.4	<b>40</b>	<0.19	NA	NA	<1
DW 8	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 9	7/6/18	<1	<1	<1	<1	<1	32	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	36	<0.019	NA	NA	<1
RW 1	7/6/18	10000	33000	3000	19000	430 J	6700	0.072 P	NA	NA	<500
	9/1/17	7700	12000	1800	9400	270	21000	0.028	8.3	NA	<200
RW 2	7/6/18	10000	32000	2900	19000	430 J	6600	0.077P	NA	NA	<500
	9/1/17	16000	49000	3700	19000	500	23000	0.12 P	<10	NA	<500
RW 3	7/6/18	10000	32000	3100	20000	490	7000	0.14 P	NA	NA	<200
	9/1/17	4600	6400	1200	11000	170	2500	0.024P	<10	NA	<50
DWW1	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW2	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	73	<0.019	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	71	NA	NA	<5	<1
DWW3	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	0.77	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW4	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW5	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW6	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1



**TABLE 2A Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	7/7/18	<5000	<500000	<100000	<5000	<100000	<50000	<100000	<25000
	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	7/7/18	760	<50000	<10000	<500	24000	370 J	<10000	<2500
	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
MW 3	7/7/18	750	<50000	<10000	<500	24000	330 J	<10000	<2500
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
MW 4	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 8	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	7/7/18	<1	<100	<20	<1	29	<10	14 J	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 14	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 16	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<50	<5000	<1000	<50	810 J	<500	<1000	<250
MW 17	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	7/7/18	<1	<100	<20	<1	25	<10	13 J	<5
	9/1/17	38	<500	<100	<5	1700	59	220	<25
MW 20	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<500	<100	<5	1200	5.7 J	140	<25
MW 21	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	7/7/18	2.2	<100	<20	<1	<20	2.9 J	<20	<5
	9/1/17	32	<1000	<200	<10	290	55 J	<200	<50
MW 23	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	36	<2000	<400	<20	<400	190 J	<400	<100
MW 27	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	7/7/18	2.2	<100	<20	<1	<20	2.7 J	<20	<5
	9/1/17	35	<1000	<200	<10	310	66 J	<200	<50
MW 30	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<100	<20	<1	58	55	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	7/7/18	21	<1000	<200	<10	180 J	190	91 J	<50
	9/1/17	<20	<2000	<400	<20	<400	<220	<400	<100
MW 34	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 38	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	7/6/18	34	<1000	<200	<10	850	41 J	240	<50
	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	7/6/18	5.8	<100	<20	<1	<20	6.3 J	9.5 J	<5
	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	29000	<100	<5	68 J	35 J	44 J	<25
DW 6	7/6/18	<1	<100	<20	<1	<20	1.5 J	<20	<5
	9/1/17	<5	16000	<100	<5	130	34 J	46 J	<25
DW 7	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	2300	<20	<1	10 J	3.9 J	12 J	5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DW 8	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	<500	<100	<5	<100	<50	<100	<25
DW 10	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
RW 1	7/6/18	660	<50000	<10000	<500	8100 J	1600 J	<10000	<2500
	9/1/17	910	<20000	<4000	<200	8500	2900	2000 J	<1000
RW 2	7/6/18	640	<50000	<10000	<500	7700 J	1500 J	<10000	<2500
	9/1/17	<500	<50000	<10000	<500	15000	4700 J	<10000	<2500
RW 3	7/6/18	610	<20000	<4000	<200	8400	1700 J	<4000	<1000
	9/1/17	<50	<5000	<1000	<50	2700	470 J	<1000	<250
DWW 1	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	7/6/18	<1	<100	<20	<1	<20	0.63 J	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
DWW 3	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5

## 2.3 RECEPTOR SURVEY

A receptor survey and drinking water well survey was conducted for the Tier II. Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, drainage ditch and two septic tanks were noted to be the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

**Table 4 Receptor Data One Accord Ministries Site ID 02131**

Receptor	Depth	Location	Assessed
Water Line	36 inches	Site E Row	Yes
Sewer Line	36 inches	Site E ROW	Yes
Phone Line	36 inches	Site E ROW	Yes
Gas Line	36 inches	Site E ROW	Yes
Septic Tank	36 inches	Site W Property Line	Yes
Septic Tank	36 inches	518 Peggy's Drive	No
DWW1	120 feet	533 Peggy's Drive	Yes
DWW2	110 feet	510 Peggy's Drive	Yes
DWW3	Unknown	568 Kee's Drive	Yes
DWW4	Unknown	603 Kee's Drive	No
DWW5	80 feet	583 Kee's Drive	Yes
DWW6	Unknown	843 Elliot Road	No
DWW7	Unknown	1719 Old Richburg	No
DWW8	Unknown	3571 Lancaster Hwy	No

**Table 4A Drinking Water Well Survey One Accord Ministries Site ID 02131**

1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
7	1719 OLD RICHBURG ROAD	JAMES KNOX	UNKNOWN	HOUSE	NO POWER NO CONTACT
8	3571 LANCASTER HWY	JOHN FAUST	UNKNOWN	HOUSE	NOT IN USE

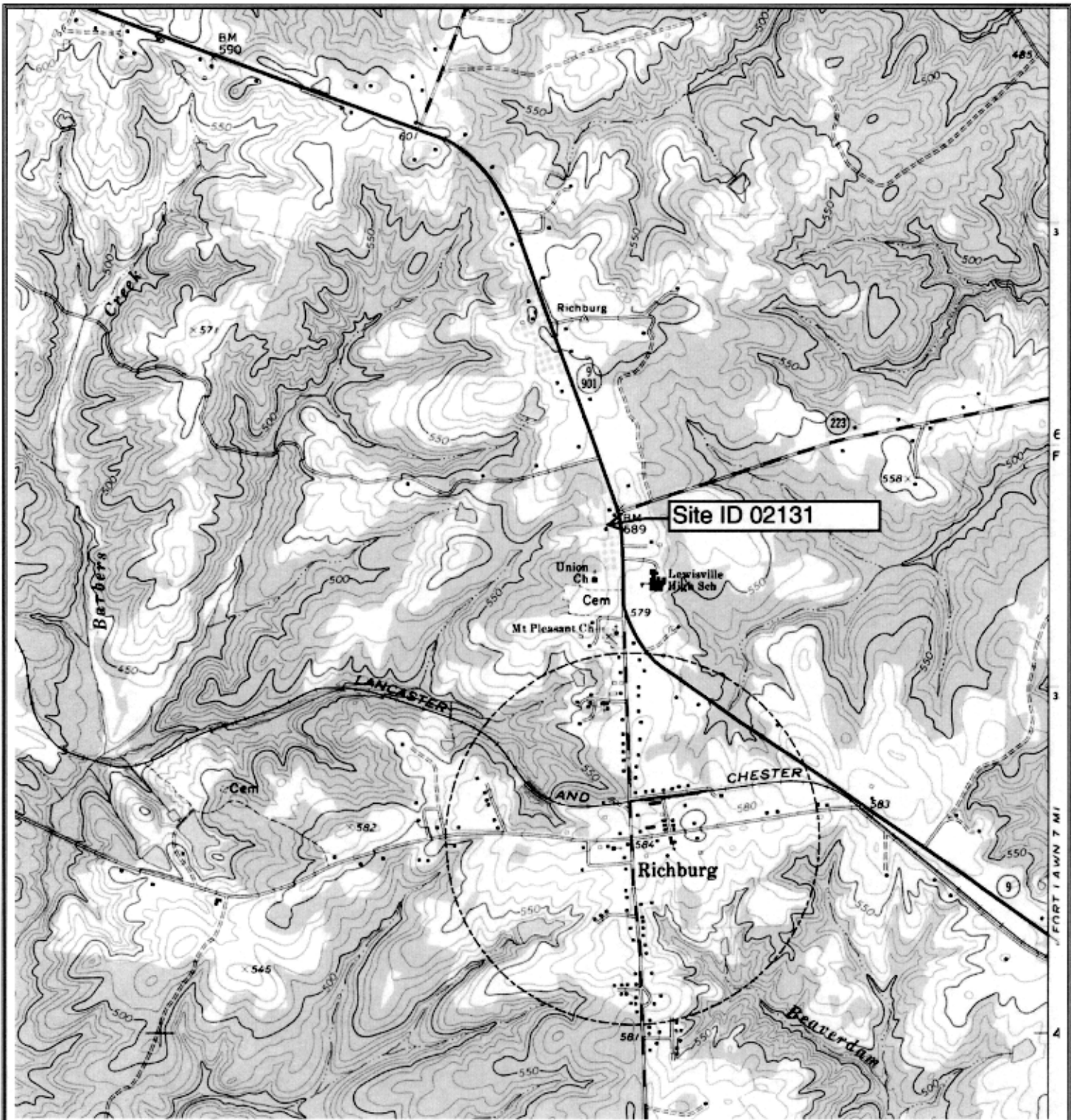
### **3.0 CONCLUSIONS**

Findings of the Tier II Assessment indicated that free product plume at the site measures approximately 420 feet on an east northeast / west southwest axis. Additional data obtained during this scope of work are as follows:

- This project included the installation of MW38, MW39 and DW10.
- Monitoring wells MW1R, MW2, MW3, MW22, MW29, MW33, DW1, DW3, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Drinking water wells DWW1, DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.



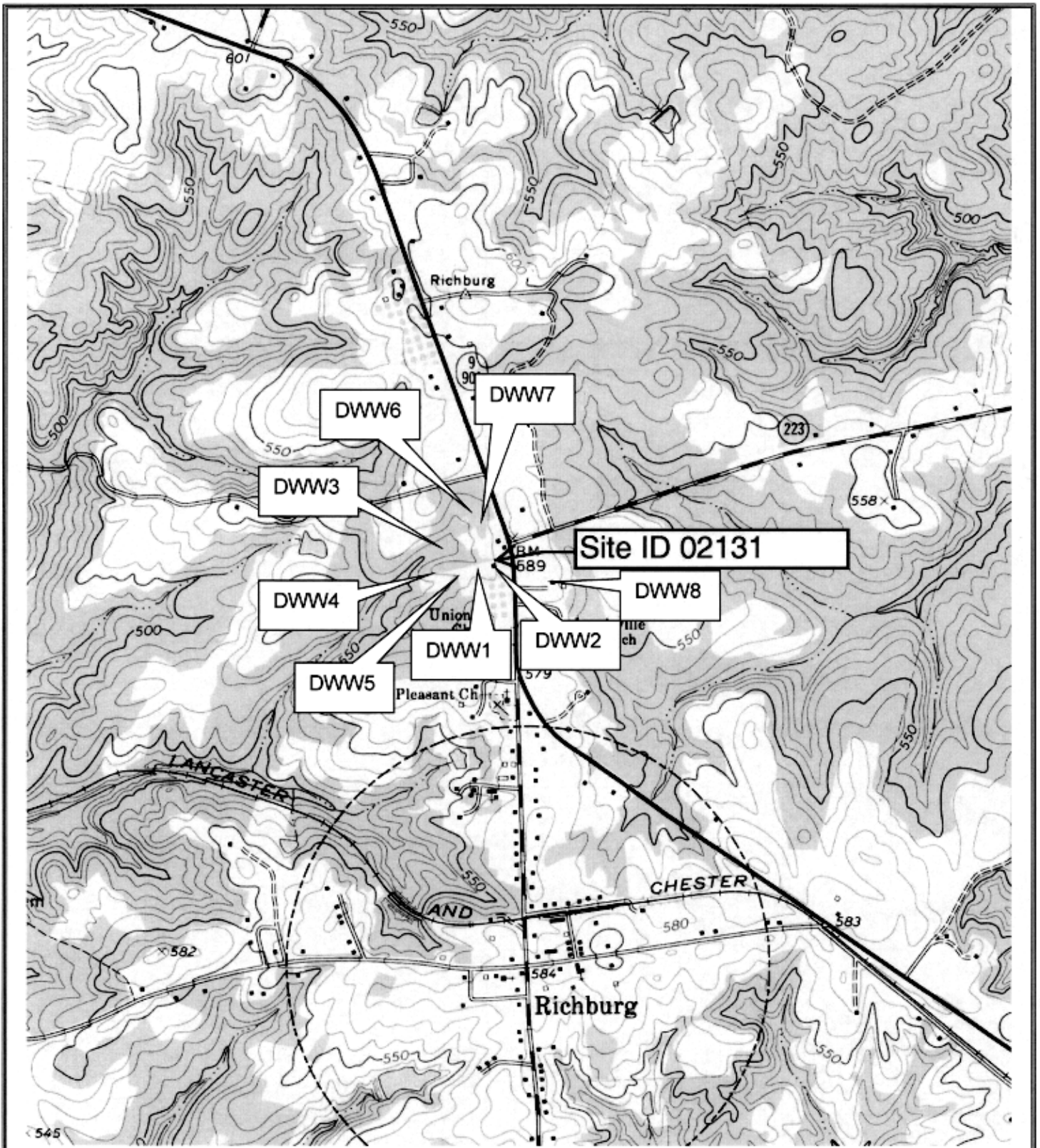
**APPENDIX A**  
**FIGURES**



SCALE 1 INCH = 2000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

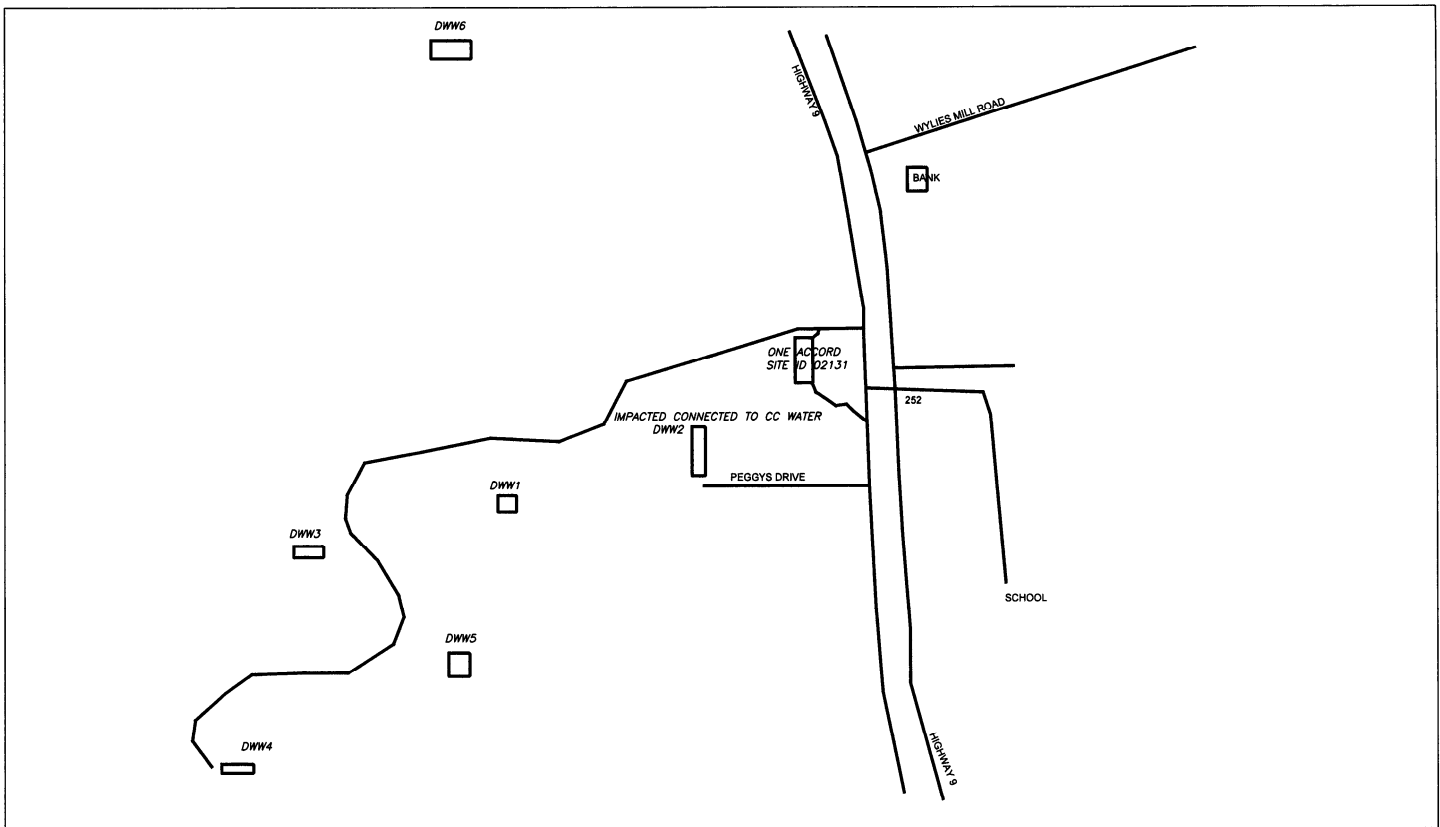
SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 - SITE LOCATION



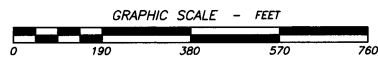
SCALE 1 INCH = 1000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDMOOR, SC 29712  
 (803) 327-0469 UCC#18

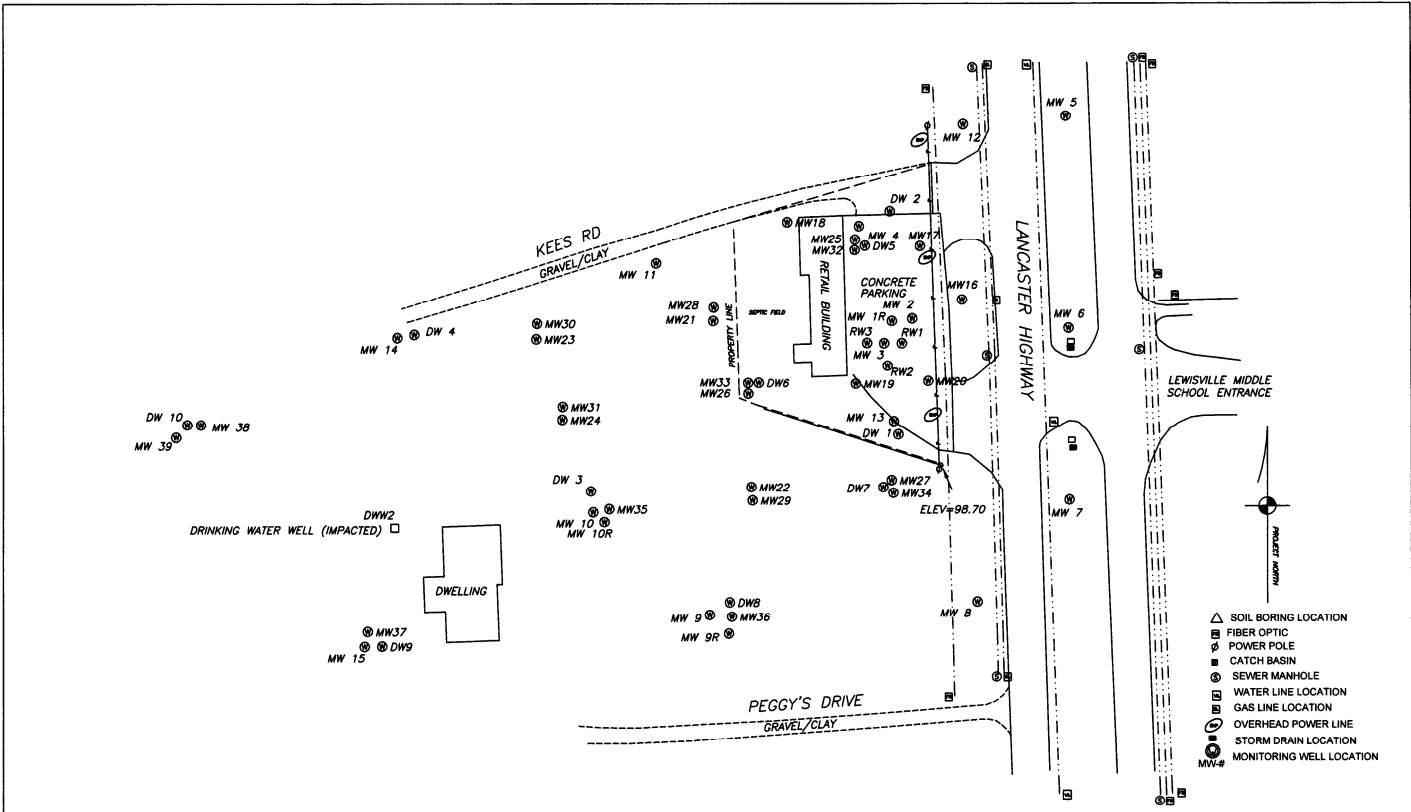
SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP



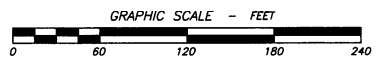
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



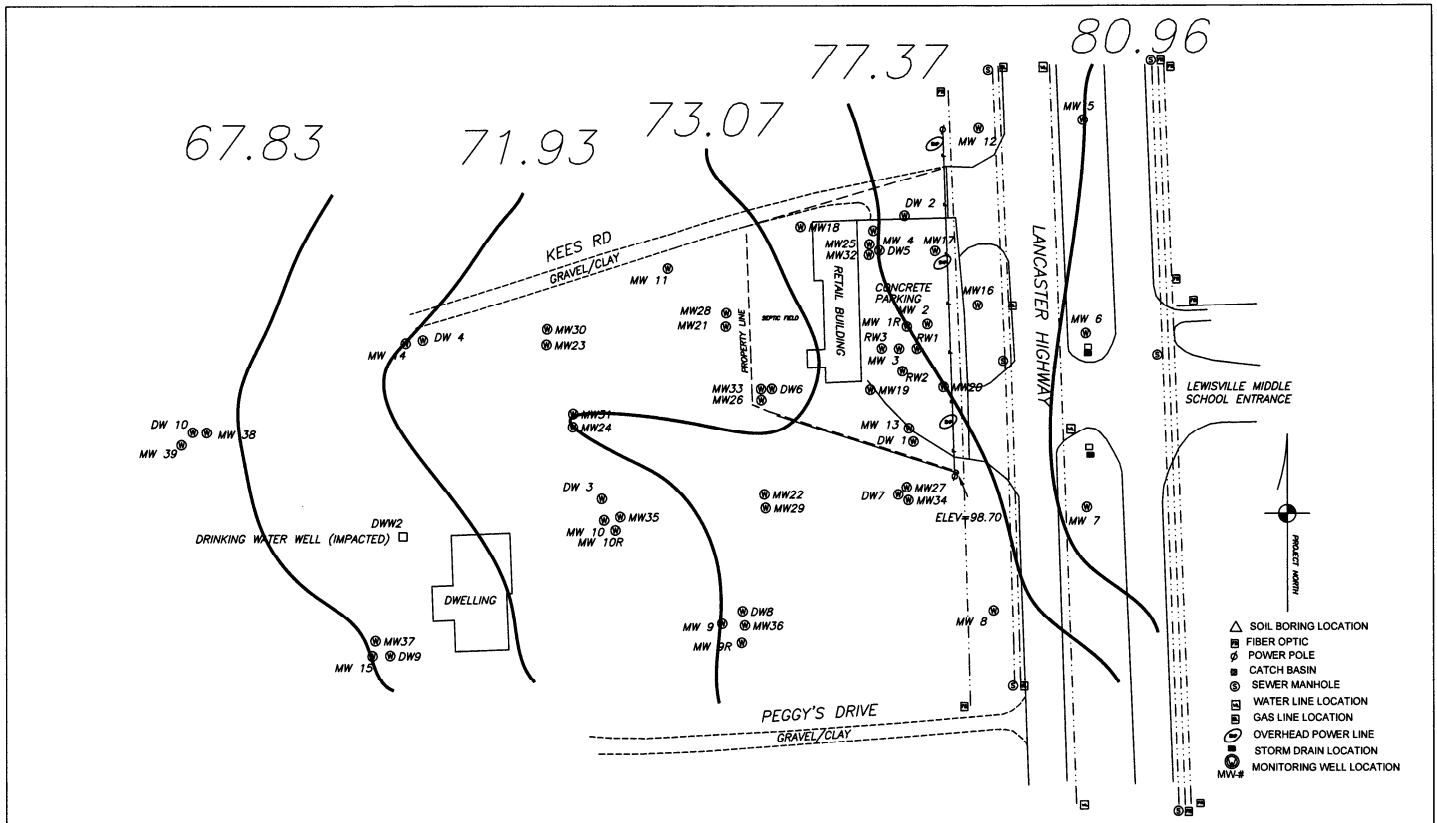
SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2A - SITE DWW MAP



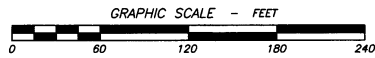
KATAWBA ENVIRONMENTAL, INC.  
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 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



KATAWBA ENVIRONMENTAL, INC.  
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(803)327-0469 UCC#18

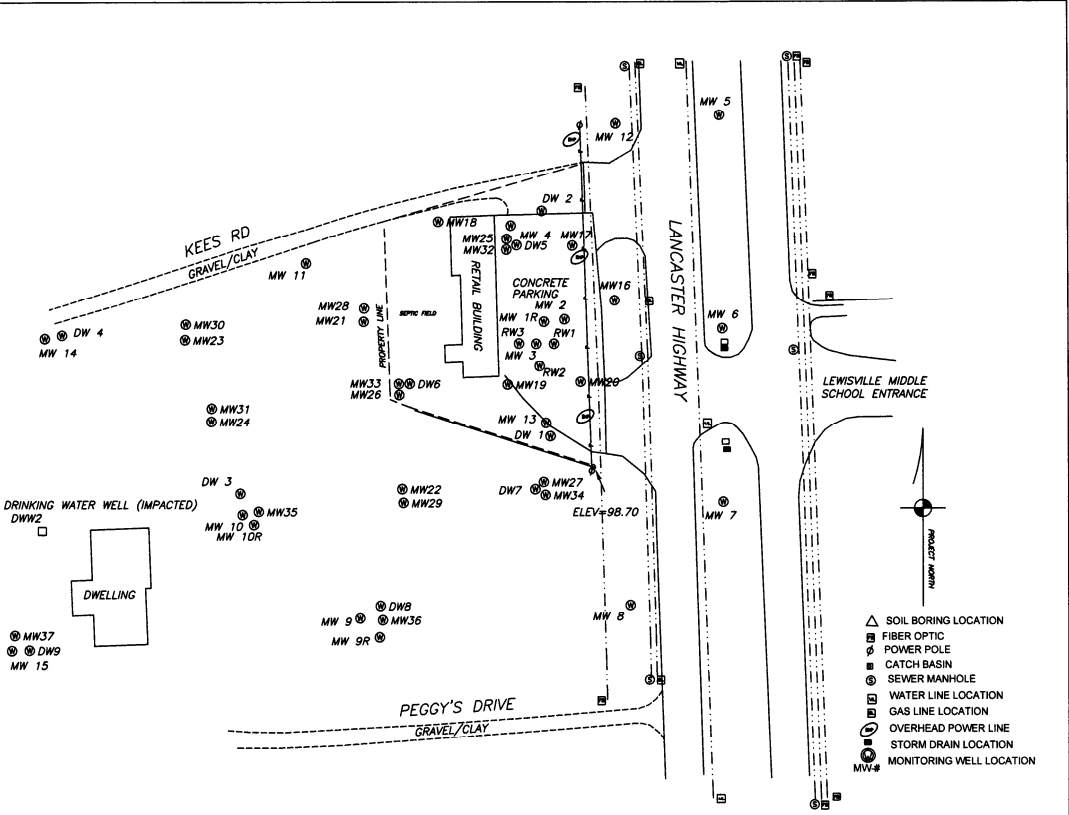


SAMPLING REPORT  
ONE ACCORD SITE ID 02131  
3570 LANCASTER HWY., RICHBURG, SC  
FIGURE 3 - PIEZOMETRIC MAP



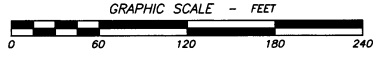
**TABLE 2 Groundwater Analytical Data One Accord Minimum Site ID 02131**

MW ID	DATE	ANIONIC	CATIONIC	3-D DENSITY	3-D TEMPERATURE	PH	REDUCED SULFIDE	IRON	COPPER	LEAD	CHLORIDE	AMMONIA	NITRATE	NITRITES	PERMANGANATE	PERMANGANATE INDEX	PERMANGANATE INDEX (TDS)
MW 18	1/15/18	<1000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000
MW 2	1/15/18	780	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000
MW 3	1/15/18	780	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000	<10000



MW ID	DATE	ANIONIC	CATIONIC	3-D DENSITY	3-D TEMPERATURE	PH	REDUCED SULFIDE	IRON	COPPER	LEAD	CHLORIDE	AMMONIA	NITRATE	NITRITES	PERMANGANATE	PERMANGANATE INDEX	PERMANGANATE INDEX (TDS)
MW 10	1/15/18	<100	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
MW 38	1/15/18	21	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
MW 39	1/15/18	<100	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000

**KATAWBA ENVIRONMENTAL, INC.**  
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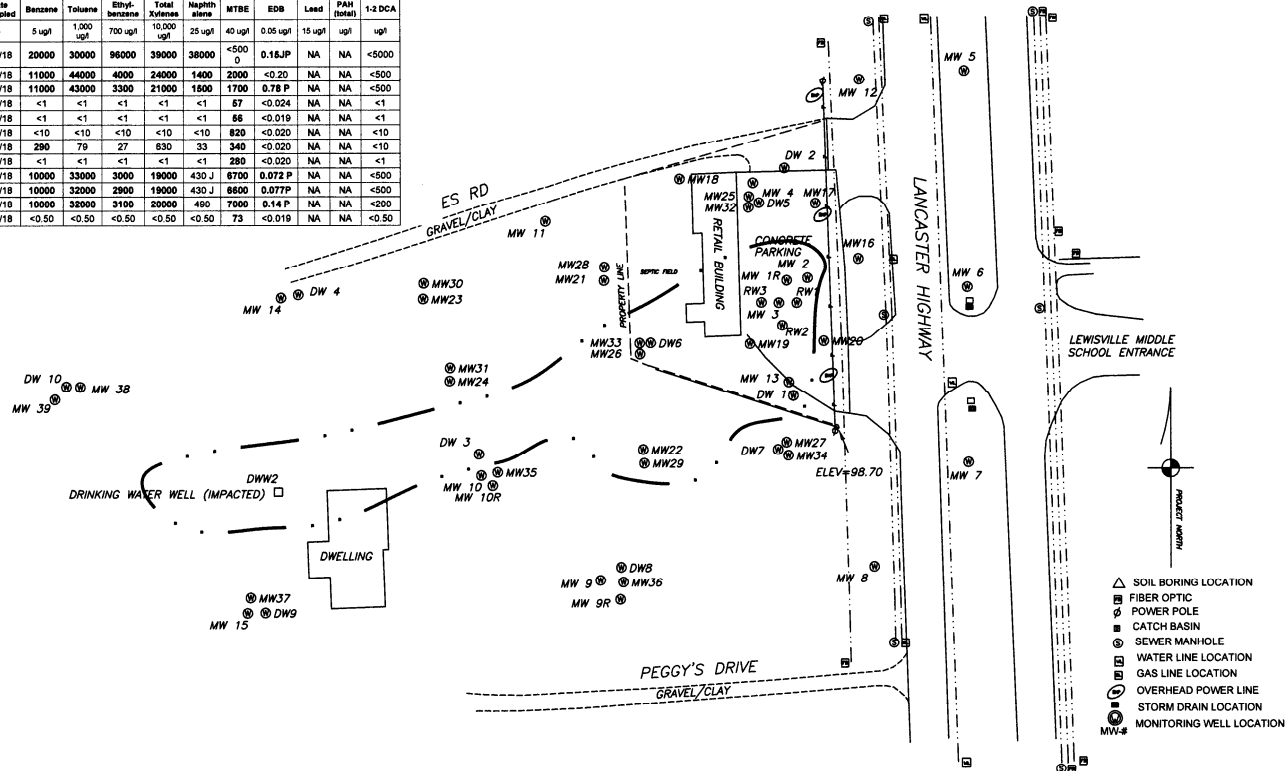


**SAMPLING REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - CONTAMINATION MAP

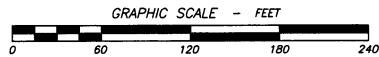


**TABLE 2 Groundwater Analytical Data One Accord Site ID 02131**

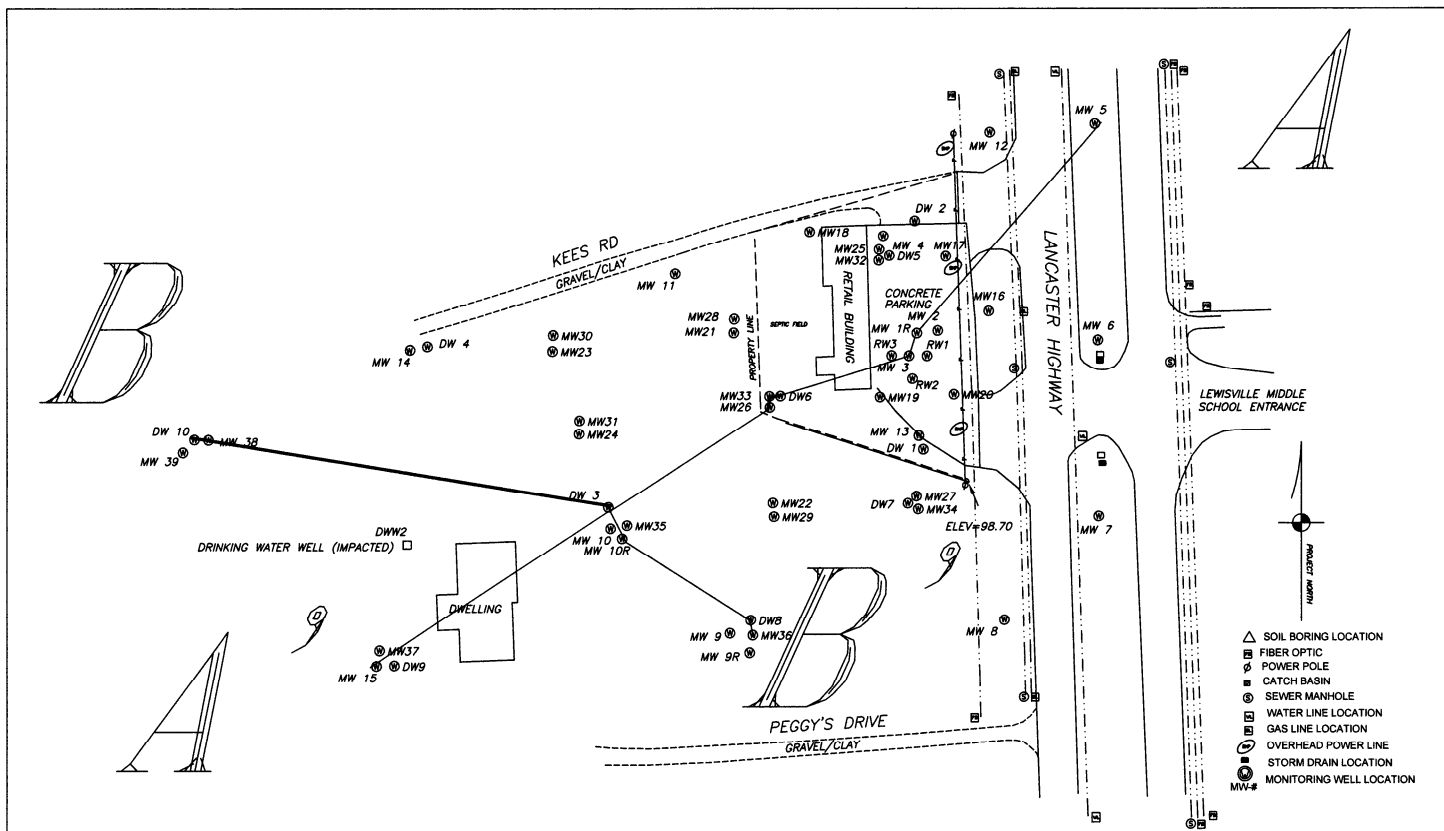
Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA	
		5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l	
MW 1R	7/7/18	20000	30000	96000	39000	38000	<500	0	0.16JP	NA	NA	<5000
MW 2	7/7/18	11000	44000	4000	24000	1400	2000	<0.20	NA	NA	NA	<500
MW 3	7/7/18	11000	43000	3300	21000	1900	1700	0.78 P	NA	NA	NA	<500
MW 22	7/7/18	<1	<1	<1	<1	<1	87	<0.024	NA	NA	NA	<1
MW 29	7/7/18	<1	<1	<1	<1	<1	86	<0.019	NA	NA	NA	<1
MW 33	7/7/18	<10	<10	<10	<10	<10	820	<0.020	NA	NA	NA	<10
DW 1	7/8/18	280	79	27	630	33	340	<0.020	NA	NA	NA	<10
DW 3	7/8/18	<1	<1	<1	<1	<1	280	<0.020	NA	NA	NA	<1
RW 1	7/8/18	10000	33000	3000	19000	430 J	6700	0.072 P	NA	NA	NA	<500
RW 2	7/8/18	10000	32000	2800	19000	430 J	8600	0.077 P	NA	NA	NA	<500
RW 3	7/0/10	10000	32000	3100	20000	480	7900	0.14 P	NA	NA	NA	<200
DWW2	7/8/18	<0.50	<0.50	<0.50	<0.50	<0.50	73	<0.018	NA	NA	NA	<0.50



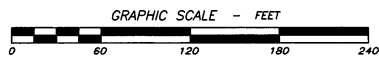
**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



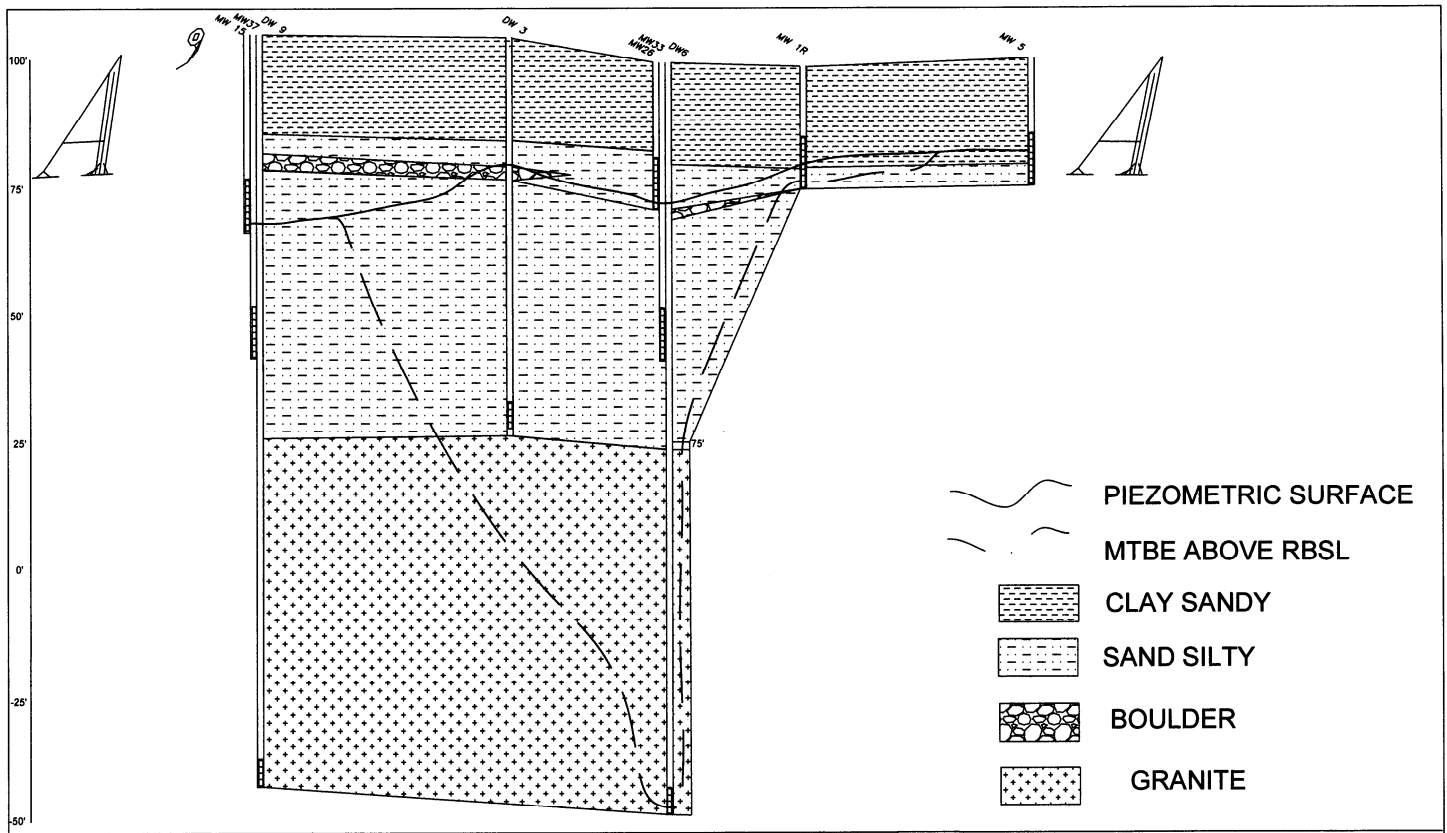
**SAMPLING REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - WELL DELINEATION MAP



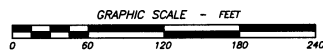
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



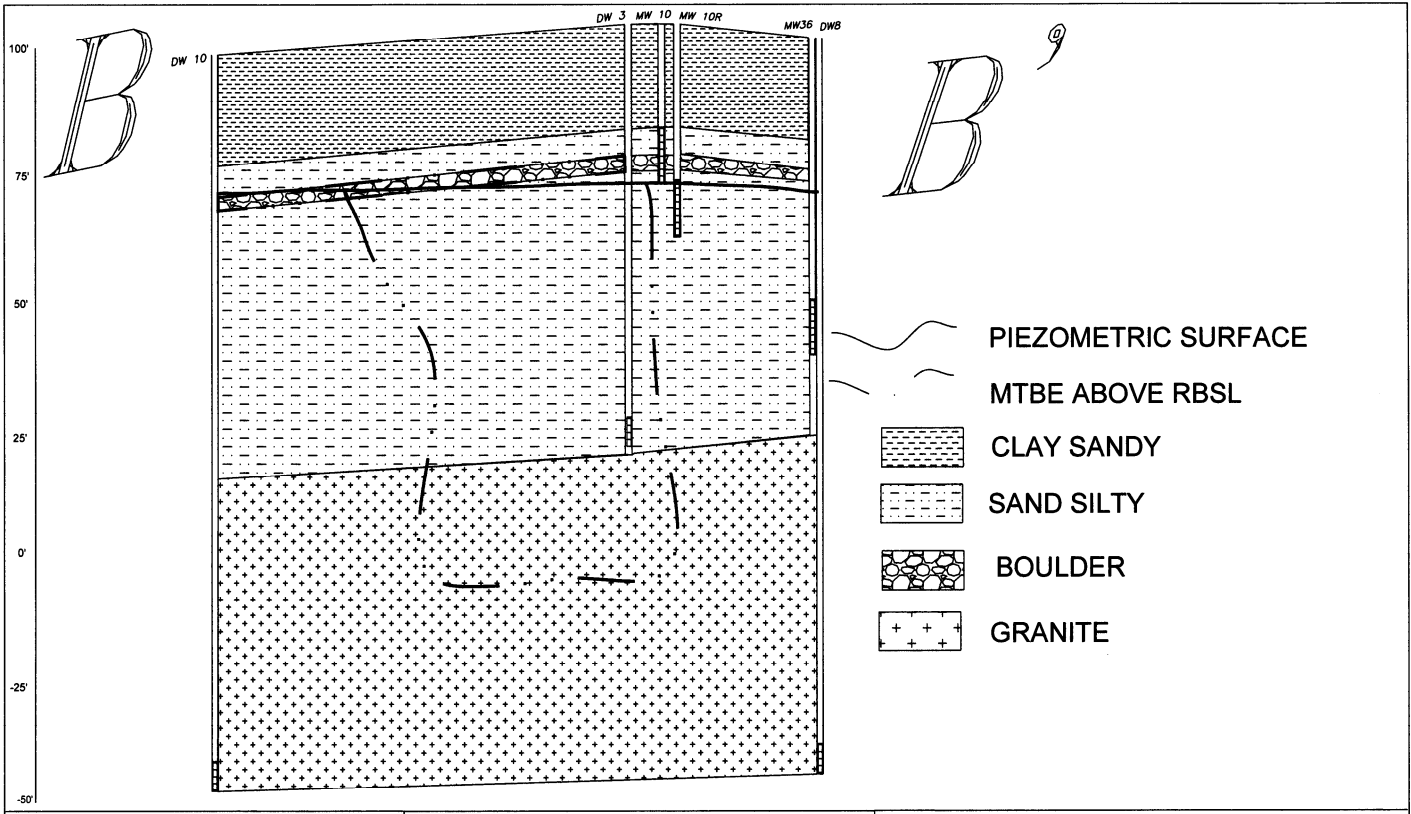
TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 6 - TRANSECT MAP



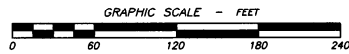
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 7 - A A' TRANSECT MAP



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 8 - B B' TRANSECT MAP

**APPENDIX B**  
**ANALYTICAL DATA**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: One Accord

Lot Number: **TG10074**

Date Completed: 07/20/2018



07/23/2018 10:45 AM  
Approved and released by:  
Project Manager: Lucas Odom



The electronic signature above is the equivalent of a handwritten signature.  
This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 [www.shealylab.com](http://www.shealylab.com)

# **SHEALY ENVIRONMENTAL SERVICES, INC.**

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Katawba Environmental, Inc. Lot Number: TG10074**

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### **EDB by Microextraction**

The following samples were diluted due to the nature of the sample matrix: TG10074-001, TG10074-002, TG10074-003. The LOQ has been elevated to reflect the dilution. The dilution caused the surrogate to recover outside of method criteria. No corrective action is required as it is known that dilutions of 5X and greater may impact surrogate recoveries.

The following samples have been qualified with a "P" as the relative percent difference between the two GC columns exceeded method criteria for EDB (-001, -003, -018, -042, -043, and -044). Per SCDHEC the lesser of the two values has been reported.

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: TG10074

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131 mw1	Aqueous	07/07/2018 2043	07/10/2018
002	02131 mw2	Aqueous	07/07/2018 2029	07/10/2018
003	02131 mw3	Aqueous	07/07/2018 2013	07/10/2018
004	02131 mw4	Aqueous	07/07/2018 1958	07/10/2018
005	02131 mw5	Aqueous	07/07/2018 1502	07/10/2018
006	02131 mw6	Aqueous	07/07/2018 1443	07/10/2018
007	02131 mw7	Aqueous	07/07/2018 1417	07/10/2018
008	02131 mw8	Aqueous	07/07/2018 1358	07/10/2018
009	02131 mw9	Aqueous	07/07/2018 0917	07/10/2018
010	02131 mw10	Aqueous	07/07/2018 1012	07/10/2018
011	02131 mw11	Aqueous	07/07/2018 1301	07/10/2018
012	02131 mw12	Aqueous	07/07/2018 1526	07/10/2018
013	02131 mw12 Dup	Aqueous	07/07/2018 1528	07/10/2018
014	02131 mw13	Aqueous	07/07/2018 1336	07/10/2018
015	02131 mw14	Aqueous	07/07/2018 0839	07/10/2018
016	02131 mw14 Dup	Aqueous	07/07/2018 0841	07/10/2018
017	02131 mw15	Aqueous	07/06/2018 2015	07/10/2018
018	02131 mw16	Aqueous	07/07/2018 1602	07/10/2018
019	02131 mw17	Aqueous	07/07/2018 1546	07/10/2018
020	02131 mw18	Aqueous	07/07/2018 1645	07/10/2018
021	02131 mw19	Aqueous	07/07/2018 1925	07/10/2018
022	02131 mw20	Aqueous	07/07/2018 1622	07/10/2018
023	02131 mw21	Aqueous	07/07/2018 1824	07/10/2018
024	02131 mw22	Aqueous	07/07/2018 1219	07/10/2018
025	02131 mw23	Aqueous	07/07/2018 1726	07/10/2018
026	02131 mw24	Aqueous	07/07/2018 1131	07/10/2018
027	02131 mw25	Aqueous	07/07/2018 1947	07/10/2018
028	02131 mw26	Aqueous	07/07/2018 1913	07/10/2018
029	02131 mw27	Aqueous	07/07/2018 1313	07/10/2018
030	02131 mw28	Aqueous	07/07/2018 1811	07/10/2018
031	02131 mw29	Aqueous	07/07/2018 1153	07/10/2018
032	02131 mw30	Aqueous	07/07/2018 1750	07/10/2018
033	02131 mw31	Aqueous	07/07/2018 1102	07/10/2018
034	02131 mw32	Aqueous	07/07/2018 1947	07/10/2018
035	02131 mw33	Aqueous	07/07/2018 1850	07/10/2018
036	02131 mw34	Aqueous	07/07/2018 1249	07/10/2018
037	02131 mw35	Aqueous	07/07/2018 1038	07/10/2018
038	02131 mw36	Aqueous	07/07/2018 0943	07/10/2018
039	02131 mw37	Aqueous	07/06/2018 2019	07/10/2018
040	02131 mw38	Aqueous	07/06/2018 1954	07/10/2018
041	02131 mw39	Aqueous	07/06/2018 1922	07/10/2018
042	02131 Rw1	Aqueous	07/06/2018 2059	07/10/2018
043	02131 Rw2	Aqueous	07/06/2018 2133	07/10/2018
044	02131 Rw3	Aqueous	07/06/2018 2110	07/10/2018
045	02131 Dw1	Aqueous	07/06/2018 1846	07/10/2018



## Sample Summary (Continued)

Lot Number: TG10074

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
046	02131 Dw2	Aqueous	07/06/2018 1732	07/10/2018
047	02131 Dw3	Aqueous	07/06/2018 1132	07/10/2018
048	02131 Dw4	Aqueous	07/06/2018 0811	07/10/2018
049	02131 Dw5	Aqueous	07/06/2018 1624	07/10/2018
050	02131 Dw6	Aqueous	07/06/2018 1350	07/10/2018
051	02131 Dw7	Aqueous	07/06/2018 1513	07/10/2018
052	02131 Dw8	Aqueous	07/06/2018 1241	07/10/2018
053	02131 Dw8 Dup	Aqueous	07/06/2018 1243	07/10/2018
054	02131 Dw9	Aqueous	07/06/2018 1024	07/10/2018
055	02131 Dw10	Aqueous	07/06/2018 0917	07/10/2018
056	02131 Dww1	Aqueous	07/06/2018 2115	07/10/2018
057	02131 Dww2	Aqueous	07/06/2018 2140	07/10/2018
058	02131 Dww3	Aqueous	07/06/2018 2132	07/10/2018
059	02131 Dww4	Aqueous	07/06/2018 2105	07/10/2018
060	02131 Dww4 Dup	Aqueous	07/06/2018 2107	07/10/2018
061	02131 Dww5	Aqueous	07/06/2018 2119	07/10/2018
062	02131 Dww6	Aqueous	07/06/2018 2148	07/10/2018
063	02131 FB	Aqueous	07/06/2018 2200	07/10/2018
064	02131 FB	Aqueous	07/06/2018 2218	07/10/2018
065	02131 TB	Aqueous	07/06/2018 2226	07/10/2018

(65 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Detection Summary Katawba Environmental, Inc. Lot Number: TG10074

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131 mw1	Aqueous	Benzene	8260B	20000		ug/L	8
001	02131 mw1	Aqueous	Ethylbenzene	8260B	96000		ug/L	8
001	02131 mw1	Aqueous	Naphthalene	8260B	38000		ug/L	8
001	02131 mw1	Aqueous	Toluene	8260B	30000		ug/L	8
001	02131 mw1	Aqueous	Xylenes (total)	8260B	39000		ug/L	8
001	02131 mw1	Aqueous	1,2-Dibromoethane (EDB)	8011	0.15	JP	ug/L	8
002	02131 mw2	Aqueous	tert-Amyl alcohol (TAA)	8260B	24000		ug/L	9
002	02131 mw2	Aqueous	tert-Amyl methyl ether	8260B	370	J	ug/L	9
002	02131 mw2	Aqueous	Benzene	8260B	11000		ug/L	9
002	02131 mw2	Aqueous	Diisopropyl ether (IPE)	8260B	760		ug/L	9
002	02131 mw2	Aqueous	Ethylbenzene	8260B	4000		ug/L	9
002	02131 mw2	Aqueous	Methyl tertiary butyl ether	8260B	2000		ug/L	9
002	02131 mw2	Aqueous	Naphthalene	8260B	1400		ug/L	9
002	02131 mw2	Aqueous	Toluene	8260B	44000		ug/L	9
002	02131 mw2	Aqueous	Xylenes (total)	8260B	24000		ug/L	9
003	02131 mw3	Aqueous	tert-Amyl alcohol (TAA)	8260B	24000		ug/L	10
003	02131 mw3	Aqueous	tert-Amyl methyl ether	8260B	330	J	ug/L	10
003	02131 mw3	Aqueous	Benzene	8260B	11000		ug/L	10
003	02131 mw3	Aqueous	Diisopropyl ether (IPE)	8260B	750		ug/L	10
003	02131 mw3	Aqueous	Ethylbenzene	8260B	3300		ug/L	10
003	02131 mw3	Aqueous	Methyl tertiary butyl ether	8260B	1700		ug/L	10
003	02131 mw3	Aqueous	Naphthalene	8260B	1500		ug/L	10
003	02131 mw3	Aqueous	Toluene	8260B	43000		ug/L	10
003	02131 mw3	Aqueous	Xylenes (total)	8260B	21000		ug/L	10
003	02131 mw3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.78	P	ug/L	10
004	02131 mw4	Aqueous	Methyl tertiary butyl ether	8260B	10		ug/L	11
008	02131 mw8	Aqueous	Methyl tertiary butyl ether	8260B	0.72	J	ug/L	15
008	02131 mw8	Aqueous	Xylenes (total)	8260B	0.67	J	ug/L	15
014	02131 mw13	Aqueous	tert-Amyl alcohol (TAA)	8260B	29		ug/L	21
014	02131 mw13	Aqueous	Benzene	8260B	2.6		ug/L	21
014	02131 mw13	Aqueous	Ethylbenzene	8260B	1.0		ug/L	21
014	02131 mw13	Aqueous	Methyl tertiary butyl ether	8260B	3.0		ug/L	21
014	02131 mw13	Aqueous	tert-butyl alcohol (TBA)	8260B	14	J	ug/L	21
014	02131 mw13	Aqueous	Toluene	8260B	2.3		ug/L	21
014	02131 mw13	Aqueous	Xylenes (total)	8260B	6.8		ug/L	21
014	02131 mw13	Aqueous	1,2-Dibromoethane (EDB)	8011	0.047		ug/L	21
018	02131 mw16	Aqueous	1,2-Dibromoethane (EDB)	8011	0.0066	JP	ug/L	25
019	02131 mw17	Aqueous	1,2-Dibromoethane (EDB)	8011	0.0066	J	ug/L	26
021	02131 mw19	Aqueous	tert-Amyl alcohol (TAA)	8260B	25		ug/L	28
021	02131 mw19	Aqueous	Benzene	8260B	1.7		ug/L	28
021	02131 mw19	Aqueous	Ethylbenzene	8260B	0.72	J	ug/L	28
021	02131 mw19	Aqueous	Methyl tertiary butyl ether	8260B	2.3		ug/L	28
021	02131 mw19	Aqueous	tert-butyl alcohol (TBA)	8260B	13	J	ug/L	28
021	02131 mw19	Aqueous	Toluene	8260B	1.7		ug/L	28
021	02131 mw19	Aqueous	Xylenes (total)	8260B	5.3		ug/L	28

## Detection Summary (Continued)

Lot Number: TG10074

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
024	02131 mw22	Aqueous	tert-Amyl methyl ether	8260B	2.9	J	ug/L	31
024	02131 mw22	Aqueous	Diisopropyl ether (IPE)	8260B	2.2		ug/L	31
024	02131 mw22	Aqueous	Methyl tertiary butyl ether	8260B	57		ug/L	31
026	02131 mw24	Aqueous	Benzene	8260B	0.42	J	ug/L	33
026	02131 mw24	Aqueous	Methyl tertiary butyl ether	8260B	0.80	J	ug/L	33
026	02131 mw24	Aqueous	Xylenes (total)	8260B	0.75	J	ug/L	33
028	02131 mw26	Aqueous	Methyl tertiary butyl ether	8260B	4.1		ug/L	35
031	02131 mw29	Aqueous	tert-Amyl methyl ether	8260B	2.7	J	ug/L	38
031	02131 mw29	Aqueous	Diisopropyl ether (IPE)	8260B	2.2		ug/L	38
031	02131 mw29	Aqueous	Methyl tertiary butyl ether	8260B	56		ug/L	38
032	02131 mw30	Aqueous	Methyl tertiary butyl ether	8260B	10		ug/L	39
033	02131 mw31	Aqueous	Benzene	8260B	0.41	J	ug/L	40
033	02131 mw31	Aqueous	Methyl tertiary butyl ether	8260B	0.80	J	ug/L	40
033	02131 mw31	Aqueous	Xylenes (total)	8260B	0.71	J	ug/L	40
035	02131 mw33	Aqueous	tert-Amyl alcohol (TAA)	8260B	180	J	ug/L	42
035	02131 mw33	Aqueous	tert-Amyl methyl ether	8260B	190		ug/L	42
035	02131 mw33	Aqueous	Diisopropyl ether (IPE)	8260B	21		ug/L	42
035	02131 mw33	Aqueous	Methyl tertiary butyl ether	8260B	820		ug/L	42
035	02131 mw33	Aqueous	tert-butyl alcohol (TBA)	8260B	91	J	ug/L	42
039	02131 mw37	Aqueous	Methyl tertiary butyl ether	8260B	0.77	J	ug/L	46
041	02131 mw39	Aqueous	Methyl tertiary butyl ether	8260B	16		ug/L	48
042	02131 Rw1	Aqueous	tert-Amyl alcohol (TAA)	8260B	8100	J	ug/L	49
042	02131 Rw1	Aqueous	tert-Amyl methyl ether	8260B	1600	J	ug/L	49
042	02131 Rw1	Aqueous	Benzene	8260B	10000		ug/L	49
042	02131 Rw1	Aqueous	Diisopropyl ether (IPE)	8260B	660		ug/L	49
042	02131 Rw1	Aqueous	Ethylbenzene	8260B	3000		ug/L	49
042	02131 Rw1	Aqueous	Methyl tertiary butyl ether	8260B	6700		ug/L	49
042	02131 Rw1	Aqueous	Naphthalene	8260B	430	J	ug/L	49
042	02131 Rw1	Aqueous	Toluene	8260B	33000		ug/L	49
042	02131 Rw1	Aqueous	Xylenes (total)	8260B	19000		ug/L	49
042	02131 Rw1	Aqueous	1,2-Dibromoethane (EDB)	8011	0.072	P	ug/L	49
043	02131 Rw2	Aqueous	tert-Amyl alcohol (TAA)	8260B	7700	J	ug/L	50
043	02131 Rw2	Aqueous	tert-Amyl methyl ether	8260B	1500	J	ug/L	50
043	02131 Rw2	Aqueous	Benzene	8260B	10000		ug/L	50
043	02131 Rw2	Aqueous	Diisopropyl ether (IPE)	8260B	640		ug/L	50
043	02131 Rw2	Aqueous	Ethylbenzene	8260B	2900		ug/L	50
043	02131 Rw2	Aqueous	Methyl tertiary butyl ether	8260B	6600		ug/L	50
043	02131 Rw2	Aqueous	Naphthalene	8260B	430	J	ug/L	50
043	02131 Rw2	Aqueous	Toluene	8260B	32000		ug/L	50
043	02131 Rw2	Aqueous	Xylenes (total)	8260B	19000		ug/L	50
043	02131 Rw2	Aqueous	1,2-Dibromoethane (EDB)	8011	0.077	P	ug/L	50
044	02131 Rw3	Aqueous	tert-Amyl alcohol (TAA)	8260B	8400		ug/L	51
044	02131 Rw3	Aqueous	tert-Amyl methyl ether	8260B	1700	J	ug/L	51
044	02131 Rw3	Aqueous	Benzene	8260B	10000		ug/L	51
044	02131 Rw3	Aqueous	Diisopropyl ether (IPE)	8260B	610		ug/L	51
044	02131 Rw3	Aqueous	Ethylbenzene	8260B	3100		ug/L	51
044	02131 Rw3	Aqueous	Methyl tertiary butyl ether	8260B	7000		ug/L	51
044	02131 Rw3	Aqueous	Naphthalene	8260B	490		ug/L	51

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**Detection Summary (Continued)****Lot Number: TG10074**

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
044	02131 Rw3	Aqueous	Toluene	8260B	32000		ug/L	51
044	02131 Rw3	Aqueous	Xylenes (total)	8260B	20000		ug/L	51
044	02131 Rw3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.14	P	ug/L	51
045	02131 Dw1	Aqueous	tert-Amyl alcohol (TAA)	8260B	850		ug/L	52
045	02131 Dw1	Aqueous	tert-Amyl methyl ether	8260B	41	J	ug/L	52
045	02131 Dw1	Aqueous	Benzene	8260B	290		ug/L	52
045	02131 Dw1	Aqueous	Diisopropyl ether (IPE)	8260B	34		ug/L	52
045	02131 Dw1	Aqueous	Ethylbenzene	8260B	27		ug/L	52
045	02131 Dw1	Aqueous	Methyl tertiary butyl ether	8260B	340		ug/L	52
045	02131 Dw1	Aqueous	Naphthalene	8260B	33		ug/L	52
045	02131 Dw1	Aqueous	tert-butyl alcohol (TBA)	8260B	240		ug/L	52
045	02131 Dw1	Aqueous	Toluene	8260B	79		ug/L	52
045	02131 Dw1	Aqueous	Xylenes (total)	8260B	630		ug/L	52
047	02131 Dw3	Aqueous	tert-Amyl methyl ether	8260B	6.3	J	ug/L	54
047	02131 Dw3	Aqueous	Diisopropyl ether (IPE)	8260B	5.8		ug/L	54
047	02131 Dw3	Aqueous	Methyl tertiary butyl ether	8260B	280		ug/L	54
047	02131 Dw3	Aqueous	tert-butyl alcohol (TBA)	8260B	9.5	J	ug/L	54
050	02131 Dw6	Aqueous	tert-Amyl methyl ether	8260B	1.5	J	ug/L	57
050	02131 Dw6	Aqueous	Benzene	8260B	2.9		ug/L	57
050	02131 Dw6	Aqueous	Methyl tertiary butyl ether	8260B	18		ug/L	57
051	02131 Dw7	Aqueous	Methyl tertiary butyl ether	8260B	1.9		ug/L	58
054	02131 Dw9	Aqueous	Methyl tertiary butyl ether	8260B	32		ug/L	61
055	02131 Dw10	Aqueous	Methyl tertiary butyl ether	8260B	9.5		ug/L	62
056	02131 Dww1	Aqueous	Methyl tertiary butyl ether	524.2	2.2		ug/L	63
057	02131 Dww2	Aqueous	tert-Amyl methyl ether	8260B	0.63	J	ug/L	65
057	02131 Dww2	Aqueous	Methyl tertiary butyl ether	524.2	73		ug/L	65
058	02131 Dww3	Aqueous	Methyl tertiary butyl ether	524.2	0.77		ug/L	67
059	02131 Dww4	Aqueous	Methyl tertiary butyl ether	524.2	1.4		ug/L	69
060	02131 Dww4 Dup	Aqueous	Methyl tertiary butyl ether	524.2	1.5		ug/L	71
061	02131 Dww5	Aqueous	Methyl tertiary butyl ether	524.2	2.8		ug/L	73

(123 detections)

Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-001**Description: **02131 mw1**Matrix: **Aqueous**Date Sampled: **07/07/2018 2043**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1000	07/16/2018 0019	BWS		77770
2	5030B	8260B	5000	07/18/2018 1921	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100000	40000	ug/L	2
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		50000	2100	ug/L	2
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>20000</b>		<b>1000</b>	<b>400</b>	<b>ug/L</b>	<b>1</b>
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25000	10000	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5000	2000	ug/L	2
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5000	2000	ug/L	2
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100000	40000	ug/L	2
Ethanol	64-17-5	8260B	ND		500000	200000	ug/L	2
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>96000</b>		<b>1000</b>	<b>400</b>	<b>ug/L</b>	<b>1</b>
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5000	2000	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5000	2000	ug/L	2
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>38000</b>		<b>5000</b>	<b>2000</b>	<b>ug/L</b>	<b>2</b>
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100000	40000	ug/L	2
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>30000</b>		<b>5000</b>	<b>2000</b>	<b>ug/L</b>	<b>2</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>39000</b>		<b>5000</b>	<b>2000</b>	<b>ug/L</b>	<b>2</b>

Surrogate	Run 1		Acceptance Limits	Run 2		Acceptance Limits
	Q	% Recovery		Q	% Recovery	
1,2-Dichloroethane-d4	100	70-130	114	70-130		
Bromofluorobenzene	107	70-130	112	70-130		
Toluene-d8	108	70-130	117	70-130		

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
3	8011	8011	10	07/19/2018 1217	DAL1	07/11/2018 1206	77376

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
<b>1,2-Dibromoethane (EDB)</b>	<b>106-93-4</b>	<b>8011</b>	<b>0.15</b>	<b>JP</b>	<b>0.19</b>	<b>0.049</b>	<b>ug/L</b>	<b>3</b>

Surrogate	Run 3		Acceptance Limits
	Q	% Recovery	
1,1,1,2-Tetrachloroethane	N	0.00	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-002**Description: **02131 mw2**Matrix: **Aqueous**Date Sampled: **07/07/2018 2029**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	07/16/2018 0041	BWS		77770

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	24000		10000	4000	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	370	J	5000	210	ug/L	1
Benzene	71-43-2	8260B	11000		500	200	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	760		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1
Ethylbenzene	100-41-4	8260B	4000		500	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	2000		500	200	ug/L	1
Naphthalene	91-20-3	8260B	1400		500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1
Toluene	108-88-3	8260B	44000		500	200	ug/L	1
Xylenes (total)	1330-20-7	8260B	24000		500	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
3	8011	8011	10	07/19/2018 1227	DAL1	07/11/2018 1206	77376

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.20	0.050	ug/L	3

Surrogate	Q	Run 3 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane	N	0.00	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-003**Description: **02131 mw3**Matrix: **Aqueous**Date Sampled: **07/07/2018 2013**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	07/16/2018 0137	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	24000		10000	4000	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	330	J	5000	210	ug/L	1
Benzene	71-43-2	8260B	11000		500	200	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	750		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1
Ethylbenzene	100-41-4	8260B	3300		500	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1700		500	200	ug/L	1
Naphthalene	91-20-3	8260B	1500		500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1
Toluene	108-88-3	8260B	43000		500	200	ug/L	1
Xylenes (total)	1330-20-7	8260B	21000		500	200	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
3	8011	8011	10	07/19/2018 1238	DAL1	07/11/2018 1206	77376

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.78	P	0.20	0.050	ug/L	3

Surrogate	Run 3		Acceptance Limits
	Q	% Recovery	
1,1,1,2-Tetrachloroethane	N	0.00	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2117	BWS		77770

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>10</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		110	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 0940	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	2

Surrogate	Run 2		Acceptance Limits
	Q	% Recovery	
1,1,1,2-Tetrachloroethane		57	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-005**Description: **02131 mw5**Matrix: **Aqueous**Date Sampled: **07/07/2018 1502**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 1743	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		101	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 0951	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		59	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-006**Description: **02131 mw6**Matrix: **Aqueous**Date Sampled: **07/07/2018 1443**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 1808	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1002	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		60	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-007**Description: **02131 mw7**Matrix: **Aqueous**Date Sampled: **07/07/2018 1417**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/15/2018 1833	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		107	70-130						
Bromofluorobenzene		111	70-130						
Toluene-d8		115	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	8011	8011	1	07/15/2018 1012	DAL1	07/13/2018 1346	77671		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		63	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-008**Description: **02131 mw8**Matrix: **Aqueous**Date Sampled: **07/07/2018 1358**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 1858	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.72</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>0.67</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1	
		% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1023	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	2

Surrogate	Q	Run 2	
		% Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		63	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-009**Description: **02131 mw9**Matrix: **Aqueous**Date Sampled: **07/07/2018 0917**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 1923	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1034	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		58	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-010**Description: **02131 mw10**Matrix: **Aqueous**Date Sampled: **07/07/2018 1012**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 1948	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1044	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		57	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-011**Description: **02131 mw11**Matrix: **Aqueous**Date Sampled: **07/07/2018 1301**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2013	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1055	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		78	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-012**Description: **02131 mw12**Matrix: **Aqueous**Date Sampled: **07/07/2018 1526**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/15/2018 2038	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	8011	8011	1	07/15/2018 1105	DAL1	07/13/2018 1346	77671		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0051	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		82	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-013**Description: **02131 mw12 Dup**Matrix: **Aqueous**Date Sampled: **07/07/2018 1528**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2103	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		109	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1116	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-014**Description: **02131 mw13**Matrix: **Aqueous**Date Sampled: **07/07/2018 1336**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2128	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	29		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>2.6</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>1.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>3.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	14	J	20	8.0	ug/L	1
Toluene	108-88-3	8260B	2.3		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	6.8		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1126	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.047		0.020	0.0049	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		64	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-015**Description: **02131 mw14**Matrix: **Aqueous**Date Sampled: **07/07/2018 0839**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	07/15/2018 2152	BWS		77771			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1		
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1		
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1		
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1		
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1		
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1		
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1		
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1		
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1		

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
2	8011	8011	1	07/15/2018 1137	DAL1	07/13/2018 1346	77671			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	2		
Surrogate	Q	Run 2 % Recovery	Acceptance Limits							
1,1,1,2-Tetrachloroethane		70	57-137							

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-016**Description: **02131 mw14 Dup**Matrix: **Aqueous**Date Sampled: **07/07/2018 0841**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/15/2018 2217	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	8011	8011	1	07/15/2018 1148	DAL1	07/13/2018 1346	77671		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		71	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-017**Description: **02131 mw15**Matrix: **Aqueous**Date Sampled: **07/06/2018 2015**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2242	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1159	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		82	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-018**Description: **02131 mw16**Matrix: **Aqueous**Date Sampled: **07/07/2018 1602**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/15/2018 2307	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/15/2018 1209	DAL1	07/13/2018 1346	77671

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.0066	JP	0.020	0.0050	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-019**Description: **02131 mw17**Matrix: **Aqueous**Date Sampled: **07/07/2018 1546**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/15/2018 2332	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	8011	8011	1	07/15/2018 1220	DAL1	07/13/2018 1346	77671		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	0.0066	J	0.020	0.0050	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		67	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-020**Description: **02131 mw18**Matrix: **Aqueous**Date Sampled: **07/07/2018 1645**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/15/2018 2357	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		112	70-130						
Bromofluorobenzene		107	70-130						
Toluene-d8		114	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/12/2018 2050	DAL1	07/11/2018 0854	77339		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		71	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-021**Description: **02131 mw19**Matrix: **Aqueous**Date Sampled: **07/07/2018 1925**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/16/2018 0022	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	25		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>1.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>0.72</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>2.3</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	13	J	20	8.0	ug/L	1	
Toluene	108-88-3	8260B	1.7		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	5.3		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		111	70-130						
Bromofluorobenzene		107	70-130						
Toluene-d8		112	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/13/2018 0628	DAL1	07/11/2018 1553	77408		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		65	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-022**Description: **02131 mw20**Matrix: **Aqueous**Date Sampled: **07/07/2018 1622**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/16/2018 0047	BWS		77771

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0700	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-023**Description: **02131 mw21**Matrix: **Aqueous**Date Sampled: **07/07/2018 1824**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/16/2018 0112	BWS		77771		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		107	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/13/2018 0710	DAL1	07/11/2018 1553	77408		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		59	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-024**Description: **02131 mw22**Matrix: **Aqueous**Date Sampled: **07/07/2018 1219**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1354	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>2.9</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>2.2</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>57</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		116	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	8011	8011	1	07/16/2018 1047	DAL1	07/13/2018 1609	77637

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.024	0.0059	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-025**Description: **02131 mw23**Matrix: **Aqueous**Date Sampled: **07/07/2018 1726**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1419	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		116	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0732	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		60	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-026**Description: **02131 mw24**Matrix: **Aqueous**Date Sampled: **07/07/2018 1131**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/18/2018 1444	MNS		78051		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>0.42</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.80</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>0.75</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		108	70-130						
Bromofluorobenzene		108	70-130						
Toluene-d8		114	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	8011	8011	1	07/16/2018 1058	DAL1	07/13/2018 1609	77637		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		76	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1509	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		115	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0753	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-028**Description: **02131 mw26**Matrix: **Aqueous**Date Sampled: **07/07/2018 1913**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1533	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>4.1</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		117	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0804	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0051	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		57	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-029**Description: **02131 mw27**Matrix: **Aqueous**Date Sampled: **07/07/2018 1313**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1558	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		110	70-130
Toluene-d8		115	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0814	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		71	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-030**Description: **02131 mw28**Matrix: **Aqueous**Date Sampled: **07/07/2018 1811**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1626	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		121	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		117	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0825	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0051	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		76	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-031**Description: **02131 mw29**Matrix: **Aqueous**Date Sampled: **07/07/2018 1153**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/18/2018 1651	MNS		78051		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>2.7</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>2.2</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>56</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		110	70-130						
Bromofluorobenzene		107	70-130						
Toluene-d8		115	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/13/2018 0835	DAL1	07/11/2018 1553	77408		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		72	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-032**Description: **02131 mw30**Matrix: **Aqueous**Date Sampled: **07/07/2018 1750**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1716	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>10</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		117	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0846	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-033**Description: **02131 mw31**Matrix: **Aqueous**Date Sampled: **07/07/2018 1102**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 1741	MNS		78051

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>0.41</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.80</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>0.71</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		116	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0857	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		68	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-034**

Description: **02131 mw32**

Matrix: **Aqueous**

Date Sampled: **07/07/2018 1947**

Date Received: **07/10/2018**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2132	KGT		78269		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)		75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)		994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene		71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)		762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane		107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)		108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol		624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol		64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)		637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene		91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)		75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene		108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)		1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/13/2018 0908	DAL1	07/11/2018 1553	77408		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)		106-93-4	8011	ND		0.019	0.0048	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		74	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-035**Description: **02131 mw33**Matrix: **Aqueous**Date Sampled: **07/07/2018 1850**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	5030B	8260B	10	07/18/2018 1856	MNS		78051				
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run			
tert-Amyl alcohol (TAA)	75-85-4	8260B	180	J	200	80	ug/L	1			
tert-Amyl methyl ether (TAME)	994-05-8	8260B	190		100	4.2	ug/L	1			
Benzene	71-43-2	8260B	ND		10	4.0	ug/L	1			
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1			
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1			
Diisopropyl ether (IPE)	108-20-3	8260B	21		10	4.0	ug/L	1			
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1			
Ethanol	64-17-5	8260B	ND		1000	400	ug/L	1			
Ethylbenzene	100-41-4	8260B	ND		10	4.0	ug/L	1			
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1			
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	820		10	4.0	ug/L	1			
Naphthalene	91-20-3	8260B	ND		10	4.0	ug/L	1			
tert-butyl alcohol (TBA)	75-65-0	8260B	91	J	200	80	ug/L	1			
Toluene	108-88-3	8260B	ND		10	4.0	ug/L	1			
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,2-Dichloroethane-d4		113	70-130								
Bromofluorobenzene		113	70-130								
Toluene-d8		117	70-130								

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	8011	8011	1	07/13/2018 0918	DAL1	07/11/2018 1553	77408				
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run			
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,1,1,2-Tetrachloroethane		81	57-137								

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: Katawba Environmental, Inc.

Laboratory ID: TG10074-036

Description: 02131 mw34

Matrix: Aqueous

Date Sampled: 07/07/2018 1249

Date Received: 07/10/2018

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2153	KGT		78269

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0929	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0051	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		68	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-037**Description: **02131 mw35**Matrix: **Aqueous**Date Sampled: **07/07/2018 1038**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2214	KGT		78269

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		103	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0939	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0051	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		70	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-038**Description: **02131 mw36**Matrix: **Aqueous**Date Sampled: **07/07/2018 0943**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2236	KGT		78269

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 0950	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		68	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-039**Description: **02131 mw37**Matrix: **Aqueous**Date Sampled: **07/06/2018 2019**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2320	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.77</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		101	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 1001	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		61	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-040**Description: **02131 mw38**Matrix: **Aqueous**Date Sampled: **07/06/2018 1954**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2345	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		101	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/13/2018 1012	DAL1	07/11/2018 1553	77408

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		59	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-041**Description: **02131 mw39**Matrix: **Aqueous**Date Sampled: **07/06/2018 1922**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2018 0010	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>16</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1335	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-042**Description: **02131 Rw1**Matrix: **Aqueous**Date Sampled: **07/06/2018 2059**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	07/20/2018 0215	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	8100	J	10000	4000	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1600	J	5000	210	ug/L	1
Benzene	71-43-2	8260B	10000		500	200	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	660		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1
Ethylbenzene	100-41-4	8260B	3000		500	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	6700		500	200	ug/L	1
Naphthalene	91-20-3	8260B	430	J	500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1
Toluene	108-88-3	8260B	33000		500	200	ug/L	1
Xylenes (total)	1330-20-7	8260B	19000		500	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/17/2018 1244	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.072	P	0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		116	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 Rw2**Matrix: **Aqueous**Date Sampled: **07/06/2018 2133**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	500	07/20/2018 0240	BWS		78256			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260B	7700	J	10000	4000	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1500	J	5000	210	ug/L	1		
Benzene	71-43-2	8260B	10000		500	200	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1		
Diisopropyl ether (IPE)	108-20-3	8260B	640		500	200	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1		
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1		
Ethylbenzene	100-41-4	8260B	2900		500	200	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1		
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	6600		500	200	ug/L	1		
Naphthalene	91-20-3	8260B	430	J	500	200	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1		
Toluene	108-88-3	8260B	32000		500	200	ug/L	1		
Xylenes (total)	1330-20-7	8260B	19000		500	200	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		95	70-130							
Bromofluorobenzene		98	70-130							
Toluene-d8		101	70-130							

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	8011	8011	1	07/17/2018 1255	DAL1	07/11/2018 1553	77409			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	8011	0.077	P	0.020	0.0051	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,1,1,2-Tetrachloroethane		110	57-137							

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 Rw3**Matrix: **Aqueous**Date Sampled: **07/06/2018 2110**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	200	07/20/2018 0306	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	8400		4000	1600	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1700	J	2000	84	ug/L	1	
Benzene	71-43-2	8260B	10000		200	80	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	400	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		200	80	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	610		200	80	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		4000	1600	ug/L	1	
Ethanol	64-17-5	8260B	ND		20000	8000	ug/L	1	
Ethylbenzene	100-41-4	8260B	3100		200	80	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		200	80	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	7000		200	80	ug/L	1	
Naphthalene	91-20-3	8260B	490		200	80	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		4000	1600	ug/L	1	
Toluene	108-88-3	8260B	32000		200	80	ug/L	1	
Xylenes (total)	1330-20-7	8260B	20000		200	80	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		92	70-130						
Bromofluorobenzene		101	70-130						
Toluene-d8		102	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/17/2018 1305	DAL1	07/11/2018 1553	77409		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	0.14	P	0.019	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		131	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-045**

Description: **02131 Dw1**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 1846**

Date Received: **07/10/2018**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	10	07/18/2018 0541	KGT		78010			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260B	850		200	80	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	41	J	100	4.2	ug/L	1		
Benzene	71-43-2	8260B	290		10	4.0	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1		
Diisopropyl ether (IPE)	108-20-3	8260B	34		10	4.0	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1		
Ethanol	64-17-5	8260B	ND		1000	400	ug/L	1		
Ethylbenzene	100-41-4	8260B	27		10	4.0	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1		
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	340		10	4.0	ug/L	1		
Naphthalene	91-20-3	8260B	33		10	4.0	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260B	240		200	80	ug/L	1		
Toluene	108-88-3	8260B	79		10	4.0	ug/L	1		
Xylenes (total)	1330-20-7	8260B	630		10	4.0	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		114	70-130							
Bromofluorobenzene		115	70-130							
Toluene-d8		115	70-130							

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	8011	8011	1	07/17/2018 1316	DAL1	07/11/2018 1553	77409			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,1,1,2-Tetrachloroethane		123	57-137							

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-046**Description: **02131 Dw2**Matrix: **Aqueous**Date Sampled: **07/06/2018 1732**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 0222	KGT		78010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		117	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1449	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		72	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 Dw3**Matrix: **Aqueous**Date Sampled: **07/06/2018 1132**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 0247	KGT		78010
2	5030B	8260B	5	07/20/2018 0330	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	6.3	J	10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	5.8		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	280		5.0	2.0	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	9.5	J	20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Run 1			Run 2		
	Q	% Recovery	Acceptance Limits	Q	% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130		97	70-130
Bromofluorobenzene		108	70-130		101	70-130
Toluene-d8		114	70-130		100	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1500	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Run 1		
	Q	% Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-048**Description: **02131 Dw4**Matrix: **Aqueous**Date Sampled: **07/06/2018 0811**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 0312	KGT		78010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		114	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1511	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 0337	KGT		78010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		113	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		115	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1521	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		66	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-050**Description: **02131 Dw6**Matrix: **Aqueous**Date Sampled: **07/06/2018 1350**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/18/2018 0401	KGT		78010		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1.5	J	10	0.42	ug/L	1	
Benzene	71-43-2	8260B	2.9		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	18		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		114	70-130						
Bromofluorobenzene		115	70-130						
Toluene-d8		115	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/15/2018 1532	DAL1	07/11/2018 1553	77409		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		76	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/18/2018 0426	KGT		78010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>1.9</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		115	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1543	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		82	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-052**Description: **02131 Dw8**Matrix: **Aqueous**Date Sampled: **07/06/2018 1241**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/20/2018 0035	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/15/2018 1553	DAL1	07/11/2018 1553	77409		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		71	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-053**Description: **02131 Dw8 Dup**Matrix: **Aqueous**Date Sampled: **07/06/2018 1243**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/20/2018 0100	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		103	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/15/2018 1604	DAL1	07/11/2018 1553	77409		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.0052	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		65	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-054**Description: **02131 Dw9**Matrix: **Aqueous**Date Sampled: **07/06/2018 1024**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2018 0126	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>32</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1615	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		81	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-055**Description: **02131 Dw10**Matrix: **Aqueous**Date Sampled: **07/06/2018 0917**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/20/2018 0150	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>9.5</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		97	70-130						
Bromofluorobenzene		101	70-130						
Toluene-d8		102	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	07/15/2018 1625	DAL1	07/11/2018 1553	77409		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		76	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>TG10074-056</b>
Description: <b>02131 Dww1</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>07/06/2018 2115</b>	
Date Received: <b>07/10/2018</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2025	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		98	70-130						
Bromofluorobenzene		103	70-130						
Toluene-d8		101	70-130						

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0039	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>2.2</b>		<b>0.50</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		81	70-130						
1,2-Dichlorobenzene-d4		119	70-130						

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1252	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: <b>Katawba Environmental, Inc.</b> Description: <b>02131 Dww1</b> Date Sampled: <b>07/06/2018 2115</b> Date Received: <b>07/10/2018</b>	Laboratory ID: <b>TG10074-056</b> Matrix: <b>Aqueous</b>
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Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		79	57-137

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LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 Dww2**Matrix: **Aqueous**Date Sampled: **07/06/2018 2140**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2050	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>0.63</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		97	70-130						
Bromofluorobenzene		98	70-130						
Toluene-d8		101	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0103	BWS		78131		
2	524.2	524.2	10	07/20/2018 0931	ECB		78301		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>73</b>		<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>2</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits			
Bromofluorobenzene		84	70-130		79	70-130			
1,2-Dichlorobenzene-d4		95	70-130		83	70-130			

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1328	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-057**

Description: **02131 Dww2**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2140**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		63	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2115	BWS		78256		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		103	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0127	BWS		78131		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>0.77</b>		<b>0.50</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	70-130
1,2-Dichlorobenzene-d4		87	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	504.1	504.1	1	07/18/2018 1352	DAL1	07/18/2018 0848	78020		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0040	ug/L	2

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-058**

Description: **02131 Dww3**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2132**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 2 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		98	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-059**Description: **02131 Dww4**Matrix: **Aqueous**Date Sampled: **07/06/2018 2105**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2140	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		95	70-130						
Bromofluorobenzene		96	70-130						
Toluene-d8		101	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0152	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>1.4</b>		<b>0.50</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		80	70-130						
1,2-Dichlorobenzene-d4		91	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1353	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0040	ug/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-059**

Description: **02131 Dww4**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2105**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		68	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2204	BWS		78256		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		102	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0217	BWS		78131		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>1.5</b>		<b>0.50</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		71	70-130
1,2-Dichlorobenzene-d4		77	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1405	DAL1	07/12/2018 0903	77467		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-060**

Description: **02131 Dww4 Dup**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2107**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		74	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-061**Description: **02131 Dww5**Matrix: **Aqueous**Date Sampled: **07/06/2018 2119**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2229	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		94	70-130						
Bromofluorobenzene		96	70-130						
Toluene-d8		101	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0242	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>2.8</b>		<b>0.50</b>	<b>0.20</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		76	70-130						
1,2-Dichlorobenzene-d4		94	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1417	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-061**

Description: **02131 Dww5**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2119**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		69	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 Dww6**Matrix: **Aqueous**Date Sampled: **07/06/2018 2148**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2255	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		94	70-130						
Bromofluorobenzene		99	70-130						
Toluene-d8		103	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0306	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.20	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		77	70-130						
1,2-Dichlorobenzene-d4		108	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1429	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-062**

Description: **02131 Dww6**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2148**

Date Received: **07/10/2018**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		94	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-063**Description: **02131 FB**Matrix: **Aqueous**Date Sampled: **07/06/2018 2200**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 1935	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	07/15/2018 1636	DAL1	07/11/2018 1553	77409

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		82	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-064**Description: **02131 FB**Matrix: **Aqueous**Date Sampled: **07/06/2018 2218**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2000	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		97	70-130						
Bromofluorobenzene		99	70-130						
Toluene-d8		102	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/18/2018 2350	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.20	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		94	70-130						
1,2-Dichlorobenzene-d4		91	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1441	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-064**

Description: **02131 FB**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2218**

Date Received: **07/10/2018**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **TG10074-065**Description: **02131 TB**Matrix: **Aqueous**Date Sampled: **07/06/2018 2226**Date Received: **07/10/2018****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2111	KGT		78269

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		102	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	07/19/2018 0015	BWS		78131

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.20	ug/L	1
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		85	70-130
1,2-Dichlorobenzene-d4		83	70-130

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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**Chain of Custody  
and  
Miscellaneous Documents**



Chain of Custody Record

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Number 83624

Client: Katawba Env; Report to Contact: Alex Amos; Telephone No./E-mail: ; Quote No.:

Address: 4278 Dyc Rd; Sample's Signature: Billy Morris; Analytic (Attach list if more space is needed): ; Page 1 of 7

City: Edgemoor; State: SC; Zip Code: 29712; Printed Name: Billy Morris

Project Name: One Accord; P.O. No.: One Accord

Table with columns: Sample ID / Description, Date, Time, Matrix, and No. of Divisions by Preservative type.

Main data table with 9 rows of sample information including IDs like 02131 MW1 and dates like 7-7-18.

Turn Around Time Required (Prior lab approval required for expedited DT): Standard or Rush (Specify) 7 Day TAT

Sample Disposal: Return to Client or Disposal by Lab; Preserve Hazard Information: Non Hazard, Flammable, etc.

1. Relinquished by: Billy Morris; Date: 7-10-18; Time: 1435; Received by: PWK Kantisenee; Date: 7/14/18; Time: 1435

2. Relinquished by: PWK Kantisenee; Date: 7/14/18; Time: 1550; Received by: ; Date: ; Time: ;

3. Relinquished by: ; Date: ; Time: ; Received by: ; Date: ; Time: ;

4. Relinquished by: ; Date: ; Time: ; Laboratory received by: L Hill; Date: 7-10-18; Time: 1550

Note: All samples are retained for four weeks from receipt unless other arrangements are made. LAB USE ONLY Received on Ice (Circle): Yes No Ice Pack Receipt Temp: 2.1 C 1.7 C

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Number 83626

Client: <b>Katawba Env</b>		Report to Contact: <b>Alex Amos</b>		Telephone No. / F-visit:		Quote No.:	
Address: <b>4278 Dix Rd</b>		Sampler's Signature: <b>Billy Morris</b>		Analysis (Attach list if more space is needed):		Page <b>2</b> of <b>7</b>	
City: <b>Edgemoor</b>	State: <b>SC</b>	Zip Code: <b>29712</b>		Printed Name: <b>Billy Morris</b>		 <b>TG10074</b> LID Remarks / Cooler I.D.	
Project Name: <b>One Accord</b>		P.O. No.: <b>One Accord</b>		Matrix:			
Project No.: <b>One Accord</b>		Date:		Time:		No. of Containers by Preservation Type:	
Sample ID / Description (Containers: 1x each sample may be numbered on one site.)		Date	Time	As Pres.	As Rec.	As Lab.	As Other
02131 MW11		7-7-18	1701	X			
02131 MW12			1526				
02131 MW12 Dup			1528				
02131 MW13			1336				
02131 MW14			839				
02131 MW14 Dup		7-7-18	841				
02131 MW15		7-6-18	2015				
02131 MW16		7-7-18	1602				
02131 MW17			1546				
02131 MW18		7-7-18	1645				
Turn Around Time Required (Prior lab approval required for expedited TAT): <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal: <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		Possible Hazard Identification: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Volatile		QC Requirements (Specify):	
1. Relinquished by: <b>Billy Morris</b>		Date: <b>7-10-18</b>	Time: <b>1435</b>	1. Received by: <b>Max K... ..</b>		Date: <b>7/10/18</b>	Time: <b>1435</b>
2. Relinquished by: <b>Max K... ..</b>		Date: <b>7/10/18</b>	Time: <b>1550</b>	2. Received by:		Date:	Time:
3. Relinquished by:		Date:	Time:	3. Received by:		Date:	Time:
4. Relinquished by:		Date:	Time:	4. Laboratory received by: <b>J Hill</b>		Date: <b>7-10-18</b>	Time: <b>1550</b>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No Ice Pack		Receipt Temp: <b>2.1 °C 1.7 °C</b>	

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Number **83627**

Client <b>Katawbi Cnv</b>		Request to Contact <b>Mark</b>		Telephone No. / E-mail		County No.	
Address <b>4298 Dye Rd</b>		Sampler's Signature <b>[Signature]</b>		Analyte (Attach list if more options needed)		Page <b>3</b> of <b>7</b>	
City <b>Edge Moor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>		<p><b>TG10074</b></p> <p>LJD Harris / Cooley LD</p>		
Project Name <b>One Accord</b>		P.G. No.		No of Containers by Preservative Type			
Project No. <b>One Accord</b>		Matrix		[Vertical Column with handwritten notes: <b>1. Dye Run (Katawbi)</b> , <b>EDB</b> , <b>X X</b> , <b>X X</b> ]			
Sample ID / Description (Locations for each sample may be combined in one line.)		Date	Time				
<b>02131 MW19</b>		<b>7-7-18</b>	<b>1925</b>				
<b>02131 MW20</b>			<b>1622</b>				
<b>02131 MW21</b>			<b>1924</b>				
<b>02131 MW22</b>			<b>1219</b>				
<b>02131 MW23</b>			<b>1726</b>				
<b>02131 MW24</b>			<b>1131</b>				
<b>02131 MW25</b>			<b>1947</b>				
<b>02131 MW26</b>			<b>1913</b>				
<b>02131 MW27</b>			<b>1213</b>				
<b>02131 MW28</b>		<b>7-7-18</b>	<b>1811</b>				
Turn Around Time Required (Prior lab equipment required for specified TAT.) <input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		Preservative Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown		CC Requirements (Specialty)	
1. Requested by <b>[Signature]</b>		Date <b>7-10-18</b>	Time <b>1435</b>	1. Received by <b>[Signature]</b>		Date <b>7/14/18</b>	Time <b>1435</b>
2. Requested by <b>[Signature]</b>		Date <b>7/10/18</b>	Time <b>1550</b>	2. Received by		Date	Time
3. Path requested by		Date	Time	3. Received by		Date	Time
4. Requested by		Date	Time	4. Laboratory received by <b>[Signature]</b>		Date <b>7-16-18</b>	Time <b>1550</b>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on ice (Circle): <input checked="" type="radio"/> Yes <input type="radio"/> No <b>Ice Peak</b>		Receipt Temp <b>21 °C 1.7 °C</b>	

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Fold/Check Copy

Revised Number: F-AL-159 Effective Date: 00-01-2014



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Number 83630

SHEALY ENVIRONMENTAL SERVICES, INC.

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Client <b>Katowba Env</b>			Person to Contact <b>Alex Amos</b>			Telephone No. / E-mail			Quote No.			
Address <b>4278 Dyc Rd</b>			Signature <b>Billy Morris</b>			Analysis (Attach list if more space is needed)			Page <b>4 of 7</b>			
City <b>Edgewater</b>		State <b>SC</b>	Zip Code <b>29712</b>		Printed Name <b>Billy Morris</b>			 <b>TG10074</b>				
Project Name <b>Doe Accord</b>			Project No. <b>Doe Accord</b>			Matrix <input checked="" type="checkbox"/> Acid <input type="checkbox"/> Base <input type="checkbox"/> Neutral <input type="checkbox"/> Other			No. of Containers by Preservative Type None <input type="checkbox"/> HCL <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> Other			Remarks / Cooler I.D. <b>6 DB</b>
(Containers for each sample may be combined on one line!)												
Sample ID / Description	Date	Time	Matrix	Acid	Base	Neutral	Other	None	HCL	HNO3	H2SO4	
02131 MW29	7-7-18	1153	X						X	X		
02131 MW30		1750										
02131 MW31		1102										
02131 MW32		1947										
02131 MW33		1950										
02131 MW34		1245										
02131 MW35		1038										
02131 MW36	7-7-18	943										
02131 MW37	7-6-18	2019										
02131 MW38	7-6-18	1954	X						X	X		
Turn Around Time Required (Prior lab approval required for expedited TAT)			Sample Disposal			Possible Hazard Identification			OC Requirements (Specify)			
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>			<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab			<input type="checkbox"/> Volatile <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown						
1. Requested by	Date	Time	1. Received by	Date	Time							
<b>Billy Morris</b>	7-10-18	1435	<b>Mark Kinslow</b>	7/10/18	1435							
2. Requested by	Date	Time	2. Received by	Date	Time							
<b>Mark Kinslow</b>	7/10/18	1550										
3. Requested by	Date	Time	3. Received by	Date	Time							
4. Requested by	Date	Time	4. Laboratory received by	Date	Time							
			<b>L Hill</b>	7-10-18	1550							
Note: All samples are retained for four weeks from receipt unless other arrangements are made.						LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack Receipt Temp <b>2.1 °C 1.7</b>						

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive • West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

**Number 83628**

**SHEALY ENVIRONMENTAL SERVICES, INC.**

Client <b>Katowba Gw</b>		Report to Contact <b>Alice Amos</b>		Telephone No. / E-mail		Quote No.	
Address <b>4278 Dvc Rd</b>		Sender's Signature <i>Billy Morris</i>		Analysis (Attach list if more space is required)		Page <b>5 of 7</b>	
City <b>Edgemoor</b>		Printed Name <b>Billy Morris</b>		Min of Conditions of Preservation Type Urines    Vials    Swabs    Tapes    Pops    N/A (Contains for each sample may be combined on one line.)		<p><b>TG10074</b></p> <p>LIC</p>	
State <b>SC</b>		Zip Code <b>29712</b>					
Project Name <b>Dvc Accord</b>		Project No. <b>Dvc Accord</b>		Date Rec'd <b>7-6-19</b>			
Sample ID / Description		Date	Time	Urine	Vials	Swabs	Tapes
02131 MW39	1922	7-6-19		X			
02131 RW1	2059						
02131 RW2	2133						
02131 RW3	2110						
02131 DW1	1846						
02131 DW2	1732						
02131 DW3	1132						
02131 DW4	811						
02131 DW5	1624						
02131 DW6	1350	7-6-19		X			

Turn Around Time Required (Prior lab approval required for expedited TAT)  Standard  Rush (Specify) **7 Day TAT**

Sample Disposal:  Return to Client  Dispose by Lab

Possible Hazard Identification:  Non-hazard  Flammable  Skin Irritant  Corrosive  Unknown

QC Requirements (Specify)

1. Requisitioned by <b>Billy Morris</b>	Date <b>7-10-19</b>	Time <b>1435</b>	1. Received by <i>Mark Kutzancee</i>	Date <b>7/10/19</b>	Time <b>1435</b>
2. Requisitioned by <i>Mark Kutzancee</i>	Date <b>7/10/19</b>	Time <b>1550</b>	2. Received by	Date	Time
3. Requisitioned by	Date	Time	3. Received by	Date	Time
4. Requisitioned by	Date	Time	4. Laboratory received by <i>L. Hilda</i>	Date <b>7-10-19</b>	Time <b>1550</b>

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
Received on ice (Circle) **Yes** No For Pink Receipt Temp **2.1 c 1.7°C**

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AJ-135 Effective Date: 08-01-2014



# Chain of Custody Record

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number 83629

Shealy Environmental Services, Inc.  
 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

SHEALY ENVIRONMENTAL SERVICES, INC.

Client <b>Kestawh Env</b>		Region to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Client No.	
Address <b>4278 Dye Rd</b>		Sampler's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>6 of 7</b>	
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>				
Project Name <b>Dye Accord</b>		P.O. No. <b>Dye Accord</b>		Date <b>7-6-18</b>			
Project No. <b>Dye Accord</b>		Sample ID / Description <b>DW7</b>		Matrix <b>Water</b>		No. of Containers by Preservative Type	
<input type="checkbox"/> Standard <input type="checkbox"/> Flush (Specify) <b>7 Day TAT</b>		<input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown		QC Requirements (Specify)	
1. Relinquished by <b>Billy Morris</b>		Date <b>7-6-18</b>		Time <b>1435</b>		1. Received by <b>Mark Yantlauer</b>	
2. Relinquished by <b>Mark Yantlauer</b>		Date <b>7/10/18</b>		Time <b>1550</b>		2. Received by	
3. Relinquished by		Date		Time		3. Received by	
4. Relinquished by		Date		Time		4. Laboratory received by <b>L Hill</b>	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				IAR USE ONLY Received on ice/Cooled: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ice Pack		Receipt Temp <b>21 °C</b> <b>1.7 °C</b>	

DISTRIBUTION: WHITE & YELLOW Return to laboratory with Sample(s); PINK First/Second Copy

Document Number: FAD 133 Effective Date: 08-01-2014



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number 86424

**SHEALY ENVIRONMENTAL SERVICES, INC.**

Client <b>Katambi Ln</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / Email		Quote No.		
Address <b>4278 Dye Rd</b>		Sampler's Signature <b>x Billy Morris</b>		Analysis (Attach list if more than is needed)		Page <b>7</b> of <b>7</b>		
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>	GCIB 1796 West Columbia 1200 Dye Glenn 675 504.1				<p>TG10074</p>
Project Name <b>Dye Accord</b>		P.O. No. <b>Dye Accord</b>						
Project No. <b>Dye Accord</b>		Sample ID / Description		Date		Time		
No. Containers for each sample may be combined on one line.								
<b>02131 DWWS</b>		<b>7-6-18</b>		<b>2119</b>		<b>X</b>		
<b>02131 DWWS</b>		<b>7-6-18</b>		<b>2148</b>		<b>X</b>		
<b>02131 FB</b>		<b>7-6-18</b>		<b>2200</b>		<b>X X</b>		
<b>02131 FB</b>		<b>7-6-18</b>		<b>2218</b>		<b>X</b>		
<b>02131 TB</b>		<b>7-6-18</b>		<b>2228</b>		<b>X</b>		

Turn Around Time Required (Prior lab approval required for expedited TAT.)		Sample Disposal		Possible Hazard Identification		OC Requirements (Specify)	
<input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown			
1. Relinquished by <b>Billy Morris</b>	Date <b>7-10-18</b>	Time <b>1435</b>	1. Received by <b>Mark Kautzner</b>	Date <b>7-10-18</b>	Time <b>1435</b>		
2. Relinquished by <b>Mark Kautzner</b>	Date <b>7/10/18</b>	Time <b>1550</b>	2. Received by	Date	Time		
3. Relinquished by	Date	Time	3. Received by	Date	Time		
4. Relinquished by	Date	Time	4. Laboratory received by <b>K Hil</b>	Date <b>7-10-18</b>	Time <b>1550</b>		

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY:  
 Received on ice (Circle) **Yes** No ice Pack Receipt Temp. **21 °C 1.9 °C**

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-1R**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 21.98 ft.

Length of Water Column (LWC=TWD-DGW) FT

1 Csg. Volume (LWC\*C) =     X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling     gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2043							
<b>pH (s.u.)</b>	6.33							
<b>Specific Cond. (umhos/cm)</b>	198							
<b>Water Temp (°C)</b>	20.1							
<b>Turbidity (*)</b>	135							
<b>Dissolved Oxygen</b>	3.81							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">Relinquished by</td> <td style="border-bottom: 1px solid black;">Date/Time</td> <td style="border-bottom: 1px solid black;">Received by</td> <td style="border-bottom: 1px solid black;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.86</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2029							
<b>pH (s.u.)</b>	6.41							
<b>Specific Cond. (umhos/cm)</b>	200							
<b>Water Temp (°C)</b>	20.8							
<b>Turbidity (*)</b>	129							
<b>Dissolved Oxygen</b>	3.98							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.84</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2013							
<b>pH (s.u.)</b>	6.03							
<b>Specific Cond. (umhos/cm)</b>	423							
<b>Water Temp (°C)</b>	20.1							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	1.94							



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.93</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1958							
<b>pH (s.u.)</b>	6.53							
<b>Specific Cond. (umhos/cm)</b>	116							
<b>Water Temp (°C)</b>	20.5							
<b>Turbidity (*)</b>	93.7							
<b>Dissolved Oxygen</b>	4.17							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>HOT</u>                  Ambient Air Temperature <u>96</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-5</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>25</u> ft.                  Depth to GW (DGW) <u>19.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.                  3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1502							
<b>pH (s.u.)</b>	7.62							
<b>Specific Cond. (umhos/cm)</b>	43.4							
<b>Water Temp (°C)</b>	18.1							
<b>Turbidity (*)</b>	104							
<b>Dissolved Oxygen</b>	1.42							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-6**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 17.18 ft.

Length of Water Column (LWC=TWD-DGW)    FT

1 Csg. Volume (LWC\*C) =    X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1443							
<b>pH (s.u.)</b>	6.13							
<b>Specific Cond. (umhos/cm)</b>	117							
<b>Water Temp (°C)</b>	22.8							
<b>Turbidity (*)</b>	129							
<b>Dissolved Oxygen</b>	4.13							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-7</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>16.13</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1417							
<b>pH (s.u.)</b>	6.21							
<b>Specific Cond. (umhos/cm)</b>	110							
<b>Water Temp (°C)</b>	21.3							
<b>Turbidity (*)</b>	118							
<b>Dissolved Oxygen</b>	3.92							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>19.87</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1358							
<b>pH (s.u.)</b>	6.58							
<b>Specific Cond. (umhos/cm)</b>	112							
<b>Water Temp (°C)</b>	20.8							
<b>Turbidity (*)</b>	156							
<b>Dissolved Oxygen</b>	2.64							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-9R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>37</u> ft.          Depth to GW (DGW) <u>30.33</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>      </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>      </u> X 0.163 = <u>      </u> gals.          3 Csg. Volumes = 3 X <u>      </u> = <u>      </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>      </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	917							
<b>pH (s.u.)</b>	6.08							
<b>Specific Cond. (umhos/cm)</b>	50.9							
<b>Water Temp (°C)</b>	18.5							
<b>Turbidity (*)</b>	74.9							
<b>Dissolved Oxygen</b>	9.44							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-10R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft.          Depth to GW (DGW) <u>31.84</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1012							
<b>pH (s.u.)</b>	7.12							
<b>Specific Cond. (umhos/cm)</b>	28.2							
<b>Water Temp (°C)</b>	19.5							
<b>Turbidity (*)</b>	83.4							
<b>Dissolved Oxygen</b>	9.86							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-11**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 29 ft.  
 Depth to GW (DGW) 26.57 ft.

Length of Water Column (LWC=TWD-DGW)      FT

1 Csg. Volume (LWC\*C) =      X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling      gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1301							
<b>pH (s.u.)</b>	6.05							
<b>Specific Cond. (umhos/cm)</b>	97.5							
<b>Water Temp (°C)</b>	20.4							
<b>Turbidity (*)</b>	118							
<b>Dissolved Oxygen</b>	1.61							



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-12</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>20.73</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>    </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>    </u> X <u>0.163</u> = <u>    </u> gals.          3 Csg. Volumes = 3 X <u>    </u> = <u>    </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1526							
<b>pH (s.u.)</b>	5.83							
<b>Specific Cond. (umhos/cm)</b>	200							
<b>Water Temp (°C)</b>	21.3							
<b>Turbidity (*)</b>	90.3							
<b>Dissolved Oxygen</b>	4.87							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-13</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>26</u> ft.          Depth to GW (DGW) <u>24.26</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1336							
<b>pH (s.u.)</b>	6.26							
<b>Specific Cond. (umhos/cm)</b>	109							
<b>Water Temp (°C)</b>	20.6							
<b>Turbidity (*)</b>	113							
<b>Dissolved Oxygen</b>	3.13							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-14</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>36</u> ft.          Depth to GW (DGW) <u>27.84</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) _____ FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	839							
<b>pH (s.u.)</b>	6.20							
<b>Specific Cond. (umhos/cm)</b>	44.2							
<b>Water Temp (°C)</b>	18.3							
<b>Turbidity (*)</b>	119							
<b>Dissolved Oxygen</b>	7.90							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/6/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-15**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 40 ft.  
 Depth to GW (DGW) 37.89 ft.

Length of Water Column (LWC=TWD-DGW) FT

1 Csg. Volume (LWC\*C) =     X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2015							
<b>pH (s.u.)</b>	7.62							
<b>Specific Cond. (umhos/cm)</b>	43.4							
<b>Water Temp (°C)</b>	18.1							
<b>Turbidity (*)</b>	104							
<b>Dissolved Oxygen</b>	14.02							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-16**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 30 ft.  
 Depth to GW (DGW) 21.73 ft.

Length of Water Column (LWC=TWD-DGW)    FT

1 Csg. Volume (LWC\*C) =    X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling    gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1602							
<b>pH (s.u.)</b>	6.63							
<b>Specific Cond. (umhos/cm)</b>	117							
<b>Water Temp (°C)</b>	22.0							
<b>Turbidity (*)</b>	128							
<b>Dissolved Oxygen</b>	4.83							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-17</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>21.06</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>    </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>    </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1546							
<b>pH (s.u.)</b>	6.53							
<b>Specific Cond. (umhos/cm)</b>	116							
<b>Water Temp (°C)</b>	21.7							
<b>Turbidity (*)</b>	137							
<b>Dissolved Oxygen</b>	4.97							

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-18</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>32</u> ft.          Depth to GW (DGW) <u>26.80</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1645							
<b>pH (s.u.)</b>	5.51							
<b>Specific Cond. (umhos/cm)</b>	243							
<b>Water Temp (°C)</b>	23.8							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	5.27							

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-19</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>32</u> ft.          Depth to GW (DGW) <u>22.77</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>    </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>    </u> X <u>0.163</u> = <u>    </u> gals.          3 Csg. Volumes = 3 X <u>    </u> = <u>    </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1925							
<b>pH (s.u.)</b>	6.31							
<b>Specific Cond. (umhos/cm)</b>	132							
<b>Water Temp (°C)</b>	20.9							
<b>Turbidity (*)</b>	109							
<b>Dissolved Oxygen</b>	2.19							



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-20</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.46</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1622							
<b>pH (s.u.)</b>	6.57							
<b>Specific Cond. (umhos/cm)</b>	184							
<b>Water Temp (°C)</b>	21.6							
<b>Turbidity (*)</b>	112							
<b>Dissolved Oxygen</b>	4.76							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-21</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>35</u> ft.          Depth to GW (DGW) <u>26.77</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1824							
<b>pH (s.u.)</b>	5.75							
<b>Specific Cond. (umhos/cm)</b>	78.2							
<b>Water Temp (°C)</b>	19.5							
<b>Turbidity (*)</b>	132							
<b>Dissolved Oxygen</b>	3.89							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>HOT</u>                  Ambient Air Temperature <u>96</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u>                  pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-22</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.                  Depth to GW (DGW) <u>28.20</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.                  3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1219							
<b>pH (s.u.)</b>	6.25							
<b>Specific Cond. (umhos/cm)</b>	187							
<b>Water Temp (°C)</b>	21.4							
<b>Turbidity (*)</b>	85.6							
<b>Dissolved Oxygen</b>	3.85							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-23**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 26.43 ft.

Length of Water Column (LWC=TWD-DGW) \_\_\_\_\_ FT

1 Csg. Volume (LWC\*C) = X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1726							
<b>pH (s.u.)</b>	6.11							
<b>Specific Cond. (umhos/cm)</b>	54.9							
<b>Water Temp (°C)</b>	18.4							
<b>Turbidity (*)</b>	137							
<b>Dissolved Oxygen</b>	13.50							

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-24**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 28.13 ft.

Length of Water Column (LWC=TWD-DGW) \_\_\_\_\_ FT

1 Csg. Volume (LWC\*C) = \_\_\_\_\_ X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1131							
<b>pH (s.u.)</b>	6.10							
<b>Specific Cond. (umhos/cm)</b>	45.5							
<b>Water Temp (°C)</b>	19.1							
<b>Turbidity (*)</b>	87.4							
<b>Dissolved Oxygen</b>	6.24							

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<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-25</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>21.77</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1947							
<b>pH (s.u.)</b>	6.49							
<b>Specific Cond. (umhos/cm)</b>	104							
<b>Water Temp (°C)</b>	20.3							
<b>Turbidity (*)</b>	81.7							
<b>Dissolved Oxygen</b>	3.34							

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-26</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>27.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1913							
<b>pH (s.u.)</b>	6.12							
<b>Specific Cond. (umhos/cm)</b>	128							
<b>Water Temp (°C)</b>	21.0							
<b>Turbidity (*)</b>	95.2							
<b>Dissolved Oxygen</b>	1.89							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1313							
<b>pH (s.u.)</b>	6.39							
<b>Specific Cond. (umhos/cm)</b>	357							
<b>Water Temp (°C)</b>	19.7							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	3.73							



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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	16				
<b>Time (military)</b>	1757	1801	1806	1811				
<b>pH (s.u.)</b>	5.81	5.76	5.70	5.68				
<b>Specific Cond. (umhos/cm)</b>	104	104	103	103				
<b>Water Temp (°C)</b>	21.2	21.1	21.0	20.9				
<b>Turbidity (*)</b>	137	143	149	153				
<b>Dissolved Oxygen</b>	8.85	8.67	8.53	8.48				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	18				
<b>Time (military)</b>	1134	1140	1147	1153				
<b>pH (s.u.)</b>	6.56	6.51	6.43	6.38				
<b>Specific Cond. (umhos/cm)</b>	30.3	29.4	28.7	28.1				
<b>Water Temp (°C)</b>	19.1	18.8	18.7	18.6				
<b>Turbidity (*)</b>	20.9	89.8	107	112				
<b>Dissolved Oxygen</b>	7.04	6.87	6.81	6.73				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	10	16.5				
<b>Time (military)</b>	1730	1737	1743	1750				
<b>pH (s.u.)</b>	5.66	5.61	5.58	5.50				
<b>Specific Cond. (umhos/cm)</b>	171	110	110	109				
<b>Water Temp (°C)</b>	21.1	21.0	20.9	20.7				
<b>Turbidity (*)</b>	40.9	84.3	107	110				
<b>Dissolved Oxygen</b>	4.96	4.85	4.81	4.73				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	3	6	9.25				
<b>Time (military)</b>	1039	1046	1055	1102				
<b>pH (s.u.)</b>	5.89	5.81	5.73	5.68				
<b>Specific Cond. (umhos/cm)</b>	70.1	69.4	68.7	68.1				
<b>Water Temp (°C)</b>	18.3	18.2	18.1	18.0				
<b>Turbidity (*)</b>	98.2	108	114	117				
<b>Dissolved Oxygen</b>	5.01	4.90	4.82	4.70				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.75				
<b>Time (military)</b>	1927	1934	1940	1947				
<b>pH (s.u.)</b>	6.43	6.40	6.37	6.32				
<b>Specific Cond. (umhos/cm)</b>	38.1	37.7	37.2	36.8				
<b>Water Temp (°C)</b>	20.5	20.4	20.3	20.2				
<b>Turbidity (*)</b>	83.9	107	115	118				
<b>Dissolved Oxygen</b>	7.32	7.23	7.18	7.15				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.25				
<b>Time (military)</b>	1830	1837	1843	1850				
<b>pH (s.u.)</b>	6.58	6.51	6.43	6.38				
<b>Specific Cond. (umhos/cm)</b>	62.8	62.1	61.7	61.1				
<b>Water Temp (°C)</b>	20.1	19.8	19.7	19.5				
<b>Turbidity (*)</b>	39.7	101	124	127				
<b>Dissolved Oxygen</b>	6.46	6.41	6.33	6.29				

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<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-34</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>56</u> ft.          Depth to GW (DGW) <u>21.94</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>34.06</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>34.06</u> X <u>0.163</u> = <u>5.55</u> gals.          3 Csg. Volumes = 3 X <u>5.55</u> = <u>16.65</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>17</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	17				
<b>Time (military)</b>	1228	1235	1242	1249				
<b>pH (s.u.)</b>	6.44	6.37	6.31	6.28				
<b>Specific Cond. (umhos/cm)</b>	221	220	219	218				
<b>Water Temp (°C)</b>	19.5	19.4	19.3	19.1				
<b>Turbidity (*)</b>	83.9	107	115	118				
<b>Dissolved Oxygen</b>	2.42	2.37	2.31	2.28				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/7/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>96</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-35</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>50</u> ft.          Depth to GW (DGW) <u>31.00</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>19.0</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>19.0</u> X <u>0.163</u> = <u>3.09</u> gals.          3 Csg. Volumes = 3 X <u>3.09</u> = <u>9.29</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>9.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	3	6	9.5				
<b>Time (military)</b>	1023	1028	1034	1038				
<b>pH (s.u.)</b>	6.74	6.17	6.13	6.06				
<b>Specific Cond. (umhos/cm)</b>	58.5	57.6	57.1	56.3				
<b>Water Temp (°C)</b>	19.4	19.2	18.9	18.8				
<b>Turbidity (*)</b>	81.6	104	113	116				
<b>Dissolved Oxygen</b>	7.42	7.31	7.25	7.20				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/7/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 96  
 Facility Name One Accord Ministries Site ID# 02131

**Well # MW-36**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 59 ft.  
 Depth to GW (DGW) 30.26 ft.

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

Length of Water Column (LWC=TWD-DGW) 28.74 FT

1 Csg. Volume (LWC\*C) = 28.74 X 0.163 = 4.68 gals.  
 3 Csg. Volumes = 3 X 4.68 = 14.05 gals. (Std. Purge Volume)

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

Total Volume of Water Purged Before Sampling 14.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	14.25				
<b>Time (military)</b>	927	933	938	943				
<b>pH (s.u.)</b>	5.93	5.84	5.76	5.71				
<b>Specific Cond. (umhos/cm)</b>	152	152	151	151				
<b>Water Temp (°C)</b>	18.3	18.2	18.1	18.0				
<b>Turbidity (*)</b>	30.4	103	117	122				
<b>Dissolved Oxygen</b>	5.81	5.72	5.65	5.59				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-37</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>64</u> ft.          Depth to GW (DGW) <u>38.90</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>30.79 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>30.79</u> X <u>0.163</u> = <u>5.01</u> gals.          3 Csg. Volumes = 3 X <u>5.01</u> = <u>15.05</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>15.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.25				
<b>Time (military)</b>	1956	2004	2012	2019				
<b>pH (s.u.)</b>	7.52	7.46	7.43	7.39				
<b>Specific Cond. (umhos/cm)</b>	62.3	61.6	61.0	60.2				
<b>Water Temp (°C)</b>	17.8	17.6	17.5	17.4				
<b>Turbidity (*)</b>	73.4	102	131	134				
<b>Dissolved Oxygen</b>	10.31	7.44	7.35	7.28				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-38</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft.          Depth to GW (DGW) <u>28.16</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>11.84</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>11.84</u> X <u>0.163</u> = <u>1.92</u> gals.          3 Csg. Volumes = 3 X <u>1.92</u> = <u>5.78</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>6</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2	4	6				
<b>Time (military)</b>	1937	1944	1948	1954				
<b>pH (s.u.)</b>	6.32	6.24	6.17	6.13				
<b>Specific Cond. (umhos/cm)</b>	126	125	124	123				
<b>Water Temp (°C)</b>	18.0	17.9	17.8	17.6				
<b>Turbidity (*)</b>	122	138	142	145				
<b>Dissolved Oxygen</b>	5.84	5.72	5.66	5.62				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-39</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>80</u> ft.          Depth to GW (DGW) <u>28.83</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>51.17</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>51.17</u> X <u>0.163</u> = <u>8.34</u> gals.          3 Csg. Volumes = 3 X <u>8.34</u> = <u>25.02</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>25.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8	16	25.5				
<b>Time (military)</b>	1858	1906	1914	1922				
<b>pH (s.u.)</b>	6.38	6.35	6.31	6.26				
<b>Specific Cond. (umhos/cm)</b>	114	113	113	112				
<b>Water Temp (°C)</b>	18.2	18.1	18.0	17.9				
<b>Turbidity (*)</b>	17.5	17.4	17.3	17.2				
<b>Dissolved Oxygen</b>	3.05	2.91	2.83	2.77				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	9.5	19	28.5				
<b>Time (military)</b>	1814	1825	1836	1846				
<b>pH (s.u.)</b>	6.67	6.61	6.58	6.52				
<b>Specific Cond. (umhos/cm)</b>	124	123	122	122				
<b>Water Temp (°C)</b>	20.7	20.6	20.5	20.4				
<b>Turbidity (*)</b>	8.7	8.1	7.6	7.4				
<b>Dissolved Oxygen</b>	4.76	4.67	4.61	4.56				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	9.5	19	28.5				
<b>Time (military)</b>	1659	1710	1721	1732				
<b>pH (s.u.)</b>	6.75	6.77	6.70	6.69				
<b>Specific Cond. (umhos/cm)</b>	148	152	159	160				
<b>Water Temp (°C)</b>	20.7	20.6	20.5	20.4				
<b>Turbidity (*)</b>	5.2	5.0	5.6	5.1				
<b>Dissolved Oxygen</b>	5.12	4.44	4.43	4.40				

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>31.34</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>43.66</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>43.66</u> X <u>0.163</u> = <u>7.11</u> gals.          3 Csg. Volumes = 3 X <u>7.11</u> = <u>21.34</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>21.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	7	14	21.5				
<b>Time (military)</b>	1110	1118	1125	1132				
<b>pH (s.u.)</b>	6.74	6.68	6.63	6.58				
<b>Specific Cond. (umhos/cm)</b>	66.8	66.1	65.3	64.7				
<b>Water Temp (°C)</b>	18.6	18.5	18.4	18.3				
<b>Turbidity (*)</b>	8.9	8.2	7.6	7.4				
<b>Dissolved Oxygen</b>	2.74	2.63	2.56	2.50				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 7/6/18  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition HOT  
 Ambient Air Temperature 98  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # DW-4**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 120 ft.  
 Depth to GW (DGW) 28.26 ft.

Length of Water Column (LWC=TWD-DGW) 57.57 FT

1 Csg. Volume (LWC\*C) = 91.74 X 0.163 = 14.95 gals.  
 3 Csg. Volumes = 3 X 14.95 = 44.86 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 45 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	15	30	45				
<b>Time (military)</b>	730	742	758	811				
<b>pH (s.u.)</b>	6.86	6.81	6.76	6.70				
<b>Specific Cond. (umhos/cm)</b>	127	126	125	124				
<b>Water Temp (°C)</b>	19.1	19.0	18.9	18.7				
<b>Turbidity (*)</b>	10.4	9.6	9.1	8.5				
<b>Dissolved Oxygen</b>	11.73	10.24	8.93	8.19				



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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-5</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>22.83</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>127.17</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>127.17</u> X <u>0.163</u> = <u>20.72</u> gals.          3 Csg. Volumes = 3 X <u>20.72</u> = <u>62.18</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>62.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	62.5				
<b>Time (military)</b>	1546	1558	1611	1624				
<b>pH (s.u.)</b>	6.19	6.12	6.06	6.01				
<b>Specific Cond. (umhos/cm)</b>	218	218	217	216				
<b>Water Temp (°C)</b>	21.2	21.1	21.0	20.9				
<b>Turbidity (*)</b>	4.7	3.9	3.5	3.2				
<b>Dissolved Oxygen</b>	6.41	6.37	6.32	6.28				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-6</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>27.10</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>122.9 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>122.9</u> X <u>0.163</u> = <u>20.03</u> gals.          3 Csg. Volumes = 3 X <u>20.03</u> = <u>60.08</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>60.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	60.25				
<b>Time (military)</b>	1312	1324	1338	1350				
<b>pH (s.u.)</b>	6.51	6.39	6.35	6.30				
<b>Specific Cond. (umhos/cm)</b>	201	200	199	198				
<b>Water Temp (°C)</b>	21.4	21.2	21.1	20.9				
<b>Turbidity (*)</b>	7.3	6.8	6.5	6.1				
<b>Dissolved Oxygen</b>	10.21	8.73	7.42	7.38				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-7</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>21.58</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>128.42 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>128.42</u> X <u>0.163</u> = <u>20.93</u> gals.          3 Csg. Volumes = 3 X <u>20.93</u> = <u>62.79</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>63</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	21	42	63				
<b>Time (military)</b>	1434	1448	1502	1513				
<b>pH (s.u.)</b>	6.56	6.51	6.46	6.45				
<b>Specific Cond. (umhos/cm)</b>	109	117	115	115				
<b>Water Temp (°C)</b>	20.1	19.5	19.5	19.4				
<b>Turbidity (*)</b>	8.1	7.6	7.8	7.5				
<b>Dissolved Oxygen</b>	2.45	2.65	2.64	2.68				

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<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>38.99</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>111.01</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>111.01</u> X <u>0.163</u> = <u>18.09</u> gals.          3 Csg. Volumes = 3 X <u>18.09</u> = <u>54.20</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>54.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	18	36	54.5				
<b>Time (military)</b>	1205	1219	1230	1241				
<b>pH (s.u.)</b>	6.14	6.10	6.06	6.01				
<b>Specific Cond. (umhos/cm)</b>	197	146	146	145				
<b>Water Temp (°C)</b>	18.9	18.8	18.7	18.6				
<b>Turbidity (*)</b>	10.9	8.7	8.1	7.6				
<b>Dissolved Oxygen</b>	13.76	8.16	7.89	7.81				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	18	36	55.5				
<b>Time (military)</b>	951	1001	1013	1024				
<b>pH (s.u.)</b>	7.26	7.21	7.15	7.10				
<b>Specific Cond. (umhos/cm)</b>	108	104	103	103				
<b>Water Temp (°C)</b>	17.6	17.5	17.4	17.3				
<b>Turbidity (*)</b>	8.3	7.4	6.8	5.9				
<b>Dissolved Oxygen</b>	5.05	4.92	4.86	4.82				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	59				
<b>Time (military)</b>	841	854	905	917				
<b>pH (s.u.)</b>	6.44	6.40	6.39	6.38				
<b>Specific Cond. (umhos/cm)</b>	157	157	156	155				
<b>Water Temp (°C)</b>	19.7	19.6	19.5	19.4				
<b>Turbidity (*)</b>	8.9	7.6	7.1	6.4				
<b>Dissolved Oxygen</b>	4.76	4.67	4.61	4.56				

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-1</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.33</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2059							
<b>pH (s.u.)</b>	6.46							
<b>Specific Cond. (umhos/cm)</b>	309							
<b>Water Temp (°C)</b>	21.4							
<b>Turbidity (*)</b>	141							
<b>Dissolved Oxygen</b>	2.47							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/6/18</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>HOT</u>          Ambient Air Temperature <u>98</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.67</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2133							
<b>pH (s.u.)</b>	6.46							
<b>Specific Cond. (umhos/cm)</b>	309							
<b>Water Temp (°C)</b>	21.4							
<b>Turbidity (*)</b>	141							
<b>Dissolved Oxygen</b>	2.47							



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>7/6/18</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>HOT</u>                  Ambient Air Temperature <u>98</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u>                  pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.                  Depth to GW (DGW) <u>21.73</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.                  3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2110							
<b>pH (s.u.)</b>	6.52							
<b>Specific Cond. (umhos/cm)</b>	341							
<b>Water Temp (°C)</b>	21.7							
<b>Turbidity (*)</b>	113							
<b>Dissolved Oxygen</b>	2.47							

**APPENDIX C**  
**WELL LOGS**



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft.      Date Started: 5/7/18  
 40 \_\_\_\_\_ ft.      Date Completed: 5/9/18

**2. LOCATION OF WELL:**      COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**10. CASING:**  Threaded       Welded  
 Diam.: 2 \_\_\_\_\_  
 Type:  PVC       Galvanized  
 Steel       Other  
 2 \_\_\_\_\_ in. to 30 \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below   
 Surface \_\_\_\_\_ inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?       Yes       No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_      **PUBLIC SYSTEM NUMBER:** MW-38

**11. SCREEN:**  
 Type: PVC \_\_\_\_\_ Diam.: 2 inch  
 Slot/Gauge: .01 \_\_\_\_\_ Length: 10 feet  
 Set Between: 40 \_\_\_\_\_ ft. and 30 \_\_\_\_\_ ft.      NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.      USE SECOND SHEET  
 Sieve Analysis       Yes (please enclose)       No

**4. ABANDONMENT:**       Yes       No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 28.16 \_\_\_\_\_ ft. below land surface after 24 hours

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	25	25
SAND Brown Silty	2	27
Boulder	3	30
SAND Brown Silty	10	40

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)       No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis       Yes       No      Bacterial Analysis       Yes       No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**       Yes       No  
 Installed from 40 \_\_\_\_\_ ft. to 39 \_\_\_\_\_ ft.  
 Effective size 2 \_\_\_\_\_      Uniformity Coefficient Coarse

**16. WELL GROUTED?**       Yes       No  
 Neat Cement       Bentonite       Bentonite/Cement       Other \_\_\_\_\_  
 Depth: From 38 \_\_\_\_\_ ft. to 0 \_\_\_\_\_ ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 \_\_\_\_\_ ft. W direction  
 Type Petroleum  
 Well Disinfected       Yes       No      Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:       Submersible       Jet (shallow)       Turbine  
 Jet (deep)       Reciprocating       Centrifugal

**19. WELL DRILLER: Tommy Bolyard**      CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
 17538 Greenhill Road           
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233      Fax No.:

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: *Tommy Bolyard*      Date: 7/15/18  
 Well Driller

**6. TYPE:**       Mud Rotary       Jetted       Bored  
 Dug       Air Rotary       Driven  
 Cable tool       Other

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
 (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

7. PERMIT NUMBER: 02131

**8. USE:**

- Residential                       Public Supply                       Process  
 Irrigation                             Air Conditioning                 Emergency  
 Test Well                               Monitor Well                       Replacement

**2. LOCATION OF WELL:**

COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)**

80 ft. Date Started: 5/7/18  
 Date Completed: 5/9/18

**10. CASING:**  Threaded  Welded

Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 75 ft. depth  
6 in. to 40 ft. depth  
 Height: Above  Below   
 Surface 4 INCHES ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:****PUBLIC SYSTEM NUMBER:**

MW-39

**4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	25	25
SAND Brown Silty	2	27
Boulder	3	30
SAND Brown Silty	50	80

**11. SCREEN:**

Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 80 ft. and 75 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL**

28.83 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**

Yes  No  
 Installed from 80 ft. to 74 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**

Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 73 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:**

0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:**

Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:**

Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_  
17538 Greenhill Road Level: A  B  C  D (circle one)  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:**

This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 7/15/18  
 Well Driller

If D Level Driller, provide supervising driller's name:

- 6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation           Air Conditioning       Emergency  
 Test Well           Monitor Well           Replacement

**9. WELL DEPTH (completed)** Date Started: 5/7/18  
150 ft. Date Completed: 5/9/18

**10. CASING:**  Threaded     Welded  
 Diam.: 2  
 Type:  PVC     Galvanized    Height: Above  Below   
 Steel     Other    Surface 4 inches \_\_\_\_\_ ft.  
2 in. to 145 ft. depth    Weight \_\_\_\_\_ lb./ft.  
6 in. to 140 ft. depth    Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
DW-10

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft. NOTE: MULTIPLE SCREENS  
                                 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No

**12. STATIC WATER LEVEL** 29.94 ft. below land surface after 24 hours

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	25	25
SAND Brown Silty	2	27
Boulder	3	30
SAND Brown Silty	52	82
Rock Granite	68	150

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 144 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement     Bentonite     Bentonite/Cement     Other \_\_\_\_\_  
 Depth: From 143 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible     Jet (shallow)     Turbine  
 Jet (deep)           Reciprocating     Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 4433 Fax No.: \_\_\_\_\_

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 7/15/18  
 Well Driller

**6. TYPE:**  Mud Rotary     Jetted     Bored  
 Dug               Air Rotary     Driven  
 Cable tool     Other

If D Level Driller, provide supervising driller's name: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account  
 Date: 5-12-18  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Buy Means / Tony Boyd  
 Driller's Name: Tony Boyd  
 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. _____	Conductivity meter serial no. _____	Temperature meter serial no. _____	Turbidity meter serial no. _____
pH=4.0 <u>4</u>	standard _____		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 38 Well Casing Diameter 2 inches Borehole Diameter 6.25 inches  
 Depth to Ground Water (DGW) 27.69 ft. Screen Length/Slot Size 10 ft. .01 in.  
 Total Well Depth (TWD) 40 ft. Screen Interval 40 ft. to 30 ft.  
 Length of water column (LWC=TWD-DGW) 12.31 ft. Type of Drilling Fluids used: ---  
 Total Gallons of Water Removed: 15 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	<u>6.45</u>	<u>6.38</u>	<u>6.26</u>	<u>6.25</u>			
Specific Conductivity (mmho/cm)*	<u>138</u>	<u>120</u>	<u>121</u>	<u>120</u>			
Water Temperature (C)*	<u>19.2</u>	<u>18.0</u>	<u>17.9</u>	<u>17.9</u>			
Turbidity (NTU)*	<u>248</u>	<u>462</u>	<u>135</u>	<u>134</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>0</u> gals	<u>5</u> gals	<u>10</u> gals	<u>15</u> gals	<u>    </u> gals	<u>    </u> gals	<u>    </u> gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: [Signature] Date: 5-12-18



**Well Development Data Verification Form**  
Underground Storage Tank Management Division

Facility Name: ONE Account  
 Date: 5-12-18  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Bryg Merson / Tony Brown  
 Driller's Name: Tony Brown  
 Weather Conditions: \_\_\_\_\_

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

<b>pH meter</b>	<b>Conductivity meter</b>	<b>Temperature meter</b>	<b>Turbidity meter</b>
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard _____	_____	NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 39 Well Casing Diameter 6/2 inches Borehole Diameter 10 inches  
 Depth to Ground Water (DGW) 28.74 ft Screen Length/Slot Size 5 ft .01 in.  
 Total Well Depth (TWD) 80 ft Screen Interval 80 ft to 75 ft.  
 Length of water column (LWC=TWD-DGW) 51.26 ft Type of Drilling Fluids used: NP  
 Total Gallons of Water Removed: 35 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (a.u.)*	6.45	6.56	6.36	6.31			
Specific Conductivity (mmhos/cm)*	119	121	118	119			
Water Temperature (C)*	19.1	18.1	17.5	17.6			
Turbidity (NTU) *	58	101	23	21			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	0 gals	10 gals	25 gals	35 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: 5-12-18



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account  
 Date: 5-12-18  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Bray Means / Tony Boyd  
 Driller's Name: Tony Boyd  
 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. _____	Conductivity meter serial no. _____	Temperature meter serial no. _____	Turbidity meter serial no. _____
pH=4.0 <u>4</u>	standard _____		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# D10 Well Casing Diameter 6/2 inches Borehole Diameter 10 inches  
 Depth to Ground Water (DGW) 89.49 ft. Screen Length/Slot Size 5 ft. .01 in.  
 Total Well Depth (TWD) 150 ft. Screen Interval 150 ft. to 145 ft.  
 Length of water column (LWC=TWD-DGW) 120 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 60 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (a.u.)*	<u>6.56</u>	<u>6.31</u>	<u>6.30</u>	<u>6.37</u>			
Specific Conductivity (mmho/cm)*	<u>168</u>	<u>152</u>	<u>155</u>	<u>153</u>			
Water Temperature (C)*	<u>18.9</u>	<u>18.9</u>	<u>19.1</u>	<u>19.0</u>			
Turbidity (NTU) *	<u>52</u>	<u>23</u>	<u>5</u>	<u>6</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>0</u> gals	<u>20</u> gals	<u>40</u> gals	<u>60</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: 5-12-18



**APPENDIX D**  
**DISPOSAL MANIFESTS**

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on 8 1/2 (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
2. Generator's Name and Mailing Address <i>KATAUMBA ENVIRONMENTAL 4278 DYE RD ROCKMONT SC 29712</i>					
4. Generator's Phone <i>(803) 417-4588</i>					
5. Transporter 1 Company Name <i>KATAUMBA ENVIRONMENTAL</i>		9. US EPA ID Number		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone	
				C. State Transporter's ID	
9. Designated Facility Name and Site Address <i>HAR MOT 221 DALTON DRIVE CHARLOTTE NC</i>		10. US EPA ID Number		D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION		13. Containers		13. Total Quantity	14. Lbs/Vol
<i>PURPLE LIQUID OILY SLUDGE</i>		No.	Type		
<i>a. ARDING CROCKY, MERITE ST, LAWRENCE, SC</i>		2	Dr	68	600
<i>b. First Stop, CR Kwon Hwy, Nimbony, SC</i>		3	Dr	143	600
<i>c. ONE ACCORD, LAWRENCE HWY, PRESTON, SC</i>		5	Dr	240	600
<i>d. Stryan Ford, Bowing St, BEaufort, SC</i>		3	Dr	136	600
G. Additional Descriptions for Materials Listed Above <i>Siphon C, Highway 278, WILMINGTON, SC</i>		1	Dr	28	600
16. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name <i>Billy Martin</i>		Signature <i>Billy Martin</i>		Date Month Day Year <i>7/12/18</i>	
17. Transporter 1 Acknowledgment of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
18. Transporter 2 Acknowledgment of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name <i>Mike Hinds</i>		Signature <i>Mike Hinds</i>		Date Month Day Year <i>7/13/18</i>	

NON-HAZARDOUS WASTE

RECYCLED PAPER



**APPENDIX E**  
**QAPP CHECKLIST**

QAPP Contractor Checklist One Accord Ministries Site ID 02131

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number	X		
3	Is name, address, & phone number of current property owner	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been	X		
16	Has the monitoring well installation and development dates been	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2			X
31	Have recommendations for further action been provided and	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk			X
37	Has the topographic map been provided with all required elements? (Figure	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements?	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?	X		
47	Have the soil boring/field screening logs been provided?	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided?	X		
52	Has all fate and transport modeling been provided? (Appendix I)	X		
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



Healthy People. Healthy Communities.

**ONE ACCORD MINISTRIES  
3570 LANCASTER HWY  
RICHBURG SC 29729**

**OCT 05 2018**



Re: **Aggressive Fluid and Vapor Recovery (AFVR) Directive**  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131; CA#57967  
Release #1 reported March 23, 2009  
Assessment Report received August 1, 2018  
Chester County

To Whom it May Concern:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) recognizes your commitment to continue work at this site using KLM Environmental, LLC as your contractor.

In accordance with Section 280.64 of the South Carolina Underground Storage Tank Control Regulations, an Aggressive Fluid and Vapor Recovery (AFVR) event may proceed immediately upon receipt of this letter as outlined in this directive and the UST Quality Assurance Program Plan (QAPP) Revision 3.1. **Please be aware that the AFVR Procedures have been updated.** The 96-Hour AFVR event should utilize recovery wells RW-1, RW-2, and RW-3. The stingers shall be lowered at six inch intervals starting at the water table interface to a target depth of 27 feet. Please advance to the target depth within the first eight (8) hours of the event. Thereafter, the stinger should be adjusted to achieve the highest vapor recovery while maintaining dewatering of the smear zone. Off-gas treatment will be necessary. A copy of DHEC QAPP Revision 3.1 for the Underground Storage Tank Division is available at <http://www.scdhec.gov/environment/PermitCentral/ApplicationForms/#UST>.

**As soon as the beginning date of the event has been scheduled, please contact Matt Wykel at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).**

**The AFVR Report should be submitted within 90 days from the date of this correspondence.** Please note that all applicable South Carolina certification requirements apply to the services and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

Your contractor can submit an invoice for each completed report for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. If the first invoice is not submitted within 120 days from the date of this letter, monies allocated for this cost agreement will be uncommitted. This means that invoices will not be processed for payment until all other committed funds are paid or monies become available.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval is obtained from the UST Management Division. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be preapproved by the DHEC for the cost to be paid. DHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, DHEC reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work.

DHEC grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. The transport and disposal must be conducted in accordance with the QAPP. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence concerning this site, please reference UST Permit #02131. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,



Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29445 (w/enc.)

Technical file (w/enc.)

**Approved Cost Agreement      57967**

Facility: 02131 ONE ACCORD MINISTRIES

WYKELJM

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
19 RPT/PROJECT MNGT & COORDINATIO		PRT REPORT PREPARATION	0.1200	\$18,342.250	2,201.07
23 EFR		A4 96 HOUR EVENT	1.0000	\$12,567.500	12,567.50
		C4 OFF GAS TREATMENT 96 HOUR	1.0000	\$780.000	780.00
		D SITE RECONNAISSANCE	1.0000	\$203.250	203.25
		F1 EFFLUENT DISPOSAL	10,000.0000	\$0.440	4,400.00
		G AFVR EQUIPMENT MOB	1.0000	\$391.500	391.50
<b>Total Amount</b>					20,543.32





Healthy People. Healthy Communities.

Article #: 92148969009997901413084790



**HARRY WHITESIDES  
2620 ST HELENA COURT  
FORT MILL SC 29715**

Re: **Water Supply Well Sampling Results**  
One Accord Ministries  
3570 Lancaster Hwy, Richburg SC, 29729  
UST Permit # 02131  
Petroleum Release Reported March 23, 2009  
Assessment Report Received August 1, 2018  
Report of Analysis Received August 1, 2018  
Chester County

OCT 17 2018

Dear Mr. Whiteside

On July 6, 2018, personnel from the Katawba Environmental, Inc. collected groundwater samples from your water supply well. The lab results from your water supply well sample indicate that Methyl tertiary butyl ether (MTBE) is present at a concentration of 0.77 µg/L. The safe drinking water standard / Risk Based Screening Level (RBSL) for MTBE is 40 µg/L. Based on current scientific evidence, concentrations below RBSL do not pose any risk to your health.

Based on these results, the UST Management Division plans to continue biannual sampling of your water supply well to ensure that contaminants remain below the safe drinking water standards. A granular activated carbon (GAC) unit can be installed on your well to remove chemicals of concern if you so desire; however, as the chemicals of concern have remained under the safe drinking water standard, the UST Division does not plan to install a GAC at this time.

If you would like to discuss these results, and/or would like to request that a GAC unit to be installed on your water supply well, please contact me at (803) 898-7705, via email at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov) or via fax at (803) 898-0673. On all written correspondence, please reference UST Permit # 02131.

Sincerely,

A handwritten signature in black ink that reads "Matt Wykel".

Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Section  
UST Management Division  
Bureau of Land & Waste Management

enc: Lab Results for Water Supply Well  
cc: Technical File (w/ enc.)

Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>TG10074-058</b>
Description: <b>02131 Dww3</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>07/06/2018 2132</b>	
Date Received: <b>07/10/2018</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2115	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		103	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	07/19/2018 0127	BWS		78131

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	0.77		0.50	0.20	ug/L	1
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	70-130
1,2-Dichlorobenzene-d4		87	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	504.1	504.1	1	07/18/2018 1352	DAL1	07/18/2018 0848	78020

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0040	ug/L	2

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Shealy Environmental Services, Inc.  
 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-058**

Description: **02131 Dww3**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2132**

Date Received: **07/10/2018**

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and  $\geq$  DL  
H = Out of holding time    W = Reported on wet weight basis

Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com



Healthy People. Healthy Communities.

Article #: 92148969009997901413084646



**MR BRUCE KEE**  
**541 KEES DRIVE DRIVE**  
**CHESTER SC 29729**

Re: **Water Supply Well Sampling Results**  
One Accord Ministries  
3570 Lancaster Hwy, Richburg SC, 29729  
UST Permit # 02131  
Petroleum Release Reported March 23, 2009  
Assessment Report Received August 1, 2018  
Report of Analysis Received August 1, 2018  
Chester County

OCT 17 2018

Dear Mr. Kee:

On July 6, 2018, personnel from the Katawba Environmental, Inc. collected groundwater samples from your water supply well. The lab results from your water supply well sample indicate that Methyl tertiary butyl ether (MTBE) is present at a concentration of 2.2 µg/L. The safe drinking water standard / Risk Based Screening Level (RBSL) for MTBE is 40 µg/L. Based on current scientific evidence, concentrations below RBSL do not pose any risk to your health.

Based on these results, the UST Management Division plans to continue biannual sampling of your water supply well to ensure that contaminants remain below the safe drinking water standards. A granular activated carbon (GAC) unit can be installed on your well to remove chemicals of concern if you so desire; however, as the chemicals of concern have remained under the safe drinking water standard, the UST Division does not plan to install a GAC at this time.

If you would like to discuss these results, and/or would like to request that a GAC unit to be installed on your water supply well, please contact me at (803) 898-7705, via email at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov) or via fax at (803) 898-0673. On all written correspondence, please reference UST Permit # 02131.

Sincerely,

A handwritten signature in black ink that reads "Matt Wykel".

Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Section  
UST Management Division  
Bureau of Land & Waste Management

enc: Lab Results for Water Supply Well  
cc: Technical File (w/ enc.)

Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>TG10074-056</b>
Description: <b>02131 Dww1</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>07/06/2018 2115</b>	
Date Received: <b>07/10/2018</b>	

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018	2025 BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		98	70-130						
Bromofluorobenzene		103	70-130						
Toluene-d8		101	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018	0039 BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	2.2		0.50	0.20	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		81	70-130						
1,2-Dichlorobenzene-d4		119	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018	1252 DAL1	07/12/2018	0903	77467	
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Shealy Environmental Services, Inc.  
 108 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Client: <b>Katawba Environmental, Inc.</b> Description: <b>02131 Dww1</b> Date Sampled: <b>07/06/2018 2115</b> Date Received: <b>07/10/2018</b>	Laboratory ID: <b>TG10074-056</b> Matrix: <b>Aqueous</b>
--	---

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		79	57-137

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LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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Article #: 92148969009997901413084851



**ROBERT AND LISA FARRIS**  
**583 KEES DRIVE**  
**RICHBURG SC 29729**

Re: **Water Supply Well Sampling Results**  
One Accord Ministries  
3570 Lancaster Hwy, Richburg SC, 29729  
UST Permit # 02131  
Petroleum Release Reported March 23, 2009  
Assessment Report Received August 1, 2018  
Report of Analysis Received August 1, 2018  
Chester County

OCT 17 2018

Dear Mr. Whiteside

On July 6, 2018, personnel from the Katawba Environmental, Inc. collected groundwater samples from your water supply well. The lab results from your water supply well sample indicate that Methyl tertiary butyl ether (MTBE) is present at a concentration of 2.8 µg/L. The safe drinking water standard / Risk Based Screening Level (RBSL) for MTBE is 40 µg/L. Based on current scientific evidence, concentrations below RBSL do not pose any risk to your health.

Based on these results, the UST Management Division plans to continue biannual sampling of your water supply well to ensure that contaminants remain below the safe drinking water standards. A granular activated carbon (GAC) unit can be installed on your well to remove chemicals of concern if you so desire; however, as the chemicals of concern have remained under the safe drinking water standard, the UST Division does not plan to install a GAC at this time.

If you would like to discuss these results, and/or would like to request that a GAC unit to be installed on your water supply well, please contact me at (803) 898-7705, via email at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov) or via fax at (803) 898-0673. On all written correspondence, please reference UST Permit # 02131.

Sincerely, 

Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Section  
UST Management Division  
Bureau of Land & Waste Management

enc: Lab Results for Water Supply Well  
cc: Technical File (w/ enc.)

Client: Katawba Environmental, Inc.

Laboratory ID: TG10074-061

Description: 02131 Dww5

Matrix: Aqueous

Date Sampled: 07/06/2018 2119

Date Received: 07/10/2018

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2229	BVS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		94	70-130						
Bromofluorobenzene		96	70-130						
Toluene-d8		101	70-130						

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0242	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	2.8		0.50	0.20	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		76	70-130						
1,2-Dichlorobenzene-d4		94	70-130						

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1417	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **TG10074-061**

Description: **02131 Dww6**

Matrix: **Aqueous**

Date Sampled: **07/06/2018 2119**

Date Received: **07/10/2018**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		69	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

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Healthy People. Healthy Communities.

Article #: 92148969009997901413084684



**MARION AND PEGGY KEE**  
**3570 LANCASTER HWY**  
**RICHBURG SC 29729**

OCT 17 2018

Re: **Water Supply Well Sampling Results**  
One Accord Ministries  
3570 Lancaster Hwy, Richburg SC, 29729  
UST Permit # 02131  
Petroleum Release Reported March 23, 2009  
Assessment Report Received August 1, 2018  
Report of Analysis Received August 1, 2018  
Chester County

Dear Mr. and Mrs. Kee,

On July 6, 2018 Katwaba Environmental, Inc., collected groundwater samples from your water supply wells located on your property at address 3570 Lancaster Highway. This sampling work was directed by the Underground Storage Tank Management Division (UST Division) to evaluate the extent of the underground petroleum release from One Accord Ministries. The lab results from your water supply well sample indicate that Methyl tertiary butyl ether (MTBE) is present at a concentration of 73 µg/L, and tert-Amyl Methyl ether (tAME) is present at an estimated concentration of .63 µg/L. The safe drinking water standard/Risk Based Screening Level (RBSL) for MTBE is 40 µg/L, and the Action Level for tAME is 128 µg/L. Based on current scientific evidence, concentrations of MTBE are above the RBSL which could pose a risk to your health.

Based on these results, the UST Management Division plans to install a granular activated carbon (GAC) unit to remove the chemicals of concern. DHEC plans to periodically resample your water supply well to ensure that contaminants remain below the safe drinking water standards after they have passed through the GAC.

Another water supply well is located on your property for the residence at 603 Kee's Trail. It is believed that this well is owned by Phillip Kee. The lab results for this water supply well indicate that MTBE is present at a concentration of 1.4 µg/L.

Based on these results, the UST Management Division plans to continue biannual sampling of the water supply well to ensure that contaminants remain below the safe drinking water standards. A granular activated carbon (GAC) unit can be installed on your well to remove chemicals of concern if you so desire; however, as the chemicals of concern have remained under the safe drinking water standard, the UST Division does not plan to install a GAC at this time.

On all correspondence concerning this site, please reference UST Permit #2131. If there are any questions concerning this correspondence, , please contact me at (803) 898-7705, via email at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov) or via fax at (803) 898-0673.

Sincerely,

A handwritten signature in black ink that reads "Matt Wykel". The signature is written in a cursive, flowing style.

Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Section  
UST Management Division  
Bureau of Land & Waste Management

enc: Lab Results for Water Supply Well Samples  
cc: Technical File (w/ enc.)

Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>TG10074-057</b>
Description: <b>02131 Dww2</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>07/06/2018 2140</b>	
Date Received: <b>07/10/2018</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2018 2050	BWS		78256

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	0.83	J	10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		101	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	07/19/2018 0103	BWS		78131
2	524.2	524.2	10	07/20/2018 0931	ECB		78301

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	73		5.0	2.0	ug/L	2
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		84	70-130		79	70-130
1,2-Dichlorobenzene-d4		95	70-130		83	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	504.1	504.1	1	07/12/2018 1328	DAL1	07/12/2018 0903	77467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Shealy Environmental Services, Inc.  
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Client: <b>Katawba Environmental, Inc.</b> Description: <b>02131 Dww2</b> Date Sampled: <b>07/06/2018 2140</b> Date Received: <b>07/10/2018</b>	Laboratory ID: <b>TG10074-057</b> Matrix: <b>Aqueous</b>
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Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		63	57-137

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LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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Client:Katawba Environmental, Inc.

Laboratory ID: TG10074-059

Description: 02131 Dww4

Matrix: Aqueous

Date Sampled: 07/06/2018 2105

Date Received: 07/10/2018

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	07/19/2018 2140	BWS		78256		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		95	70-130						
Bromofluorobenzene		96	70-130						
Toluene-d8		101	70-130						

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	07/19/2018 0152	BWS		78131		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.20	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.20	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	1.4		0.50	0.20	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.20	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.20	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		80	70-130						
1,2-Dichlorobenzene-d4		91	70-130						

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	07/12/2018 1353	DAL1	07/12/2018 0903	77467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0040	ug/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>TG10074-059</b>
Description: <b>02131 Dww4</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>07/06/2018 2105</b>	
Date Received: <b>07/10/2018</b>	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		68	57-137

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LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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# Katawba Environmental, Inc.

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December 14, 2019

Mr. Matt Wykel  
SCDHEC  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708



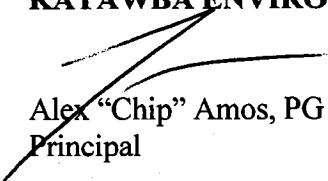
**RE: AFVR REPORT  
ONE ACCORD  
UST PERMIT # 02131, CA 57967  
RICHBURG, SOUTH CAROLINA**

Dear Mr. Wykel:

Katawba Environmental, Inc. (Katawba) has prepared this AFVR Report for the above-referenced facility for your review. This event was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated October 5, 2018.

A comprehensive sampling event is recommended as the next scope of work. If we can be of further assistance or provide any additional information, do not hesitate to contact me at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC. #18**

  
Alex "Chip" Amos, PG  
Principal

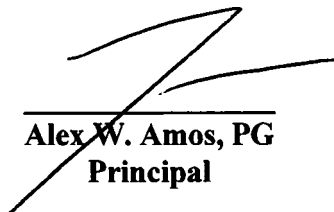




# *AFVR Report*

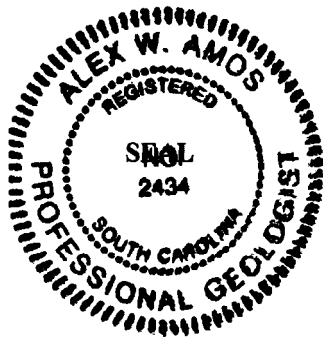
## **One Accord 3570 Lancaster Highway Richburg, South Carolina UST Permit #02131**

December 2018



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Alex W. Amos, PG  
Principal



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## **1.0 INTRODUCTION**

Ms. Angel Hough has retained Katawba Environmental, Inc. (Katawba) to conduct this AFVR event at One Accord (subject site). The subject site is located at 3570 Lancaster Highway, Richburg, South Carolina. A United States Geological Survey map is provided in Appendix A as Figure 1. A comprehensive map of the site is provided as Figure 2. The site currently operates as a church ministry facility that no longer retails petroleum products.

This AFVR event was implemented in response to SCDHEC correspondence dated October 5, 2018. The scope of work to be performed included the implementation of a 96 hour AFVR event to be conducted on RW-1, RW-2 and RW-3. Mr. Alex W. Amos PG, of Katawba, prepared this AFVR Report. The following summarizes the results of this event:

### **AFVR EVENT 11/26/18**

- Approximately 15 gallons of free product was evacuated from monitoring wells RW-1, RW-2 and RW-3.
- RW-1 contained 0.0 feet of free product prior to the event. RW-2 contained 0.0 feet of free product prior to the event. RW-3 contained 0.0 feet of free product prior to the event. After the event free product was non existent in the surveyed wells.
- 66.95 pounds of carbon were recovered as emissions.
- 77.50 pounds of gasoline vapor were recovered as emissions.
- 12.76 gallons of gasoline were recovered as emissions.

The following AFVR Report details site conditions as assessed on November 26, 2018 to November 30, 2018 and provides limited conclusions based upon data obtained on that date.

## **2.0 AFVR EVENT**

On November 26, 2018 an AFVR event was conducted by Katawba Environmental, Inc. on wells RW-1, RW-2 and RW-3. Mr. Cal Funderburk and Dan Arbegast of Katawba were present during the event. Site conditions were overcast with a temperature of 52 degrees. Prior to the event and after the event groundwater elevation in the AFVR wells were measured. Magnehelic gauges were installed and read every 30 minutes on the surveyed wells. RW-1 contained 0.0 feet of free product prior to the event. RW-2 contained 0.0 feet of free product prior to the event. RW-3 contained 0.0 feet of free product prior to the event. Approximately 15 gallons of product accumulated in the tanker after the AFVR was completed. 66.95 pounds of carbon were recovered as emissions with 77.50 pounds of gasoline vapor recovered as emissions. 12.76 gallons of gas were recovered as emissions. Approximately 3251 gallons of fuel/water mixture were removed from RW-1, RW-2 and RW-3 and disposed of at US Water Recovery, Goose Creek, South Carolina. Off gas treatments were completed by use of granular carbon filtration of stack effluent.

TABLE 1 RADIUS OF INFLUENCE GAUGE READINGS

Time	RW-1	RW-2	RW-3	MW-16	MW-19	MW-20
8:00 D1	15 / WL 21.20	15 / WL 21.21	15 / WL 21.24	0/WL 21.75	0/WL 20.95	0/WL 22.05
8:30	15	15	15	0	0	3
9:00	15	15	15	0	0	3
9:30	15	15	15	0	0	3
10:00	15	15	15	0	0	3
10:30	15	15	15	0	0	3
11:00	15	15	15	0	0	3
11:30	15	15	15	0	0	3
12:00	15	15	15	0	0	2
12:30	15	15	15	0	0	2
13:00	15	15	15	0	0.5	2
13:30	15	15	15	0	0.5	2
14:00	15	15	15	0	0.5	2
14:30	15	15	15	0	0.5	2
15:00	15	15	15	0	0.5	2
15:30	15	15	15	0	1	2
16:00	15	15	15	0	1	2.5
17:00	15	15	15	1	1	3
18:00	15	15	15	1	1	3
19:00	15	15	15	1	1	3
20:00	15	15	15	1	1	3
21:00	15	15	15	1	1	3
22:00	15	15	15	1	1	3
23:00	15	15	15	1	1	2
24:00	15	15	15	1	1	2
8:00 D2	15	15	15	1	1	2
9:00	15	15	15	1	1	2
10:00	15	15	15	1.5	1	2
11:00	15	15	15	1.5	1	2.5
12:00	15	15	15	1.5	1	2
13:00	15	15	15	1.5	1	2

Time	RW-1	RW-2	RW-3	MW-16	MW-19	MW-20
14:00	15	15	15	0.5	0.25	2
15:00	15	15	15	0.5	0.25	2
16:00	15	15	15	0.5	0.25	2
17:00	15	15	15	0.5	0.25	2
18:00	15	15	15	0.5	0.25	2
19:00	15	15	15	0.5	0.25	2
20:00	15	15	15	0.5	0.25	2
21:00	15	15	15	0.5	0.25	2
22:00	15	15	15	0.5	0.25	2
23:00	15	15	15	0.5	0.25	2
24:00	15	15	15	0.5	0.25	2
8:00 D3	15	15	15	1	1	3
9:00	15	15	15	1	1	3
10:00	15	15	15	1	1	3
11:00	15	15	15	1	1	3
12:00	15	15	15	1	1	3
13:00	15	15	15	1	1	3
14:00	15	15	15	1	1	3
15:00	15	15	15	1	1	3
16:00	15	15	15	1	1	3
17:00	15	15	15	1	1	3
18:00	15	15	15	1	1	3
19:00	15	15	15	1	1	3
20:00	15	15	15	1	1	3
21:00	15	15	15	1	1	3
22:00	15	15	15	1	1	3
23:00	15	15	15	1	1	3
24:00	15	15	15	1	1	3
8:00 D4	15	15	15	1	1	3
9:00	15	15	15	1	1	3
10:00	15	15	15	1	1	3
11:00	15	15	15	1	1	3

Time	RW-1	RW-2	RW-3	MW-16	MW-19	MW-20
12:00	15	15	15	1	1	3
13:00	15	15	15	1	1	3
14:00	15	15	15	1	1	3
15:00	15	15	15	1	1	3
16:00	15	15	15	1	1	3
17:00	15	15	15	1	1	3
18:00	15	15	15	1	1	3
19:00	15	15	15	1	1	3
20:00	15	15	15	1	1	3
21:00	15	15	15	1	1	3
22:00	15	15	15	1	1	3
23:00	15	15	15	1	1	3
24:00	15	15	15	1	1	3
8:00	15 /WL 23.31	15 /WL 24.12	15 /WL 22.16	1/WL 21.67	1/WL 23.59	3/WL 20.81

**TABLE 2 DEPTH OF FREE PRODUCT**

Well/Date	RW-1	RW-2	RW-3	MW-16	MW-19	MW-20
Start 11/26/18	0.0	0.0	0.0	0.0	0.0	0.0
Finish 11/30/18	0.0	0.0	0.0	0.0	0.0	0.0

**OFFGAS / STINGER DEPTH**

Time	OVA	OFF GAS OVA	STINGER DEPTH RW1	STINGER DEPTH RW2	STINGER DEPTH RW3
8:00 D1	1530	0	21	21	21
8:30	1795	0	21.5	21.5	21.5
9:00	1184	5	22	22	22
9:30	1256	2	22.5	22.5	22.5
10:00	1221	21	23	23	23
10:30	1249	23	23.5	23.5	23.5
11:00	1407	44	24	24	24
11:30	1579	54	24.5	24.5	24.5
12:00	1429	69	25	25	25
12:30	1689	108	25.5	25.5	25.5
1:00	1901	214	26	26	26
1:30	1956	309	26.5	26.5	26.5
2:00	1850	390	27	27	27
2:30	1902	Carb Change	27	27	27
3:00	2121	0	27	27	27
3:30	1605	11	27	27	27
4:00	1858	13	27	27	27
4:30	1931	14	27	27	27
5:00	1852	36	27	27	27
6:00	1937	44	27	27	27
7:00	1852	50	27	27	27
8:00	1859	54	27	27	27
9:00	1857	42	27	27	27
10:00	1231	51	27	27	27
11:00	557	54	27	27	27
12:00	710	57	27	27	27
8:00 D2	447	Carb Change	27	27	27
9:00	529	0	27	27	27
10:00	1139	0	27	27	27
11:00	1691	11	27	27	27
12:00	1207	15	27	27	27
1:00	1404	16	27	27	27
2:00	1149	22	27	27	27
3:00	1438	30	27	27	27
4:00	1324	45	27	27	27
5:00	1239	52	27	27	27
6:00	1245	152	27	27	27



Time	OVA	OFF GAS OVA	STINGER DEPTH RW1	STINGER DEPTH RW2	STINGER DEPTH RW3
7:00	1996	121	27	27	27
8:00	746	150	27	27	27
9:00	355	Carb Change	27	27	27
10:00	362	0	27	27	27
11:00	317	7	27	27	27
12:00	314	9	27	27	27
8:00 D3	362	Carb Change	27	27	27
9:00	298	0	27	27	27
10:00	781	0	27	27	27
11:00	946	5	27	27	27
12:00	1582	7	27	27	27
1:00	787	6	27	27	27
2:00	822	6	27	27	27
3:00	749	6	27	27	27
4:00	700	7	27	27	27
5:00	771	5	27	27	27
6:00	791	6	27	27	27
7:00	774	8	27	27	27
8:00	768	10	27	27	27
9:00	772	19	27	27	27
10:00	750	34	27	27	27
11:00	513	43	27	27	27
12:00	484	54	27	27	27
8:00 D4	290	Carb Change	27	27	27
9:00	267	0	27	27	27
10:00	348	0	27	27	27
11:00	404	0	27	27	27
12:00	613	10	27	27	27
1:00	1100	10	27	27	27
2:00	1023	16	27	27	27
3:00	1041	17	27	27	27
4:00	924	15	27	27	27
5:00	482	20	27	27	27
6:00	702	24	27	27	27
7:00	727	53	27	27	27
8:00	721	92	27	27	27
9:00	770	211	27	27	27
10:00	920	Carb Change	27	27	27
11:00	1149	1	27	27	27
12:00	1038	2	27	27	27

### 3.0 CONCLUSIONS

- Approximately 15 gallons of free product was evacuated from monitoring wells RW-1, RW-2 and RW-3.
- RW-1 contained 0.0 feet of free product prior to the event. RW-2 contained 0.0 feet of free product prior to the event. RW-3 contained 0.0 feet of free product prior to the event. After the event free product was non existent in the surveyed wells.
- 66.95 pounds of carbon were recovered as emissions.
- 77.50 pounds of gasoline vapor were recovered as emissions.
- 12.76 gallons of gasoline were recovered as emissions.

AFVR PROJECT SUMMARY TABLE				
AFVR	Carbon recovered	Gas vapor recovered	Gas gallon recovered emissions	Total gallons of liquid removed
Date 11/30/18	66.95	77.50	12.76	3251
Total	66.95	77.50	12.76	3251

### 4.0 RECOMMENDATIONS

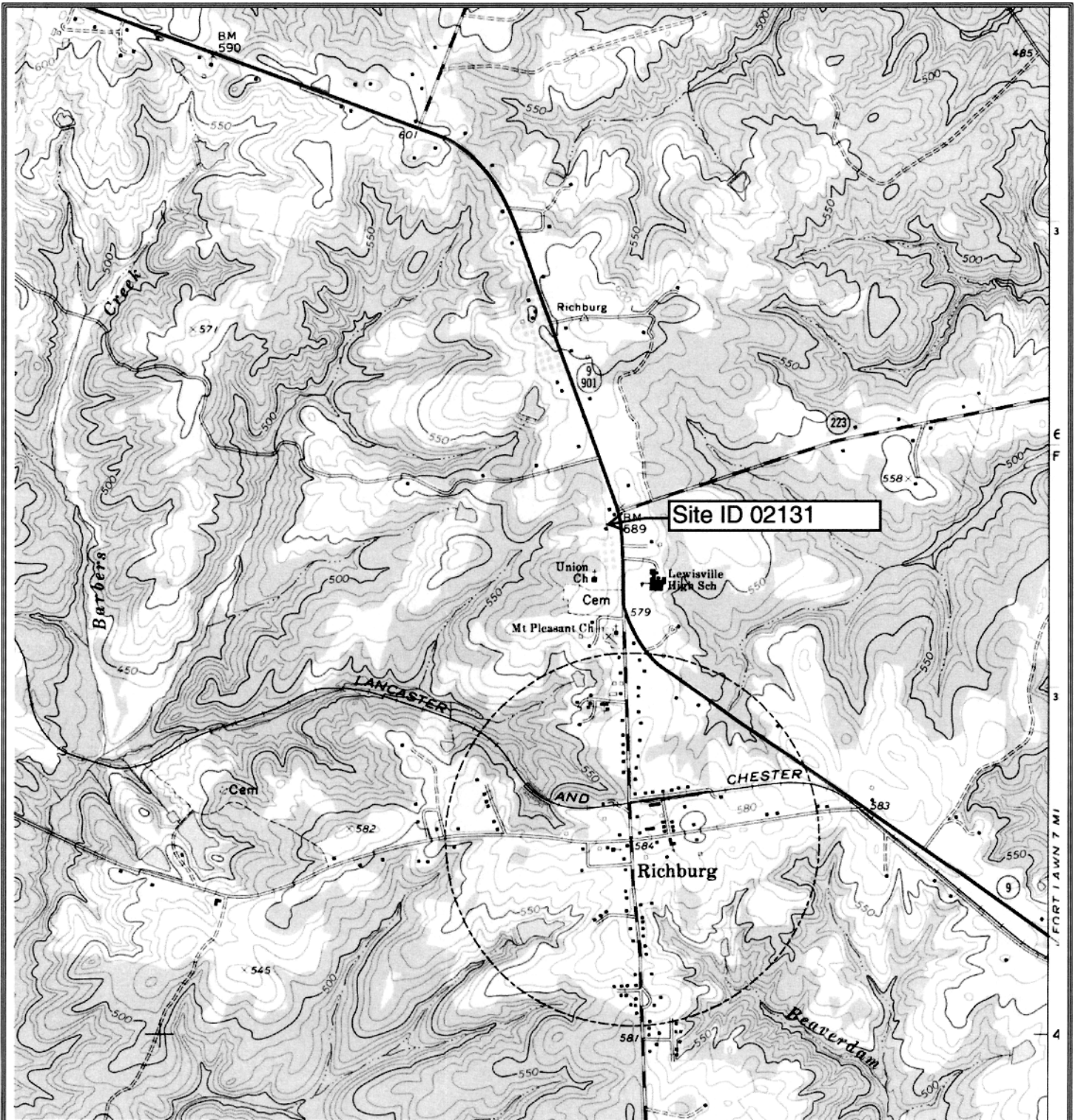
It is recommended that additional sampling be conducted as the next scope of work.

### 5.0 REFERENCES

Wykel, Matt Letter to Amos, October 5, 2018

Katawba Environmental, Inc. Assessment Report August 1, 2018

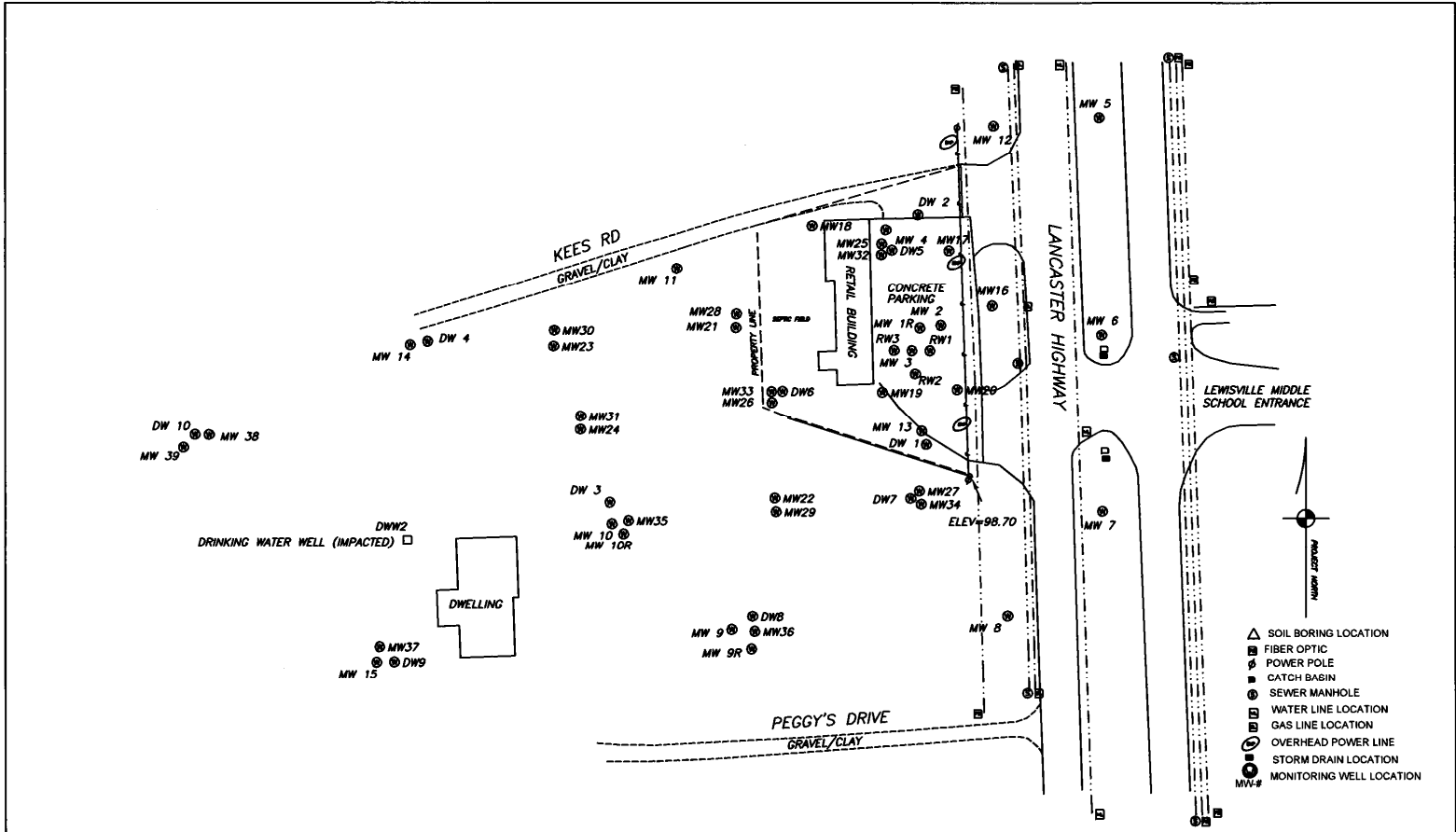
**APPENDIX A**  
**FIGURES**



SCALE INCH = 2000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

AFVR REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP

**APPENDIX B**  
**AFVR REPORT**

**AFVR Field Emissions Data**

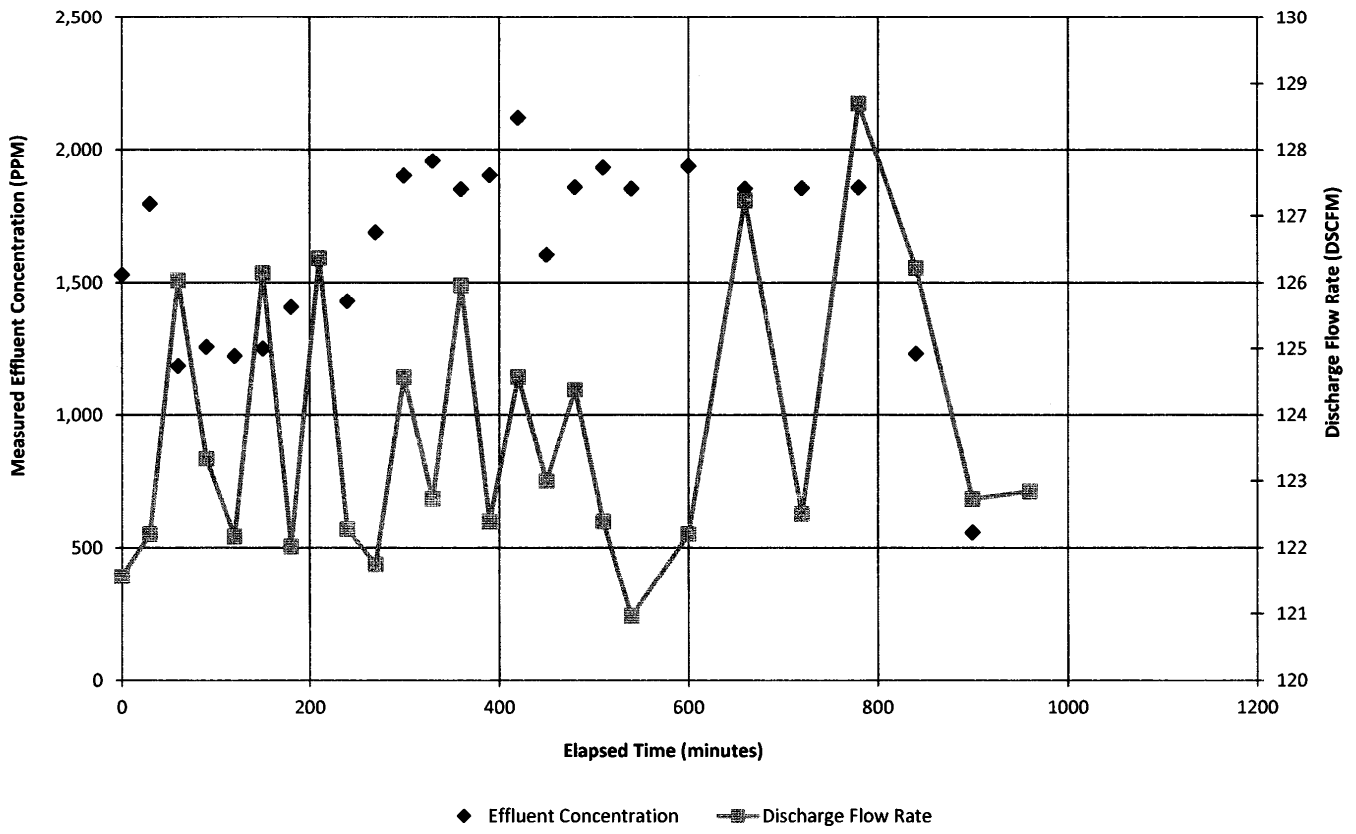
Date:		11/26/2018		21		SILT		Kalawaba		250025		PMRc		PMRg		PMRg	
Site Name:		One Accord		Average Depth to Ground Water		Soil Type		Vacuum Contractor		Vacuum Truck Specification (CFM @ mm Hg)		PPMm		PPMc		Ccm	
SCDHEC Site ID #:		2131		RW 1 RW2 RW 3		Vacuum Truck Specification (CFM @ mm Hg)		PPMm		PPMc		Ccm		PMRc		PMRg	
Well ID #:		RW 1 RW2 RW 3		Pipe ID		Temp.		Rel Humid		PPMmeasured		K		Elapsed Flow		DSCFM	
Date	Time	Vacuum (in. Hg)	Velocity (ft/min)	Pipe ID (in)	Temp. (F)	Rel Humid (%)	PPMmeasured (ppm)	K	Elapsed Flow (min)	DSCFM	PPMm	PPMc	Ccm (mg/dsm3)	(lb/dscf)	PMRc (lb/hr)	PMRg (lb/hr)	PMRg (gal/hr)
11/26/2018	8:00	20	3,239	3	170.0	83.0	1,530	4	0	121.57	1677.1	6708.3	3347.2	2.09E-04	1.52	1.76	0.29
11/26/2018	8:30	20	3,256	3	170.0	79.0	1,795	4	30	122.20	1967.6	7870.2	3926.9	2.45E-04	1.80	2.08	0.34
11/26/2018	9:00	20	3,358	3	170.0	78.0	1,184	4	60	126.03	1297.8	5191.3	2590.3	1.62E-04	1.22	1.42	0.23
11/26/2018	9:30	20	3,286	3	170.0	78.0	1,256	4	90	123.33	1376.7	5507.0	2747.8	1.72E-04	1.27	1.47	0.24
11/26/2018	10:00	20	3,255	3	170.0	78.0	1,221	4	120	122.17	1338.4	5353.5	2671.2	1.87E-04	1.22	1.41	0.23
11/26/2018	10:30	20	3,361	3	170.0	78.0	1,249	4	150	126.14	1369.1	5476.3	2732.5	1.71E-04	1.29	1.49	0.25
11/26/2018	11:00	20	3,251	3	170.0	99.0	1,407	4	180	122.02	1542.3	6189.0	3078.1	1.92E-04	1.41	1.63	0.27
11/26/2018	11:30	20	3,367	3	170.0	99.0	1,579	4	210	126.37	1730.8	6923.2	3454.4	2.16E-04	1.64	1.89	0.31
11/26/2018	12:00	20	3,258	3	170.0	86.0	1,429	4	240	122.28	1566.4	6265.5	3126.2	1.95E-04	1.43	1.66	0.27
11/26/2018	12:30	20	3,244	3	170.0	85.0	1,889	4	270	121.75	1851.4	7405.5	3695.0	2.31E-04	1.69	1.95	0.32
11/26/2018	13:00	20	3,319	3	170.0	86.0	1,901	4	300	124.57	2063.7	8335.0	4158.8	2.80E-04	1.94	2.25	0.37
11/26/2018	13:30	20	3,270	3	170.0	90.0	1,956	4	330	122.73	2144.0	8576.1	4279.2	2.87E-04	1.97	2.28	0.37
11/26/2018	14:00	20	3,356	3	170.0	83.0	1,850	4	360	125.96	2027.8	8111.4	4047.3	2.53E-04	1.91	2.21	0.36
11/26/2018	14:30	20	3,261	3	170.0	82.0	1,902	4	390	122.39	2084.8	8339.4	4161.0	2.60E-04	1.91	2.21	0.36
11/26/2018	15:00	20	3,319	3	170.0	81.0	2,121	4	420	124.57	2324.9	9299.6	4640.1	2.90E-04	2.17	2.51	0.41
11/26/2018	15:30	20	3,277	3	170.0	79.0	1,605	4	450	122.99	1759.3	7037.2	3511.3	2.19E-04	1.62	1.87	0.31
11/26/2018	16:00	20	3,314	3	170.0	76.0	1,650	4	480	124.30	2036.6	8146.5	4064.8	2.54E-04	1.89	2.19	0.36
11/26/2018	16:30	20	3,261	3	170.0	75.0	1,931	4	510	122.39	2116.6	8488.5	4224.5	2.94E-04	1.94	2.24	0.37
11/26/2018	17:00	20	3,223	3	170.0	72.0	1,852	4	540	120.97	2030.0	8120.2	4051.6	2.53E-04	1.84	2.12	0.35
11/26/2018	18:00	20	3,256	3	170.0	71.0	1,937	4	600	122.20	2123.2	8492.8	4237.6	2.65E-04	1.94	2.24	0.37
11/26/2018	19:00	20	3,380	3	170.0	70.0	1,852	4	660	127.23	2030.0	8120.2	4051.6	2.53E-04	1.93	2.23	0.37
11/26/2018	20:00	20	3,264	3	170.0	65.0	1,854	4	720	122.50	2032.2	8128.9	4056.0	2.53E-04	1.86	2.15	0.35
11/26/2018	21:00	20	3,429	3	170.0	63.0	1,857	4	780	128.70	2035.5	8142.1	4062.6	2.54E-04	1.96	2.27	0.37
11/26/2018	22:00	20	3,363	3	170.0	62.0	1,231	4	840	126.22	1349.3	5397.4	2693.1	1.88E-04	1.27	1.47	0.24
11/26/2018	23:00	20	3,270	3	170.0	51.0	557	4	900	122.73	810.5	2442.2	1218.6	7.81E-05	0.56	0.65	0.11
11/26/2018	0:00	20	3,273	3	170.0	50.0	710	4	960	122.84	778.3	3113.0	1553.3	9.70E-05	0.71	0.83	0.14
Average		20	3,297	3	170	77	1,589	4		123.74	1741.7	6966.9	3476.2	2.17E-04	1.61	1.87	0.31

Bws: 0.087702226  
Bwsw: 0.06

Total Pounds of Carbon Recovered as Emissions: 25.78  
Total Pounds of Gasoline Vapor Recovered as Emissions: 29.84  
Total Gallons of Gasoline Recovered as Emissions: 4.91  
(This Number Represents the Gallons Recovered via Vapors, Not Total Liquids)

Qstd = (60 sec/min) (1-Bws) (velocity) (Pipe ID sq ft) [(528 ft / (Temp + 460)) (Listed As Flow Above)]  
Bws = (Bwsn / 18 lb-mole H2O) / [(1/28.84 lb-mole dry air) + Bwsn / 18 lb-mole H2O]  
PPMm = (PPMw) / (1-Bws)      PPMc = (PPM) (K)  
Cc = Ccm (62.43 E-9 lb-mole/mg-ft<sup>3</sup>)      PMRg = (PMRc) (Mg/Mc)  
Bgs = below top of casing  
Bwsn = (Bwsn / 18 lb-mole H2O) / [(1/28.84 lb-mole dry air) + Bwsn / 18 lb-mole H2O]  
Qstd = (60 sec/min) (1-Bws) (V) (A) (Temp deg Rankin)  
Bgs = below top of casing  
Bws = water vapor % by volume  
PPMmeasured = obtained directly from Photo Ionization Detector (PID)  
Bwsw = pounds of water per pound of dry air, derived from the psychrometric chart (Temp Vs relative hum)  
PPMw = PPM measured (wet Conc.)  
K = # of carbons in calibration gas (isobutylene)  
PPMc = PPMw, volumetric concentration of VOC emissions as carbon, dry basis, at STP  
Ccm = mg/dsm<sup>3</sup>, mass concentration of VOC emissions as carbon  
Mc = 12.01 mg/mg-mole, molecular wt. of carbon  
Kc = 24.07 dm<sup>3</sup>/m<sup>3</sup> mg-mole, mass to volume conversion factor at stp  
Cc = Bwsdct, mass concentration of VOC emissions as carbon, dry basis, at STP  
PMRc = lb/hr, pollutant mass removal rate of VOC's as carbon  
PMRg = lb/hr, pollutant mass removal rate of VOC's as gasoline  
Mcg = 89 mg/mg-mole, weight of carbon in gasoline molecule  
PPMm = "dry" concentration  
Mg = 103 mg/mg-mole, molecular wt. of gasoline  
Qstd = Flow at DSCFM  
Ccm = PPMc (Mc/Kc)  
PMRc = Cc (Qstd) (60 min/hr)

### AFVR Field Emissions Data





**AFVR Field Emissions Data**

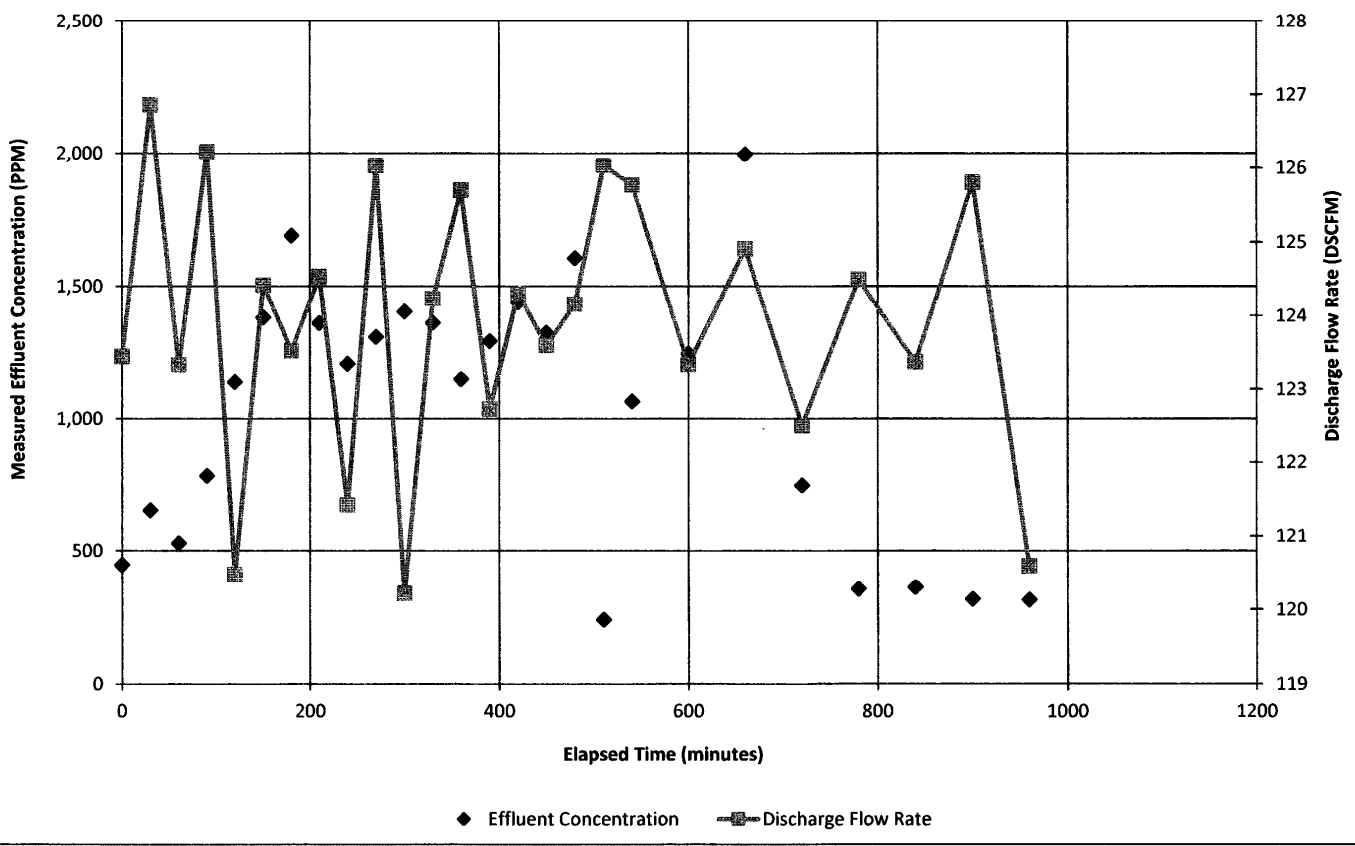
Date	Time	Vacuum (in. Hg)	Velocity (ft/min)	Pipe ID (in)	Temp (F)	Rel Humid (%)	PPMmeasured (ppm)	Vacuum Truck Specification (CFM @ min Hg)		Vacuum Contractor		Ccm (mg/dsm3)	PM10 (lb/dscf)	PM2.5 (lb/hr)	PM10 (lb/hr)	PM2.5 (gal/hr)	
								K	Elapsed Flow (min)	PPM1	PPM2						
11/27/2018	8:00	20	3,290	3	170.0	0.0	447	4	0	123.44	490.0	1959.9	977.9	6.11E-05	0.45	0.52	0.09
11/27/2018	8:30	20	3,381	3	170.0	0.0	652	4	30	126.86	714.7	2858.7	1426.4	8.90E-05	0.68	0.78	0.13
11/27/2018	9:00	20	3,287	3	170.0	0.0	529	4	60	123.33	579.9	2319.4	1157.3	7.23E-05	0.53	0.62	0.10
11/27/2018	9:30	20	3,366	3	170.0	0.0	782	4	90	126.22	857.2	3428.7	1710.8	1.07E-04	0.81	0.94	0.15
11/27/2018	10:00	20	3,211	3	170.0	0.0	1,159	4	120	120.48	1249.5	4904.0	2491.8	1.56E-04	1.12	1.30	0.21
11/27/2018	10:30	20	3,316	3	170.0	0.0	1,382	4	150	124.42	1514.9	6059.4	3023.4	1.89E-04	1.41	1.63	0.27
11/27/2018	11:00	20	3,292	3	170.0	0.0	1,691	4	180	123.52	1853.6	7414.2	3699.4	2.31E-04	1.71	1.98	0.33
11/27/2018	11:30	20	3,319	3	170.0	0.0	1,360	4	210	124.53	1490.7	5663.0	2975.3	1.86E-04	1.39	1.61	0.26
11/27/2018	12:00	20	3,236	3	170.0	0.0	1,207	4	240	121.42	1323.0	5292.1	2640.6	1.65E-04	1.20	1.39	0.23
11/27/2018	12:30	20	3,359	3	170.0	0.0	1,308	4	270	126.03	1433.7	5735.0	2861.5	1.79E-04	1.35	1.56	0.26
11/27/2018	13:00	20	3,204	3	170.0	0.0	1,404	4	300	120.22	1539.0	6155.9	3071.5	1.92E-04	1.38	1.60	0.26
11/27/2018	13:30	20	3,311	3	170.0	0.0	1,361	4	330	124.23	1491.8	5967.2	2977.5	1.88E-04	1.39	1.60	0.26
11/27/2018	14:00	20	3,350	3	171.0	0.0	1,149	4	360	125.69	1259.5	5037.8	2513.7	1.57E-04	1.18	1.37	0.23
11/27/2018	14:30	20	3,271	3	171.0	0.0	1,292	4	390	122.73	1416.2	5664.8	2826.5	1.76E-04	1.30	1.50	0.25
11/27/2018	15:00	20	3,313	3	171.0	0.0	1,438	4	420	124.31	1576.2	6305.0	3145.9	1.96E-04	1.46	1.70	0.28
11/27/2018	15:30	20	3,284	3	171.0	0.0	1,324	4	450	123.59	1451.3	5805.1	2896.5	1.81E-04	1.34	1.55	0.26
11/27/2018	16:00	20	3,309	3	171.0	0.0	1,606	4	480	124.15	1700.4	7041.0	3513.5	2.19E-04	1.63	1.89	0.31
11/27/2018	16:30	20	3,359	3	170.0	0.0	2,239	4	510	126.03	262.0	1047.9	522.9	3.26E-05	0.25	0.29	0.05
11/27/2018	17:00	20	3,352	3	170.0	0.0	1,065	4	540	125.77	1167.4	4669.5	2329.9	1.45E-04	1.10	1.27	0.21
11/27/2018	18:00	20	3,287	3	170.0	0.0	1,245	4	600	123.53	1364.7	5458.7	2723.7	1.70E-04	1.26	1.46	0.24
11/27/2018	19:00	20	3,329	3	170.0	0.0	1,996	4	660	124.91	2187.9	8781.5	4365.7	2.73E-04	2.04	2.36	0.39
11/27/2018	20:00	20	3,265	3	170.0	0.0	746	4	720	122.50	817.7	3270.9	1632.0	1.02E-04	0.75	0.87	0.14
11/27/2018	21:00	20	3,318	3	170.0	0.0	355	4	780	124.49	389.1	1558.5	776.6	4.85E-05	0.36	0.42	0.07
11/27/2018	22:00	20	3,288	3	170.0	0.0	362	4	840	123.37	396.8	1567.2	792.0	4.94E-05	0.37	0.42	0.07
11/27/2018	23:00	20	3,353	3	170.0	0.0	317	4	900	125.81	347.5	1389.9	693.5	4.33E-05	0.33	0.38	0.06
11/27/2018	0:00	20	3,214	3	170.0	0.0	314	4	960	120.59	344.2	1576.7	886.9	4.29E-05	0.31	0.36	0.06
<b>Average</b>		20	3,303	3	170	0	1,027	4		123.92	1128.1	4504.3	2247.5	1.40E-04	1.04	1.21	0.20

Bws: 0.087702226  
Bwsw: 0.06

Total Pounds of Carbon Recovered as Emissions: 16.68  
Total Pounds of Gasoline Vapor Recovered as Emissions: 19.31  
Total Gallons of Gasoline Recovered as Emissions: 3.18  
(This Number Represents the Gallons Recovered via Vapors, Not Total Liquids)

Q<sub>air</sub> = (Q<sub>scfm</sub> / 14.7) \* (Baro / 30.1) \* (Flow ID in ft) \* (2000 / R) \* (Temp. + 460) (Corrected Air Flow Above)  
Bws = Bws / 18 (Remove H<sub>2</sub>O) \* (1425.34 / (mole dry air)) \* Bws / 18 (Remove H<sub>2</sub>O)  
PPM1 = (PPM1 / 1) \* Bws  
PPM2 = (PPM2 / 1) \* Bws  
C<sub>cm</sub> = (C<sub>cm</sub> / 1) \* (Q<sub>scfm</sub> / 1000) \* (1000 / 1000)  
Bws = before top of catalyst  
Bws = Bws / 18 (Remove H<sub>2</sub>O) \* (1425.34 / (mole dry air)) \* Bws / 18 (Remove H<sub>2</sub>O)  
C<sub>cm</sub> = (C<sub>cm</sub> / 1) \* (Q<sub>scfm</sub> / 1000) \* (1000 / 1000)  
Bws = before top of catalyst  
Bws = before top of catalyst  
PPMmeasured = obtained directly from Photo Ionization Detector (PID)  
Bws = pounds of water per pound of dry air, derived from the dry-basis mole fraction of reactive vapor  
PPM1 = PPM measured (wet basis)  
m = # of carbons in calibration gas (isobutylene)  
PPM1 = PPM1 \* volumetric concentration of CO emissions as carbon dry basis, at STP  
C<sub>cm</sub> = (mg/dsm<sup>3</sup>) \* mass concentration of VOC emissions as carbon  
M<sub>1</sub> = 12.01 (molecular mass) of carbon  
M<sub>2</sub> = 28.02 (molecular mass) of ethane  
C<sub>cm</sub> = (mg/dsm<sub>2</sub>) \* (molecular mass) to volume conversion factor at STP  
PPM1 = (mg/dsm<sub>2</sub>) \* (molecular mass) of CO emissions as carbon, dry basis, at STP  
PPM1 = (mg/dsm<sub>2</sub>) \* (molecular mass) of VOCs as carbon  
PPM2 = (mg/dsm<sub>2</sub>) \* (molecular mass) of VOCs as gasoline  
M<sub>2</sub> = 80 (molecular weight) of carbon in gasoline molecule  
PPM1 = (mg/dsm<sub>2</sub>) concentration  
M<sub>2</sub> = 103 (molecular weight) of gasoline  
C<sub>cm</sub> = Flow at DSCFM  
C<sub>cm</sub> = PPM1 (dry basis)  
PPM1 = (C<sub>cm</sub> / 1000) \* (1000 / 1000)

### AFVR Field Emissions Data



**AFVR Field Emissions Data**

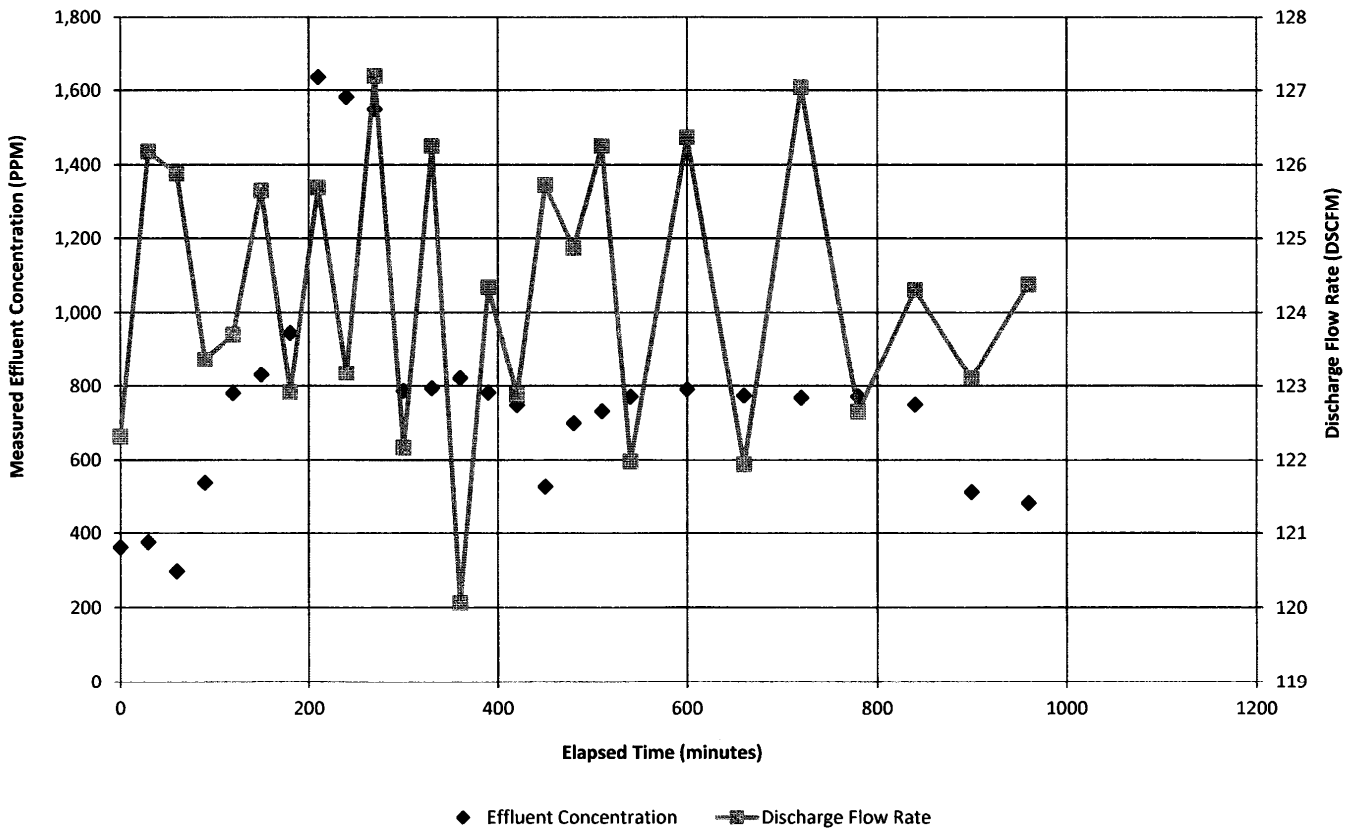
Date:		11/28/2018		AFVR Field Emissions Data		Average Depth to Ground Water		21									
Site Name:		Ore Accord		Soil Type		Kalambo		SILT									
SCDHEC Site ID #:		2131		Vacuum Contractor		253022		253022									
Well ID #:		RW1 RW2 RW3		Vacuum Truck Specifics (CFM @ min Hg)		PPM <sub>d</sub>		PPM <sub>c</sub>									
Date	Time	Vacuum (in. Hg)	Velocity (ft/min)	Pipe ID (in)	Temp. (F)	Ret Humid (%)	PPM <sub>measured</sub> (ppm)	K	Elapsed Flow (min)	DSCFM	PPM <sub>d</sub>	PPM <sub>c</sub>	Con (mg/dsm <sup>3</sup> )	Con (lb/dscf)	PMR <sub>c</sub> (lb/hr)	PMR <sub>d</sub> (lb/hr)	PMR <sub>g</sub> (gal/hr)
11/28/2018	8:00	20	3,261	3	186.0	0.0	362	4	0	122.32	396.8	1587.2	792.0	4.94E-05	0.36	0.42	0.07
11/28/2018	8:30	20	3,384	3	170.0	0.0	376	4	30	126.18	412.1	1648.6	822.6	5.14E-05	0.39	0.45	0.07
11/28/2018	9:00	20	3,356	3	170.0	0.0	298	4	60	125.88	326.6	1306.6	651.9	4.07E-05	0.31	0.36	0.06
11/28/2018	9:30	20	3,289	3	170.0	0.0	599	4	90	123.37	590.8	2363.3	1179.2	7.36E-05	0.54	0.63	0.10
11/28/2018	10:00	20	3,298	3	170.0	0.0	781	4	120	123.70	855.1	3424.3	1709.6	1.07E-04	0.79	0.92	0.15
11/28/2018	10:30	20	3,350	3	170.0	0.0	831	4	150	125.65	910.9	3543.5	1818.0	1.13E-04	0.86	0.99	0.16
11/28/2018	11:00	20	3,277	3	170.0	0.0	946	4	180	122.92	1036.9	4147.8	2068.6	1.29E-04	0.95	1.10	0.18
11/28/2018	11:30	20	3,351	3	170.0	0.0	1,636	4	210	125.69	1793.3	7173.1	3579.1	2.23E-04	1.69	1.95	0.32
11/28/2018	12:00	20	3,284	3	170.0	0.0	1,582	4	240	123.18	1734.1	6936.3	3461.0	2.16E-04	1.60	1.85	0.30
11/28/2018	12:30	20	3,391	3	170.0	0.0	1,550	4	270	127.19	1699.0	6796.0	3391.0	2.12E-04	1.62	1.87	0.31
11/28/2018	13:00	20	3,257	3	170.0	0.0	787	4	300	122.17	862.7	3450.6	1721.7	1.07E-04	0.79	0.91	0.15
11/28/2018	13:30	20	3,386	3	170.0	0.0	794	4	330	126.26	879.3	3481.3	1737.0	1.09E-04	0.82	0.95	0.16
11/28/2018	14:00	20	3,201	3	170.0	0.0	822	4	360	120.07	801.0	3604.1	1798.3	1.12E-04	0.81	0.94	0.15
11/28/2018	14:30	20	3,315	3	170.0	0.0	782	4	390	124.94	857.2	3428.7	1710.8	1.07E-04	0.80	0.92	0.15
11/28/2018	15:00	20	3,276	3	170.0	0.0	749	4	420	122.88	821.0	3264.0	1638.6	1.02E-04	0.75	0.87	0.14
11/28/2018	15:30	20	3,352	3	170.0	0.0	528	4	450	125.73	576.8	2315.0	1155.1	7.21E-05	0.54	0.63	0.10
11/28/2018	16:00	20	3,329	3	176.9	0.0	706	4	480	124.87	767.3	3069.2	1531.4	9.56E-05	0.72	0.83	0.14
11/28/2018	16:30	20	3,366	3	170.0	0.0	732	4	510	126.26	802.4	3209.5	1601.4	1.00E-04	0.76	0.88	0.14
11/28/2018	17:00	20	3,252	3	170.0	0.0	771	4	540	121.98	845.1	3380.5	1696.7	1.05E-04	0.77	0.89	0.15
11/28/2018	18:00	20	3,369	3	170.0	0.0	791	4	600	126.57	867.0	3462.2	1730.5	1.08E-04	0.82	0.95	0.16
11/28/2018	19:00	20	3,251	3	170.0	0.0	774	4	660	121.94	848.4	3393.6	1693.3	1.06E-04	0.77	0.90	0.15
11/28/2018	20:00	20	3,387	3	170.0	0.0	768	4	720	127.04	841.8	3357.3	1680.2	1.05E-04	0.80	0.93	0.15
11/28/2018	21:00	20	3,270	3	170.0	0.0	772	4	780	122.65	846.2	3384.9	1688.9	1.05E-04	0.78	0.90	0.15
11/28/2018	22:00	20	3,314	3	170.0	0.0	750	4	840	124.30	822.1	3286.4	1640.8	1.02E-04	0.76	0.88	0.14
11/28/2018	23:00	20	3,282	3	170.0	0.0	513	4	900	123.10	562.3	2249.3	1122.3	7.01E-05	0.52	0.60	0.10
11/28/2018	6:00	20	3,316	3	170.0	0.0	484	4	960	124.38	530.5	2122.1	1058.9	6.61E-05	0.48	0.57	0.09
Average		20	3,312	3	170	0	785	4		124.25	860.8	3443.2	1718.0	1.07E-04	0.80	0.93	0.15

Bws: 0.067702226  
Bwsw: 0.06

Total Pounds of Carbon Recovered as Emissions: 12.80  
Total Pounds of Gasoline Vapor Recovered as Emissions: 14.82  
Total Gallons of Gasoline Recovered as Emissions: 2.44  
(This Number Represents the Gallons Recovered via Vapors, Not Total Liquids)

Qid = (Q<sub>scdm</sub>) (1 - β<sub>scdm</sub>) (V<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>) (Unit As Flow Above)  
Bws = (B<sub>scdm</sub>) (1 - β<sub>scdm</sub>) (V<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>) (Unit As Flow Above)  
PPM<sub>d</sub> = (PPM<sub>measured</sub>) (1 - β<sub>scdm</sub>)  
PPM<sub>c</sub> = (PPM<sub>measured</sub>) (β<sub>scdm</sub>)  
Con = (Con<sub>measured</sub>) (1 - β<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>)  
Con = (Con<sub>measured</sub>) (β<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>)  
Bws before tax of duty  
Bws = (B<sub>scdm</sub>) (1 - β<sub>scdm</sub>) (V<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>) (Unit As Flow Above)  
Qid = (Q<sub>scdm</sub>) (1 - β<sub>scdm</sub>) (V<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>) (Unit As Flow Above)  
Bws = (B<sub>scdm</sub>) (1 - β<sub>scdm</sub>) (V<sub>scdm</sub>) (P<sub>scdm</sub> / P<sub>atm</sub>) (T<sub>scdm</sub> / T<sub>atm</sub>) (Unit As Flow Above)  
Bws = water vapor flow volume  
PPM<sub>measured</sub> = obtained directly from PPM<sub>measured</sub> Detector (PFD)  
Bws = pounds of water and pounds of dry air derived from the psychrometric chart using wet-bulb temperature  
PPM<sub>d</sub> = PPM measured (dry basis)  
K = # of carbon in carbon dioxide molecule  
PPM<sub>c</sub> = PPM volumetric concentration of VOC emissions as carbon dry basis at STP  
Con = (mg/dsm<sup>3</sup>) = mass concentration of VOC emissions as carbon  
M<sub>c</sub> = 12.01 mg/mole = molecular wt. of carbon  
V<sub>scdm</sub> = (CFM) (scfm) (mg/mole) (mole to volume conversion) factor at STP  
Con = (mg/dsm<sup>3</sup>) = mass concentration of VOC emissions as carbon dry basis at STP  
PMR<sub>c</sub> = (lb/hr) = carbon mass removal rate of VOCs as carbon  
PMR<sub>d</sub> = (lb/hr) = carbon mass removal rate of VOCs as gasoline  
M<sub>g</sub> = 88 mg/mole = weight of carbon in gasoline molecule  
PPM<sub>d</sub> = "dry" concentration  
M<sub>g</sub> = 103 mg/mole = molecular wt. of gasoline  
Qid = Flow at DSCFM  
Con = PPM (dry basis)  
PPM<sub>c</sub> = Con (carbon dry basis)

### AFVR Field Emissions Data



AFVR Field Emissions Data

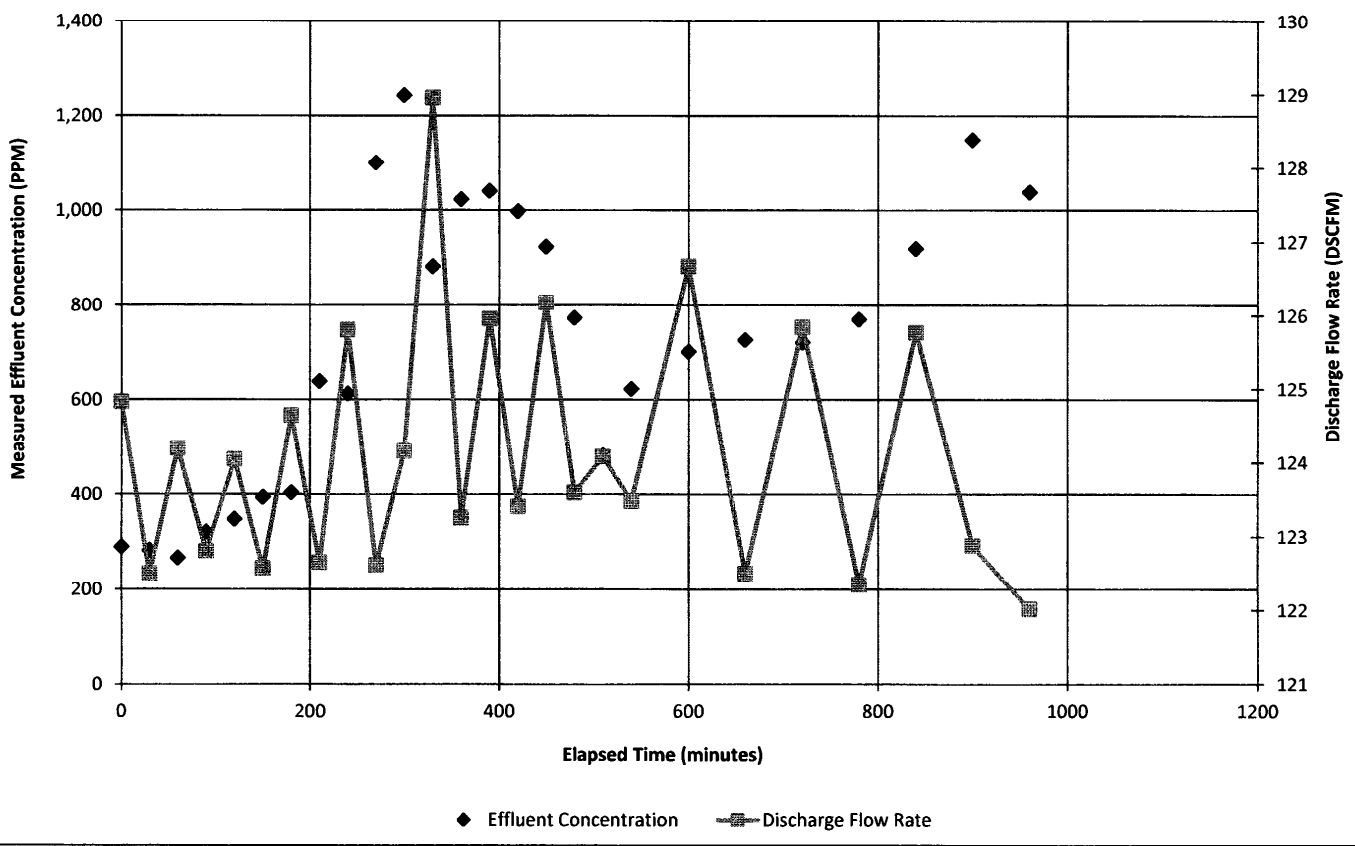
Date: 11/29/2018		Average Depth to Ground Water										21					
Site Name: One Accord		Vacuum Contractor										SILT					
SCDHEC Site ID #: 2131		Soil Type										Katawba					
Well ID #: RW 1 RW2 RW 3		25D/25															
Date	Time	Vacuum (in. Hg)	Velocity (ft/min)	Pipe ID (in)	Temp. (F)	Rel Humid (%)	PPMmeasured (ppm)	K	Elapsed Flow (min)	Flow (DSCFM)	PPMd	PPMc	Ccm (mg/dsm3)	Cc (lb/dscf)	PMRc (lb/hr)	PMRg (lb/hr)	PMRg (gal/hr)
11/29/2018	5:00	20	3,326	3	170.0	0.0	293	4	0	124.83	317.9	1271.5	634.4	3.96E-05	0.30	0.34	0.06
11/29/2018	8:30	20	3,284	3	170.0	0.0	280	4	30	122.50	310.2	1240.8	619.1	3.87E-05	0.28	0.33	0.05
11/29/2018	9:00	20	3,309	3	170.0	0.0	287	4	60	124.19	292.7	1170.7	504.1	3.85E-05	0.27	0.31	0.05
11/29/2018	9:30	20	3,272	3	170.0	0.0	321	4	90	122.80	351.9	1407.4	702.3	4.58E-05	0.32	0.37	0.06
11/29/2018	10:00	20	3,305	3	170.0	0.0	348	4	120	124.04	381.5	1525.8	761.3	4.75E-05	0.25	0.41	0.07
11/29/2018	10:30	20	3,269	3	170.0	0.0	394	4	150	122.58	431.9	1727.5	862.0	5.38E-05	0.40	0.46	0.08
11/29/2018	11:00	20	3,321	3	170.0	0.0	404	4	180	124.64	442.8	1771.4	863.6	5.52E-05	0.41	0.48	0.08
11/29/2018	11:30	20	3,268	3	170.0	0.0	639	4	210	122.65	700.4	2801.7	1397.9	8.73E-05	0.64	0.74	0.12
11/29/2018	12:00	20	3,352	3	170.0	0.0	613	4	240	125.81	671.9	2687.7	1341.1	8.37E-05	0.63	0.73	0.12
11/29/2018	12:30	20	3,287	3	170.0	0.0	1,100	4	270	122.62	1205.7	4823.0	2406.5	1.50E-04	1.11	1.28	0.21
11/29/2018	13:00	20	3,308	3	170.0	0.0	1,243	4	300	124.16	1362.5	5450.0	2719.3	1.70E-04	1.26	1.46	0.24
11/29/2018	13:30	20	3,438	3	170.0	0.0	882	4	330	128.96	956.8	3687.2	1929.6	1.20E-04	0.93	1.08	0.18
11/29/2018	14:00	20	3,284	3	170.0	0.0	1,023	4	360	123.25	1121.3	4485.4	2238.0	1.40E-04	1.03	1.20	0.20
11/29/2018	14:30	20	3,356	3	170.0	0.0	1,041	4	390	125.96	1141.1	4564.3	2277.4	1.42E-04	1.07	1.24	0.20
11/29/2018	15:00	20	3,288	3	170.0	0.0	998	4	420	123.40	1093.9	4375.8	2183.3	1.36E-04	1.01	1.17	0.19
11/29/2018	15:30	20	3,362	3	170.0	0.0	924	4	450	126.18	1012.8	4051.3	2021.4	1.26E-04	0.96	1.11	0.18
11/29/2018	16:00	20	3,293	3	170.0	0.0	773	4	480	123.59	847.3	3389.2	1691.1	1.05E-04	0.78	0.91	0.15
11/29/2018	16:30	20	3,306	3	170.0	0.0	482	4	510	124.08	528.3	2113.3	1054.5	6.58E-05	0.49	0.57	0.09
11/29/2018	17:00	20	3,290	3	170.0	0.0	623	4	540	123.48	682.9	2731.6	1362.9	8.51E-05	0.63	0.73	0.12
11/29/2018	18:00	20	3,375	3	170.0	0.0	702	4	600	126.67	769.5	3077.9	1535.8	9.99E-05	0.73	0.84	0.14
11/29/2018	19:00	20	3,284	3	170.0	0.0	727	4	660	122.50	796.9	3187.6	1590.5	9.93E-05	0.73	0.84	0.14
11/29/2018	20:00	20	3,353	3	170.0	0.0	721	4	720	125.84	790.3	3161.2	1577.3	9.85E-05	0.74	0.85	0.14
11/29/2018	21:00	20	3,260	3	170.0	0.0	770	4	780	122.35	844.0	3376.1	1684.5	1.05E-04	0.77	0.89	0.15
11/29/2018	22:00	20	3,351	3	170.0	0.0	920	4	840	125.77	1008.4	4053.8	2012.7	1.26E-04	0.95	1.10	0.18
11/29/2018	23:00	20	3,274	3	170.0	0.0	1,149	4	900	122.86	1259.5	5037.8	2513.7	1.57E-04	1.16	1.34	0.22
11/29/2018	0:00	20	3,251	3	170.0	0.0	1,008	4	960	122.02	1137.8	4551.1	2270.6	1.42E-04	1.04	1.20	0.20
Average		20	3,308	3	170	0	718	4		124.15	787.3	3149.3	1571.4	9.81E-05	0.73	0.85	0.14

Bws: 0.067702226  
Bwsv: 0.06

Total Pounds of Carbon Recovered as Emissions: 11.70  
Total Pounds of Gasoline Vapor Recovered as Emissions: 13.54  
Total Gallons of Gasoline Recovered as Emissions: 2.23  
(This Number Represents the Gallons Recovered via Vapors, Not Total Liquids)

Q20 = (C20 scfm) / (60 sec/min) / (Flow ID, scfm) / (200 OR / Temp. = 460) / (Listed As Flow Above)  
Bws = (Bws / 18 Rhmole H2O) / (125.94 Rhmole dry air) + (Bws / 18 Rhmole H2O)  
PPMd = (PPM) / (1-Bws)  
PPMc = (PPM) / (1-Bws)  
Ccm = (Ccm) / (1-Bws)  
Cc = (Ccm) / (1-Bws)  
PMRc = (PMR) / (1-Bws)  
PMRg = (PMR) / (1-Bws)  
Mw = 101 mg/mole molecular wt of gasoline  
C20 = Flow at C20  
Ccm = PPM (dry)  
PMRc = Cc (water) (0.067)

### AFVR Field Emissions Data



43884536  
TICKET NUMBER



**CERTIFIED  
AUTOMATED  
TRUCK  
SCALE**

CAT SCALE COMPANY  
P.O. BOX 630  
WALCOTT, IA 52773  
(563) 284-6263  
www.catscale.com

**THE CAT SCALE GUARANTEE**

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.\*

**WEIGH WHAT WE SAY OR WE PAY®**

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

- (1) Reimburse you for the cost of the overweight fine if our scale is wrong, OR
- (2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

**IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:**

- 1) Post bond and request a court date.
- 2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE, ext. 7 (Toll Free) or visit www.catscaleguarantee.com for instructions.
- 3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Guarantee Department.

\* The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE-26-18

STEER AXLE 9700 lb

DRIVE AXLE 12280 lb

TRAILER AXLE 9000 lb

\* GROSS WEIGHT 30980 lb

09:00  
43884536

sc254

LOCATION: KANGAROO EXPRESS  
PUBLIC WEIGHMASTER'S  
CERTIFICATE OF  
WEIGHT & MEASURE I 26 EXIT 199B  
SUMMERVILLE SC

IMPRINT SEAL HERE  
(IF APPLICABLE)

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facie evidence of the accuracy of the weight shown as prescribed by law.

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED

**FREIGHT ALL KINDS**

**GOOD SELL**

COMPANY

TRAILER #

70623

TRAILER #

\$1.50

WEIGHMASTER OR  
WEIGHER SIGNATURE

TINA

TICKET # OF  
FULL S W EIGH  
(IF REWEIGH)

WEIGH NUMBER  
1536

CUSTOMER COPY

DRIVER IN TRUCK MUST SIGN OFF HERE



43884571

TICKET NUMBER



**CERTIFIED  
AUTOMATED  
TRUCK  
SCALE**

CAT SCALE COMPANY  
P.O. BOX 630  
WALCOTT, IA 52773  
(563) 284-6263  
www.catscale.com

**THE CAT SCALE GUARANTEE**

The CAT Scale Company guarantees that our scales will give an accurate weight. What makes us different from other scale companies is that we back up our guarantee with cash.<sup>®</sup>

**WEIGH WHAT WE SAY OR WE PAY<sup>®</sup>**

If you get an overweight fine from the state **AFTER** one of our CAT Scales showed a legal weight, we will immediately check our scale and we will:

- (1) Reimburse you for the cost of the overweight fine if our scale is wrong, **OR**
- (2) A representative of CAT Scale Company will appear in court **WITH** the driver as an expert witness if we believe our scale was correct.

**IF YOU SHOULD GET AN OVERWEIGHT FINE, YOU SHOULD DO THE FOLLOWING TO GET THE PROBLEM RESOLVED:**

- 1) Post bond and request a court date.
- 2) Call CAT Scale Company direct 24 hours a day at 1-877-CAT-SCALE, ext. 7 (Toll Free) or visit [www.catscaleguarantee.com](http://www.catscaleguarantee.com) for instructions.
- 3) **IMMEDIATELY** send a copy of the citation, CAT Scale Ticket, your name, company, address, and phone number to CAT Scale Company Attn: Guarantee Department.

\* The four weights shown below are separate weights. The GROSS WEIGHT is the CERTIFIED WEIGHT and was weighed on a full length platform scale. All weights are guaranteed by CAT Scale.

DATE 30-18

STEER AXLE 11940 lb

DRIVE AXLE 24740 lb

TRAILER AXLE 21380 lb

\* GROSS WEIGHT 68060 lb

16:08

43884571

SCALE

LOCATION KANGAROO EXPRESS

I 26 EXIT 199B

SUMMERVILLE SC

PUBLIC WEIGHMASTER'S  
CERTIFICATE OF  
WEIGHT & MEASURE

IMPRINT SEAL HERE  
(IF APPLICABLE)

This is to certify that the following described merchandise was weighed, counted, or measured by a public or deputy weighmaster, and when properly signed and sealed shall be prima facia evidence of the accuracy of the weight shown as prescribed by law.

**FREIGHT ALL KINDS**

LIVESTOCK, PRODUCE, PROPERTY, COMMODITY, OR ARTICLE WEIGHED

SELL COMPANY

TRACTOR #

TRAILER #

EIGH NUMBER

1571

\$11.50

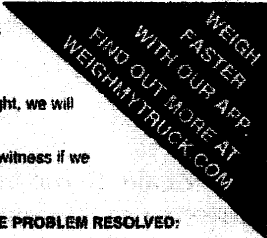
WEIGHMASTER OR  
WEIGHER SIGNATURE

TINA

TICKET # OF  
FULL S WEIGHT  
(IF REWEIGH)

CUSTOMER COPY

© CAT Scale® Reg 10/03 1.11.17



DRIVER IN TRUCK UNLESS CHECKED HERE



# US Water Recovery

<b>Non-Hazardous Manifest: Waste Water or Drums</b>		<b>Number:</b>	
1. Generator's EPA ID# (if applicable):		Waste ID Number:	
2. Generator's Name and Mailing Address: <i>3570 Concepcion Hwy Rickburg SC</i>		Phone ( )	
		P O #:	
3. Agent of Generator and Mailing Address:		Phone ( )	
		P O #:	
4. Transporter Company Name: <i>Goodsell Services</i>		Phone ( )	
<i>511 old Mt Holly Rd</i>			
Truck & Trailer License Number: <i>Goose Creek SC 29945</i>			
5. Transporter U.S. EPA ID#:			
6. Facility Name and Site Address: US Water Recovery 511 Old Mt. Holly Rd. Goose Creek, SC 29445		Mailing Address: US Water Recovery 511 Old Mt. Holly Rd. Goose Creek, SC 29445	
		Phone: (843) 797-3111	
		Fax: (843) 797-1884	
7. Facility U.S. EPA ID#:			
Start Level:		End Level:	
		Total Gallons:	
		Tank Number	
8. U.S. DOT Description		Container	
		Unit	
		Quantity	
		No.	
		Type	
a. Non-Hazardous, non-regulated waste water		<i>70833 BT Gal</i>	
		<i>3251</i>	
9. Generator's Certification: I hereby declare that the contents of this consignment are not hazardous by definition or listing and are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and the laws of the State of South Carolina. I further certify that the contents of this consignment are as represented by the description contained on the Waste Profile Form previously submitted to and approved by the Designated Facility.			
Printed/Typed Name: <i>[Signature]</i>		Signature:	
		Date:	
10. Transporter Acknowledgement of Receipt of Materials			
Printed/Typed Name: <i>Dan Kinsman</i>		Signature: <i>[Signature]</i>	
		Date: <i>11/30/18</i>	
11. Discrepancy Indication space:			
12. Facility Owner or Operator: Certification of Receipt of Materials			
Printed/Typed Name: <i>Dan Kinsman</i>		Signature: <i>[Signature]</i>	
		Date: <i>11/30/18</i>	

White - Facility      Yellow - Office      Pink - Transporter      Blue - Generator

21167



Healthy People. Healthy Communities.

ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729

JAN 09 2019



Re: Site-Specific Work Plan (SSWP) Request for Groundwater Sampling  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131  
Release reported March 23, 2009  
AFVR Report received December 17, 2018  
Chester County

To Whom it May Concern:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report submitted by your contractor. The report documents petroleum chemicals in the soil and groundwater above Risk-Based Screening Levels (RBSLs).

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of groundwater sampling is necessary. The groundwater sampling must be conducted in accordance with the most recent revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan (ACQAP), and in compliance with all applicable regulations. A copy of the UST QAPP is available at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentCleanup/QualityAssurance/>.

Groundwater samples should be collected from all monitoring wells, water supply wells, and surface waters within a 1,000 foot radius of the site and analyzed for BTEX, Naphthalene, MtBE, 1,2-DCA, the 8 oxygenates, and EDB.

**Your contractor must complete the SSWP and submit it within 30 days from the date of this letter.** Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from DHEC must be issued before work begins.**

On all correspondence regarding this site, please reference UST Permit number referenced above. Should you have any questions regarding this correspondence, please feel free to contact me by phone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,

A handwritten signature in black ink that reads "Matt Wykel". The signature is written in a cursive, slightly slanted style.

Matt Wykel, Hydrogeologist  
Corrective Action & Field Support Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, LLC, 4278 Dye Road, Edgemoor, SC 29712  
Technical file

PERMISSION FORM

PROPERTY OWNER

UST Permit # 02131



If you are the Property Owner or are the authorized representative for that person, please complete this form.

I, Harry D. Terry, certify that I am the legal owner of the property identified below or serve as the authorized representative for the property owner. I authorize the South Carolina Department of Health and Environmental Control (SCDHEC), or a contractor selected by SCDHEC, to enter this property at reasonable times only to conduct assessment and corrective action activities, as required. The contractor will be designated as the contractor for the UST owner or operator for only the required environmental site rehabilitation activities. Compensation to the contractor will be from the SUPERB Account and I will have no obligation to pay the contractor. I understand that SCDHEC will notify me of all activities that are necessary prior to their initiation and will promptly provide to me a summary of the data upon request.

Name of Facility Fireball Service Station Phone # 803-789-5571

Street Address of Facility 3570 Lancaster Hwy

Town, City, District, Suburb Richburg

Name of nearest intersecting street, road, highway, alley

Is this facility within the city limits? (yes or no) No

Does a public water or sewer utility service this facility? (yes or no) yes, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines \_\_\_\_\_, phone number \_\_\_\_\_

Were underground storage tanks previously removed from the ground at this facility? (yes or no) No If yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation \_\_\_\_\_ Phone number \_\_\_\_\_

Is the property currently leased or rented to someone? (yes or no) No. If yes, please provide their name \_\_\_\_\_ and phone number \_\_\_\_\_ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site. Financed with Bank

NAME of Property owner (Please Print): Harry D. Terry

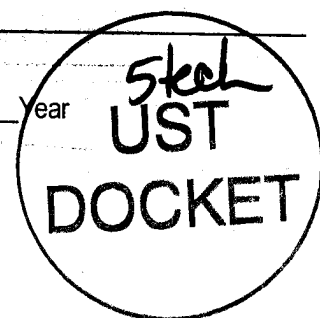
Phone Number (home) 803-789-6413 (work) 803-789-5571

Current Mailing Address: 3570 Lancaster Hwy, Richburg, SC 29729

Signature of Property Owner: Harry D. Terry

Witness: Jammy D. Champion

Date: April Month 24 Day 2009 Year





# Katawba Environmental, Inc.

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1/16/2019

Mr. Matt Wykel, Hydrogeologist  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

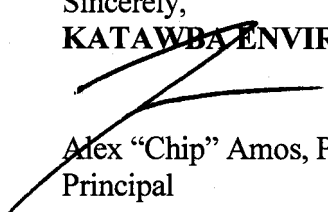
**RE: SITE SPECIFIC WORK PLAN  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**



Dear Mr. Wykel:

Katawba Environmental, Inc. (Katawba) has prepared this Site Specific Work Plan for the above-referenced facility for your review. This plan was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated January 9, 2019. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC.**

  
Alex "Chip" Amos, PG  
Principal

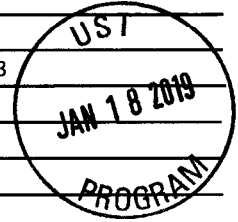




**Site-Specific Work Plan for Approved ACQAP  
Underground Storage Tank Management Division**

To: Matt Wykel (SCDHEC Project Manager)  
 From: Alex Amos, PG (Contractor Project Manager)  
 Contractor: Katawba Environmental, Inc. UST Contractor Certification Number: 18

Facility Name: One Accord Ministries UST Permit #: 02131  
 Facility Address: 3570 Lancaster Highway, Richburg, SC 29729  
 Responsible Party: Angela Hough One Accord Ministries Phone: 803-804-0253  
 RP Address: Same  
 Property Owner (if different): Same  
 Property Owner Address: Same  
 Current Use of Property: Church Youth Group Ministries



**Scope of Work** (Please check all that apply)

- IGWA                       Tier II                       Groundwater Sampling                       GAC  
 Tier I                       Monitoring Well Installation                       Other \_\_\_\_\_

**Analyses** (Please check all that apply)

Groundwater/Surface Water:

- BTEXNMDCA (8260B)                       Lead                       BOD                       Methane  
 Oxygenates (8260B)                       8 RCRA Metals                       Nitrate                       Ethanol  
 EDB (8011)                       TPH                       Sulfate                       Dissolved Iron  
 PAH (8270D)                       pH                       Other \_\_\_\_\_

Drinking Water Supply Wells:

- BTEXNMDCA (524.2)                       Mercury (200.8 245.1 or 245.2)                       EDB (504.1)  
 Oxygenates & Ethanol (8260B)                       RCRA Metals (200.8)

Soil:

- BTEXNM                       Lead                       RCRA Metals                       TPH-DRO (3550B/8015B)                       Grain Size  
 PAH                       Oil & Grease (9071)                       TPH-GRO (5030B/8015B)                       TOC

Air:

- BTEXN

**Sample Collection** (Estimate the number of samples of each matrix that are expected to be collected.)

\_\_\_\_\_ Soil                      6 \_\_\_\_\_ Water Supply Wells                      \_\_\_\_\_ Air                      2 \_\_\_\_\_ Field Blank  
52 \_\_\_\_\_ Monitoring Wells                      \_\_\_\_\_ Surface Water                      5 \_\_\_\_\_ Duplicate                      2 \_\_\_\_\_ Trip Blank

**Field Screening Methodology**

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of deep points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 Field Screening Methodology: \_\_\_\_\_

**Permanent Monitoring Wells**

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of deep wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of recovery wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point

Comments, if warranted:

Paired shallow, intermediate and deep well cluster

UST Permit #: 02131 Facility Name: One Accord Ministries

**Implementation Schedule** (Number of calendar days from approval)

Field Work Start-Up: 30 Days Field Work Completion: 60 days  
Report Submittal: 90 Days # of Copies Provided to Property Owners: 1

**Aquifer Characterization**

Pump Test:  Slug Test:  (Check one and provide explanation below for choice)

**Investigation Derived Waste Disposal**

Soil: \_\_\_\_\_ Tons Purge Water: 150 Gallons  
Drilling Fluids: \_\_\_\_\_ Gallons Free-Phase Product: \_\_\_\_\_ Gallons

**Additional Details For This Scope of Work**

For example, list wells to be sampled, wells to be abandoned/repared, well pads/bolts/caps to replace, details of AFVR event, etc.

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**

Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.

Name of Laboratory: \_\_\_\_\_  
SCDHEC Certification Number: \_\_\_\_\_  
Name of Laboratory Director: \_\_\_\_\_

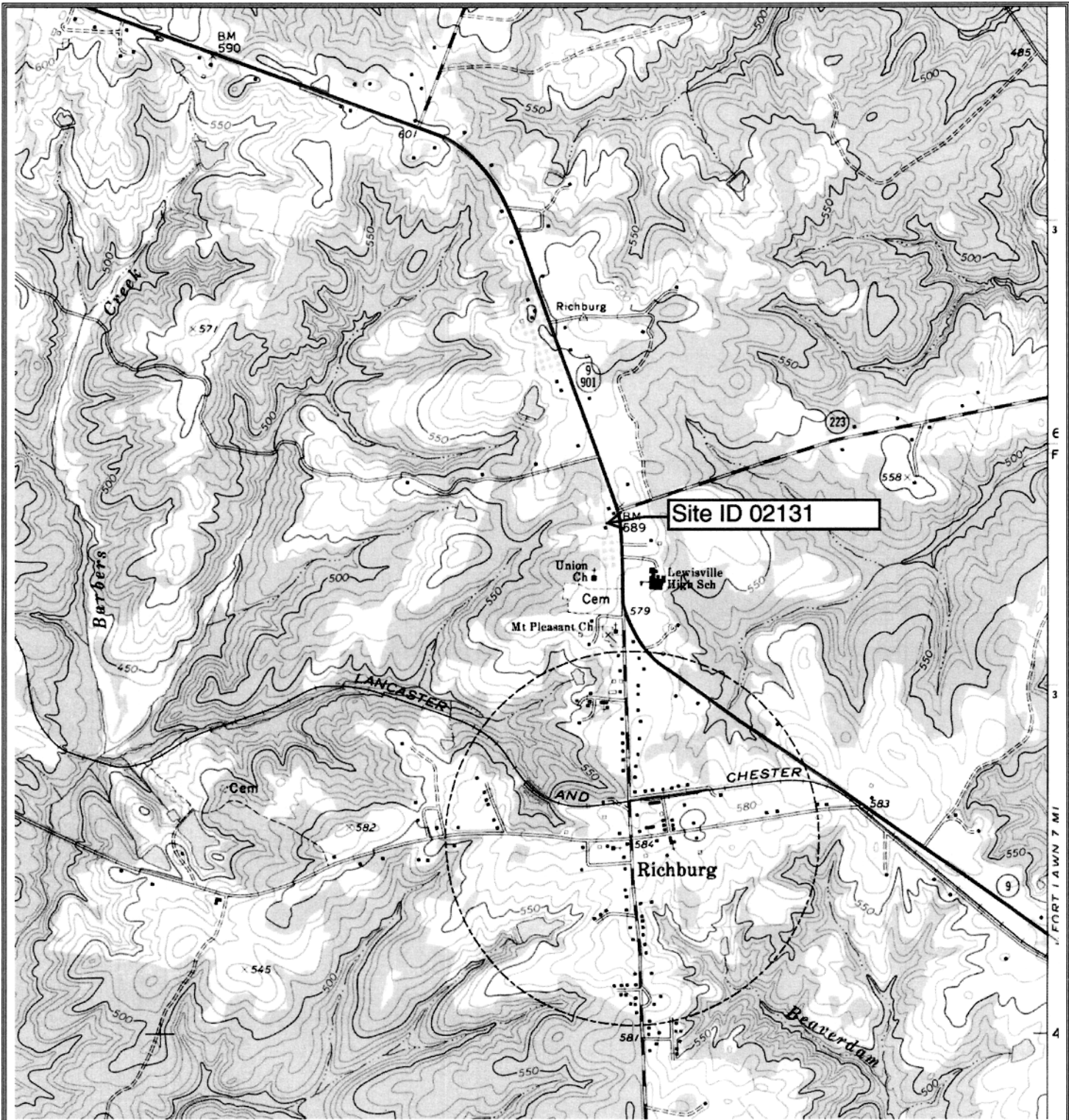
Yes Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.

Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_

No Other variations from ACQAP. Please describe below.

**Attachments**

1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:  
North Arrow Proposed monitoring well locations  
Location of property lines Legend with facility name and address, UST permit number, and bar scale  
Location of buildings Streets or highways (indicate names and numbers)  
Previous soil sampling locations Location of all present and former ASTs and USTs  
Previous monitoring well locations Location of all potential receptors  
Proposed soil boring locations
3. Assessment Component Cost Agreement, SCDHEC Form D-3664

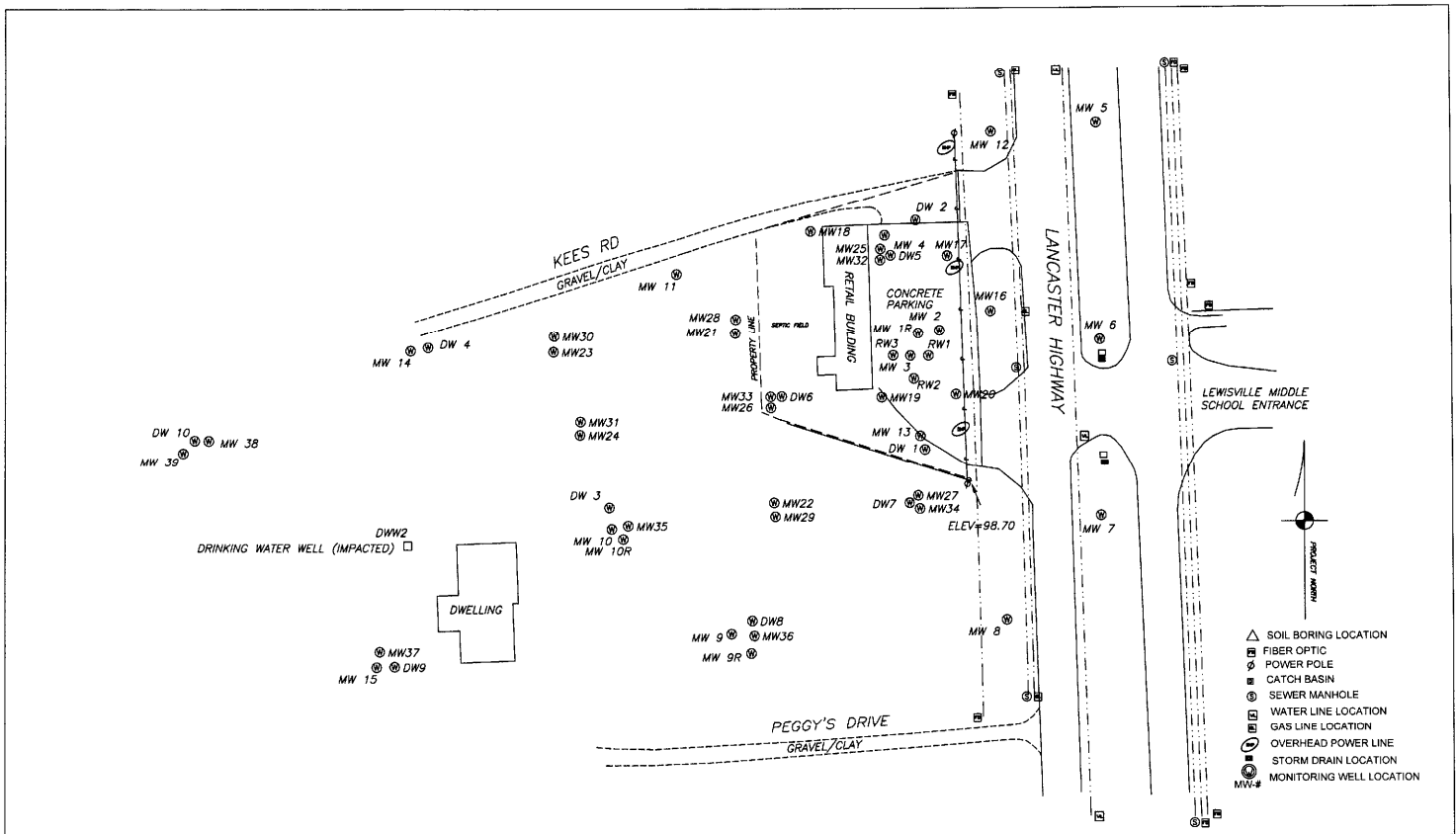


SCALE 1 INCH=1000 FT

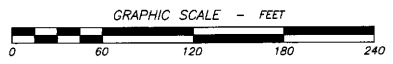
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDMOOR, SC 29712  
 (803) 327-0469 UCC#18

SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HIGHWAY  
 RICHBURG, SOUTH CAROLINA  
 FIGURE 1 – SITE LOCATION





KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGE Moor, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



Healthy People. Healthy Communities.

**ASSESSMENT COMPONENT COST AGREEMENT**

**SOUTH CAROLINA**

Department of Health and Environmental Control

Underground Storage Tank Management Division

State Underground Petroleum Environmental Response Bank Account

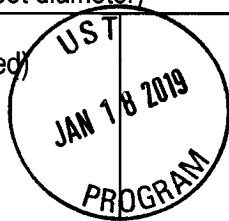
August 16, 2016

**Facility Name: One Accord**

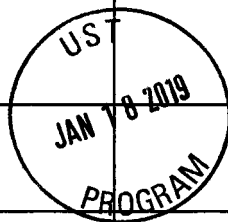
**UST Permit #: 02131**

**Cost Agreement #:**

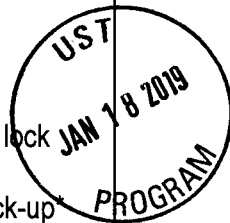
ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan Preparation</b>				
A1. Site-specific Work Plan	1	each	\$150.00	\$150.00
B1. Tax Map		each	\$70.00	\$0.00
C1. Tier II or Comp. Plan /QAPP Appendix B		each	\$250.00	\$0.00
<b>2. A1. Receptor Survey *</b>				
		each	\$551.00	\$0.00
<b>3. Survey (500 ft x 500 ft)</b>				
A1. Comprehensive Survey		each	\$1,040.00	\$0.00
<b>B. Subsurface Geophysical Survey</b>				
1B. < 10 meters below grade		each	\$1,300.00	\$0.00
2B. > 10 meters below grade		each	\$2,310.00	\$0.00
C1. Geophysical UST or Drum Survey		each	\$910.00	\$0.00
<b>4. Mob/Demob</b>				
A1. Equipment		each	\$1,020.00	\$0.00
B1. Personnel	2	each	\$423.00	\$846.00
C1. Adverse Terrain Vehicle		each	\$500.00	\$0.00
<b>5. A1. Soil Borings (hand auger)*</b>				
		foot	\$5.00	\$0.00
<b>6. Soil Borings (requiring equipment, push technology, etc)* or Field Screening (including water ssample, soil sample, soil gas sample, etc.)*</b>				
AA. Standard		per foot	\$15.00	\$0.00
C1. Fractured Rock		per foot	\$20.20	\$0.00
<b>7. A1. Soil Leachability Model</b>				
		each	\$60.00	\$0.00
<b>8. Abandonment (per foot)*</b>				
A1. 2" diameter or less		per foot	\$3.10	\$0.00
B1. Greater than 2" to 6" diameter		per foot	\$4.50	\$0.00
C1. Dug/Bored well (up to 6 feet diameter)		per foot	\$15.00	\$0.00
<b>9. Well Installation (per foot)*</b>				
A1. Water Table (hand augered)		per foot	\$10.60	\$0.00
B1. Water Table (drill rig)		per foot	\$38.00	\$0.00
CC. Telescoping		per foot	\$50.00	\$0.00
DD. Rock Drilling		per foot	\$58.00	\$0.00
E1. 2" Rock Coring		per foot	\$30.90	\$0.00
G1. Rock Multi-sampling ports/screens		per foot	\$33.40	\$0.00
HH. Recovery Well (4" diameter)		per foot	\$45.00	\$0.00
II. Pushed Pre-packed screen (1.25" dia)		per foot	\$15.00	\$0.00
K. Re-develop Existing Well.		per foot	\$11.00	\$0.00
<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product *</b>				
A1. Groundwater Purge	22	per well/recept	\$60.00	\$1,320.00
B1. Air or Vapors		per recepto	\$12.00	\$0.00
C1. Water Supply	6	er well/recept	\$22.00	\$132.00
D1. Groundwater No Purge or Duplicate	35	er well/recept	\$28.00	\$980.00
E1. Gauge Well only		per well	\$7.00	\$0.00
F1. Sample Below Product		per well	\$12.00	\$0.00
G1. Passive Diffusion Bag		each	\$26.00	\$0.00
H1. Field Blank	2	each	\$24.60	\$49.20



<b>11. Laboratory Analyses-Groundwater</b>					
A2. BTEXNM+Oxyg's+1,2 DCA+Eth(82)	58	per sample	\$122.00		\$7,076.00
AA1. Lead, Filtered		per sample	\$13.80		\$0.00
B2. Rush EPA Method 8260B (All of item A.)		per sample	\$153.60		\$0.00
C2. Trimethyl, Butyl, and Isopropyl Benzenes		per sample	\$36.40		\$0.00
D1. PAH's		per sample	\$60.60		\$0.00
E1. Lead		per sample	\$16.00		\$0.00
F1. EDB by EPA 8011	57	per sample	\$45.20		\$2,576.40
FF1. EDB by EPA Method 8011 Rush		per sample	\$68.20		\$0.00
G1. 8 RCRA Metals		per sample	\$63.40		\$0.00
H1. TPH (9070)		per sample	\$41.00		\$0.00
II. pH		per sample	\$5.20		\$0.00
J1. BOD		per sample	\$20.00		\$0.00
PP. Ethanol		per sample	\$14.80		\$0.00
<b>11. Analyses-Drinking Water</b>					
L. BTEXNM+1,2 DCA (524.2)	8	per sample	\$124.05		\$992.40
M. 7-OXYGENATES & ETHANOL (8260B)	8	per sample	\$91.75		\$734.00
N. EDB (504.1)	8	per sample	\$79.50		\$636.00
O. RCRA METALS (200.8)		per sample	\$100.00		\$0.00
<b>11. Analyses-Soil</b>					
Q1. BTEX + Naphth.		per sample	\$64.00		\$0.00
R1. PAH's		per sample	\$64.04		\$0.00
S1. 8 RCRA Metals		per sample	\$56.40		\$0.00
U1. TPH-DRO (3550C/8015C)		per sample	\$40.00		\$0.00
V1. TPH- GRO (5030B/8015C)		per sample	\$35.96		\$0.00
W1. Grain size/hydrometer		per sample	\$104.00		\$0.00
X1. Total Organic Carbon		per sample	\$30.60		\$0.00
<b>11. Analyses-Air</b>					
Y1. BTEX + Naphthalene		per sample	\$216.00		\$0.00
<b>11. Analyses-Free Phase Product</b>					
Z1. Hydrocarbon Fuel Identification		per sample	\$357.00		\$0.00
<b>12. Aquifer Characterization</b>					
A1. Pumping Test*		per hour	\$23.00		\$0.00
B1. Slug Test*		per test	\$191.00		\$0.00
C1. Fractured Rock		per test	\$100.00		\$0.00
<b>13. A1. Free Product Recovery Rate Test*</b>					
		each	\$38.00		\$0.00
<b>14. Fate/Transport Modeling</b>					
A1. Mathematical Model		each	\$100.00		\$0.00
B1. Computer Model		each	\$100.00		\$0.00
<b>15. Risk Evaluation</b>					
A. Tier I Risk Evaluation		each	\$300.00		\$0.00
B1. Tier II Risk Evaluation		each	\$100.00		\$0.00
<b>16. A1. Subsequent Survey*</b>					
		each	\$260.00		\$0.00
<b>17. Disposal (gallons or tons)*</b>					
AA. Wastewater	150	gallon	\$0.56		\$84.00
BB. Free Product		gallon	\$0.50		\$0.00
C1. Soil Treatment/Disposal		ton	\$60.00		\$0.00
D1. Drilling fluids		gallon	\$0.42		\$0.00
<b>18. Miscellaneous (attach receipts)</b>					
		each	\$0.00		\$0.00



		each	\$0.00	\$0.00
		each	\$0.00	\$0.00
<b>20. Tier I Assessment (Use DHEC 3665 form)</b>		standard		\$0.00
<b>21. IGWA (Use DHEC 3666 form)</b>		standard		\$0.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>		PFP Bid		\$0.00
<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>				
A1. 8-hour Event*		each	\$1,375.00	\$0.00
AA. 24-hour Event*		each	\$3,825.00	\$0.00
A3. 48-hour Event*		each	\$6,265.00	\$0.00
A4. 96-hour Event*		each	\$12,567.50	\$0.00
C1. Off-gas Treatment 8 hour		per event	\$122.50	\$0.00
C2. Off-gas Treatment 24 hour		per event	\$241.50	\$0.00
C3. Off-gas Treatment 48 hour		per event	\$327.00	\$0.00
C4. Off-gas Treatment 96 hour		per event	\$780.00	\$0.00
D. Site Reconnaissance		each	\$203.25	\$0.00
E1. Additional Hook-ups		each	\$25.75	\$0.00
F1. Effluent Disposal		gallon	\$0.44	\$0.00
G. AFVR Mobilization/Demobilization		each	\$391.50	\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>				
A1. New GAC System Installation*		each	\$1,900.00	\$0.00
BB. Refurbished GAC Sys. Install*		each	\$900.00	\$0.00
C1. Filter replacement/removal*		each	\$350.00	\$0.00
DD. GAC System removal, cleaning, & refurbishment*		each	\$275.00	\$0.00
E1. GAC System housing*		each	\$250.00	\$0.00
F. In-line particulate filter		each	\$150.00	\$0.00
G1. Additional piping & fittings		foot	\$1.50	\$0.00
<b>25. Well Repair</b>				
A1. Additional Copies of the Report Delivered		each	\$50.00	\$0.00
B1. Repair 2x2 MW pad*		each	\$50.00	\$0.00
C1. Repair 4x4 MW pad*		each	\$88.00	\$0.00
D1. Repair well vault*		each	\$118.00	\$0.00
F1. Replace well cover bolts		each	\$2.60	\$0.00
G. Replace locking well cap & lock		each	\$15.00	\$0.00
H1. Replace/Repair stick-up*		each	\$134.00	\$0.00
II. Convert Flush-mount to Stick-up*		each	\$150.00	\$0.00
J1. Convert Stick-up to Flush-mount*		each	\$130.00	\$0.00
K1. Replace missing/illegible well ID plate		each	\$12.00	\$0.00
<b>Report Prep &amp; Project Management</b>	12%	percent	\$15,576.00	\$1,869.12
<b>TOTAL</b>				<b>\$17,445.12</b>





ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729

**FEB 27 2019**



Re: **Groundwater Sampling**  
One Accord Ministries, 3570 Lancaster Hwy., Richburg, SC  
UST Permit #02131; CA# 58944  
Release reported March 23, 2009  
SSWP Received January 19, 2019  
Chester County

To Whom it May Concern:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced Site Specific Work Plan submitted on your behalf of your contractor. This scope of work will include groundwater sampling. All work should be conducted in accordance with the most recent version of the UST Quality Assurance Program Plan (QAPP), and must be conducted in compliance with all applicable regulations. A copy of the DHEC QAPP for the UST Management Division is available at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentCleanup/QualityAssurance>.

Activities at the site should begin immediately upon receipt of this letter. **Cost agreement #58944** has been approved for the amount shown on the enclosed cost agreement form for scopes of work mentioned above. Groundwater samples will be analyzed for BTEX, Naphthalene, MTBE, 1,2-DCA, and 8 Oxygenates. **All wells not bracketing the water table should be purged prior to sampling.** Sampling and analyses should be conducted in accordance with Appendix F of the most recent version of the QAPP and to include duplicate samples, field and trip blanks.

**The Monitoring Report and invoice are due within 60 days from the date of this letter.** The report submitted at the completion of these activities should include the required information outlined in the QAPP. Please note that all applicable South Carolina certification requirements apply to the services and report preparation. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor.

Your contractor can submit an invoice for direct payment from State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding the services and report preparation must be satisfied.

If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval from DHEC is obtained. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be pre-approved by DHEC for the cost to be paid. DHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, DHEC reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work.

Please note if unnecessary dilutions are completed resulting in reporting limits of individual Chemicals of Concern in excess of Risk-Based Screening Levels (RBSLs), the data cannot be used. In those cases, the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL. The UST Management Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release.

DHEC grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. The transport and disposal must be conducted in accordance with the QAPP. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference **UST Permit #02131** and **CA #58944**. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-7705 or by e-mail at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,



Matt Wykel, Hydrogeologist  
Corrective Action and Field Support Sections  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712(w/enc)  
Technical File(w/enc)

**Approved Cost Agreement 58944**

Facility: 02131 ONE ACCORD MINISTRIES

WYKELJM

PO Number.

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
01 PLAN		A1 SITE SPECIFIC WORK PLAN	1.0000	\$150.000	150.00
04 MOB/DEMOB		B1 PERSONNEL	3.0000	\$423.000	1,269.00
10 SAMPLE COLLECTION		A1 GROUNDWATER (PURGE)	22 0000	\$60.000	1,320.00
		C1 WATER SUPPLY	6.0000	\$22.000	132.00
		D1 GROUNDWATER NO PURGE/DUPLICATE	35.0000	\$28.000	980.00
		H1 FIELD BLANK	2.0000	\$24.600	49.20
11 ANALYSES					
	GW GROUNDWATER	A2 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	58.0000	\$122.000	7,076.00
		F1 EDB BY 8011	57.0000	\$45.200	2,576.40
	WATER DRINKING WATER	L BTEXNM+1,2 DCA (524.2)	8.0000	\$124.050	992.40
		M 7-OXYGENATES & ETHANOL (8260B)	8.0000	\$91.750	734.00
		N EDB (504.1)	7.0000	\$79.500	556.50
17 DISPOSAL					
		AA WASTEWATER	150.0000	\$0.560	84.00
19 RPT/PROJECT MNGT & COORDINATIO					
		PRT REPORT PREPARATION	0.1200	\$15,919.500	1,910.34
				<b>Total Amount</b>	<b>17,829.84</b>



# Katawba Environmental, Inc.

April 11, 2019

Mr. Matt Wykel  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708



**RE: Sampling Report  
One Accord Ministries  
UST Permit #02131 CA #58944  
3570 Lancaster Highway  
Richburg, South Carolina**

Dear Mr. Wykel:

Katawba Environmental, Inc. (Katawba) has prepared this Sampling Report for the above-referenced facility for your review. This Assessment was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated February 27, 2019.

It is recommended that multiple AFVR Events be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

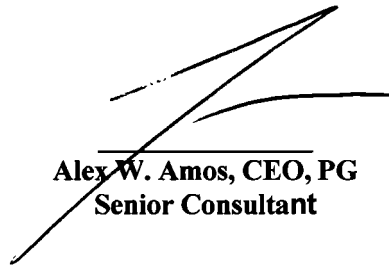
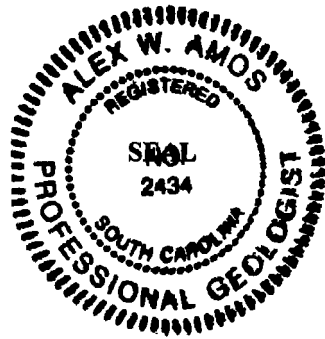
Sincerely,  
**KATAWBA ENVIRONMENTAL, INC. #18**

  
Alex W. Amos, CEO, PG  
Senior Consultant





*Sampling Report*  
**One Accord**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit #02131**



Alex W. Amos, CEO, PG  
Senior Consultant

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## 1.0 INTRODUCTION

Katawba Environmental, Inc. has been contracted by Ms. Angel Hough to complete a Sampling Report for One Accord Ministries. The Subject Site (Site ID 02131) is located at 3570 Lancaster Highway in Richburg, South Carolina (Appendix A, Figure 1). The subject site currently operates as youth ministry for Union ARP Church. The facility no longer retails petroleum products.

The surrounding area is mixed residential and commercial development. The subject site is abutted by residential structures to the north, south, east and west. First Citizens Bank is located approximately 421 feet northeast, the entrance for Lewisville Middle school is located approximately 260 feet east and Union ARP Church is located approximately 560 feet southwest. The nearest permitted UST site appears to be in excess of 2500 feet from the subject site.

The release at the subject site was reported March 23, 2009. An Initial Groundwater Assessment was conducted in November 2012. A Tier I was conducted in March 2014. The findings of the Tier I indicated further assessment was warranted to delineate the vertical and horizontal extent of the petroleum hydrocarbon release. Findings of the Tier II Assessment indicated that the plume extends approximately 420 feet from the source in a west southwestern direction. Findings of this assessment scope of work are as follows.

- Monitoring wells MW1R, MW2, MW16, MW20, MW22, MW24, MW30, MW31, MW33, DW3, DW5, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Drinking water wells DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.
- Drinking water well DWW1 could not be accessed due to the presence of a dog.
- Drinking water well DWW2 contains MTBE at a level of 79 ug/L.

## **1.1 Site Information**

The responsible party for the subject site is One Accord Ministries, PO Box 220, Richburg, South Carolina 29729. Angel Hough is the contact for One Accord Ministries and can be communicated with via mail or phone at (803) 804-0253. According to Chester County Tax Assessor records the parcel is currently owned by owned by Angela D. Hough and Melvin E. Hugh Sr. Survivorship, PO Box 220, Richburg, South Carolina 29729. The subject site is a square shaped parcel that is occupied by one primary structure and a storage unit in the rear of the facility. The subject site is listed with the Chester County Assessor's Office as TM 125-00-00-059-000.

## **2.0 ASSESSMENT INFORMATION**

One Accord Ministries is located at an elevation of 585 feet above mean sea level. Topographically overland flow is to the south. Groundwater levels varied over the investigation site from 15.41 feet BLS to 37.43 feet BLS. Groundwater flow at the site was calculated to be to the west southwest.

### **2.1 Piezometric Data**

Figure 2 in Appendix A serves as the comprehensive site map showing the locations of the 52 monitoring wells located at the subject site. Piezometric data for all monitoring wells associated with the release at the One Accord Ministries site can be found in Table 1. Water levels were measured on March 18, 2019. A piezometric map was created utilizing groundwater elevations measured during this scope of work is included as Figure 3 in Appendix A.

Depths to fluid measurements were collected relative to the top of casing for each well with the accuracy of measurements being within 0.01 foot or 1/8 inch. A hydrocarbon interface probe capable of detecting and measuring a hydrocarbon product thickness of 0.01 foot or 1/8 inch was used for depth to fluid measurements.

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	3/18/19	99.20	24-14	--	20.73	78.47
MW 2	3/18/19	99.04	28-18	--	20.49	78.55
MW 3	3/18/19	98.95	28-18	--	21.31	77.64
MW 4	3/18/19	99.30	28-18	--	21.17	78.13
MW 5	3/18/19	100.13	25-15	--	16.31	83.82
MW 6	3/18/19	98.09	24-14	--	16.93	81.86
MW 7	3/18/19	96.98	23-13	--	15.41	81.57
MW 8	3/18/19	95.83	23-13	--	18.53	77.30
MW 9R	3/18/19	103.90	37-27	--	29.73	74.17
MW 10 R	3/18/19	104.51	40-30	--	30.47	74.04
MW 11	3/18/19	99.24	29-19	--	25.82	73.42
MW 12	3/18/19	98.96	29-19	--	20.10	78.86
MW 13	3/18/19	98.51	26-16	--	25.21	73.30
MW 14	3/18/19	99.77	36-26	--	27.32	72.45
MW 15	3/18/19	105.72	40-30	--	36.12	69.60
MW 16	3/18/19	94.17	30-20	--	22.31	71.86
MW 17	3/18/19	98.62	30-20	--	21.29	77.33
MW 18	3/18/19	100.03	32-22	--	20.98	79.05
MW 19	3/18/19	99.24	32-22	--	21.35	77.89
MW 20	3/18/19	98.22	28-18	--	22.31	75.91
MW 21	3/18/19	98.84	35-25	--	20.94	77.90
MW 22	3/18/19	101.55	30-20	--	27.17	74.38
MW 23	3/18/19	99.18	35-25	--	26.22	72.96
MW 24	3/18/19	101.20	35-25	--	27.37	73.83
MW 25	3/18/19	99.37	30-20	--	20.17	79.20
MW 26	3/18/19	99.24	28-18	--	26.83	72.41

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 27	3/18/19	99.35	28-18	--	21.73	77.62
MW 28	3/18/19	99.25	59-49	--	25.63	73.62
MW 29	3/18/19	101.64	64-54	--	26.84	74.80
MW 30	3/18/19	99.41	59-49	--	25.17	74.24
MW 31	3/18/19	101.24	57-47	--	27.07	74.17
MW 32	3/18/19	99.18	56-46	--	21.47	77.71
MW 33	3/18/19	98.90	58-48	--	27.49	71.41
MW 34	3/18/19	99.28	56-46	--	20.75	78.53
MW 35	3/18/19	104.25	50-40	--	29.74	74.51
MW 36	3/18/19	103.59	59-49	--	29.41	74.18
MW 37	3/18/19	105.69	64-54	--	37.42	68.27
MW 38	3/18/19	99.63	40-30	--	26.93	72.70
MW 39	3/18/19	99.52	80-75	--	27.64	71.88
DW 1	3/18/19	98.42	75-70	--	18.33	80.09
DW 2	3/18/19	99.59	75-70	--	22.73	76.86
DW 3	3/18/19	104.30	75-70	--	30.76	73.54
DW 4	3/18/19	99.81	120-115	--	27.31	72.50
DW 5	3/18/19	99.52	150-145	--	21.43	78.09
DW 6	3/18/19	98.54	150-145	--	28.33	70.21
DW 7	3/18/19	99.32	150-145	--	18.39	80.93
DW 8	3/18/19	103.97	150-145	--	37.43	66.54
DW 9	3/18/19	105.79	150-145	--	36.89	68.90
DW 10	3/18/19	99.44	150-145	--	28.74	70.70
RW 1	3/18/19	98.90	29-19	--	21.18	77.72
RW 2	3/18/19	98.87	29-19	--	20.76	78.11
RW 3	3/18/19	99.01	29-19	--	20.91	78.10

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	3/18/19	99.20	24-14	--	20.73	78.47
	7/7/18			--	21.98	77.22
	9/1/17			--	16.59	82.61
	3/13/17			--	21.93	77.27
	1/31/17			--	21.83	77.37
MW 1	12/18/13	UNK	29-19	--	NL	NL
	10/26/12			--	23.51	UNK
MW 2	3/18/19	99.04	28-18	--	20.49	78.55
	7/7/18			--	21.86	77.18
	9/1/17			--	21.39	77.65
	3/13/17			--	21.74	77.30
	1/31/17			--	21.69	77.35
	12/18/13			--	18.48	80.56
MW 3	3/18/19	98.95	28-18	--	21.31	77.64
	7/7/18			--	21.84	77.11
	9/1/17			--	22.17	76.78
	3/13/17			21.67	21.73	77.19
	1/31/17			21.70	21.76	77.19
	12/18/13			--	18.85	80.10
MW 4	3/18/19	99.30	28-18	--	21.17	78.13
	7/7/18			--	21.93	77.37
	9/1/17			--	21.42	77.88
	3/13/17			--	21.32	77.98
	1/31/17			--	21.94	77.36
	12/18/13			--	19.48	79.82
MW 5	3/18/19	100.13	25-15	--	16.31	83.82
	7/7/18			--	19.17	80.96
	9/1/17			--	18.10	82.03
	3/13/17			--	22.09	78.04
	1/31/17			--	22.71	77.42
MW 6	3/18/19	98.09	24-14	--	16.93	81.86
	7/7/18			--	17.18	80.91
	3/13/17			--	20.44	77.65
	9/1/17			--	16.29	81.80
	1/31/17			--	20.79	77.30
MW 7	3/18/19	96.98	23-13	--	15.41	81.57
	7/7/18			--	16.13	80.85
	9/1/17			--	16.07	80.91
	1/31/17			--	19.86	77.12
	3/13/17			--	19.66	77.32
MW 8	3/18/19	95.83	23-13	--	18.53	77.30
	7/7/18			--	19.87	75.96
	9/1/17			--	30.07	75.76
	1/31/17			--	19.16	76.67
	3/13/17			--	19.20	76.63

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 9R	3/18/19	103.90	37-27	--	29.73	74.17
	7/7/18			--	30.33	73.57
	9/1/17			--	24.97	73.58
	3/13/17			--	29.23	74.67
	3/3/17			--	29.37	74.53
MW 9	1/31/17	103.75	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 10 R	3/18/19	104.51	40-30	--	30.47	74.04
	7/7/18			--	31.84	72.67
	9/1/17			--	30.89	73.62
	3/13/17			--	31.73	72.78
	3/3/17			--	31.58	72.93
MW 10	1/31/17	104.68	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 11	3/18/19	99.24	29-19	--	25.82	73.42
	7/7/18			--	26.57	72.67
	9/1/17			--	17.49	72.85
	3/13/17			--	25.63	73.61
	1/31/17			--	26.31	72.93
MW 12	3/18/19	98.96	29-19	--	20.10	78.86
	7/7/18			--	20.73	78.23
	9/1/17			--	17.57	81.39
	3/13/17			--	20.59	78.37
	1/31/17			--	21.62	77.34
MW 13	3/18/19	98.51	26-16	--	25.21	73.30
	7/7/18			--	24.26	74.25
	9/1/17			--	24.71	73.80
	3/13/17			--	21.20	77.31
	1/31/17			--	20.52	77.99
MW 14	3/18/19	99.77	36-26	--	27.32	72.45
	7/7/18			--	27.84	71.93
	9/1/17			--	28.16	71.61
	3/13/17			--	27.24	72.53
	3/3/17			--	28.02	71.75
MW 15	3/18/19	105.72	40-30	--	36.12	69.60
	7/6/18			--	37.89	67.83
	9/1/17			--	37.19	68.53
	3/13/17			--	36.72	69.00
	3/3/17			--	37.12	68.60
MW 16	3/18/19	94.17	30-20	--	22.31	71.86
	7/7/18			--	21.73	72.44
	9/1/17			--	21.42	77.72



Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 17	3/18/19	98.62	30-20	--	21.29	77.33
	7/7/18			--	21.06	77.56
	9/1/17			--	21.57	77.05
MW 18	3/18/19	100.03	32-22	--	20.98	79.05
	7/7/18			--	26.80	73.23
	9/1/17			--	25.61	74.42
MW 19	3/18/19	99.24	32-22	--	21.35	77.89
	7/7/18			--	22.77	76.47
	9/1/17			--	23.25	75.99
MW 20	3/18/19	98.22	28-18	--	22.31	75.91
	7/7/18			--	21.64	76.58
	9/1/17			--	21.59	76.63
MW 21	3/18/19	98.84	35-25	--	20.94	77.90
	7/7/18			--	26.77	72.07
	9/1/17			--	27.03	71.81
MW 22	3/18/19	101.55	30-20	--	27.17	74.38
	7/7/18			--	28.20	73.35
	9/1/17			--	28.15	73.40
MW 23	3/18/19	99.18	35-25	--	26.22	72.96
	7/7/18			--	26.43	72.75
	9/1/17			--	27.00	72.18
MW 24	3/18/19	101.20	35-25	--	27.37	73.83
	7/7/18			--	28.13	73.07
	9/1/17			--	28.43	72.77
MW 25	3/18/19	99.37	30-20	--	20.17	73.83
	7/7/18			--	21.77	77.60
	9/1/17			--	21.59	77.78
MW 26	3/18/19	99.24	28-18	--	26.83	72.41
	7/7/18			--	27.17	72.07
	9/1/17			--	26.93	72.31
MW 27	3/18/19	99.35	28-18	--	21.73	77.62
	7/7/18			--	22.42	76.93
	9/1/17			--	18.21	81.14
MW 28	3/18/19	99.25	59-49	--	25.63	73.62
	7/7/18			--	26.75	72.50
	9/1/17			--	27.18	72.07
MW 29	3/18/19	101.64	64-54	--	26.84	74.80
	7/7/18			--	28.32	73.32
	9/1/17			--	28.49	73.15
MW 30	3/18/19	99.41	59-49	--	25.17	74.24
	7/7/18			--	25.35	74.06
	9/1/17			--	26.85	72.56

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 31	3/18/19	101.24	57-47	--	27.07	74.17
	7/7/18			--	38.23	63.01
	9/1/17			--	28.40	72.84
MW 32	3/18/19	99.18	56-46	--	21.47	77.71
	7/7/18			--	22.12	77.06
	9/1/17			--	21.60	77.58
MW 33	3/18/19	98.90	58-48	--	27.49	71.41
	7/7/18			--	27.21	71.69
	9/1/17			--	27.13	71.77
MW 34	3/18/19	99.28	56-46	--	20.75	78.53
	7/7/18			--	21.94	77.34
	9/1/17			--	21.84	77.44
MW 35	3/18/19	104.25	50-40	--	29.74	74.51
	7/7/18			--	31.00	73.25
	9/1/17			--	31.25	73.00
MW 36	3/18/19	103.59	59-49	--	29.41	74.18
	7/7/18			--	30.26	73.33
	9/1/17			--	29.90	73.69
MW 37	3/18/19	105.69	64-54	--	37.42	68.27
	7/6/18			--	38.90	66.79
	9/1/17			--	37.22	68.47
MW 38	3/18/19	99.63	40-30	--	26.93	72.70
	7/6/18			--	28.16	71.47
MW 39	3/18/19	99.52	80-75	--	27.64	71.88
	7/6/18			--	28.83	70.69
DW 1	3/18/19	98.42	75-70	--	18.33	80.09
	7/6/18			--	17.43	80.99
	9/1/17			--	17.32	81.10
	3/13/17			--	21.36	77.06
	1/31/17			--	21.53	76.89
DW 2	3/18/19	99.59	75-70	--	22.73	76.86
	7/6/18			--	17.64	81.95
	9/1/17			--	17.59	82.00
	3/13/17			--	21.70	77.89
	1/31/17			--	22.29	77.30
DW 3	3/18/19	104.30	75-70	--	30.76	73.54
	7/6/18			--	31.34	72.96
	9/1/17			--	26.10	78.20
	3/13/17			--	32.47	71.83
	1/31/17			--	31.29	73.01

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
DW 4	3/18/19	99.81	120-115	--	27.31	72.50
	7/6/18			--	28.26	71.55
	9/1/17			--	28.30	71.51
	3/13/17			--	27.63	72.18
	1/31/17			--	28.05	71.76
DW 5	3/18/19	99.52	150-145	--	21.43	78.09
	7/6/18			--	22.83	76.69
	9/1/17			--	21.61	77.91
DW 6	3/18/19	98.54	150-145	--	28.33	70.21
	7/6/18			--	27.10	71.44
	9/1/17			--	27.17	71.37
DW 7	3/18/19	99.32	150-145	--	18.39	80.93
	7/6/18			--	21.58	77.74
	9/1/17			--	21.40	77.92
DW 8	3/18/19	103.97	150-145	--	37.43	66.54
	7/6/18			--	38.99	64.98
	9/1/17			--	30.51	73.46
DW 9	3/18/19	105.79	150-145	--	36.89	68.90
	7/6/18			--	37.41	68.38
	9/1/17			--	37.12	68.67
DW 10	3/18/19	99.44	150-145	--	28.74	70.70
	7/6/18			--	29.94	69.50
RW 1	3/18/19	98.90	29-19	--	21.18	77.72
	7/6/18			--	21.33	77.57
	9/1/17			--	21.12	77.78
RW 2	3/18/19	98.87	29-19	--	20.76	78.11
	7/6/18			--	21.67	77.20
	9/1/17			--	21.10	77.77
RW 3	3/18/19	99.01	29-19	--	20.91	78.10
	7/6/18			--	21.73	77.28
	9/1/17			--	21.14	77.87

## **2.2 Groundwater Sampling**

Samples were collected from monitoring wells installed during this and prior rounds of assessment. Prior to sampling each well, depths to groundwater were measured utilizing an oil/water interface probe. These measurements were used to construct a piezometric map which is located in Appendix A, as Figure 3. Groundwater was evacuated from each well utilizing a battery operated Monsoon purge pump. As directed by SCDHEC all wells were purged three volumes prior to sampling. Sampling of wells located at the site was completed by utilizing a disposable bailer attached to a new non colored nylon line. Groundwater samples collected were placed into laboratory supplied containers and stored on ice for same day transport for analysis. Katawba personnel submitted all groundwater samples to Shealy Environmental, 106 Vantage Point Drive, Cayce, SC 29033 to the attention of laboratory director Dan Wright who can be contacted at 803-791-9700. The results for the groundwater sampling analysis are as follows.

**TABLE 2 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	3/19/19	8200	29000	2000	13000	570	4800	<0.022	NA	NA	<500
MW 2	3/19/19	7600	25000	1800	13000	510	1400	<2.0	NA	NA	<200
MW 3	3/19/19	<1	<1	<1	<1	<1	0.54 J	<0.020	NA	NA	<1
MW 4	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 7	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9R	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10R	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	3/19/19	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW15	3/19/19	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 16	3/19/19	890	1900	270	1600	41	130	<0.020	NA	NA	<20
MW 17	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 18	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 19	3/19/19	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 20	3/19/19	2500	5600	780	5300	200	680	<0.020	NA	NA	<100
MW 21	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 22	3/19/19	<1	<1	<1	<1	<1	52	<0.023	NA	NA	<1
MW 23	3/18/19	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 24	3/19/19	<1	<1	<1	<1	<1	710	<0.020	NA	NA	<1
MW 25	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 26	3/18/19	<1	<1	<1	<1	<1	19	<0.021	NA	NA	<1
MW 27	3/18/19	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 28	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 29	3/19/19	<1	<1	<1	<1	<1	14	<0.020	NA	NA	<1
MW 30	3/18/19	<1	<1	<1	<1	<1	100	<0.020	NA	NA	<1
DUP	3/18/19	<1	<1	<1	<1	<1	100	<0.019	NA	NA	<1
MW 31	3/19/19	<10	<10	<10	<10	<10	1400	<0.021	NA	NA	<10
MW 32	3/19/19	<1	<1	<1	<1	<1	<1	<0.022	NA	NA	<1
MW 33	3/19/19	<10	<10	<10	<10	<10	1200	<0.022	NA	NA	<10
MW 34	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 35	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 36	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 37	3/19/19	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
MW 38	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 39	3/19/19	<1	<1	<1	<1	<1	20	<0.021	NA	NA	<1
DW 1	3/18/19	<1	<1	<1	<1	<1	9.3	<0.020	NA	NA	<1
DW 2	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	3/18/19	<1	<1	<1	<1	<1	81	<0.020	NA	NA	<1
DW 4	3/18/19	<1	<1	<1	<1	<1	6	<0.020	NA	NA	<1
DW 5	3/18/19	6.3	0.90 J	4.9	14	9.6	170	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 6	3/18/19	<1	<1	<1	<1	<1	2.6	<0.020	NA	NA	<1
DW 7	3/18/19	<1	<1	<1	<1	<1	0.88 J	<0.019	NA	NA	<1
DW 8	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 9	3/18/19	<1	<1	<1	<1	<1	32	<0.020	NA	NA	<1
DW 10	3/18/19	<1	<1	<1	<1	<1	9	<0.020	NA	NA	<1
RW 1	3/19/19	5400	7300	770	4200	140	13000	<0.021	NA	NA	<100
RW 2	3/19/19	7500	19000	1100	7200	210	19000	0.12 P	NA	NA	<200
RW 3	3/19/19	3600	6900	740	4600	120	3000	0.035 P	NA	NA	<100
DWW1	3/19/19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DWW2	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	79	<0.019	NA	NA	<0.50
DWW3	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	0.70	<0.019	NA	NA	<0.50
DWW4	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	<0.019	NA	NA	<0.50
DWW5	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	<0.019	NA	NA	<0.50
DWW6	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.019	NA	NA	<0.50
DUP	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.019	NA	NA	<0.50
FB	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB2	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
TB	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50

**TABLE 2 Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	3/19/19	640	<50000	<10000	<500	8900 J	1900 J	<10000	<2500
MW 2	3/19/19	630	<20000	<4000	<200	21000	360 J	1800 J	<1000
MW 3	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 4	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 9R	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 10R	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DUP	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5



01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 14	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DUP	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 16	3/19/19	44	<2000	<400	<20	3300	<200	250 J	<100
MW 17	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 20	3/19/19	<100	<10000	<2000	<100	4700	<1000	<2000	<500
MW 21	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	3/19/19	<1	<100	<20	<1	<20	4.4 J	<20	<5
MW 23	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	3/19/19	12	<100	<20	<1	<20	75	<20	<5
MW 25	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 27	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	3/19/19	<1	<100	<20	<1	<20	0.62 J	<20	<5
MW 30	3/18/19	<1	<100	<20	<1	<20	5.2 J	<20	<5
DUP	3/18/19	1.8	<100	<20	<1	<20	5.1 J	<20	<5
MW 31	3/19/19	32	<1000	<200	<10	160 J	140	96 J	<50

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	3/19/19	21	<1000	<200	<10	<200	150	<200	<50
MW 34	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 38	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	3/18/19	<1	<100	<20	<1	<20	0.63 J	<20	<5
DW 2	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	3/18/19	2.1	<100	<20	<1	<20	2.2 J	<20	<5
DW 4	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	3/18/19	3.1	<100	<20	<1	41	22	21	<5
DW 6	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 7	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 8	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DW 10	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RW 1	3/19/19	740	<10000	<2000	<100	8500	2300	970 J	<500
RW 2	3/19/19	920	<20000	<4000	<200	14000	3400	1700 J	<1000
RW 3	3/19/19	250	<10000	<2000	<100	5300	700 J	<2000	<500
DWW 1	3/19/19	NA	NA	NA	NA	NA	NA	NA	NA
DWW 2	3/19/19	<1	<100	<20	<1	<20	1.1 J	<20	<5
DWW 3	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
DUP	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
FB	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
FB 2	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
TB	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5

**TABLE 2A Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	3/19/19	8200	29000	2000	13000	570	4800	<0.022	NA	NA	<500
	7/7/18	20000	30000	96000	39000	38000	<5000	0.15JP	NA	NA	<5000
	1/31/17	11000	42000	2800	20000	750	5700	0.010 J	NA	NA	<500
MW 2	3/19/19	7600	25000	1800	13000	510	1400	<2.0	NA	NA	<200
	7/7/18	11000	44000	4000	24000	1400	2000	<0.20	NA	NA	<500
	1/31/17	13000	41000	3200	20000	760	1800	<0.020	NA	NA	<500
	12/18/13	13000	44000	4200	22000	<500	3100	<0.020	16	780	<500
MW 3	3/19/19	<1	<1	<1	<1	<1	0.54 J	<0.020	NA	NA	<1
	7/7/18	11000	43000	3300	21000	1500	1700	0.78 P	NA	NA	<500
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP	FP	FP
	12/18/13	15000	44000	4600	23000	1400	31000	0.074	7.2	860	<1000
MW 4	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	12/18/13	<1	1	4600	23000	1400	31000	<0.020	9.7	<5	1
MW 5	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 7	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	0.67 J	<1	0.72 J	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	2.6	2.3	1	6.8	<1	3	0.047	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 14	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
MW15	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
MW 16	3/19/19	890	1900	270	1600	41	130	<0.020	NA	NA	<20
	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	1400	5500	290	3700	<50	79	<0.020	<10	NA	<50
MW 17	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	2.4	9.3	<100	7.7	<1	<1	<0.019	12	NA	<1
MW 18	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	0.6	NA	<1
MW 19	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	1.7	1.7	0.72	5.3	<1	2.3	<0.020	NA	NA	<1
	9/1/17	980	65	73	580	13	930	<0.019	<10	NA	<5
MW 20	3/19/19	2500	5600	780	5300	200	680	<0.020	NA	NA	<100
	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	160	410	63	280	4.6 J	97	<0.020	<10	NA	<5
MW 21	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	17	NA	<1
MW 22	3/19/19	<1	<1	<1	<1	<1	52	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	57	<0.024	NA	NA	<1
	9/1/17	55 J	<10	<10	<10	<10	950	<0.019	67	NA	<10
MW 23	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	11	NA	<1
MW 24	3/19/19	<1	<1	<1	<1	<1	710	<0.020	NA	NA	<1
	7/7/18	0.42 J	<1	<1	0.75 J	<1	0.80 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	70	<0.019	6.4	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 25	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	1.7	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 26	3/18/19	<1	<1	<1	<1	<1	19	<0.021	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	4.1	<0.020	NA	NA	<1
	9/1/17	<b>110</b>	<20	<20	57	<20	<b>1800</b>	<0.019	38	NA	<20
MW 27	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 28	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	0.87 J	<1	<1	<1	<1	0.85 J	<0.019	<10	NA	<1
MW 29	3/19/19	<1	<1	<1	<1	<1	14	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<b>56</b>	<0.020	NA	NA	<1
	9/1/17	<10	<10	<10	<10	<10	<b>1100</b>	<0.019	<10	NA	<10
MW 30	3/18/19	<1	<1	<1	<1	<1	<b>100</b>	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	11	<0.019	<10	NA	<1
MW 31	3/19/19	<10	<10	<10	<10	<10	<b>1400</b>	<0.021	NA	NA	<10
	7/7/18	0.41 J	<1	<1	0.71 J	<1	0.80J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	7.2	<1	<b>740</b>	<0.019	<10	NA	<1
MW 32	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 33	3/19/19	<10	<10	<10	<10	<10	<b>1200</b>	<0.020	NA	NA	<10
	7/7/18	<10	<10	<10	<10	<10	<b>820</b>	<0.020	NA	NA	<10
	9/1/17	<b>140</b>	<20	<20	47	<20	<b>2300</b>	<0.019	<10	NA	<20
MW 34	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 35	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	0.90 J	<0.019	<10	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 36	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 37	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	0.77 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.020	6.5	NA	<1
MW 38	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 39	3/19/19	<1	<1	<1	<1	<1	20	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	16	<0.020	NA	NA	<1
DW 1	3/18/19	<1	<1	<1	<1	<1	9.3	<0.020	NA	NA	<1
	7/6/18	290	79	27	630	33	340	<0.020	NA	NA	<10
	1/31/17	990	200	100	1600	37	1000	<0.020	NA	NA	<10
DW 2	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	3/18/19	<1	<1	<1	<1	<1	81	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	280	<0.020	NA	NA	<1
	1/31/17	<5	4.2 J	<5	<5	<5	190	<0.020	NA	NA	<5
DW 4	3/18/19	<1	<1	<1	<1	<1	6	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DW 5	3/18/19	6.3	0.90 J	4.9	14	9.6	170	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	26	4.7 J	5	46	30	330	<0.020	NA	NA	<5
DW 6	3/19/19	<1	<1	<1	<1	<1	2.6	<0.020	NA	NA	<1
	7/6/18	2.9	<1	<1	<1	<1	18	<0.019	NA	NA	<1
	9/1/17	22	<5	<5	28	18	400	<0.020	NA	NA	<5
DW 7	3/19/19	<1	<1	<1	<1	<1	0.88 J	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	1.9	<0.019	NA	NA	<1
	9/1/17	3.5	0.91 J	0.93 J	7.8	5.4	40	<0.19	NA	NA	<1
DW 8	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1



Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 9	3/18/19	<1	<1	<1	<1	<1	32	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	32	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	36	<0.019	NA	NA	<1
RW 1	3/19/19	5400	7300	770	4200	140	13000	<0.021	NA	NA	<100
	7/6/18	10000	33000	3000	19000	430 J	6700	0.072 P	NA	NA	<500
	9/1/17	7700	12000	1800	9400	270	21000	0.028	8.3	NA	<200
RW 2	3/19/19	7500	19000	1100	7200	210	19000	0.12 P	NA	NA	<200
	7/6/18	10000	32000	2900	19000	430 J	6600	0.077P	NA	NA	<500
	9/1/17	16000	49000	3700	19000	500	23000	0.12 P	<10	NA	<500
RW 3	3/19/19	3600	6900	740	4600	120	3000	0.035 P	NA	NA	<100
	7/6/18	10000	32000	3100	20000	490	7000	0.14 P	NA	NA	<200
	9/1/17	4600	6400	1200	11000	170	2500	0.024P	<10	NA	<50
DWW1	3/19/19	DOG	DOG	DOG	DOG	DOG	DOG	DOG	DOG	DOG	DOG
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW2	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	79	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	73	<0.019	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	71	NA	NA	<5	<1
DWW3	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	0.70	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	0.77	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW4	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW5	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW6	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1

**TABLE 2A Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	3/19/19	640	<50000	<10000	<500	8900 J	1900 J	<10000	<2500
	7/7/18	<5000	<500000	<100000	<5000	<100000	<50000	<100000	<25000
	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	3/19/19	630	<20000	<4000	<200	21000	360 J	1800 J	<1000
	7/7/18	760	<50000	<10000	<500	24000	370 J	<10000	<2500
	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
MW 3	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	750	<50000	<10000	<500	24000	330 J	<10000	<2500
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
MW 4	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 8	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	29	<10	14 J	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 14	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 16	3/19/19	44	<2000	<400	<20	3300	<200	250 J	<100
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<50	<5000	<1000	<50	810 J	<500	<1000	<250
MW 17	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	25	<10	13 J	<5
	9/1/17	38	<500	<100	<5	1700	59	220	<25
MW 20	3/19/19	<100	<10000	<2000	<100	4700	<1000	<2000	<500
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<500	<100	<5	1200	5.7 J	140	<25
MW 21	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	3/19/19	<1	<100	<20	<1	<20	4.4 J	<20	<5
	7/7/18	2.2	<100	<20	<1	<20	2.9 J	<20	<5
	9/1/17	32	<1000	<200	<10	290	55 J	<200	<50
MW 23	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	3/19/19	12	<100	<20	<1	<20	75	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	36	<2000	<400	<20	<400	190 J	<400	<100

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 27	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	3/19/19	<1	<100	<20	<1	<20	0.62 J	<20	<5
	7/7/18	2.2	<100	<20	<1	<20	2.7 J	<20	<5
	9/1/17	35	<1000	<200	<10	310	66 J	<200	<50
MW 30	3/18/19	<1	<100	<20	<1	<20	5.2 J	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	3/19/19	32	<1000	<200	<10	160 J	140	96 J	<50
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<100	<20	<1	58	55	<20	<5
MW 32	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	3/19/19	21	<1000	<200	<10	<200	150	<200	<50
	7/7/18	21	<1000	<200	<10	180 J	190	91 J	<50
	9/1/17	<20	<2000	<400	<20	<400	<220	<400	<100
MW 34	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 36	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 38	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	3/18/19	<1	<100	<20	<1	<20	0.63 J	<20	<5
	7/6/18	34	<1000	<200	<10	850	41 J	240	<50
	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	3/18/19	2.1	<100	<20	<1	<20	2.2 J	<20	<5
	7/6/18	5.8	<100	<20	<1	<20	6.3 J	9.5 J	<5
	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	3/18/19	3.1	<100	<20	<1	41	22	21	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	29000	<100	<5	68 J	35 J	44 J	<25
DW 6	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	1.5 J	<20	<5
	9/1/17	<5	16000	<100	<5	130	34 J	46 J	<25
DW 7	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	2300	<20	<1	10 J	3.9 J	12 J	5

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Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DW 8	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	<500	<100	<5	<100	<50	<100	<25
DW 10	3/18/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
RW 1	3/19/19	740	<10000	<2000	<100	8500	2300	970 J	<500
	7/6/18	660	<50000	<10000	<500	8100 J	1600 J	<10000	<2500
	9/1/17	910	<20000	<4000	<200	8500	2900	2000 J	<1000
RW 2	3/19/19	920	<20000	<4000	<200	14000	3400	1700 J	<1000
	7/6/18	640	<50000	<10000	<500	7700 J	1500 J	<10000	<2500
	9/1/17	<500	<50000	<10000	<500	15000	4700 J	<10000	<2500
RW 3	3/19/19	250	<10000	<2000	<100	5300	700 J	<2000	<500
	7/6/18	610	<20000	<4000	<200	8400	1700 J	<4000	<1000
	9/1/17	<50	<5000	<1000	<50	2700	470 J	<1000	<250

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DWW 1	3/19/19	DOG	DOG	DOG	DOG	DOG	DOG	DOG	DOG
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	0.63 J	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
DWW 3	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5



## 2.3 RECEPTOR SURVEY

A receptor survey and drinking water well survey was conducted for the Tier II. Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, drainage ditch and two septic tanks were noted to be the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

**Table 4 Receptor Data One Accord Ministries Site ID 02131**

Receptor	Depth	Location	Assessed
Water Line	36 inches	Site E Row	Yes
Sewer Line	36 inches	Site E ROW	Yes
Phone Line	36 inches	Site E ROW	Yes
Gas Line	36 inches	Site E ROW	Yes
Septic Tank	36 inches	Site W Property Line	Yes
Septic Tank	36 inches	518 Peggy's Drive	No
DWW1	120 feet	533 Peggy's Drive	Yes
DWW2	110 feet	510 Peggy's Drive	Yes
DWW3	Unknown	568 Kee's Drive	Yes
DWW4	Unknown	603 Kee's Drive	No
DWW5	80 feet	583 Kee's Drive	Yes
DWW6	Unknown	843 Elliot Road	No
DWW7	Unknown	1719 Old Richburg	No
DWW8	Unknown	3571 Lancaster Hwy	No

**Table 4A Drinking Water Well Survey One Accord Ministries Site ID 02131**

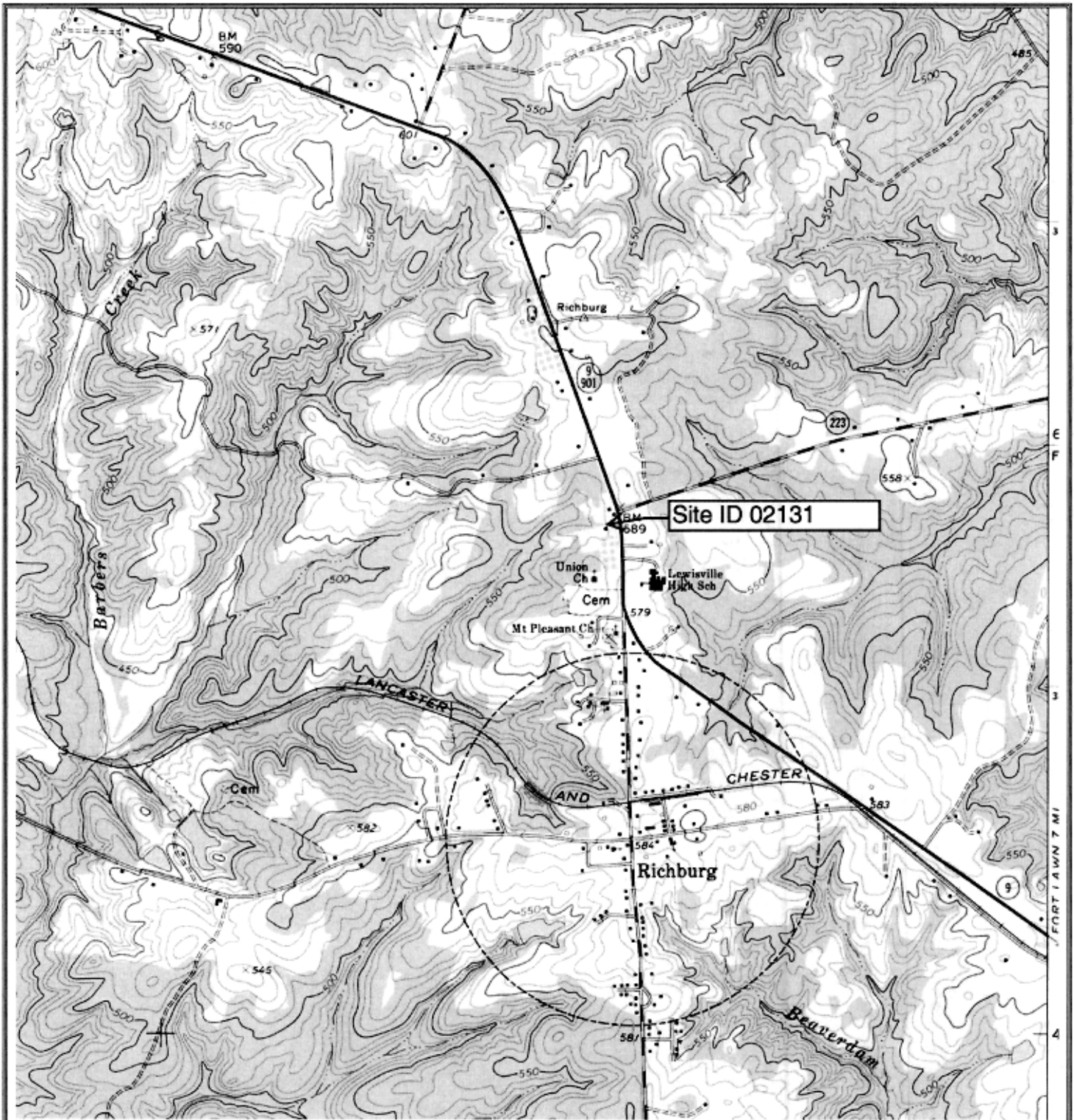
1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
7	1719 OLD RICHBURG ROAD	JAMES KNOX	UNKNOWN	HOUSE	NO POWER NO CONTACT
8	3571 LANCASTER HWY	JOHN FAUST	UNKNOWN	HOUSE	NOT IN USE

### **3.0 CONCLUSIONS**

Findings of this scope of work are as follows:

- Monitoring wells MW1R, MW2, MW16, MW20, MW22, MW24, MW30, MW31, MW33, DW3, DW5, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Drinking water wells DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.
- Drinking water well DWW1 could not be accessed due to the presence of a dog.
- Drinking water well DWW2 contains MTBE at a level of 79 ug/L.

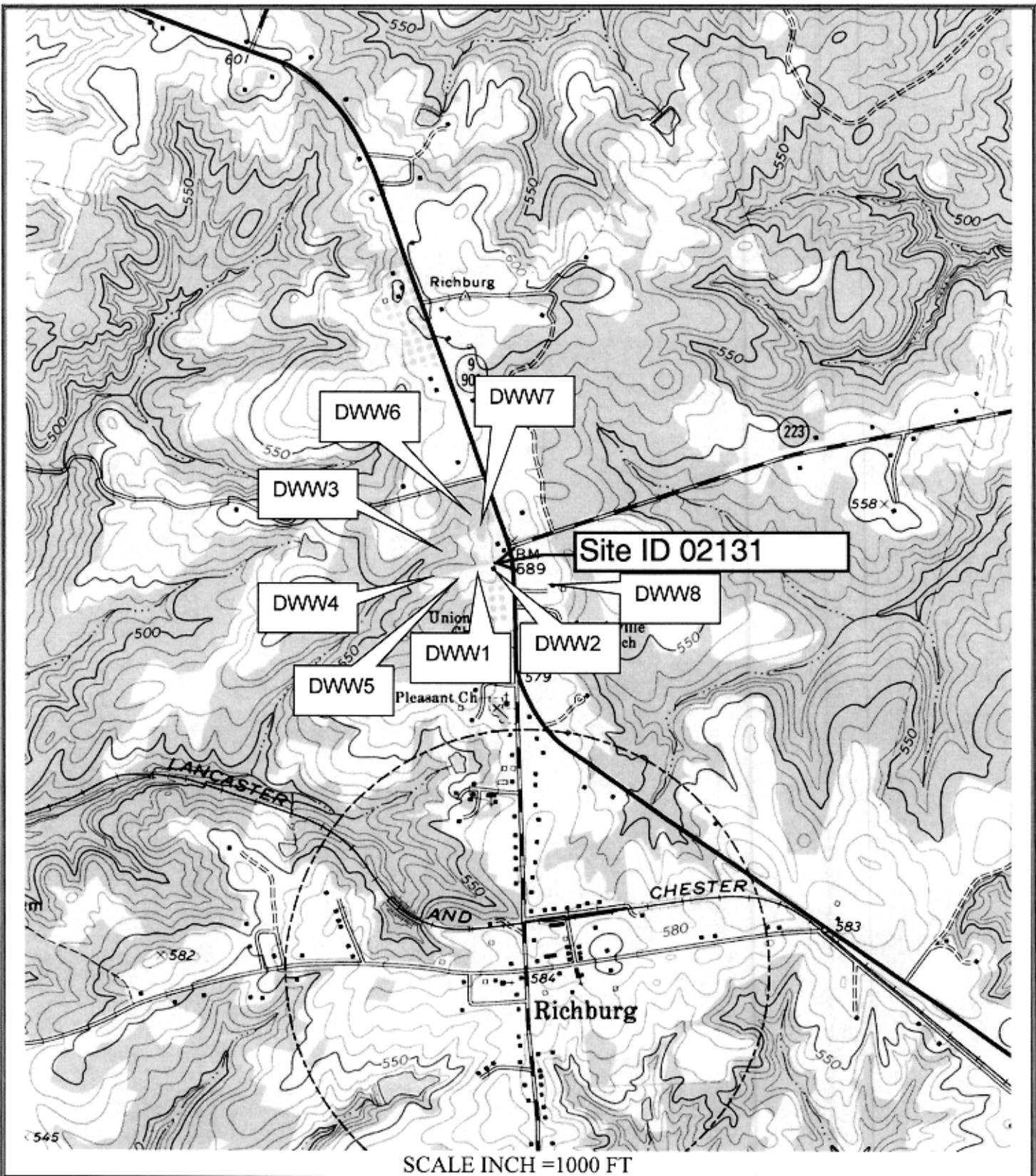
**APPENDIX A**  
**FIGURES**



SCALE 1 INCH = 2000 FT

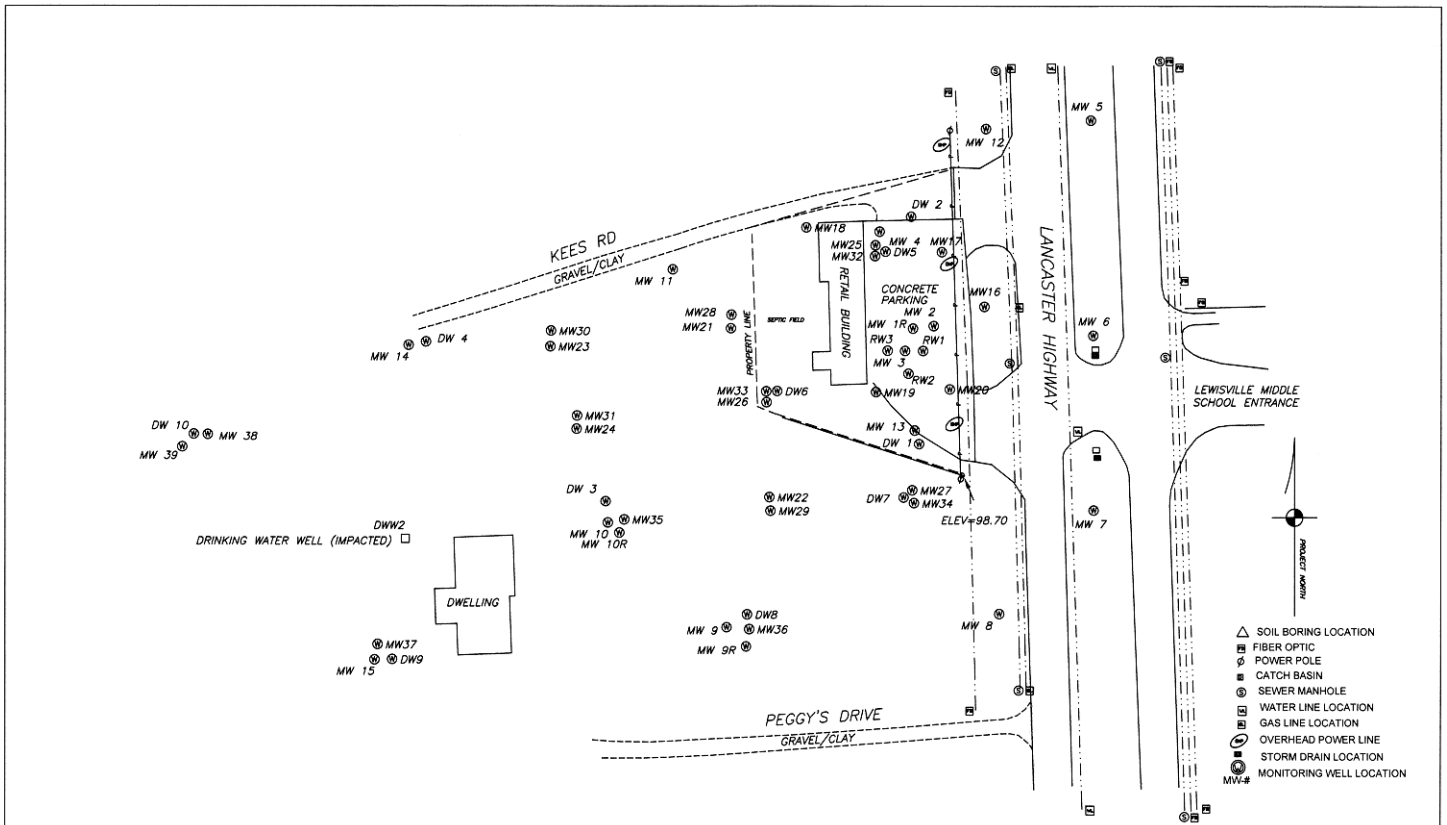
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 - SITE LOCATION

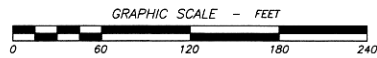


KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

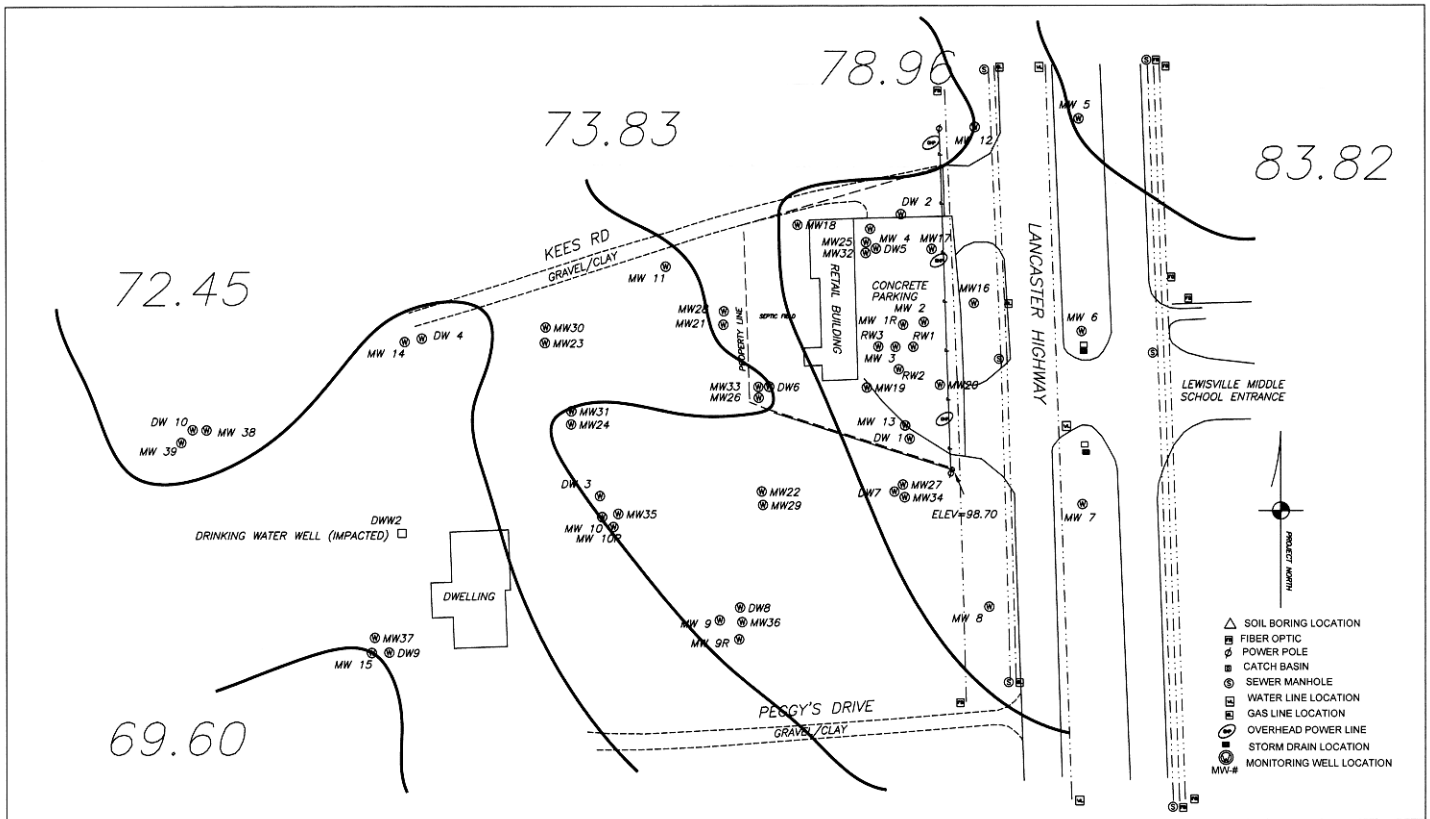
SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP



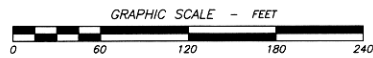
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

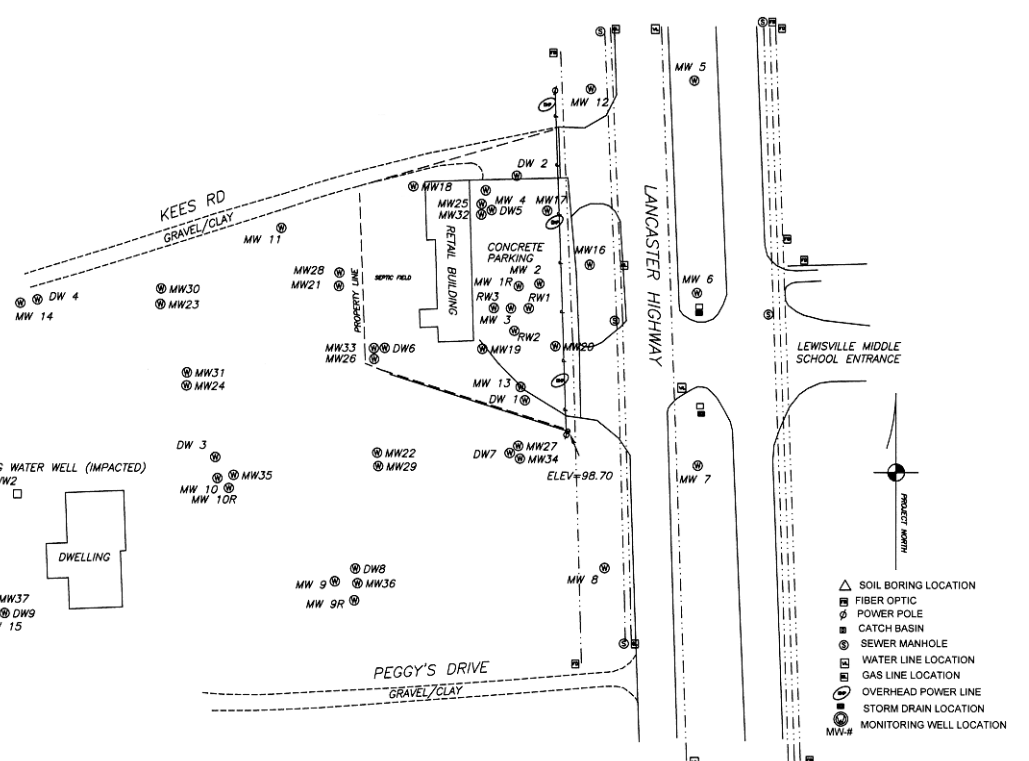


SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 3 - PIEZOMETRIC MAP



**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

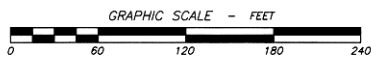
Sample ID	Date Sampled	Season	Column	Depth (feet)	Total Solids (mg/L)	THM5 (mg/L)	ECR (mg/L)	Lead (ppb)	PAH (ppb)	1,4-DCA (ppb)
MW 1	3/18/19	SPR	3000	3000	2000	0.5	0.1	NA	NA	<100
MW 2	3/18/19	FALL	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 3	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 4	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 5	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 6	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 7	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 8	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 9	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 10	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 11	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 12	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 13	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 14	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 15	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 16	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 17	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 18	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 19	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 20	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 21	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 22	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 23	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 24	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 25	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 26	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 27	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 28	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 29	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 30	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 31	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 32	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 33	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 34	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 35	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 36	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 37	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 38	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
MW 39	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100



**TABLE 4 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Season	Column	Depth (feet)	Total Solids (mg/L)	THM5 (mg/L)	ECR (mg/L)	Lead (ppb)	PAH (ppb)	1,4-DCA (ppb)
DW 1	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 2	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 3	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 4	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 5	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 6	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 7	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 8	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 9	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100
DW 10	3/18/19	SPR	3000	3000	1000	0.5	0.1	NA	NA	<100

**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



**SAMPLING REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - CONTAMINATION MAP



**APPENDIX B**  
**ANALYTICAL DATA**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: One Accord

Lot Number: **UC23021**

Date Completed: 04/10/2019



04/10/2019 2:51 PM  
Approved and released by:  
Lab Director - Greenville: Lucas Odom



The electronic signature above is the equivalent of a handwritten signature.  
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Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 [www.shealylab.com](http://www.shealylab.com)

# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## Case Narrative Katawba Environmental, Inc. Lot Number: UC23021

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### VOCs by GC/MS

The laboratory control sample (LCS) for analytical batch 11730 exceeded acceptance criteria for the following analytes: tert-Butyl formate. These analytes were biased high and were not detected in the samples affected.

### EDB by Microextraction

The following sample was diluted due to the nature of the sample matrix: UC23021-002. The LOQ has been elevated to reflect the dilution.

Surrogate recovery for the following samples was outside the upper control limit: UC23021-018 and UC23021-022. This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

UC23021-056, UC23021-057, UC23021-058, UC23021-059, UC23021-060, UC23021-061, UC23021-063 The weekly MDL check failed on initial run. Samples were outside of 24 hour window for re-analysis. Maintenance was performed on instrument, and samples were re-extracted out of hold. The initial run was reported.

Samples -054 and -055 have been qualified with a "P" as the relative percent difference between the two GC columns exceeds method criteria. Per SCDHEC, the lesser of the two values has been reported.

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: UC23021

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131 MW1	Aqueous	03/19/2019 1930	03/23/2019
002	02131 MW2	Aqueous	03/19/2019 1910	03/23/2019
003	02131 MW3	Aqueous	03/19/2019 1941	03/23/2019
004	02131 MW4	Aqueous	03/19/2019 1526	03/23/2019
005	02131 MW5	Aqueous	03/19/2019 1419	03/23/2019
006	02131 MW6	Aqueous	03/19/2019 1356	03/23/2019
007	02131 MW7	Aqueous	03/19/2019 1337	03/23/2019
008	02131 MW8	Aqueous	03/19/2019 1043	03/23/2019
009	02131 MW9	Aqueous	03/19/2019 1022	03/23/2019
010	02131 MW10	Aqueous	03/19/2019 0938	03/23/2019
011	02131 MW11	Aqueous	03/18/2019 1724	03/23/2019
012	02131 MW12	Aqueous	03/19/2019 1437	03/23/2019
013	02131 MW12 Dup	Aqueous	03/19/2019 1439	03/23/2019
014	02131 MW13	Aqueous	03/19/2019 1743	03/23/2019
015	02131 MW14	Aqueous	03/18/2019 1843	03/23/2019
016	02131 MW14 Dup	Aqueous	03/18/2019 1845	03/23/2019
017	02131 MW15	Aqueous	03/19/2019 0921	03/23/2019
018	02131 MW16	Aqueous	03/19/2019 1841	03/23/2019
019	02131 MW17	Aqueous	03/19/2019 1856	03/23/2019
020	02131 MW18	Aqueous	03/19/2019 1459	03/23/2019
021	02131 MW19	Aqueous	03/19/2019 1810	03/23/2019
022	02131 MW20	Aqueous	03/19/2019 1823	03/23/2019
023	02131 MW21	Aqueous	03/19/2019 1623	03/23/2019
024	02131 MW22	Aqueous	03/19/2019 1213	03/23/2019
025	02131 MW23	Aqueous	03/18/2019 1819	03/23/2019
026	02131 MW24	Aqueous	03/19/2019 1148	03/23/2019
027	02131 MW25	Aqueous	03/19/2019 1543	03/23/2019
028	02131 MW26	Aqueous	03/19/2019 1730	03/23/2019
029	02131 MW27	Aqueous	03/19/2019 1300	03/23/2019
030	02131 MW28	Aqueous	03/19/2019 1648	03/23/2019
031	02131 MW29	Aqueous	03/19/2019 1237	03/23/2019
032	02131 MW30	Aqueous	03/18/2019 1758	03/23/2019
033	02131 MW30 Dup	Aqueous	03/18/2019 1800	03/23/2019
034	02131 MW31	Aqueous	03/19/2019 1129	03/23/2019
035	02131 MW32	Aqueous	03/19/2019 1610	03/23/2019
036	02131 MW33	Aqueous	03/19/2019 1710	03/23/2019
037	02131 MW34	Aqueous	03/19/2019 1318	03/23/2019
038	02131 MW35	Aqueous	03/19/2019 0959	03/23/2019
039	02131 MW36	Aqueous	03/19/2019 1106	03/23/2019
040	02131 MW37	Aqueous	03/19/2019 0902	03/23/2019
041	02131 MW38	Aqueous	03/19/2019 0817	03/23/2019
042	02131 MW39	Aqueous	03/19/2019 0839	03/23/2019
043	02131 DW1	Aqueous	03/18/2019 1247	03/23/2019
044	02131 DW2	Aqueous	03/18/2019 1709	03/23/2019
045	02131 DW3	Aqueous	03/18/2019 1455	03/23/2019

## Sample Summary (Continued)

Lot Number: UC23021

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
046	02131 DW4	Aqueous	03/18/2019 0713	03/23/2019
047	02131 DW5	Aqueous	03/18/2019 1603	03/23/2019
048	02131 DW6	Aqueous	03/18/2019 1350	03/23/2019
049	02131 DW7	Aqueous	03/18/2019 1139	03/23/2019
050	02131 DW8	Aqueous	03/18/2019 1028	03/23/2019
051	02131 DW9	Aqueous	03/18/2019 0923	03/23/2019
052	02131 DW10	Aqueous	03/18/2019 0819	03/23/2019
053	02131 RW1	Aqueous	03/19/2019 2010	03/23/2019
054	02131 RW2	Aqueous	03/19/2019 2033	03/23/2019
055	02131 RW3	Aqueous	03/19/2019 2051	03/23/2019
056	02131 DWW2	Aqueous	03/19/2019 1910	03/23/2019
057	02131 DWW3	Aqueous	03/19/2019 1941	03/23/2019
058	02131 DWW4	Aqueous	03/19/2019 1952	03/23/2019
059	02131 DWW5	Aqueous	03/19/2019 1921	03/23/2019
060	02131 DWW6	Aqueous	03/19/2019 1959	03/23/2019
061	02131 DWW6 Dup	Aqueous	03/19/2019 2001	03/23/2019
062	02131 FB	Aqueous	03/18/2019 2059	03/23/2019
063	02131 FB	Aqueous	03/19/2019 2017	03/23/2019
064	02131 TB	Aqueous	03/19/2019 2030	03/23/2019

(64 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Detection Summary Katawba Environmental, Inc. Lot Number: UC23021

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131 MW1	Aqueous	tert-Amyl alcohol (TAA)	8260B	8900	J	ug/L	9
001	02131 MW1	Aqueous	tert-Amyl methyl ether	8260B	1900	J	ug/L	9
001	02131 MW1	Aqueous	Benzene	8260B	8200		ug/L	9
001	02131 MW1	Aqueous	Diisopropyl ether (IPE)	8260B	640		ug/L	9
001	02131 MW1	Aqueous	Ethylbenzene	8260B	2000		ug/L	9
001	02131 MW1	Aqueous	Methyl tertiary butyl ether	8260B	4800		ug/L	9
001	02131 MW1	Aqueous	Naphthalene	8260B	570		ug/L	9
001	02131 MW1	Aqueous	Toluene	8260B	29000		ug/L	9
001	02131 MW1	Aqueous	Xylenes (total)	8260B	13000		ug/L	9
002	02131 MW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	21000		ug/L	10
002	02131 MW2	Aqueous	tert-Amyl methyl ether	8260B	360	J	ug/L	10
002	02131 MW2	Aqueous	Benzene	8260B	7600		ug/L	10
002	02131 MW2	Aqueous	Diisopropyl ether (IPE)	8260B	630		ug/L	10
002	02131 MW2	Aqueous	Ethylbenzene	8260B	1800		ug/L	10
002	02131 MW2	Aqueous	Methyl tertiary butyl ether	8260B	1400		ug/L	10
002	02131 MW2	Aqueous	Naphthalene	8260B	510		ug/L	10
002	02131 MW2	Aqueous	tert-butyl alcohol (TBA)	8260B	1800	J	ug/L	10
002	02131 MW2	Aqueous	Toluene	8260B	25000		ug/L	10
002	02131 MW2	Aqueous	Xylenes (total)	8260B	13000		ug/L	10
003	02131 MW3	Aqueous	Methyl tertiary butyl ether	8260B	0.54	J	ug/L	11
018	02131 MW16	Aqueous	tert-Amyl alcohol (TAA)	8260B	3300		ug/L	26
018	02131 MW16	Aqueous	Benzene	8260B	890		ug/L	26
018	02131 MW16	Aqueous	Diisopropyl ether (IPE)	8260B	44		ug/L	26
018	02131 MW16	Aqueous	Ethylbenzene	8260B	270		ug/L	26
018	02131 MW16	Aqueous	Methyl tertiary butyl ether	8260B	130		ug/L	26
018	02131 MW16	Aqueous	Naphthalene	8260B	41		ug/L	26
018	02131 MW16	Aqueous	tert-butyl alcohol (TBA)	8260B	250	J	ug/L	26
018	02131 MW16	Aqueous	Toluene	8260B	1900		ug/L	26
018	02131 MW16	Aqueous	Xylenes (total)	8260B	1600		ug/L	26
022	02131 MW20	Aqueous	tert-Amyl alcohol (TAA)	8260B	4700		ug/L	30
022	02131 MW20	Aqueous	Benzene	8260B	2500		ug/L	30
022	02131 MW20	Aqueous	Ethylbenzene	8260B	780		ug/L	30
022	02131 MW20	Aqueous	Methyl tertiary butyl ether	8260B	680		ug/L	30
022	02131 MW20	Aqueous	Naphthalene	8260B	200		ug/L	30
022	02131 MW20	Aqueous	Toluene	8260B	5600		ug/L	30
022	02131 MW20	Aqueous	Xylenes (total)	8260B	5300		ug/L	30
024	02131 MW22	Aqueous	tert-Amyl methyl ether	8260B	4.4	J	ug/L	32
024	02131 MW22	Aqueous	Methyl tertiary butyl ether	8260B	52		ug/L	32
026	02131 MW24	Aqueous	tert-Amyl methyl ether	8260B	75		ug/L	34
026	02131 MW24	Aqueous	Diisopropyl ether (IPE)	8260B	12		ug/L	34
026	02131 MW24	Aqueous	Methyl tertiary butyl ether	8260B	710		ug/L	34
028	02131 MW26	Aqueous	Methyl tertiary butyl ether	8260B	19		ug/L	36
031	02131 MW29	Aqueous	tert-Amyl methyl ether	8260B	0.62	J	ug/L	39
031	02131 MW29	Aqueous	Methyl tertiary butyl ether	8260B	14		ug/L	39
032	02131 MW30	Aqueous	tert-Amyl methyl ether	8260B	5.2	J	ug/L	40



## Detection Summary (Continued)

Lot Number: UC23021

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
032	02131 MW30	Aqueous	Methyl tertiary butyl ether	8260B	100		ug/L	40
033	02131 MW30 Dup	Aqueous	tert-Amyl methyl ether	8260B	5.1	J	ug/L	41
033	02131 MW30 Dup	Aqueous	Diisopropyl ether (IPE)	8260B	1.8		ug/L	41
033	02131 MW30 Dup	Aqueous	Methyl tertiary butyl ether	8260B	100		ug/L	41
034	02131 MW31	Aqueous	tert-Amyl alcohol (TAA)	8260B	160	J	ug/L	42
034	02131 MW31	Aqueous	tert-Amyl methyl ether	8260B	140		ug/L	42
034	02131 MW31	Aqueous	Diisopropyl ether (IPE)	8260B	32		ug/L	42
034	02131 MW31	Aqueous	Methyl tertiary butyl ether	8260B	1400		ug/L	42
034	02131 MW31	Aqueous	tert-butyl alcohol (TBA)	8260B	96	J	ug/L	42
036	02131 MW33	Aqueous	tert-Amyl methyl ether	8260B	150		ug/L	44
036	02131 MW33	Aqueous	Diisopropyl ether (IPE)	8260B	21		ug/L	44
036	02131 MW33	Aqueous	Methyl tertiary butyl ether	8260B	1200		ug/L	44
042	02131 MW39	Aqueous	Methyl tertiary butyl ether	8260B	20		ug/L	50
043	02131 DW1	Aqueous	tert-Amyl methyl ether	8260B	0.63	J	ug/L	51
043	02131 DW1	Aqueous	Methyl tertiary butyl ether	8260B	9.3		ug/L	51
045	02131 DW3	Aqueous	tert-Amyl methyl ether	8260B	2.2	J	ug/L	53
045	02131 DW3	Aqueous	Diisopropyl ether (IPE)	8260B	2.1		ug/L	53
045	02131 DW3	Aqueous	Methyl tertiary butyl ether	8260B	81		ug/L	53
046	02131 DW4	Aqueous	Methyl tertiary butyl ether	8260B	6.0		ug/L	54
047	02131 DW5	Aqueous	tert-Amyl alcohol (TAA)	8260B	41		ug/L	55
047	02131 DW5	Aqueous	tert-Amyl methyl ether	8260B	22		ug/L	55
047	02131 DW5	Aqueous	Benzene	8260B	6.3		ug/L	55
047	02131 DW5	Aqueous	Diisopropyl ether (IPE)	8260B	3.1		ug/L	55
047	02131 DW5	Aqueous	Ethylbenzene	8260B	4.9		ug/L	55
047	02131 DW5	Aqueous	Methyl tertiary butyl ether	8260B	170		ug/L	55
047	02131 DW5	Aqueous	Naphthalene	8260B	9.6		ug/L	55
047	02131 DW5	Aqueous	tert-butyl alcohol (TBA)	8260B	21		ug/L	55
047	02131 DW5	Aqueous	Toluene	8260B	0.90	J	ug/L	55
047	02131 DW5	Aqueous	Xylenes (total)	8260B	14		ug/L	55
048	02131 DW6	Aqueous	Methyl tertiary butyl ether	8260B	2.6		ug/L	56
049	02131 DW7	Aqueous	Methyl tertiary butyl ether	8260B	0.88	J	ug/L	57
051	02131 DW9	Aqueous	Methyl tertiary butyl ether	8260B	32		ug/L	59
052	02131 DW10	Aqueous	Methyl tertiary butyl ether	8260B	9.0		ug/L	60
053	02131 RW1	Aqueous	tert-Amyl alcohol (TAA)	8260B	8500		ug/L	61
053	02131 RW1	Aqueous	tert-Amyl methyl ether	8260B	2300		ug/L	61
053	02131 RW1	Aqueous	Benzene	8260B	5400		ug/L	61
053	02131 RW1	Aqueous	Diisopropyl ether (IPE)	8260B	740		ug/L	61
053	02131 RW1	Aqueous	Ethylbenzene	8260B	770		ug/L	61
053	02131 RW1	Aqueous	Methyl tertiary butyl ether	8260B	13000		ug/L	61
053	02131 RW1	Aqueous	Naphthalene	8260B	140		ug/L	61
053	02131 RW1	Aqueous	tert-butyl alcohol (TBA)	8260B	970	J	ug/L	61
053	02131 RW1	Aqueous	Toluene	8260B	7300		ug/L	61
053	02131 RW1	Aqueous	Xylenes (total)	8260B	4200		ug/L	61
054	02131 RW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	14000		ug/L	62
054	02131 RW2	Aqueous	tert-Amyl methyl ether	8260B	3400		ug/L	62
054	02131 RW2	Aqueous	Benzene	8260B	7500		ug/L	62
054	02131 RW2	Aqueous	Diisopropyl ether (IPE)	8260B	920		ug/L	62
054	02131 RW2	Aqueous	Ethylbenzene	8260B	1100		ug/L	62

## Detection Summary (Continued)

Lot Number: UC23021

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
054	02131 RW2	Aqueous	Methyl tertiary butyl ether	8260B	19000		ug/L	62
054	02131 RW2	Aqueous	Naphthalene	8260B	210		ug/L	62
054	02131 RW2	Aqueous	tert-butyl alcohol (TBA)	8260B	1700	J	ug/L	62
054	02131 RW2	Aqueous	Toluene	8260B	19000		ug/L	62
054	02131 RW2	Aqueous	Xylenes (total)	8260B	7200		ug/L	62
054	02131 RW2	Aqueous	1,2-Dibromoethane (EDB)	8011	0.12	P	ug/L	62
055	02131 RW3	Aqueous	tert-Amyl alcohol (TAA)	8260B	5300		ug/L	63
055	02131 RW3	Aqueous	tert-Amyl methyl ether	8260B	700	J	ug/L	63
055	02131 RW3	Aqueous	Benzene	8260B	3600		ug/L	63
055	02131 RW3	Aqueous	Diisopropyl ether (IPE)	8260B	250		ug/L	63
055	02131 RW3	Aqueous	Ethylbenzene	8260B	740		ug/L	63
055	02131 RW3	Aqueous	Methyl tertiary butyl ether	8260B	3000		ug/L	63
055	02131 RW3	Aqueous	Naphthalene	8260B	120		ug/L	63
055	02131 RW3	Aqueous	Toluene	8260B	6900		ug/L	63
055	02131 RW3	Aqueous	Xylenes (total)	8260B	4600		ug/L	63
055	02131 RW3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.035	P	ug/L	63
056	02131 DWW2	Aqueous	tert-Amyl methyl ether	8260B	11	J	ug/L	64
056	02131 DWW2	Aqueous	Methyl tertiary butyl ether	524.2	79		ug/L	64
057	02131 DWW3	Aqueous	Methyl tertiary butyl ether	524.2	0.70		ug/L	66
058	02131 DWW4	Aqueous	Methyl tertiary butyl ether	524.2	1.5		ug/L	68
059	02131 DWW5	Aqueous	Methyl tertiary butyl ether	524.2	3.5		ug/L	70

(114 detections)

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-001**Description: **02131 MW1**Matrix: **Aqueous**Date Sampled: **03/19/2019 1930**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	03/30/2019 0627	STM		11730

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	8900	J	10000	4000	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1900	J	5000	210	ug/L	1
Benzene	71-43-2	8260B	8200		500	200	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	640		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	26000	ug/L	1
Ethylbenzene	100-41-4	8260B	2000		500	200	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	4800		500	200	ug/L	1
Naphthalene	91-20-3	8260B	570		500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1
Toluene	108-88-3	8260B	29000		500	200	ug/L	1
Xylenes (total)	1330-20-7	8260B	13000		500	200	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/29/2019 2355	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.022	0.022	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		87	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-002**Description: **02131 MW2**Matrix: **Aqueous**Date Sampled: **03/19/2019 1910**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	200	03/30/2019 0448	STM		11730		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	21000		4000	1600	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	360	J	2000	84	ug/L	1	
Benzene	71-43-2	8260B	7600		200	80	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	400	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		200	80	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	630		200	80	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		4000	1600	ug/L	1	
Ethanol	64-17-5	8260B	ND		20000	10000	ug/L	1	
Ethylbenzene	100-41-4	8260B	1800		200	80	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		200	80	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1400		200	80	ug/L	1	
Naphthalene	91-20-3	8260B	510		200	80	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	1800	J	4000	1600	ug/L	1	
Toluene	108-88-3	8260B	25000		200	80	ug/L	1	
Xylenes (total)	1330-20-7	8260B	13000		200	80	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		91	70-130						
Bromofluorobenzene		94	70-130						
Toluene-d8		96	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	100	04/01/2019 1110	DAL1	03/26/2019 2115	11344		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		2.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane	N	1840	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-003**Description: **02131 MW3**Matrix: **Aqueous**Date Sampled: **03/19/2019 1941**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0243	STM		11730

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.54</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		97	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0017	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		76	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-004**Description: **02131 MW4**Matrix: **Aqueous**Date Sampled: **03/19/2019 1526**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0029	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		97	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0027	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		60	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-005**Description: **02131 MW5**Matrix: **Aqueous**Date Sampled: **03/19/2019 1419**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0053	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0038	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		70	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0116	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0048	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		77	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



Description: **02131 MW7**Matrix: **Aqueous**Date Sampled: **03/19/2019 1337**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 0140	STM		11729		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	03/30/2019 0059	DAL1	03/26/2019 2115	11344		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		68	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-008**Description: **02131 MW8**Matrix: **Aqueous**Date Sampled: **03/19/2019 1043**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0203	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0109	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

LOQ = Limit of Quantitation  
 ND = Not detected at or above the DL  
 H = Out of holding time  
 B = Detected in the method blank  
 N = Recovery is out of criteria  
 W = Reported on wet weight basis  
 E = Quantitation of compound exceeded the calibration range  
 P = The RPD between two GC columns exceeds 40%  
 DL = Detection Limit  
 J = Estimated result < LOQ and ≥ DL

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0226	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0120	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		64	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-010**Description: **02131 MW10**Matrix: **Aqueous**Date Sampled: **03/19/2019 0938**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0249	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0130	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		73	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-011**Description: **02131 MW11**Matrix: **Aqueous**Date Sampled: **03/18/2019 1724**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0313	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0141	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		62	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-012**Description: **02131 MW12**Matrix: **Aqueous**Date Sampled: **03/19/2019 1437**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0336	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0152	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		71	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW12 Dup**Matrix: **Aqueous**Date Sampled: **03/19/2019 1439**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0359	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0202	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		75	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0422	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		97	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0213	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		72	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis



Description: **02131 MW14**Matrix: **Aqueous**Date Sampled: **03/18/2019 1843**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0445	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		97	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/30/2019 0235	DAL1	03/26/2019 2115	11344

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		62	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW14 Dup**Matrix: **Aqueous**Date Sampled: **03/18/2019 1845**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0509	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0410	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW15**Matrix: **Aqueous**Date Sampled: **03/19/2019 0921**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 0531	STM		11729		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0420	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		94	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW16**Matrix: **Aqueous**Date Sampled: **03/19/2019 1841**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	20	03/30/2019 0752	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	3300		400	160	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		200	8.4	ug/L	1
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>890</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	40	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		20	8.0	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>44</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		400	160	ug/L	1
Ethanol	64-17-5	8260B	ND		2000	1000	ug/L	1
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>270</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20	8.0	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>130</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>41</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
tert-butyl alcohol (TBA)	75-65-0	8260B	250	J	400	160	ug/L	1
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>1900</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>1600</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0431	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane	N	175	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW17**Matrix: **Aqueous**Date Sampled: **03/19/2019 1856**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 0555	STM		11729		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0442	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		96	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW18**Matrix: **Aqueous**Date Sampled: **03/19/2019 1459**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0618	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0452	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description: **02131 MW19**Matrix: **Aqueous**Date Sampled: **03/19/2019 1810**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0642	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0503	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		93	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW20**Matrix: **Aqueous**Date Sampled: **03/19/2019 1823**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	100	03/30/2019 0449	STM		11734		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	4700		2000	800	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		1000	42	ug/L	1	
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>2500</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	200	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		100	40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	800	ug/L	1	
Ethanol	64-17-5	8260B	ND		10000	5200	ug/L	1	
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>780</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>680</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>200</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	800	ug/L	1	
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>5600</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>5300</b>		<b>100</b>	<b>40</b>	<b>ug/L</b>	<b>1</b>	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		91	70-130						
Bromofluorobenzene		97	70-130						
Toluene-d8		95	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/04/2019 2343	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane	N	142	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0705	STM		11729

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		96	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/04/2019 2354	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		91	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW22**Matrix: **Aqueous**Date Sampled: **03/19/2019 1213**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0320	STM		11734

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>4.4</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>52</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0005	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.023	0.023	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		88	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW23**Matrix: **Aqueous**Date Sampled: **03/18/2019 1819**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 0342	STM		11734		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		87	70-130						
Bromofluorobenzene		95	70-130						
Toluene-d8		93	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0514	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		101	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 MW24**Matrix: **Aqueous**Date Sampled: **03/19/2019 1148**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 0728	STM		11729
2	5030B	8260B	20	04/02/2019 0244	MNS		11930

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>75</b>		<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>12</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>710</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>2</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Run 2	
	Q	% Recovery	Q	% Recovery
1,2-Dichloroethane-d4	92	70-130	90	70-130
Bromofluorobenzene	99	70-130	96	70-130
Toluene-d8	94	70-130	93	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0015	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Run 1	
	Q	% Recovery
1,1,1,2-Tetrachloroethane	90	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1123	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0026	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1145	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>19</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		93	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0036	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1207	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		89	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0047	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW28**Matrix: **Aqueous**Date Sampled: **03/19/2019 1648**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1229	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		91	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0058	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW29**Matrix: **Aqueous**Date Sampled: **03/19/2019 1237**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1251	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>0.62</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>14</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		91	70-130						
Bromofluorobenzene		94	70-130						
Toluene-d8		92	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0109	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		101	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1313	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>5.2</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>100</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		95	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0524	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW30 Dup**Matrix: **Aqueous**Date Sampled: **03/18/2019 1800**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1334	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>5.1</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>1.8</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>100</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		93	70-130						
Bromofluorobenzene		95	70-130						
Toluene-d8		94	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0535	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		91	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-034**Description: **02131 MW31**Matrix: **Aqueous**Date Sampled: **03/19/2019 1129**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	10	03/30/2019 1803	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	160	J	200	80	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	140		100	4.2	ug/L	1	
Benzene	71-43-2	8260B	ND		10	4.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	32		10	4.0	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1	
Ethanol	64-17-5	8260B	ND		1000	520	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		10	4.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1400		10	4.0	ug/L	1	
Naphthalene	91-20-3	8260B	ND		10	4.0	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	96	J	200	80	ug/L	1	
Toluene	108-88-3	8260B	ND		10	4.0	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		95	70-130						
Bromofluorobenzene		95	70-130						
Toluene-d8		93	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0119	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		99	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-035**Description: **02131 MW32**Matrix: **Aqueous**Date Sampled: **03/19/2019 1610**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1356	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		90	70-130						
Bromofluorobenzene		90	70-130						
Toluene-d8		89	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0129	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.022	0.022	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		103	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 MW33**Matrix: **Aqueous**Date Sampled: **03/19/2019 1710**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	03/30/2019 1825	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		200	80	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>150</b>		<b>100</b>	<b>4.2</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		10	4.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>21</b>		<b>10</b>	<b>4.0</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	520	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		10	4.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>1200</b>		<b>10</b>	<b>4.0</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		10	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		200	80	ug/L	1
Toluene	108-88-3	8260B	ND		10	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0140	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.022	0.022	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		98	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-037**Description: **02131 MW34**Matrix: **Aqueous**Date Sampled: **03/19/2019 1318**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1419	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		91	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0151	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		96	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW35**Matrix: **Aqueous**Date Sampled: **03/19/2019 0959**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1442	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		96	70-130						
Bromofluorobenzene		97	70-130						
Toluene-d8		94	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0201	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		107	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 MW36**Matrix: **Aqueous**Date Sampled: **03/19/2019 1106**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1504	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		93	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0212	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW37**Matrix: **Aqueous**Date Sampled: **03/19/2019 0902**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1527	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		92	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0223	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		103	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-041**

Description: **02131 MW38**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 0817**

Date Received: **03/23/2019**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1550	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		88	70-130
Toluene-d8		89	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0234	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1613	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>20</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		92	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0244	CHG	04/02/2019 0054	11931

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description: **02131 DW1**

Matrix: **Aqueous**

Date Sampled: **03/18/2019 1247**

Date Received: **03/23/2019**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1635	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>0.63</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>9.3</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0546	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		91	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 DW2**Matrix: **Aqueous**Date Sampled: **03/18/2019 1709**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1656	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		92	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0556	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description: **02131 DW3**Matrix: **Aqueous**Date Sampled: **03/18/2019 1455**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1719	BWS		11747		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>2.2</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260B</b>	<b>2.1</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>81</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		92	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0607	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		91	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 DW4**Matrix: **Aqueous**Date Sampled: **03/18/2019 0713**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1741	BWS		11747

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>6.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		89	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0617	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		102	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 DW5**Matrix: **Aqueous**Date Sampled: **03/18/2019 1603**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1141	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	41		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	22		10	0.42	ug/L	1
Benzene	71-43-2	8260B	6.3		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	3.1		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	4.9		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	170		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	9.6		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	21		20	8.0	ug/L	1
Toluene	108-88-3	8260B	0.90	J	1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	14		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0628	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description: **02131 DW6**Matrix: **Aqueous**Date Sampled: **03/18/2019 1350**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1204	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>2.6</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		99	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0639	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		86	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 DW7**Matrix: **Aqueous**Date Sampled: **03/18/2019 1139**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1228	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.88</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0649	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		101	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-050**Description: **02131 DW8**Matrix: **Aqueous**Date Sampled: **03/18/2019 1028**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1251	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		83	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0700	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		102	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 DW9**Matrix: **Aqueous**Date Sampled: **03/18/2019 0923**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1313	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>32</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		84	70-130						
Bromofluorobenzene		95	70-130						
Toluene-d8		96	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0711	CHG	03/29/2019 1703	11703		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		98	57-137						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1336	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>9.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		99	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0732	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**Laboratory ID: **UC23021-053**Description: **02131 RW1**Matrix: **Aqueous**Date Sampled: **03/19/2019 2010**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	100	03/30/2019 1815	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	8500		2000	800	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	2300		1000	42	ug/L	1	
Benzene	71-43-2	8260B	5400		100	40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	200	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		100	40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	740		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	800	ug/L	1	
Ethanol	64-17-5	8260B	ND		10000	5200	ug/L	1	
Ethylbenzene	100-41-4	8260B	770		100	40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	13000		100	40	ug/L	1	
Naphthalene	91-20-3	8260B	140		100	40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	970	J	2000	800	ug/L	1	
Toluene	108-88-3	8260B	7300		100	40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	4200		100	40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		87	70-130						
Bromofluorobenzene		101	70-130						
Toluene-d8		94	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0255	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.021	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		104	57-137						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description: 02131 RW2

Matrix: Aqueous

Date Sampled: 03/19/2019 2033

Date Received: 03/23/2019

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	200	03/30/2019 1838	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	14000		4000	1600	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	3400		2000	84	ug/L	1	
Benzene	71-43-2	8260B	7500		200	80	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	400	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		200	80	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	920		200	80	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		4000	1600	ug/L	1	
Ethanol	64-17-5	8260B	ND		20000	10000	ug/L	1	
Ethylbenzene	100-41-4	8260B	1100		200	80	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		200	80	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	19000		200	80	ug/L	1	
Naphthalene	91-20-3	8260B	210		200	80	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	1700	J	4000	1600	ug/L	1	
Toluene	108-88-3	8260B	19000		200	80	ug/L	1	
Xylenes (total)	1330-20-7	8260B	7200		200	80	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		95	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	04/05/2019 0316	CHG	04/02/2019 0054	11931		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	0.12	P	0.020	0.020	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		130	57-137						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-055**

Description: **02131 RW3**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 2051**

Date Received: **03/23/2019**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	100	03/30/2019 1901	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	5300		2000	800	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	700	J	1000	42	ug/L	1
Benzene	71-43-2	8260B	3600		100	40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		500	200	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		100	40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	250		100	40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		2000	800	ug/L	1
Ethanol	64-17-5	8260B	ND		10000	5200	ug/L	1
Ethylbenzene	100-41-4	8260B	740		100	40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		100	40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	3000		100	40	ug/L	1
Naphthalene	91-20-3	8260B	120		100	40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		2000	800	ug/L	1
Toluene	108-88-3	8260B	6900		100	40	ug/L	1
Xylenes (total)	1330-20-7	8260B	4600		100	40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/04/2019 2147	CHG	04/02/2019 1213	12000

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.035	P	0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description: **02131 DWW2**Matrix: **Aqueous**Date Sampled: **03/19/2019 1910**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1359	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>1.1</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		84	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		98	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	03/30/2019 2318	STM		11777
2	524.2	524.2	10	04/01/2019 1057	BWS		11854

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>79</b>		<b>5.0</b>	<b>4.0</b>	<b>ug/L</b>	<b>2</b>
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130		97	70-130
1,2-Dichlorobenzene-d4		92	70-130		95	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	504.1	504.1	1	04/01/2019 1329	DAL1	04/01/2019 0911	11821

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0038	ug/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>UC23021-056</b>
Description: <b>02131 DWW2</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>03/19/2019 1910</b>	
Date Received: <b>03/23/2019</b>	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

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LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: **02131 DWW3**Matrix: **Aqueous**Date Sampled: **03/19/2019 1941**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1422	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		86	70-130						
Bromofluorobenzene		98	70-130						
Toluene-d8		98	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	03/30/2019 2343	STM		11777		
2	524.2	524.2	1	04/01/2019 1123	BWS		11854		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>0.70</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>2</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits			
Bromofluorobenzene		99	70-130		93	70-130			
1,2-Dichlorobenzene-d4		98	70-130		91	70-130			

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	04/01/2019 1341	DAL1	04/01/2019 0911	11821		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-057**

Description: **02131 DWW3**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 1941**

Date Received: **03/23/2019**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		99	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

Shealy Environmental Services, Inc

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Description: **02131 DWW4**Matrix: **Aqueous**Date Sampled: **03/19/2019 1952**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1445	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		87	70-130						
Bromofluorobenzene		100	70-130						
Toluene-d8		99	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	03/31/2019 0009	STM		11777		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>1.5</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		88	70-130						
1,2-Dichlorobenzene-d4		93	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	04/01/2019 1353	DAL1	04/01/2019 0911	11821		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: <b>Katawba Environmental, Inc.</b> Description: <b>02131 DWW4</b> Date Sampled: <b>03/19/2019 1952</b> Date Received: <b>03/23/2019</b>	Laboratory ID: <b>UC23021-058</b> Matrix: <b>Aqueous</b>
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Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

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LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1508	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	03/31/2019 0034	STM		11777

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>3.5</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichlorobenzene-d4		92	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	504.1	504.1	1	04/01/2019 1405	DAL1	04/01/2019 0911	11821

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>UC23021-059</b>
Description: <b>02131 DWW5</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>03/19/2019 1921</b>	
Date Received: <b>03/23/2019</b>	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		96	57-137

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LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL
H = Out of holding time	W = Reported on wet weight basis		

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1531	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		98	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	03/31/2019 0100	STM		11777

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.40	ug/L	1
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichlorobenzene-d4		97	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	504.1	504.1	1	04/01/2019 1416	DAL1	04/01/2019 0911	11821

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0039	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-060**

Description: **02131 DWW6**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 1959**

Date Received: **03/23/2019**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		101	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1555	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		96	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524.2	524.2	1	03/31/2019 0126	STM		11777

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.40	ug/L	1
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichlorobenzene-d4		97	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	504.1	504.1	1	04/01/2019 1429	DAL1	04/01/2019 0911	11821

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-061**

Description: **02131 DWW6 Dup**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 2001**

Date Received: **03/23/2019**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		106	57-137

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/30/2019 1618	BWS		11751

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		97	70-130

### EDB & DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	04/05/2019 0753	CHG	03/29/2019 1703	11703

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 FB**Matrix: **Aqueous**Date Sampled: **03/19/2019 2017**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1641	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		87	70-130						
Bromofluorobenzene		103	70-130						
Toluene-d8		96	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	03/31/2019 0151	STM		11777		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.40	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		99	70-130						
1,2-Dichlorobenzene-d4		94	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	04/01/2019 1441	DAL1	04/01/2019 0911	11821		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0039	ug/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**

Laboratory ID: **UC23021-063**

Description: **02131 FB**

Matrix: **Aqueous**

Date Sampled: **03/19/2019 2017**

Date Received: **03/23/2019**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		103	57-137

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and  $\geq$  DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 TB**Matrix: **Aqueous**Date Sampled: **03/19/2019 2030**Date Received: **03/23/2019****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/30/2019 1704	BWS		11751		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		88	70-130						
Bromofluorobenzene		100	70-130						
Toluene-d8		95	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	03/31/2019 0216	STM		11777		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.40	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		91	70-130						
1,2-Dichlorobenzene-d4		97	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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**Chain of Custody  
and  
Miscellaneous Documents**



# Chain of Custody Record

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number 94855

Client <b>Katawba ENV</b>		Report to Contact <b>Alex Lewis</b>		Telephone No / E-mail		Date: Mo.	
Address <b>4276 Oyc Rd</b>		Sampler's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>1</b> of <b>7</b>	
City <b>Edgemour</b>	State <b>SC</b>	Zip Code <b>29712</b>		Printed Name <b>Billy Morris</b>		Barcode <b>UC23021</b>	
Project Name <b>One Accord</b>		P.O. No. <b>One Accord</b>		Mobile		No of Containers by Invasive type	
Sample ID / Description <b>02131 MW1</b>		Date <b>3-19-18</b>	Time <b>1930</b>	Accepted	Analysis	Remarks / Cooler I.D.	
<b>02131 MW2</b>			<b>1910</b>				
<b>02131 MW3</b>			<b>1941</b>				
<b>02131 MW4</b>			<b>1526</b>				
<b>02131 MW5</b>			<b>1419</b>				
<b>02131 MW6</b>			<b>1356</b>				
<b>02131 MW7</b>			<b>1337</b>				
<b>02131 MW8</b>			<b>1043</b>				
<b>02131 MW9</b>			<b>1022</b>				
<b>02131 MW10</b>		<b>3-19-18</b>	<b>938</b>	<b>X</b>			

Handwritten notes: **02131 MW1-10**, **EDB**

Turn Around Time Required (Prior lab approval required for expedited TAT):  
 Standard  Rush (Specify) **7 Day TAT**

Sample Disposal:  
 Return to Client  Dispose by Lab

Possible Hazard Identification:  
 Non-Hazard  Harmable  Skin Irritant  Flammable  Unknown

QC Requirements (Specify):

1. Relinquished by <b>Billy Morris</b>	Date <b>3-22-18</b>	Time <b>1517</b>	1. Received by	Date	Time
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by <b>L Hill</b>	Date <b>3-22-18</b>	Time <b>1517</b>

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAD USE ONLY  
 Received on 209 (Circle) **0** YES NO Ice Pack Receipt Temp. **7.0 | 1.5**

SHEALY ENVIRONMENTAL SERVICES, INC.




**Chain of Custody Record**

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 www.shealylab.com

Number **94856**

**SHEALY ENVIRONMENTAL SERVICES, INC.**

Client <b>Katumba Trail</b>			Report to Contact <b>Alex Adams</b>			Telephone No. / E-mail			Quote No.								
Address <b>4278 Dye Rd</b>			Sampler's Signature <i>[Signature]</i>			Analysis (Attach list if more space is needed)			Page <b>2</b> of <b>7</b>								
City <b>Edgewater</b>	State <b>SC</b>	Zip Code <b>29712</b>	x <b>Billy Morris</b> Printed Name			Filtered through 0.45 micron filter CDS			 <b>UC23021</b> LID Remarks / Cooler I.D.								
Project Name <b>Om Accord</b>			Dilly Morris														
Project No. <b>Om Accord</b>		P.O. No. <b>Om Accord</b>		Matrix		No of Containers by Preservative Type											
Sample ID / Description (Containers for each sample may be combined on one line)				Date	Time	Aluminum	Amies	Amies	Amies	Amies	Amies	Amies					
<b>02131 MW11</b>				<b>3/18/19</b>	<b>1724</b>	X											
<b>02131 MW12</b>				<b>3-19-19</b>	<b>1437</b>												
<b>02131 MW12 Dup</b>				<b>3-19-19</b>	<b>1439</b>												
<b>02131 MW13</b>				<b>3-19-19</b>	<b>1743</b>												
<b>02131 MW14</b>				<b>3/18/19</b>	<b>1843</b>												
<b>02131 MW14 Dup</b>				<b>3/18/19</b>	<b>1845</b>												
<b>02131 MW15</b>				<b>3-19-19</b>	<b>921</b>												
<b>02131 MW16</b>				<b>3-19-19</b>	<b>1841</b>												
<b>02131 MW17</b>				<b>3-19-19</b>	<b>1856</b>												
<b>02131 MW18</b>				<b>3-15-19</b>	<b>1459</b>	X											
Turn Around Time Required (Prior lab approval required for expedited TAT)				Sample Disposal				Possible Hazard Identification				QC Requirements (Specify)					
<input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>				<input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab				<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown									
1. Relinquished by <b>Billy Morris</b>				Date	Time	1. Received by				Date	Time						
				<b>3-22-19</b>	<b>1517</b>												
2. Relinquished by				Date	Time	2. Received by				Date	Time						
3. Relinquished by				Date	Time	3. Received by				Date	Time						
4. Relinquished by				Date	Time	4. Laboratory received by <b>Z. Hill</b>				Date	Time						
										<b>3-22-19</b>	<b>1517</b>						
Note: All samples are retained for four weeks from receipt unless other arrangements are made.						LAB USE ONLY						Received on Ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack Receipt Term <b>7, 24, 15</b>					



# Chain of Custody Record

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number 94857

Client <b>Katowba Env</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.	
Address <b>4228 Dyc Rd</b>		Sampler's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>3 of 7</b>	
City <b>Edgewater</b>	State <b>SC</b>	Zip Code <b>29712</b>		Printed Name <b>Billy Morris</b>		Barcode <b>UC23021</b>	
Project Name <b>One Accord</b>		R.O. No. <b>One Accord</b>		Matrix		No. of Containers by Preservative Type	
Sample ID / Description		Date	Time	Acetone	Acid	Alkaline	Other
Containers for each sample may be combined on one line.							
<b>02131 MW19</b>		<b>3-19-19</b>	<b>1810</b>	<b>X</b>			
<b>02131 MW20</b>		<b>1</b>	<b>1820</b>				
<b>02131 MW21</b>		<b>1</b>	<b>1623</b>				
<b>02131 MW22</b>		<b>3-19-19</b>	<b>1213</b>				
<b>02131 MW23</b>		<b>3-18-19</b>	<b>1819</b>				
<b>02131 MW24</b>		<b>3-19-19</b>	<b>1148</b>				
<b>02131 MW25</b>		<b>1</b>	<b>1543</b>				
<b>02131 MW26</b>		<b>1</b>	<b>1730</b>				
<b>02131 MW27</b>		<b>1</b>	<b>1300</b>				
<b>02131 MW28</b>		<b>3-19-19</b>	<b>1648</b>	<b>X</b>			
Turn Around Time Required (Prior lab approval required for expedited TAT.) <input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		Possible Hazard Identification <input type="checkbox"/> Non-Hazardic <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Pesticide <input type="checkbox"/> Unknown		QC Requirements (Specify)	
1. Relinquished by <b>Billy Morris</b>		Date	Time	1. Received by		Date	Time
		<b>3-22-19</b>	<b>1517</b>				
2. Relinquished by		Date	Time	2. Received by		Date	Time
3. Relinquished by		Date	Time	3. Received by		Date	Time
4. Relinquished by		Date	Time	4. Laboratory received by <b>L. Hill</b>		Date	Time
						<b>3-22-19</b>	<b>1517</b>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on ice (Uncooled) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack		Receipt Initials <b>3.0.1.5</b>	

DISTRIBUTION: WHITE & YELLOW Return to laboratory with Sample(s); PINK Field/Clerk Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

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 Page 82 of 87

SHEALY ENVIRONMENTAL SERVICES, INC.



# Chain of Custody Record

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 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number **94858**

SHEALY ENVIRONMENTAL SERVICES, INC.

Client <b>Katawba</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.																																																																																																																																																																																																													
Address <b>4278 Oyc Rd</b>		Sampler's Signature <b>x Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>4 of 7</b>																																																																																																																																																																																																													
City <b>Edgewater</b>	State <b>SC</b>	Zip Code <b>29732</b>		Printed Name <b>Billy Morris</b>		Barcode <b>UC23021</b>																																																																																																																																																																																																													
Project Name <b>One Accord</b>		P.O. No. <b>One Accord</b>		Matrix		No. of Containers by Preservative Type																																																																																																																																																																																																													
Project No. <b>One Accord</b>		Date		Time		Remarks / Cooler I.D.																																																																																																																																																																																																													
<table border="1"> <thead> <tr> <th rowspan="2">Sample ID / Description (Containers for each sample may be combined on one line.)</th> <th rowspan="2">Date</th> <th rowspan="2">Time</th> <th rowspan="2">Collection Container</th> <th colspan="2">Matrix</th> <th colspan="8">No. of Containers by Preservative Type</th> </tr> <tr> <th>Uncontaminated</th> <th>Contaminated</th> <th>Uncontaminated</th> <th>Contaminated</th> <th>Uncontaminated</th> <th>Contaminated</th> <th>Uncontaminated</th> <th>Contaminated</th> <th>Uncontaminated</th> <th>Contaminated</th> </tr> </thead> <tbody> <tr> <td>02131 MW29</td> <td>3-19-19</td> <td>1237</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW30</td> <td>3-18-19</td> <td>1758</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW30 Dup</td> <td>3-18-19</td> <td>1800</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW31</td> <td>3-19-19</td> <td>1129</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW32</td> <td></td> <td>1610</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW33</td> <td></td> <td>1710</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW34</td> <td></td> <td>1316</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW35</td> <td></td> <td>959</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW36</td> <td></td> <td>1106</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02131 MW37</td> <td>3-19-19</td> <td>902</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Collection Container	Matrix		No. of Containers by Preservative Type								Uncontaminated	Contaminated	Uncontaminated	Contaminated	Uncontaminated	Contaminated	Uncontaminated	Contaminated	Uncontaminated	Contaminated	02131 MW29	3-19-19	1237	X															02131 MW30	3-18-19	1758																02131 MW30 Dup	3-18-19	1800																02131 MW31	3-19-19	1129																02131 MW32		1610																02131 MW33		1710																02131 MW34		1316																02131 MW35		959																02131 MW36		1106																02131 MW37	3-19-19	902	X														
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Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY

Received on ice (Circle)  Yes  No Ice Pack  Receipt Temp **20.15** °C

DISTRIBUTION: WHITE & YELLOW/ Return to laboratory with Sample(s); PINK/ Retain Copy

Document Number: F-AJ-133 Revision: Date: 08-01-2014



Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
108 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 94859

Client: Kataba Inc
Address: 4278 Dye Rd
City: Edgemoor SC 29122
Project Name: One Record
Report to Contact: Alex Jones
Sampler's Signature: Billy Morris
Printed Name: Billy Morris

Page 5 of 7



Table with columns: Sample ID / Description, Date, Time, Matrix, and No. of Containers by Preservative Type. Rows include samples like 02131 MWS8, 02131 MWS7, 02131 DW1, etc.

Turn Around Time Required (Prior lab approval required for expedited TAT)
Standard or Rush (Specify)
Possible Hazard Identification
QC Requirements (Specify)
1. Relinquished by: Billy Morris
2. Relinquished by
3. Relinquished by
4. Relinquished by

Note: All samples are retained for four weeks from receipt unless other arrangements are made.
LAB USE ONLY
Preservative: Ice Pack
Recept Temp: 7.0, 1.5

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
108 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com
Page 84 of 87



# Chain of Custody Record

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Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

Number **94860**

SHEALY ENVIRONMENTAL SERVICES, INC.

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106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Client <b>Katawba Co</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.	
Address <b>4278 Dyc Rd</b>		Sampler's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>6</b> of <b>7</b>	
City <b>Edgewood</b>	State <b>SC</b>	Zip Code <b>29712</b>	Project Name <b>De Aard</b>		Barcode 		
Project No. <b>De Aard</b>		R.O. No. <b>De Aard</b>		Matrix		No. of Containers by Preservative Type	
Sample ID / Description <b>02131 DW9</b>		Date <b>3-18-19</b>	Time <b>9:23</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW10</b>		<b>3-18-19</b>	<b>8:19</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 RW1</b>		<b>3-17-19</b>	<b>20:10</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 RW2</b>			<b>20:33</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 RW3</b>			<b>20:51</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW2</b>			<b>19:10</b>		<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW3</b>			<b>19:41</b>		<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW4</b>			<b>19:52</b>		<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW5</b>			<b>19:21</b>		<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
<b>02131 DW6</b>		<b>3-19-19</b>	<b>19:59</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>	<input checked="" type="checkbox"/> <b>EDB</b>
Turn Around Time Required (Prior lab approval required for expedited TAT) <input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Discard by Lab		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown		QC Requirements (Specify)	
1. Relinquished by <b>Billy Morris</b>		Date <b>3-22-19</b>	Time <b>15:17</b>	1. Received by <b>L. Hor</b>		Date <b>3-22-19</b>	Time <b>15:17</b>
2. Relinquished by		Date	Time	2. Received by		Date	Time
3. Relinquished by		Date	Time	3. Received by		Date	Time
4. Relinquished by		Date	Time	4. Laboratory received by <b>L. Hor</b>		Date <b>3-22-19</b>	Time <b>15:17</b>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack		Receipt Temp. <b>7.0</b> °C	





Chain of Custody Record

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108 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 94996

Client: Katerba tw
Address: 4278 Dyc Rd
City: Edgemoor State: SC Zip Code: 29712
Project Name: DM Accord
Project No: DM Accord
Report to Contact: Alex Jones
Sampler's Signature: Billy Morris
Printed Name: Billy Morris
Analysis (Attach list if more space is needed):
Matrix:
No of Containers by Preservative Type:
Sample ID / Description:
Date: Time:
02131 DWw6 Dwp 3-18-19 2001
FB 3-18-19 2059
FB 3-19-19 2017
TB 3-19-19 2030



UC23021

LID

Remarks / Cover I.D.

SHEALY ENVIRONMENTAL SERVICES, INC.

Turn Around Time Required (Prior lab approval required for expedited TAT)
Sample Disposal
Possible Hazard Identification
QC Requirements (Specify)
1. Relinquished by: Billy Morris Date: 3-22-19 Time: 15:17
2. Relinquished by:
3. Relinquished by:
4. Relinquished by:
LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack Receipt Temp: 70, 15, 74

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy

Document Number: F-AD-123 Effective Date: 08-01-2014

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-1R**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 20.73 ft.

Length of Water Column (LWC=TWD-DGW) 3 FT

1 Csg. Volume (LWC\*C) = 3 X 0.163 = 0.489 gals.  
 3 Csg. Volumes = 3 X 0.489 = 1.467 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1.467 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1930							
<b>pH (s.u.)</b>	6.16							
<b>Specific Cond. (umhos/cm)</b>	159							
<b>Water Temp (°C)</b>	19.4							
<b>Turbidity (*)</b>	148							
<b>Dissolved Oxygen</b>	3.73							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-2**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 20.49 ft.

Length of Water Column (LWC=TWD-DGW) \_\_\_\_\_ FT

1 Csg. Volume (LWC\*C) = X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1910							
<b>pH (s.u.)</b>	6.19							
<b>Specific Cond. (umhos/cm)</b>	198							
<b>Water Temp (°C)</b>	19.9							
<b>Turbidity (*)</b>	143							
<b>Dissolved Oxygen</b>	3.63							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border-bottom: 1px solid black;">Relinquished by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> <td style="width: 25%; border-bottom: 1px solid black;">Received by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time	<p><b>Well # <u>MW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.31</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>    </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>    </u> X <u>0.163</u> = <u>    </u> gals.          3 Csg. Volumes = 3 X <u>    </u> = <u>    </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time		

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1941							
<b>pH (s.u.)</b>	7.13							
<b>Specific Cond. (umhos/cm)</b>	223							
<b>Water Temp (°C)</b>	20.9							
<b>Turbidity (*)</b>	147							
<b>Dissolved Oxygen</b>	2.27							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X 0.163 = <u>  </u> gals.          3 Csg. Volumes = 3 X <u>  </u> = <u>  </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1526							
<b>pH (s.u.)</b>	6.41							
<b>Specific Cond. (umhos/cm)</b>	110							
<b>Water Temp (°C)</b>	19.9							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	4.03							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-5**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 25 ft.  
 Depth to GW (DGW) 16.31 ft.

Length of Water Column (LWC=TWD-DGW) \_\_\_\_\_ FT

1 Csg. Volume (LWC\*C) = \_\_\_\_\_ X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1419							
<b>pH (s.u.)</b>	5.73							
<b>Specific Cond. (umhos/cm)</b>	103							
<b>Water Temp (°C)</b>	21.0							
<b>Turbidity (*)</b>	109							
<b>Dissolved Oxygen</b>	3.03							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-6**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 16.93 ft.

Length of Water Column (LWC=TWD-DGW) 7.07 FT

1 Csg. Volume (LWC\*C) =  $7.07 \times 0.163 = 1.15$  gals.  
 3 Csg. Volumes =  $3 \times 1.15 = 3.45$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.5 gals

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1356							
<b>pH (s.u.)</b>	6.03							
<b>Specific Cond. (umhos/cm)</b>	103							
<b>Water Temp (°C)</b>	21.7							
<b>Turbidity (*)</b>	113							
<b>Dissolved Oxygen</b>	4.02							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-7**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 23 ft.  
 Depth to GW (DGW) 15.41 ft.

Length of Water Column (LWC=TWD-DGW) 7.59 FT

1 Csg. Volume (LWC\*C) = 7.59 X 0.163 = 1.237 gals.  
 3 Csg. Volumes = 3 X 1.237 = 3.711 gals. (Std. Purge Volume)

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

Total Volume of Water Purged Before Sampling 3.711 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1337							
<b>pH (s.u.)</b>	6.13							
<b>Specific Cond. (umhos/cm)</b>	115							
<b>Water Temp (°C)</b>	20.9							
<b>Turbidity (*)</b>	109							
<b>Dissolved Oxygen</b>	3.37							



**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-8**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 23 ft.  
 Depth to GW (DGW) 18.53 ft.

Length of Water Column (LWC=TWD-DGW) 4 FT

1 Csg. Volume (LWC\*C) = 4 X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1043							
<b>pH (s.u.)</b>	6.23							
<b>Specific Cond. (umhos/cm)</b>	116							
<b>Water Temp (°C)</b>	19.8							
<b>Turbidity (*)</b>	103							
<b>Dissolved Oxygen</b>	2.65							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">pH Meter <u>Hannah</u></td> <td style="width: 50%;">Conductivity Meter: <u>YSI</u></td> </tr> <tr> <td>serial no. <u>08366812</u></td> <td>serial no. <u>11G100871</u></td> </tr> <tr> <td>pH=4.0 <u>4.0=4.0</u></td> <td>Standard <u>10.0=10.0</u></td> </tr> <tr> <td>pH=7.0 <u>7.0=7.0</u></td> <td>Standard <u>100.0=100.0</u></td> </tr> <tr> <td>pH=10.0 <u>10.0=10.0</u></td> <td>Standard <u>1000.0=1000.0</u></td> </tr> </table> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>	serial no. <u>08366812</u>	serial no. <u>11G100871</u>	pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>	pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>	pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-9</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>37</u> ft.          Depth to GW (DGW) <u>29.73</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) _____ FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>																		
serial no. <u>08366812</u>	serial no. <u>11G100871</u>																		
pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>																		
pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>																		
pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>																		
Relinquished by	Date/Time	Received by	Date/Time																

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1022							
<b>pH (s.u.)</b>	5.90							
<b>Specific Cond. (umhos/cm)</b>	49.3							
<b>Water Temp (°C)</b>	19.3							
<b>Turbidity (*)</b>	90							
<b>Dissolved Oxygen</b>	8.37							

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-10</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft.          Depth to GW (DGW) <u>30.47</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>9.53</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>9.53 X 0.163</u> = <u>1.55</u> gals.          3 Csg. Volumes = 3 X <u>1.55</u> = <u>4.66</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	938							
<b>pH (s.u.)</b>	6.87							
<b>Specific Cond. (umhos/cm)</b>	23.1							
<b>Water Temp (°C)</b>	19.4							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	8.72							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-11**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 29 ft.  
 Depth to GW (DGW) 25.82 ft.

Length of Water Column (LWC=TWD-DGW)    FT

1 Csg. Volume (LWC\*C) =    X 0.163 =    gals.  
 3 Csg. Volumes = 3 X    =    gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling    gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1724							
<b>pH (s.u.)</b>	6.13							
<b>Specific Cond. (umhos/cm)</b>	103							
<b>Water Temp (°C)</b>	20.1							
<b>Turbidity (*)</b>	103							
<b>Dissolved Oxygen</b>	10.43							

**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-12**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 29 ft.  
 Depth to GW (DGW) 20.10 ft.

Length of Water Column (LWC=TWD-DGW) \_\_\_\_\_ FT

1 Csg. Volume (LWC\*C) = \_\_\_\_\_ X 0.163 = \_\_\_\_\_ gals.  
 3 Csg. Volumes = 3 X \_\_\_\_\_ = \_\_\_\_\_ gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling \_\_\_\_\_ gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1437							
<b>pH (s.u.)</b>	5.76							
<b>Specific Cond. (umhos/cm)</b>	198							
<b>Water Temp (°C)</b>	21.0							
<b>Turbidity (*)</b>	106							
<b>Dissolved Oxygen</b>	4.16							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-13</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>26</u> ft.          Depth to GW (DGW) <u>25.21</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) _____ FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1743							
<b>pH (s.u.)</b>	6.13							
<b>Specific Cond. (umhos/cm)</b>	98.7							
<b>Water Temp (°C)</b>	20.1							
<b>Turbidity (*)</b>	124							
<b>Dissolved Oxygen</b>	3.64							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1843							
<b>pH (s.u.)</b>	6.12							
<b>Specific Cond. (umhos/cm)</b>	41.7							
<b>Water Temp (°C)</b>	18.5							
<b>Turbidity (*)</b>	147							
<b>Dissolved Oxygen</b>	6.47							

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pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>																		
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Relinquished by	Date/Time	Received by	Date/Time																

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	921							
<b>pH (s.u.)</b>	7.43							
<b>Specific Cond. (umhos/cm)</b>	41.6							
<b>Water Temp (°C)</b>	18.3							
<b>Turbidity (*)</b>	126							
<b>Dissolved Oxygen</b>	10.76							



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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	841							
<b>pH (s.u.)</b>	6.41							
<b>Specific Cond. (umhos/cm)</b>	113							
<b>Water Temp (°C)</b>	21.6							
<b>Turbidity (*)</b>	135							
<b>Dissolved Oxygen</b>	4.38							

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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <table style="width:100%; border: none;"> <tr> <td>pH Meter <u>Hannah</u></td> <td>Conductivity Meter: <u>YSI</u></td> </tr> <tr> <td>serial no. <u>08366812</u></td> <td>serial no. <u>11G100871</u></td> </tr> <tr> <td>pH=4.0 <u>4.0=4.0</u></td> <td>Standard <u>10.0=10.0</u></td> </tr> <tr> <td>pH=7.0 <u>7.0=7.0</u></td> <td>Standard <u>100.0=100.0</u></td> </tr> <tr> <td>pH=10.0 <u>10.0=10.0</u></td> <td>Standard <u>1000.0=1000.0</u></td> </tr> </table> <p align="center"><b>Chain of Custody</b></p> <table style="width:100%; border: none;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>	serial no. <u>08366812</u>	serial no. <u>11G100871</u>	pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>	pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>	pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-17</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>21.29</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) _____ FT</p> <p>1 Csg. Volume (LWC*C) = _____ X 0.163 = _____ gals.          3 Csg. Volumes = 3 X _____ = _____ gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling _____ gals</p> <p><b>Used purge pump to evacuate</b></p>
pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>																		
serial no. <u>08366812</u>	serial no. <u>11G100871</u>																		
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pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>																		
Relinquished by	Date/Time	Received by	Date/Time																

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1856							
<b>pH (s.u.)</b>	6.17							
<b>Specific Cond. (umhos/cm)</b>	113							
<b>Water Temp (°C)</b>	20.3							
<b>Turbidity (*)</b>	149							
<b>Dissolved Oxygen</b>	4.17							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2	4	5.5				
<b>Time (military)</b>	1443	1449	1454	1459				
<b>pH (s.u.)</b>	6.19	6.28	6.21	6.19				
<b>Specific Cond. (umhos/cm)</b>	117	119	123	121				
<b>Water Temp (°C)</b>	20.6	20.1	19.9	19.6				
<b>Turbidity (*)</b>	117	119	121	123				
<b>Dissolved Oxygen</b>	3.92	3.85	3.96	4.01				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2	3.5	5.25				
<b>Time (military)</b>	1754	1759	1805	1810				
<b>pH (s.u.)</b>	6.25	6.20	6.23	6.21				
<b>Specific Cond. (umhos/cm)</b>	125	119	115	117				
<b>Water Temp (°C)</b>	21.0	20.2	20.1	20.3				
<b>Turbidity (*)</b>	98	119	113	115				
<b>Dissolved Oxygen</b>	2.46	2.26	2.14	2.10				

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<b>Quality Assurance:</b> pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u> serial no. <u>08366812</u> serial no. <u>11G100871</u> pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u> pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u> pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u>		<b>Chain of Custody</b> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border-bottom: 1px solid black;">Relinquished by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> <td style="width: 25%; border-bottom: 1px solid black;">Received by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> </tr> </table>		Relinquished by	Date/Time	Received by	Date/Time	
Relinquished by	Date/Time	Received by	Date/Time					
		<b>Used purge pump to evacuate</b>						
	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1823							
<b>pH (s.u.)</b>	6.32							
<b>Specific Cond. (umhos/cm)</b>	181							
<b>Water Temp (°C)</b>	21.0							
<b>Turbidity (*)</b>	131							
<b>Dissolved Oxygen</b>	4.52							

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <table style="width:100%; border: none;"> <tr> <td>pH Meter <u>Hannah</u></td> <td>Conductivity Meter: <u>YSI</u></td> </tr> <tr> <td>serial no. <u>08366812</u></td> <td>serial no. <u>11G100871</u></td> </tr> <tr> <td>pH=4.0 <u>4.0=4.0</u></td> <td>Standard <u>10.0=10.0</u></td> </tr> <tr> <td>pH=7.0 <u>7.0=7.0</u></td> <td>Standard <u>100.0=100.0</u></td> </tr> <tr> <td>pH=10.0 <u>10.0=10.0</u></td> <td>Standard <u>1000.0=1000.0</u></td> </tr> </table> <p align="center"><b>Chain of Custody</b></p> <table style="width:100%; border: none;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>	serial no. <u>08366812</u>	serial no. <u>11G100871</u>	pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>	pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>	pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-21</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>35</u> ft.          Depth to GW (DGW) <u>20.94</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>14.06 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>14.06</u> x <u>0.163</u> = <u>2.29</u> gals.          3 Csg. Volumes = 3 X <u>2.29</u> = <u>6.87</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>7</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
pH Meter <u>Hannah</u>	Conductivity Meter: <u>YSI</u>																		
serial no. <u>08366812</u>	serial no. <u>11G100871</u>																		
pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>																		
pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>																		
pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>																		
Relinquished by	Date/Time	Received by	Date/Time																

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2.5	5	7				
<b>Time (military)</b>	1608	1612	1618	1623				
<b>pH (s.u.)</b>	5.05	5.09	5.17	5.19				
<b>Specific Cond. (umhos/cm)</b>	63.9	89.9	85.8	84.2				
<b>Water Temp (°C)</b>	19.8	19.5	19.2	19.1				
<b>Turbidity (*)</b>	140	136	129	125				
<b>Dissolved Oxygen</b>	3.41	3.26	3.20	3.21				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-22</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>27.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>  </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> x <u>0.163</u> = <u>  </u> gals.          3 Csg. Volumes = 3 X <u>  </u> = <u>  </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1213							
<b>pH (s.u.)</b>	6.12							
<b>Specific Cond. (umhos/cm)</b>	123							
<b>Water Temp (°C)</b>	19.8							
<b>Turbidity (*)</b>	116							
<b>Dissolved Oxygen</b>	1.45							

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-23**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 26.22 ft.

Length of Water Column (LWC=TWD-DGW)    FT

1 Csg. Volume (LWC\*C) =    x 0.163 =    gals.  
 3 Csg. Volumes = 3 X    =    gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling    gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1819							
<b>pH (s.u.)</b>	5.94							
<b>Specific Cond. (umhos/cm)</b>	133							
<b>Water Temp (°C)</b>	18.6							
<b>Turbidity (*)</b>	143							
<b>Dissolved Oxygen</b>	10.91							



**South Carolina Department of Health and Environmental Control  
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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1148							
<b>pH (s.u.)</b>	5.92							
<b>Specific Cond. (umhos/cm)</b>	41.7							
<b>Water Temp (°C)</b>	19.4							
<b>Turbidity (*)</b>	93.8							
<b>Dissolved Oxygen</b>	6.08							

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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-25</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>20.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>    </u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>    </u> x 0.163 = <u>    </u> gals.          3 Csg. Volumes = 3 X <u>    </u> = <u>    </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1543							
<b>pH (s.u.)</b>	6.31							
<b>Specific Cond. (umhos/cm)</b>	114							
<b>Water Temp (°C)</b>	20.0							
<b>Turbidity (*)</b>	102							
<b>Dissolved Oxygen</b>	3.23							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1730							
<b>pH (s.u.)</b>	6.61							
<b>Specific Cond. (umhos/cm)</b>	129							
<b>Water Temp (°C)</b>	19.8							
<b>Turbidity (*)</b>	105							
<b>Dissolved Oxygen</b>	2.56							

**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**  
 pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-27**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 21.73 ft.

Length of Water Column (LWC=TWD-DGW) 6.27 FT

1 Csg. Volume (LWC\*C) = 6.27 x 0.163 = 1.02 gals.  
 3 Csg. Volumes = 3 X 1.02 = 3.06 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.06 gals

**Used purge pump to evacuate**

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1300							
<b>pH (s.u.)</b>	19.9							
<b>Specific Cond. (umhos/cm)</b>	348							
<b>Water Temp (°C)</b>	19.9							
<b>Turbidity (*)</b>	113							
<b>Dissolved Oxygen</b>	2.41							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.5				
<b>Time (military)</b>	1624	1633	1641	1648				
<b>pH (s.u.)</b>	5.73	5.64	5.58	5.47				
<b>Specific Cond. (umhos/cm)</b>	112	111	110	109				
<b>Water Temp (°C)</b>	21.0	20.8	20.7	20.6				
<b>Turbidity (*)</b>	141	153	161	163				
<b>Dissolved Oxygen</b>	7.74	7.59	7.43	7.37				

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Date (mm/dd/yy) 3/18/19  
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 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-29**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 64 ft.  
 Depth to GW (DGW) 26.84 ft.

Length of Water Column (LWC=TWD-DGW) 37.16 FT

1 Csg. Volume (LWC\*C) =  $37.16 \times 0.163 = 6.05$  gals.  
 3 Csg. Volumes =  $3 \times 6.05 = 18.17$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 18.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	18.25				
<b>Time (military)</b>	1217	1225	1231	1237				
<b>pH (s.u.)</b>	6.43	6.36	6.28	6.19				
<b>Specific Cond. (umhos/cm)</b>	29.1	28.7	27.4	26.8				
<b>Water Temp (°C)</b>	19.3	19.2	19.1	19.0				
<b>Turbidity (*)</b>	21	36	39	40				
<b>Dissolved Oxygen</b>	6.90	6.84	6.73	6.67				

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 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**  
 pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-30**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 59 ft.  
 Depth to GW (DGW) 25.17 ft.

Length of Water Column (LWC=TWD-DGW) 33.83 FT

1 Csg. Volume (LWC\*C) = 33.83 x 0.163 = 5.51 gals.  
 3 Csg. Volumes = 3 X 5.51 = 16.54 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 16.75 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.75				
<b>Time (military)</b>	1736	1743	1751	1758				
<b>pH (s.u.)</b>	5.31	5.26	5.17	5.08				
<b>Specific Cond. (umhos/cm)</b>	163	162	161	160				
<b>Water Temp (°C)</b>	20.9	20.8	20.7	20.6				
<b>Turbidity (*)</b>	37	36	35	34				
<b>Dissolved Oxygen</b>	4.83	4.71	4.65	4.52				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-31</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>57</u> ft.          Depth to GW (DGW) <u>27.07</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>29.93 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>29.93</u> x <u>0.163</u> = <u>4.87</u> gals.          3 Csg. Volumes = 3 X <u>4.87</u> = <u>14.63</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>14.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	14.75				
<b>Time (military)</b>	1108	1115	1122	1129				
<b>pH (s.u.)</b>	5.13	5.21	5.56	5.59				
<b>Specific Cond. (umhos/cm)</b>	69.1	73.2	74.6	75.9				
<b>Water Temp (°C)</b>	18.4	18.3	17.9	17.6				
<b>Turbidity (*)</b>	103	115	126	129				
<b>Dissolved Oxygen</b>	4.91	4.85	4.81	4.82				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-32</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>56</u> ft.          Depth to GW (DGW) <u>21.47</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>34.53 FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>34.53 \times 0.163 = 5.62</math> gals.          3 Csg. Volumes = <math>3 \times 5.62 = 16.88</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>17</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	12	17				
<b>Time (military)</b>	1546	1552	1603	1610				
<b>pH (s.u.)</b>	6.38	6.26	6.15	6.12				
<b>Specific Cond. (umhos/cm)</b>	33.1	32.9	32.4	32.1				
<b>Water Temp (°C)</b>	20.1	20.0	19.9	19.5				
<b>Turbidity (*)</b>	91	103	112	115				
<b>Dissolved Oxygen</b>	6.17	6.05	5.96	5.89				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-33**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 58 ft.  
 Depth to GW (DGW) 27.49 ft.

Length of Water Column (LWC=TWD-DGW) 30.51 FT

1 Csg. Volume (LWC\*C) = 30.51 x 0.163 = 4.97 gals.  
 3 Csg. Volumes = 3 X 4.97 = 14.91 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 15 gals

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15				
<b>Time (military)</b>	1648	1655	1703	1710				
<b>pH (s.u.)</b>	6.58	6.31	6.28	6.26				
<b>Specific Cond. (umhos/cm)</b>	105	112	111	110				
<b>Water Temp (°C)</b>	19.8	19.5	18.9	18.8				
<b>Turbidity (*)</b>	98	102	111	115				
<b>Dissolved Oxygen</b>	2.05	2.15	2.13	2.09				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-34**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 56 ft.  
 Depth to GW (DGW) 20.75 ft.

Length of Water Column (LWC=TWD-DGW) 35.25 FT

1 Csg. Volume (LWC\*C) =  $35.25 \times 0.163 = 5.74$  gals.  
 3 Csg. Volumes =  $3 \times 5.74 = 17.23$  gals. (Std. Purge Volume)

otal Volume of Water Purged Before Sampling 17.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	17.5				
<b>Time (military)</b>	1256	1305	1312	1318				
<b>pH (s.u.)</b>	6.32	6.24	6.16	6.05				
<b>Specific Cond. (umhos/cm)</b>	224	223	222	221				
<b>Water Temp (°C)</b>	19.7	19.5	19.4	19.3				
<b>Turbidity (*)</b>	102	124	127	129				
<b>Dissolved Oxygen</b>	2.31	2.23	2.17	2.09				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-35</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>50</u> ft.          Depth to GW (DGW) <u>29.74</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>20.26 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>20.26</u> x <u>0.163</u> = <u>3.30</u> gals.          3 Csg. Volumes = 3 X <u>3.30</u> = <u>9.90</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>10</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	3.5	6.5	10				
<b>Time (military)</b>	936	942	951	959				
<b>pH (s.u.)</b>	6.49	6.34	6.23	6.21				
<b>Specific Cond. (umhos/cm)</b>	54.2	53.3	52.8	51.6				
<b>Water Temp (°C)</b>	20.1	20.0	19.9	18.9				
<b>Turbidity (*)</b>	89	94	106	110				
<b>Dissolved Oxygen</b>	6.84	6.72	6.64	6.55				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/18/19  
 Field Personnel Cal Funderburk / Billy Morris / Dan Arbegast  
 General Weather Condition Sunny  
 Ambient Air Temperature 63  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-36**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 59 ft.  
 Depth to GW (DGW) 29.41 ft.

Length of Water Column (LWC=TWD-DGW) 29.59 FT

1 Csg. Volume (LWC\*C) = 29.59 x 0.163 = 4.82 gals.  
 3 Csg. Volumes = 3 X 4.82 = 14.46 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 14.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	14.5				
<b>Time (military)</b>	1048	1054	1058	1106				
<b>pH (s.u.)</b>	5.72	5.66	5.53	5.45				
<b>Specific Cond. (umhos/cm)</b>	150	148	147	146				
<b>Water Temp (°C)</b>	19.3	19.2	19.1	19.0				
<b>Turbidity (*)</b>	41	71	80	83				
<b>Dissolved Oxygen</b>	5.47	5.32	5.24	5.27				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-37</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>64</u> ft.          Depth to GW (DGW) <u>37.42</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>26.58 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>26.58</u> x <u>0.163</u> = <u>4.33</u> gals.          3 Csg. Volumes = 3 X <u>4.33</u> = <u>12.99</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>13</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	4	8	13				
<b>Time (military)</b>	836	841	849	902				
<b>pH (s.u.)</b>	7.40	7.33	7.26	7.18				
<b>Specific Cond. (umhos/cm)</b>	61.9	60.8	59.3	58.7				
<b>Water Temp (°C)</b>	19.4	19.3	19.2	19.1				
<b>Turbidity (*)</b>	75	74	72	71				
<b>Dissolved Oxygen</b>	9.37	9.23	9.16	9.07				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>                  Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>                  General Weather Condition <u>Sunny</u>                  Ambient Air Temperature <u>63</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <p>Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____</p>	<p><b>Well # <u>MW-38</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft.                  Depth to GW (DGW) <u>26.93</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>13.07 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>13.07</u> x <u>0.163</u> = <u>2.13</u> gals.                  3 Csg. Volumes = 3 X <u>2.13</u> = <u>6.39</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>6.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
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	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2.5	5	6.5				
<b>Time (military)</b>	804	808	812	817				
<b>pH (s.u.)</b>	6.24	6.16	6.09	5.99				
<b>Specific Cond. (umhos/cm)</b>	123	122	121	120				
<b>Water Temp (°C)</b>	19.1	19.0	18.9	18.8				
<b>Turbidity (*)</b>	117	118	123	126				
<b>Dissolved Oxygen</b>	5.63	5.52	5.48	5.39				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-39</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>80</u> ft.          Depth to GW (DGW) <u>27.64</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>52.36</u> FT</p> <p>1 Csg. Volume (LWC*C) = <math>52.36 \times 0.163 = 8.53</math> gals.          3 Csg. Volumes = 3 X <u>8.53</u> = <u>25.60</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>26</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26				
<b>Time (military)</b>	815	822	831	839				
<b>pH (s.u.)</b>	6.24	6.16	6.08	5.99				
<b>Specific Cond. (umhos/cm)</b>	112	111	110	109				
<b>Water Temp (°C)</b>	19.1	19.0	18.9	18.8				
<b>Turbidity (*)</b>	18	18	18	18				
<b>Dissolved Oxygen</b>	3.21	3.17	3.06	2.94				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>                  Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>                  General Weather Condition <u>Sunny</u>                  Ambient Air Temperature <u>63</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u>                  pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-1</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.                  Depth to GW (DGW) <u>18.33</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>56.67 FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>56.67 \times 0.163 = 9.23</math> gals.                  3 Csg. Volumes = <math>3 \times 9.23 = 27.71</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>27.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	27.75				
<b>Time (military)</b>	1221	1231	1239	1247				
<b>pH (s.u.)</b>	6.48	6.33	6.28	6.25				
<b>Specific Cond. (umhos/cm)</b>	133	132	131	130				
<b>Water Temp (°C)</b>	20.0	19.9	19.8	19.5				
<b>Turbidity (*)</b>	9.8	7.9	6.4	6.1				
<b>Dissolved Oxygen</b>	4.62	4.51	4.43	4.37				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>22.73</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>52.27 FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>52.27 \times 0.163 = 8.52</math> gals.          3 Csg. Volumes = 3 X <u>8.52</u> = <u>25.56</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>26</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26				
<b>Time (military)</b>	1638	1647	1658	1709				
<b>pH (s.u.)</b>	6.09	5.89	5.76	5.63				
<b>Specific Cond. (umhos/cm)</b>	198	197	196	195				
<b>Water Temp (°C)</b>	21.3	21.2	21.1	21.0				
<b>Turbidity (*)</b>	4.9	3.7	3.1	2.8				
<b>Dissolved Oxygen</b>	6.29	6.13	6.04	5.95				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>30.76</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>44.24 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>44.24</u> x <u>0.163</u> = <u>7.21</u> gals.          3 Csg. Volumes = 3 X <u>7.21</u> = <u>21.63</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>21.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	7.5	16	21.75				
<b>Time (military)</b>	1431	1440	1449	1455				
<b>pH (s.u.)</b>	6.43	6.37	6.24	6.26				
<b>Specific Cond. (umhos/cm)</b>	63.2	62.4	61.7	60.9				
<b>Water Temp (°C)</b>	18.9	17.3	16.5	15.4				
<b>Turbidity (*)</b>	7.7	5.9	4.6	3.9				
<b>Dissolved Oxygen</b>	2.39	2.24	2.17	2.04				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>120</u> ft.          Depth to GW (DGW) <u>27.31</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>92.69 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>92.69 x 0.163 = 15.10</u> gals.          3 Csg. Volumes = 3 X <u>15.10</u> = <u>45.32</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>45.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	15	30	45.5				
<b>Time (military)</b>	640	651	704	713				
<b>pH (s.u.)</b>	6.67	6.53	6.49	6.38				
<b>Specific Cond. (umhos/cm)</b>	134	133	132	131				
<b>Water Temp (°C)</b>	18.6	18.5	18.4	18.4				
<b>Turbidity (*)</b>	8	7	6	5				
<b>Dissolved Oxygen</b>	10.32	10.24	10.24	10.18				

**South Carolina Department of Health and Environmental Control  
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**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Relinquished by</td> <td style="width:25%;">Date/Time</td> <td style="width:25%;">Received by</td> <td style="width:25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-5</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>21.43</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>128.57FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>\frac{128.57 \times 0.163}{1} = 20.95</math> gals.          3 Csg. Volumes = 3 X <u>20.95</u> = <u>62.87</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>63</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	41	63				
<b>Time (military)</b>	1517	1531	1545	1603				
<b>pH (s.u.)</b>	6.06	5.92	5.83	5.72				
<b>Specific Cond. (umhos/cm)</b>	207	206	205	204				
<b>Water Temp (°C)</b>	21.0	20.8	20.7	20.6				
<b>Turbidity (*)</b>	5.8	4.9	4.1	3.7				
<b>Dissolved Oxygen</b>	6.36	6.24	6.17	6.07				

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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbogast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-6</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>28.33</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>121.67FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>121.67 \times 0.163 = 19.83</math> gals.          3 Csg. Volumes = 3 X <u>19.83</u> = <u>59.49</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>59.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	59.6				
<b>Time (military)</b>	1318	1323	1336	1350				
<b>pH (s.u.)</b>	6.33	6.27	6.19	6.17				
<b>Specific Cond. (umhos/cm)</b>	198	197	196	195				
<b>Water Temp (°C)</b>	21.2	21.1	21.0	20.9				
<b>Turbidity (*)</b>	9.5	9.2	8.4	7.3				
<b>Dissolved Oxygen</b>	9.31	9.22	9.16	9.14				

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**Field Data Information Sheet for Ground Water Sampling/Development**

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	64.5				
<b>Time (military)</b>	1102	1113	1126	1139				
<b>pH (s.u.)</b>	6.13	6.04	5.99	5.97				
<b>Specific Cond. (umhos/cm)</b>	113	112	111	110				
<b>Water Temp (°C)</b>	21.6	21.8	21.4	21.3				
<b>Turbidity (*)</b>	9.4	8.2	7.7	6.5				
<b>Dissolved Oxygen</b>	4.39	4.28	4.17	4.02				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	18	36	55.25				
<b>Time (military)</b>	947	1003	1015	1028				
<b>pH (s.u.)</b>	6.01	5.93	5.87	5.75				
<b>Specific Cond. (umhos/cm)</b>	138	137	136	135				
<b>Water Temp (°C)</b>	19.2	19.1	19.0	18.9				
<b>Turbidity (*)</b>	11	10	9.3	8.5				
<b>Dissolved Oxygen</b>	10.47	10.33	10.27	10.19				



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Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-9</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>36.89</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>113.11FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>113.11 \text{ ft} \times 0.163 = 18.43</math> gals.          3 Csg. Volumes = <math>3 \times 18.43 = 55.31</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>55.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	19	37	55.5				
<b>Time (military)</b>	847	858	910	923				
<b>pH (s.u.)</b>	7.17	7.09	6.93	6.87				
<b>Specific Cond. (umhos/cm)</b>	103	102	101	100				
<b>Water Temp (°C)</b>	19.8	19.7	19.6	19.5				
<b>Turbidity (*)</b>	9.4	8.6	7.3	6.5				
<b>Dissolved Oxygen</b>	5.90	5.82	5.73	5.66				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbogast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-10</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>28.74</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>121.26 FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>\frac{121.26 \times 0.163}{1} = 19.76</math> gals.          3 Csg. Volumes = 3 X <u>19.76</u> = <u>59.29</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>59.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	59.5				
<b>Time (military)</b>	736	752	804	819				
<b>pH (s.u.)</b>	6.37	6.24	6.18	6.09				
<b>Specific Cond. (umhos/cm)</b>	143	142	141	140				
<b>Water Temp (°C)</b>	21.7	20.9	19.8	19.5				
<b>Turbidity (*)</b>	7.67	6.53	6.49	6.36				
<b>Dissolved Oxygen</b>	1.90	1.86	1.73	1.69				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-1</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.18</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.82 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>  </u> x <u>0.652</u> = <u>  </u> gals.          3 Csg. Volumes = 3 X <u>  </u> = <u>  </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2010							
<b>pH (s.u.)</b>	6.39							
<b>Specific Cond. (umhos/cm)</b>	217							
<b>Water Temp (°C)</b>	20.8							
<b>Turbidity (*)</b>	153							
<b>Dissolved Oxygen</b>	2.13							

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>20.76</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.24 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>  </u> x <u>0.652</u> = <u>  </u> gals.          3 Csg. Volumes = 3 X <u>  </u> = <u>  </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	2033							
<b>pH (s.u.)</b>	6.43							
<b>Specific Cond. (umhos/cm)</b>	334							
<b>Water Temp (°C)</b>	21.4							
<b>Turbidity (*)</b>	121							
<b>Dissolved Oxygen</b>	4.13							

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>3/18/19</u>          Field Personnel <u>Cal Funderburk / Billy Morris / Dan Arbegast</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>63</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>20.91</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.09 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>    </u> x <u>0.652</u> = <u>    </u> gals.          3 Csg. Volumes = 3 X <u>    </u> = <u>    </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>    </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	205							
<b>pH (s.u.)</b>	6.43							
<b>Specific Cond. (umhos/cm)</b>	317							
<b>Water Temp (°C)</b>	20.8							
<b>Turbidity (*)</b>	129							
<b>Dissolved Oxygen</b>	2.21							

**APPENDIX C**  
**DISPOSAL MANIFESTS**

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		
3. Generator's Name and Mailing Address <i>Karawan Environmental 4276 Dye Rd Eugene, SC 29112</i>								
4. Generator's Phone (803) 327-4464		6. US EPA ID Number		A. State Transporter's ID				
5. Transporter 1 Company Name <i>Karawan Environmental</i>				B. Transporter 1 Phone				
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID				
				D. Transporter 2 Phone				
9. Designated Facility Name and Site Address <i>Har Mar 221 Dalton Dr Cherokee, NC</i>		10. US EPA ID Number		E. State Facility's ID				
				F. Facility's Phone				
11. WASTE DESCRIPTION <i>Punch Water UST Site</i>		12. Containers		13. Total Quantity		14. Unit Wt./Vol.		
		No.	Type					
		<i>Dot Pierce, Peach Tree St, Hickory Grove</i>		1	Dm	18	Gm	
		<i>Bens Country Store, Limesia Rd, York, SC</i>		1	Dm	46	Gm	
		<i>Marys, Fintzen Rd, Rock Hill, SC</i>		1	Dm	10	Gm	
<i>One Account, Highway 9, Richburg, SC</i>		2	Dm	83	Gm			
15. Special Handling Instructions and Additional Information				16. Handling Codes for Wastes Listed Above				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.								
Printed/Typed Name <i>Billy Martin</i>		Signature <i>Billy Martin</i>		Date Month Day Year <i>3   18   19</i>				
17. Transporter 1 Acknowledgment of Receipt of Materials				Date				
Printed/Typed Name		Signature		Month Day Year				
18. Transporter 2 Acknowledgment of Receipt of Materials				Date				
Printed/Typed Name		Signature		Month Day Year				
19. Discrepancy Indication Space								
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.								
Printed/Typed Name <i>Mike Hinds</i>		Signature <i>Mike Hinds</i>		Date Month Day Year <i>3   18   19</i>				

NON-HAZARDOUS WASTE



**APPENDIX D**  
**QAPP CHECKLIST**



QAPP Contractor Checklist One Accord Ministries Site ID 02131

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number	X		
3	Is name, address, & phone number of current property owner	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been	X		
16	Has the monitoring well installation and development dates been	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2			X
31	Have recommendations for further action been provided and	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk			X
37	Has the topographic map been provided with all required elements? (Figure	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements?	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?	X		
47	Have the soil boring/field screening logs been provided?	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided?	X		
52	Has all fate and transport modeling been provided? (Appendix I)	X		
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



Healthy People. Healthy Communities.

**CERTIFIED MAIL**  
**9214 8969 0099 9790 1414 9949 44**

**JUN 11 2019**



ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729

Re: Corrective Action Options  
Once Accord Ministries, 3570 Lancaster Hwy., Richburg, SC  
UST Permit #02131  
Release reported March 23, 2009  
Monitoring Report received April 16, 2019  
Chester County

To Whom it May Concern:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) reviewed the above-referenced report submitted by Katawba Environmental, Inc. on your behalf. This report, combined with site history, indicates active corrective action is necessary at the site to mitigate petroleum impact and ensure that there is no detrimental exposure to human health or the environment. While you, as the owner/operator, are ultimately responsible for cleanup actions taken in response to this release, funds from the State Underground Environmental Response Bank (SUPERB) Account and SUPERB Financial Responsibility Fund (SFRF) shall provide combined coverage for site rehabilitation and third party claims not to exceed one million dollars.

The SUPERB Site Rehabilitation and Fund Access Regulations R.61-98 require the UST owner/operator to develop and implement a reasonable, cost-effective corrective action to be performed by a DHEC certified site rehabilitation contractor. The selected technology must reduce the petroleum chemicals of concern concentrations to site-specific target levels that are determined by DHEC. As the owner/operator for the above-referenced release, you may choose one of two options discussed below to proceed toward meeting this requirement.

**Option 1: Owner/Operator Lead**

You may continue to use your existing DHEC Certified Site Rehabilitation Contractor of choice or select another contractor from the list found at <http://www.scdhec.gov/Environment/LW/UST/VendorsRecyclersContractors/CertifiedContractors/> to perform the corrective action. To assist you in determining the clean-up technology, time frame, clean-up levels, and associated costs, DHEC will develop and

provide you copies of a technical specifications package to send to DHEC certified contractors you may wish to utilize for this corrective action.

The maximum amount of allowable costs for the active correction action work that may be reimbursed by the SUPERB fund will be determined through a solicitation process. DHEC will post the technical specifications package for the active corrective action on the DHEC website

(<http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentClean-up/CorrectiveActionSection/>) and will solicit bids from DHEC certified contractors to conduct the work by publishing a notice in the South Carolina Business Opportunities, a bi-weekly state government publication. This process is intended to ensure an adequate solicitation response is obtained so that a fair and competitive price for the work can be established. The lowest corrective action cost submitted in response to the solicitation will determine the reasonable or SUPERB-allowable cost. Except for the limitations specified in the solicitation, the reasonable or SUPERB-allowable cost is the maximum amount the SUPERB Account will pay for this active corrective action.

You may consider entering a written contract with your selected contractor following completion of the solicitation process to address any costs more than the reasonable or SUPERB-allowable costs and not approved by DHEC for reimbursement from the SUPERB Account. DHEC would not be a party to the contract; however, we will monitor and ensure you are making progress with corrective action activities. If the selected contractor is not able to complete the required activities, you will be required to find another certified contractor to complete the required activities.

**To utilize the owner/operator lead option, please sign and return the enclosed Owner/Operator Lead Form for Site Rehabilitation within 15 days of the date of this letter.**

### **Option 2: State Lead**

If you choose the state lead option, DHEC will procure a DHEC Certified Site Rehabilitation Contractor to perform active corrective action. The contractor for this work will enter into a contract with DHEC and will be subject to the terms and conditions of the bid document for which he or she was awarded the work. You would not be a party to the contract.

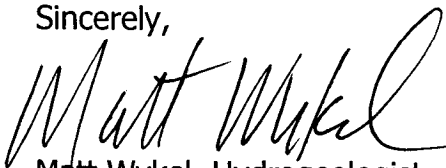
The awarded contractor will only be authorized to perform the active corrective action as defined by the bid document. Any work to be completed prior to the scope of work as defined by the bid document will be performed by your current contractor. Any work to be performed after the completion of this active corrective action may be performed by your current contractor or by another DHEC certified contractor of your choosing.

As long as you do not interfere with or prohibit the work at your site, you will not be responsible for this active corrective action in the event the contractor does not perform appropriately or does not make satisfactory progress towards achieving the established corrective action goals.

**To utilize the state lead option, please sign and return the enclosed State Lead Form for Site Rehabilitation within 15 days of the date of this letter.**

We appreciate your prompt attention to this important matter. Please reference UST Permit #02131 on all correspondence or inquiries regarding this project. If you have any questions, please contact me at (803) 898-7705 or [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,



Matt Wykel, Hydrogeologist  
Corrective Action & Field Support  
UST Management Division  
Bureau of Land and Waste Management

enc: Active Corrective Action Options form  
Permission/Right-of-Entry forms

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (w/enc)  
Technical File (w/enc)



## State Lead Option Permission Form for Active Corrective Action

**Only complete this form if:** You are the legal owner of the existing or former underground storage tanks, **OR** are the legal owner's designated authorized representative.

I certify that I am the legal owner of the existing or former underground storage tanks located identified below and for the release reported the date listed below or serve as the authorized representative for the UST owner. I grant permission to the South Carolina Department of Health and Environmental Control (DHEC) to post the technical specifications package for the active corrective action on the DHEC website and solicit bids from DHEC certified contractors to conduct the work by publishing a notice in the South Carolina Business Opportunities and to select a corrective action contractor, on my behalf, after bid solicitation results are received. The contractor will be designated as my contractor for only the required environmental site rehabilitation activities. I understand that DHEC or its contractor will be responsible for obtaining right-of-entry from the property owner and notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report.

<b>UST Permit #</b>	02131	<b>Release Report Date:</b>	March 23, 2009
<b>Facility Name:</b>	One Accord Ministries		
<b>Facility Address:</b>	3570 Lancaster Hwy., Richburg, SC 29729		
<b>Facility Phone Number:</b>			
<b>Is facility within city limits? (check yes/no)</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<b>Name of nearest intersecting street/road/highway:</b>			
<b>Does public water/sewer utility service this facility?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
*If no, please provide a contact name/number that can assist in the location of private water and septic tank lines:			
<b>Name:</b>	<b>Phone Number:</b>		
<b>Were USTs previously removed from the ground at this facility?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
*If yes, please provide the name/contact number of a person that can assist in the location of the former UST(s):			
<b>Name:</b>	<b>Phone Number:</b>		
<b>Is the facility currently leased to someone?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
*If yes, notify them of the pending work scope, and please provide their name/contact number:			
<b>Name:</b>	<b>Phone Number:</b>		

**\*Please note that if vehicles or other mobile structures are parked over the location of the existing or former USTs, they should be moved prior to DHEC's contractor mobilizes to the facility.**

<b>Name of UST owner/former owner or authorized representative (Print):</b>			
<b>Signature of UST owner/former owner or authorized representative:</b>		<b>Date</b>	
<b>Affiliation (if applicable)</b>			
<b>Signature of Witness</b>		<b>Date</b>	

### Contact Info

<b>Phone Numbers:</b>	<b>Home:</b>	<b>Cell:</b>
<b>Email Address:</b>		



## Owner/Operator Lead Form for Active Corrective Action

**Only complete this form if:** You are the legal owner of the existing or former underground storage tanks, **OR** are the legal owner's designated authorized representative.

I certify that I am the legal owner of record for the underground storage tanks identified below for the release date reported below or serve as the authorized representative for the owner. I wish for DHEC to post the technical specifications package for the active corrective action on the DHEC website and solicit bids from DHEC certified contractors to conduct the work by publishing a notice in the South Carolina Business Opportunities and to select my own corrective action contractor after bid solicitation results are received. **I understand the lowest corrective action cost submitted in response to the solicitation will determine the reasonable or SUPERB-allowable cost. I understand if the selected contractor is not able to complete the required activities, I will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable or SUPERB-allowable cost is the maximum amount the SUPERB Account will pay for the active corrective action.**

UST Permit #	02131	Release Report Date:	March 23, 2009
Facility Name:	One Accord Ministries		
Facility Address:	3570 Lancaster Hwy., Richburg, SC 29729		
Facility Phone Number:			

Name of UST owner/former owner or authorized representative (Print):		
Signature of UST owner/former owner or authorized representative:		Date
Affiliation (if applicable)		
Signature of Witness		Date

### Contact Info

Phone Numbers:	Home:	Cell:
Email Address:		

Domenico Model			Transport Parameters			Simulation Time			
UST # 02131 Site Name: One Accord Modeler: Matt Wykel Date: 4.22.2019			<i>shallow MTOE</i> x <sub>max</sub> 600 ft y <sub>max</sub> 258 ft z 0 ft Source Width 70 ft Source Thickness 20 ft			t <sub>sim</sub> 21 yrs			
Groundwater Flow Parameters			Plume Length			Aquifer Characteristics			
K 43.8 ft/yr dh/dx 60.53 θ 0.25 dec. % v <sub>x</sub> 10 ft/yr			561 ft α <sub>x</sub> 18.93264 ft α <sub>y</sub> 1.893264 ft α <sub>z</sub> 1.00E-99 ft			ρ <sub>d</sub> 1.7 kg/L f <sub>oc</sub> 0.0002			
Source Area CoC Data			Retarded Velocity (ft/yr)			Simulation Points for Breakthrough Curves			
CoC	C <sub>source</sub> (mg/L)	K <sub>oc</sub> (L/kg)	CoC	R	v <sub>R</sub>	x	ft	x	ft
Benzene		81	Benzene	1.110	9.01				
Toluene		133	Toluene	1.181	8.47				
Ethylbenzene		176	Ethylbenzene	1.239	8.07				
Xylenes		639	Xylenes	1.869	5.35				
Naphthalene		1543	Naphthalene	3.098	3.23				
MtBE	5.7	11	MtBE	1.015	9.85				
EDB		28	EDB	1.038	9.63				
1,2-DCA		17.5	1,2-DCA	1.024	9.77				

$$C(x, y, z, t) = \left(\frac{C_0}{8}\right) \exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1 - \sqrt{1 + \frac{4\lambda\alpha_x}{v}}\right)\right] \operatorname{erfc}\left[\frac{x - vt\sqrt{1 + \frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right] \left\{ \operatorname{erf}\left[\frac{y + \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] - \operatorname{erf}\left[\frac{y - \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] \right\} \left\{ \operatorname{erf}\left[\frac{z + Z}{2\sqrt{\alpha_z x}}\right] - \operatorname{erf}\left[\frac{z - Z}{2\sqrt{\alpha_z x}}\right] \right\}$$



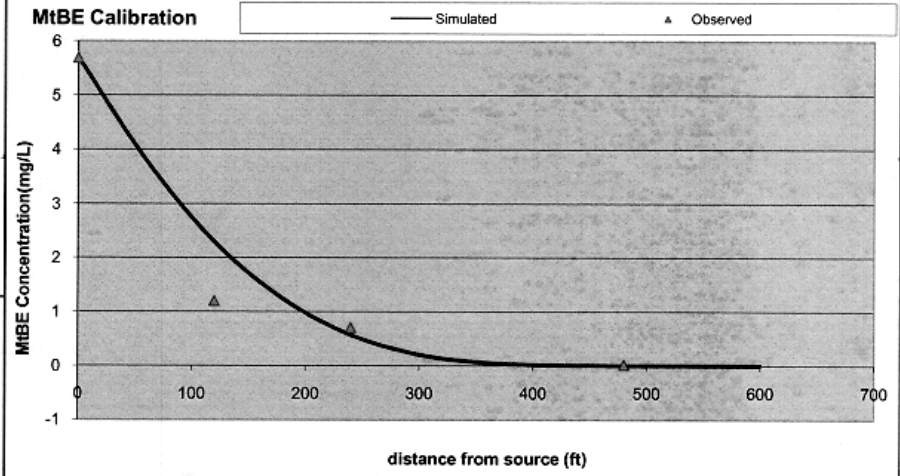
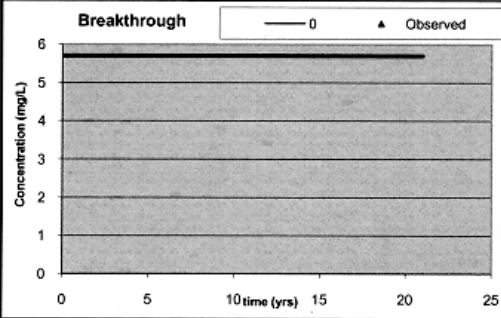
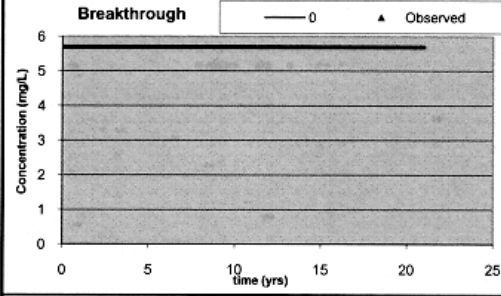

**MtBE Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data				
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)
0	5.7	5.7	0		5.7		5.7
60		3.801	2.1		5.700		5.700
120	1.2	2.292	4.2		5.700		5.700
180		1.245	6.3		5.700		5.700
240	0.71	0.569	8.4		5.700		5.700
300		0.201	10.5		5.700		5.700
360		0.052	12.6		5.700		5.700
420		0.009	14.7		5.700		5.700
480	0.02	0.001	16.8		5.700		5.700
540		0.000	18.9		5.700		5.700
600		0.000	21		5.700		5.700

Site ID 02131  
 Site Name One Accord

Model Calibration Parameters

t <sub>1/2</sub>	10	yrs	λ	0.0693	yr <sup>-1</sup>
v <sub>x</sub>	10	ft/yr			
R	1.000				
v <sub>R</sub>	10.000	ft/yr	C <sub>source</sub>	5.7	mg/L
L <sub>p</sub>	561	ft	t <sub>sim</sub>	21	yrs
α <sub>x</sub>	18.93264	ft			
α <sub>y</sub>	1.893264	ft			
α <sub>z</sub>	1E-99	ft			



Source	60	120	180	240	300	360	420	480	540	600
258	0	0	0	5.2336E-14	5.2885E-12	6.099E-11	1.69E-10	1.63E-10	6.72E-11	1.33E-11
129	8.686E-10	1.3183E-05	0.00024097	0.00068567	0.00075971	0.0004307	0.000139	2.65E-05	3.08E-06	2.21E-07
0	3.80051138	2.29169733	1.24454285	0.56851971	0.20147355	0.0519687	0.009344	0.001139	9.24E-05	4.94E-06
129	8.686E-10	1.3183E-05	0.00024097	0.00068567	0.00075971	0.0004307	0.000139	2.65E-05	3.08E-06	2.21E-07
258	0	0	0	5.2336E-14	5.2885E-12	6.099E-11	1.69E-10	1.63E-10	6.72E-11	1.33E-11

SSTLs

t 1000 yrs

UST Permit # 02131  
Site Name: One Accord

SSTLs in mg/L		RBSLs (mg/L):			0.040						
MW #	x (ft)	y (ft)	z (ft)					MtBE SSTL			
MW-1R	367	0	0					0.597			
RW-1	367	0	0					0.597			
RW-2	354	0	0					0.544			
RW-3	348	0	0					0.521			
MW-2	383	0	0					0.670			
DWW_2	0.01	0	0					0.040			
MW-16	419	0	0					0.867			
MW-20	377	0	0					0.642			
MW-33,26	258	0	0					0.269			
MW-31,24	135	0	0					0.105			
MW-22	245	0	0					0.244			
MW-30	174	0	0					0.142			
DW-3	133.3	0	0					0.104			
MW-39	160	0	0					0.128			
DW-1	353.3	0	0					0.541			
				$\lambda$ (yr <sup>-1</sup> ):				0.069			
				R:				1.000			
				Pure Substance Solubility:				5110			
				Effective Solubility:				173			

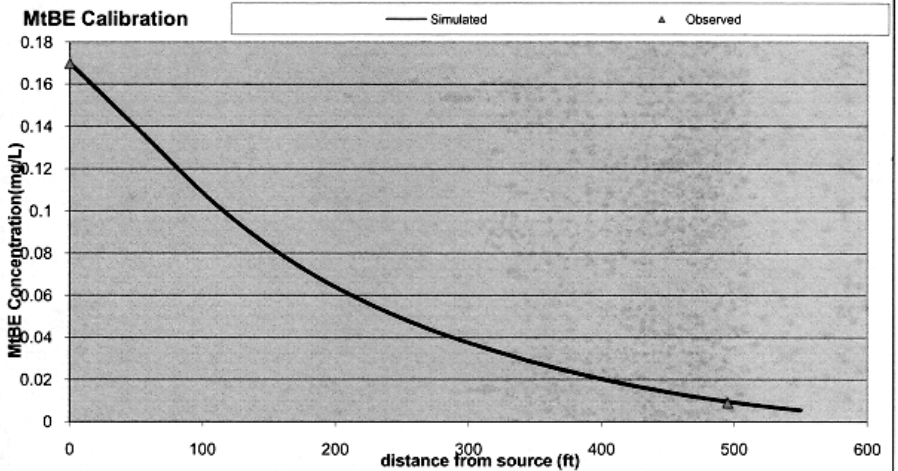
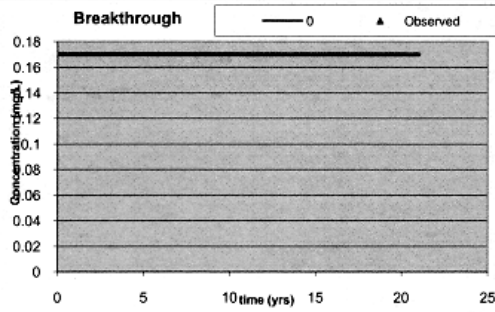
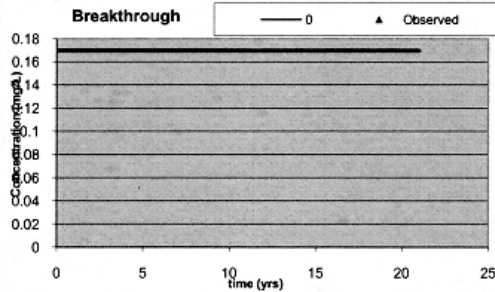
Domenico Model			Transport Parameters			Simulation Time		
UST # 02131 Site Name: One Accord Modeler: Matt Wykel Date: 4.22.2019			<i>Deep MTBE</i> X <sub>max</sub> 550 ft Y <sub>max</sub> 258 ft z 0 ft Source Width 70 ft Source Thickness 20 ft Plume Length 600 ft α <sub>x</sub> 19.53555 ft α <sub>y</sub> 1.953555 ft α <sub>z</sub> 1.00E-99 ft			t <sub>sim</sub> 21 yrs		
Groundwater Flow Parameters						Aquifer Characteristics		
K 0.249 ft/yr dh/dx 0.0097 θ 0.25 dec. % v <sub>x</sub> 22 ft/yr						ρ <sub>d</sub> 1.7 kg/L f <sub>oc</sub> 0.0002		
Source Area CoC Data			Retarded Velocity (ft/yr)			Simulation Points for Breakthrough Curves		
CoC	C <sub>source</sub> (mg/L)	K <sub>oc</sub> (L/kg)	CoC	R	v <sub>R</sub>	x		ft
Benzene		81	Benzene	1.110	19.82			
Toluene		133	Toluene	1.181	18.63			
Ethylbenzene		176	Ethylbenzene	1.239	17.75			
Xylenes		639	Xylenes	1.869	11.77			
Naphthalene		1543	Naphthalene	3.098	7.10			
MTBE	0.17	11	MTBE	1.015	21.68			
EDB		28	EDB	1.038	21.19			
1,2-DCA		17.5	1,2-DCA	1.024	21.49			
						x		ft
						y		ft
						z		ft

$$C(x, y, z, t) = \left(\frac{C_0}{8}\right) \exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1 - \sqrt{1 + \frac{4\lambda\alpha_x}{v}}\right)\right] \operatorname{erfc}\left[\frac{x - vt\sqrt{1 + \frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right] \left\{ \operatorname{erf}\left[\frac{y + \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] - \operatorname{erf}\left[\frac{y - \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] \right\} \left\{ \operatorname{erf}\left[\frac{z + Z}{2\sqrt{\alpha_z x}}\right] - \operatorname{erf}\left[\frac{z - Z}{2\sqrt{\alpha_z x}}\right] \right\}$$

**MtBE Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data					Site ID 02131 Site Name One Accord	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Model Calibration Parameters	
0	0.17	0.17	0		0.17		0.17	t <sub>1/2</sub>	8 yrs
55		0.137	2.1		0.170		0.170	v <sub>x</sub>	22 ft/yr
110		0.103	4.2		0.170		0.170	R	1.000
165		0.077	6.3		0.170		0.170	v <sub>R</sub>	22.000 ft/yr
220		0.058	8.4		0.170		0.170	L <sub>p</sub>	600 ft
275		0.043	10.5		0.170		0.170	α <sub>x</sub>	19.53555 ft
330		0.032	12.6		0.170		0.170	α <sub>y</sub>	1.953555 ft
385		0.022	14.7		0.170		0.170	α <sub>z</sub>	1E-99 ft
440		0.015	16.8		0.170		0.170	C <sub>source</sub>	0.17 mg/L
495	0.009	0.009	18.9		0.170		0.170	t <sub>sim</sub>	21 yrs
550		0.005	21		0.170		0.170	λ	0.08663 yr <sup>-1</sup>



Source	55	110	165	220	275	330	385	440	495	550
258	0	0	0	1.0566E-15	3.0736E-13	1.243E-11	1.58E-10	9.45E-10	3.27E-09	7.39E-09
129	9.948E-12	3.2775E-07	9.8759E-06	5.0396E-05	0.00012415	0.000208	0.000272	0.000293	0.000267	0.000207
0	0.13651295	0.10302262	0.07687613	0.05750838	0.04290587	0.0315282	0.022421	0.015117	0.009465	0.005401
129	9.948E-12	3.2775E-07	9.8759E-06	5.0396E-05	0.00012415	0.000208	0.000272	0.000293	0.000267	0.000207
258	0	0	0	1.0566E-15	3.0736E-13	1.243E-11	1.58E-10	9.45E-10	3.27E-09	7.39E-09

SSTLs

t 1000 yrs

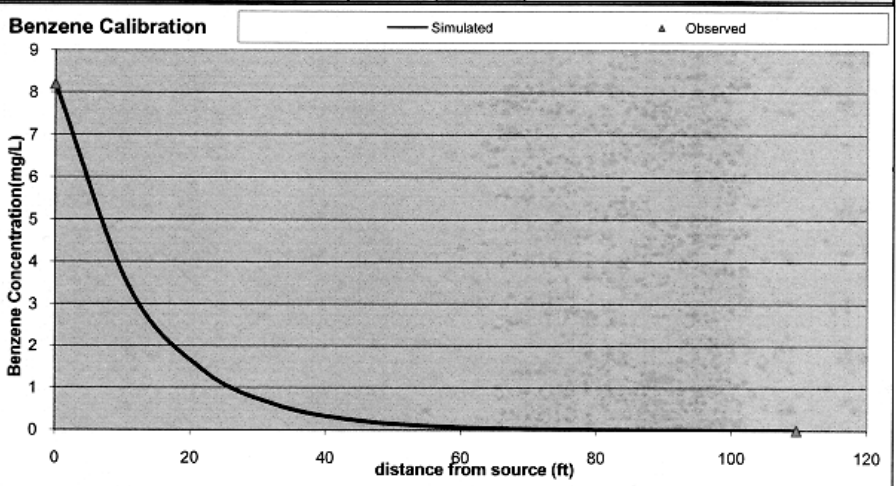
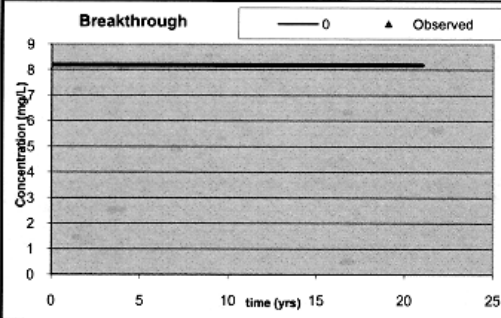
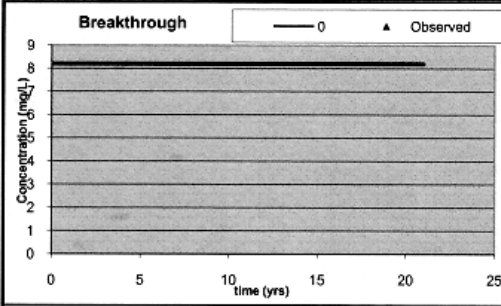
UST Permit # 02131

Site Name: One Accord

SSTLs in mg/L		RBSLs (mg/L):			0.040						
MW #	x (ft)	y (ft)	z (ft)					MIBE SSTL			
DW-4	133.3		0					0.075			
DW-5	380	0	0					0.254			
DW-6	273.3	0	0					0.153			
DW-7	340	0	0					0.210			
DW-8	233.3	0	0					0.125			
DW-9	80	0	0					0.056			
DW-10	153.3	0	0					0.083			
MW-39	160	0	0					0.086			
				$\lambda$ (yr <sup>-1</sup> ):				0.087			
				R:				1.000			
				Pure Substance Solubility:				5110			
				Effective Solubility:				173			

<b>Domenico Model</b>																																																																						
UST # 02131 Site Name: One Accord Modeler: Matt Wykel Date: 4.22.2019		<b>Transport Parameters</b>			<b>Simulation Time</b>																																																																	
		Shallow BTEX			t <sub>sim</sub> <input type="text" value="21"/> yrs																																																																	
		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>x<sub>max</sub></td><td><input type="text" value="109.6"/></td><td>ft</td></tr> <tr><td>y<sub>max</sub></td><td><input type="text" value="100"/></td><td>ft</td></tr> <tr><td>z</td><td><input type="text" value="0"/></td><td>ft</td></tr> <tr><td>Source Width</td><td><input type="text" value="70"/></td><td>ft</td></tr> <tr><td>Source Thickness</td><td><input type="text" value="20"/></td><td>ft</td></tr> </table>			x <sub>max</sub>	<input type="text" value="109.6"/>	ft	y <sub>max</sub>	<input type="text" value="100"/>	ft	z	<input type="text" value="0"/>	ft	Source Width	<input type="text" value="70"/>	ft	Source Thickness	<input type="text" value="20"/>	ft	<b>Aquifer Characteristics</b>																																																		
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<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>CoC</th> <th>C<sub>source</sub> (mg/L)</th> <th>K<sub>oc</sub> (L/kg)</th> </tr> </thead> <tbody> <tr><td>Benzene</td><td>8.2</td><td>81</td></tr> <tr><td>Toluene</td><td>29</td><td>133</td></tr> <tr><td>Ethylbenzene</td><td>2</td><td>176</td></tr> <tr><td>Xylenes</td><td>13</td><td>639</td></tr> <tr><td>Naphthalene</td><td>0.57</td><td>1543</td></tr> <tr><td>MtBE</td><td>4.8</td><td>11</td></tr> <tr><td>EDB</td><td></td><td>28</td></tr> <tr><td>1,2-DCA</td><td></td><td>17.5</td></tr> </tbody> </table>			CoC	C <sub>source</sub> (mg/L)	K <sub>oc</sub> (L/kg)	Benzene	8.2	81	Toluene	29	133	Ethylbenzene	2	176	Xylenes	13	639	Naphthalene	0.57	1543	MtBE	4.8	11	EDB		28	1,2-DCA		17.5	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>CoC</th> <th>R</th> <th>v<sub>R</sub></th> </tr> </thead> <tbody> <tr><td>Benzene</td><td>1.110</td><td>9.01</td></tr> <tr><td>Toluene</td><td>1.181</td><td>8.47</td></tr> <tr><td>Ethylbenzene</td><td>1.239</td><td>8.07</td></tr> <tr><td>Xylenes</td><td>1.869</td><td>5.35</td></tr> <tr><td>Naphthalene</td><td>3.098</td><td>3.23</td></tr> <tr><td>MtBE</td><td>1.015</td><td>9.85</td></tr> <tr><td>EDB</td><td>1.038</td><td>9.63</td></tr> <tr><td>1,2-DCA</td><td>1.024</td><td>9.77</td></tr> </tbody> </table>			CoC	R	v <sub>R</sub>	Benzene	1.110	9.01	Toluene	1.181	8.47	Ethylbenzene	1.239	8.07	Xylenes	1.869	5.35	Naphthalene	3.098	3.23	MtBE	1.015	9.85	EDB	1.038	9.63	1,2-DCA	1.024	9.77	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>x</td><td><input type="text"/></td><td>ft</td></tr> <tr><td>y</td><td><input type="text"/></td><td>ft</td></tr> <tr><td>z</td><td><input type="text"/></td><td>ft</td></tr> </table>		x	<input type="text"/>	ft	y	<input type="text"/>	ft	z	<input type="text"/>	ft
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$C(x, y, z, t) = \left(\frac{C_0}{8}\right) \exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1 - \sqrt{1 + \frac{4\lambda\alpha_x}{v}}\right)\right] \operatorname{erfc}\left[\frac{x - vt\sqrt{1 + \frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right] \left\{ \operatorname{erf}\left[\frac{y + \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] - \operatorname{erf}\left[\frac{y - \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] \right\} \left\{ \operatorname{erf}\left[\frac{z + Z}{2\sqrt{\alpha_z x}}\right] - \operatorname{erf}\left[\frac{z - Z}{2\sqrt{\alpha_z x}}\right] \right\}$																																																																						

Benzene Calibration							
Spatial Calibration Data (centerline)			Temporal Calibration Data			Site ID	02131
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name One Accord	
0	8.2	8.2	0	8.2	8.2	Model Calibration Parameters	
10.96		3.411	2.1	8.200	8.200	t <sub>1/2</sub>	0.6 yrs
21.92		1.419	4.2	8.200	8.200	v <sub>s</sub>	10 ft/yr
32.88		0.590	6.3	8.200	8.200	R	1.110
43.84		0.246	8.4	8.200	8.200	v <sub>R</sub>	9.008 ft/yr
54.8		0.102	10.5	8.200	8.200	L <sub>p</sub>	109.6 ft
65.76		0.042	12.6	8.200	8.200	α <sub>x</sub>	7.527211 ft
76.72		0.018	14.7	8.200	8.200	α <sub>y</sub>	0.752721 ft
87.68		0.007	16.8	8.200	8.200	α <sub>z</sub>	1E-99 ft
98.64		0.003	18.9	8.200	8.200	C <sub>source</sub>	8.2 mg/L
109.6	0.001	0.001	21	8.200	8.200	t <sub>sim</sub>	21 yrs



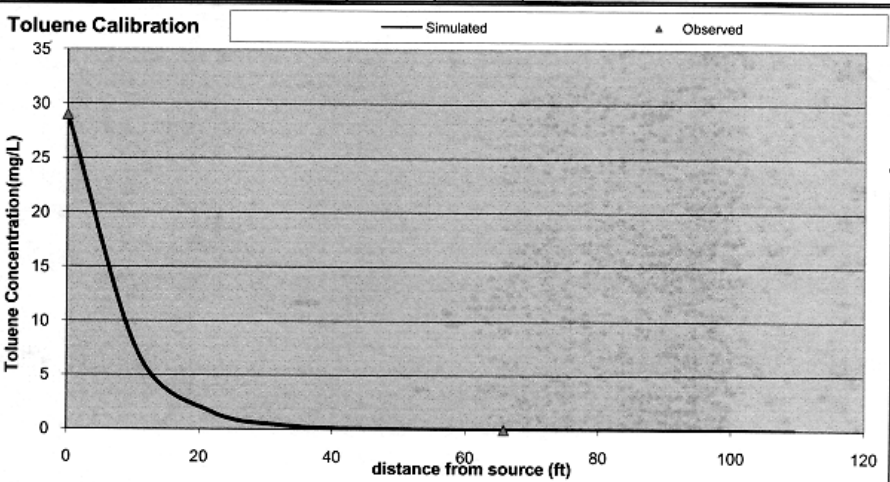
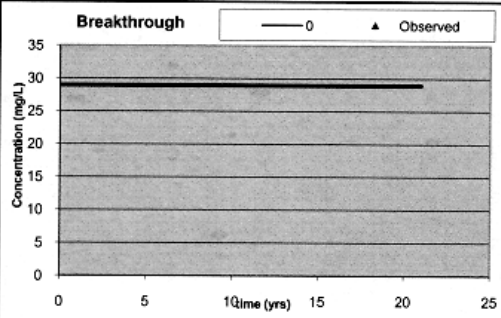
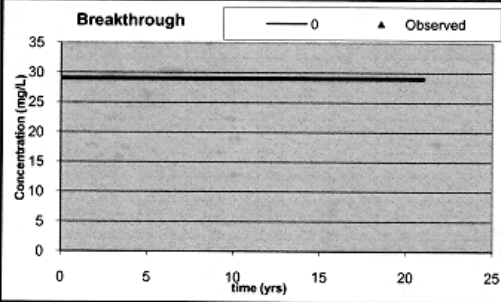
Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	4.2328E-14	1.372E-12	1.29E-11	5.65E-11	1.47E-10	2.66E-10
50	0.00037833	0.00640219	0.00974244	0.00796181	0.00503936	0.0027982	0.001439	0.000705	0.000334	0.000155
0	3.41128453	1.41912953	0.59037213	0.24559701	0.10216067	0.0424863	0.017663	0.007339	0.003048	0.001265
50	0.00037833	0.00640219	0.00974244	0.00796181	0.00503936	0.0027982	0.001439	0.000705	0.000334	0.000155
100	0	0	0	0	4.2328E-14	1.372E-12	1.29E-11	5.65E-11	1.47E-10	2.66E-10

**Toluene Calibration**

Spatial Calibration Data			Temporal Calibration Data				Site ID	
(centerline)			0				02131	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name
0	29	29	0		29		29	One Accord
10.96		6.804	2.1		29.000		29.000	
21.92		1.596	4.2		29.000		29.000	
32.88		0.375	6.3		29.000		29.000	
43.84		0.088	8.4		29.000		29.000	
54.8		0.021	10.5		29.000		29.000	
65.76	0.005	0.005	12.6		29.000		29.000	
76.72		0.001	14.7		29.000		29.000	
87.68		0.000	16.8		29.000		29.000	
98.64		0.000	18.9		29.000		29.000	
109.6		0.000	21		29.000		29.000	

Model Calibration Parameters				
t <sub>1/2</sub>	0.31	yrs	λ	2.23548 yr <sup>-1</sup>
v <sub>x</sub>	10	ft/yr		
R	1.181			
v <sub>R</sub>	8.468	ft/yr	C <sub>source</sub>	29 mg/L
L <sub>p</sub>	109.6	ft	t <sub>sim</sub>	21 yrs
α <sub>x</sub>	7.527211	ft		
α <sub>y</sub>	0.752721	ft		
α <sub>z</sub>	1E-99	ft		

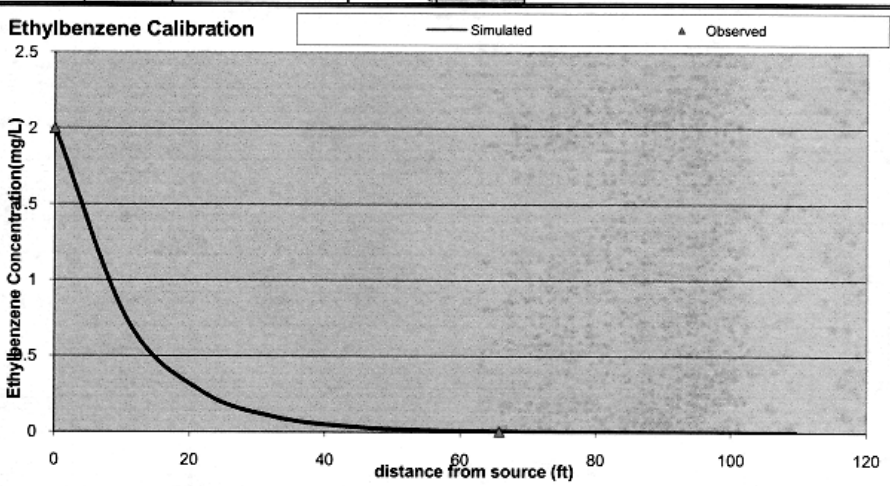
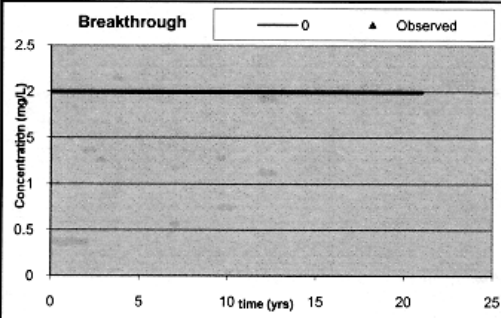
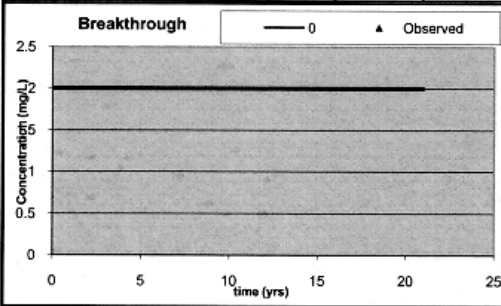


Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	8.5423E-15	1.561E-13	8.31E-13	2.04E-12	3E-12	3.07E-12
50	0.00075462	0.00720207	0.00618114	0.00284895	0.001017	0.0003185	9.24E-05	2.55E-05	6.82E-06	1.78E-06
0	6.80415748	1.59643307	0.37456465	0.08788126	0.02061718	0.0048358	0.001134	0.000266	6.22E-05	1.46E-05
50	0.00075462	0.00720207	0.00618114	0.00284895	0.001017	0.0003185	9.24E-05	2.55E-05	6.82E-06	1.78E-06
100	0	0	0	0	8.5423E-15	1.561E-13	8.31E-13	2.04E-12	3E-12	3.07E-12



**Ethylbenzene Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data				Site ID 02131	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name One Accord
0	2	2	0		2		2	Model Calibration Parameters t <sub>1/2</sub> 0.55 yrs      λ 1.26 yr <sup>-1</sup> v <sub>x</sub> 10 ft/yr R 1.239 v <sub>R</sub> 8.069 ft/yr      C <sub>source</sub> 2 mg/L L <sub>p</sub> 109.6 ft α <sub>x</sub> 7.527211 ft      t <sub>sim</sub> 21 yrs α <sub>y</sub> 0.752721 ft α <sub>z</sub> 1E-99 ft
10.96		0.728	2.1		2.000		2.000	
21.92		0.265	4.2		2.000		2.000	
32.88		0.097	6.3		2.000		2.000	
43.84		0.035	8.4		2.000		2.000	
54.8		0.013	10.5		2.000		2.000	
65.76	0.005	0.005	12.6		2.000		2.000	
76.72		0.002	14.7		2.000		2.000	
87.68		0.001	16.8		2.000		2.000	
98.64		0.000	18.9		2.000		2.000	
109.6		0.000	21		2.000		2.000	



Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	5.3004E-15	1.503E-13	1.24E-12	4.74E-12	1.08E-11	1.71E-11
50	8.0757E-05	0.001196	0.0015928	0.00113919	0.00063104	0.0003067	0.000138	5.92E-05	2.45E-05	9.94E-06
0	0.72815953	0.26510815	0.09652045	0.03514059	0.0127927	0.0046561	0.001694	0.000616	0.000224	8.13E-05
50	8.0757E-05	0.001196	0.0015928	0.00113919	0.00063104	0.0003067	0.000138	5.92E-05	2.45E-05	9.94E-06
100	0	0	0	0	5.3004E-15	1.503E-13	1.24E-12	4.74E-12	1.08E-11	1.71E-11

**Xylenes Calibration**

**Spatial Calibration Data**

(centerline)

x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)
0	13	13
10.96		3.450
21.92		0.916
32.88		0.243
43.84		0.065
54.8		0.017
65.76	0.005	0.005
76.72		0.001
87.68		0.000
98.64		0.000
109.6		0.000

**Temporal Calibration Data**

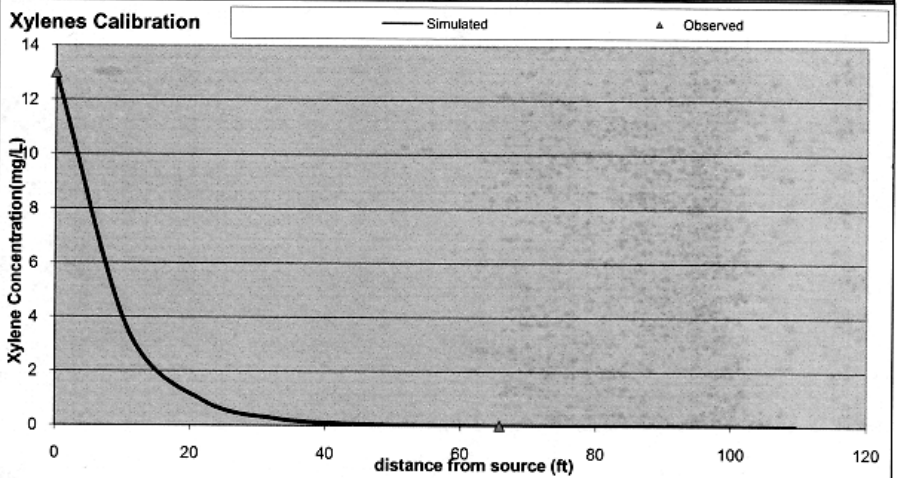
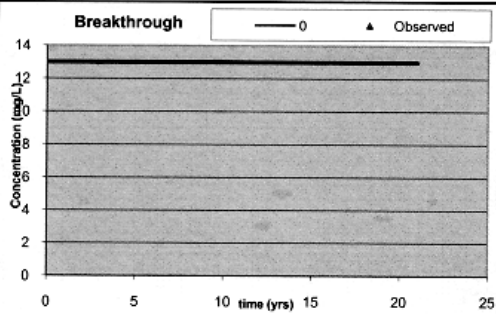
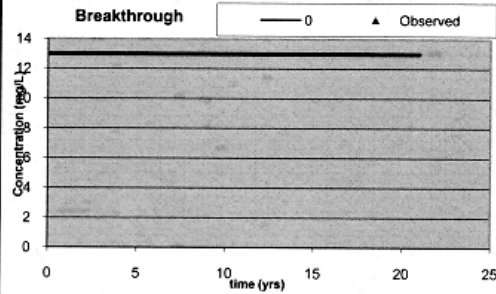
t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)
0		13		13
2.1		13.000		13.000
4.2		13.000		13.000
6.3		13.000		13.000
8.4		13.000		13.000
10.5		13.000		13.000
12.6		13.000		13.000
14.7		13.000		13.000
16.8		13.000		13.000
18.9		13.000		13.000
21		13.000		13.000

Site ID 02131

Site Name One Accord

**Model Calibration Parameters**

t <sub>1/2</sub>	0.56	yrs	λ	1.2375	yr <sup>-1</sup>
v <sub>x</sub>	10	ft/yr			
R	1.869				
v <sub>R</sub>	5.350	ft/yr	C <sub>source</sub>	13	mg/L
L <sub>p</sub>	109.6	ft	t <sub>sim</sub>	21	yrs
α <sub>x</sub>	7.527211	ft			
α <sub>y</sub>	0.752721	ft			
α <sub>z</sub>	1E-99	ft			



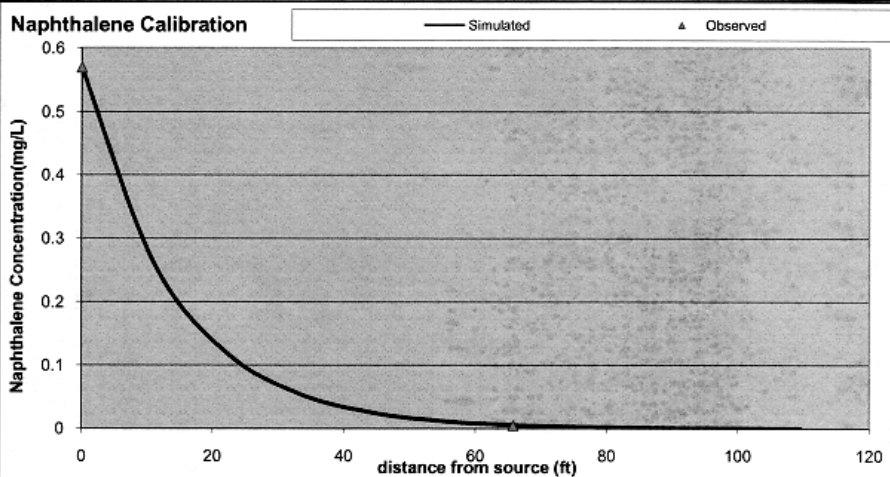
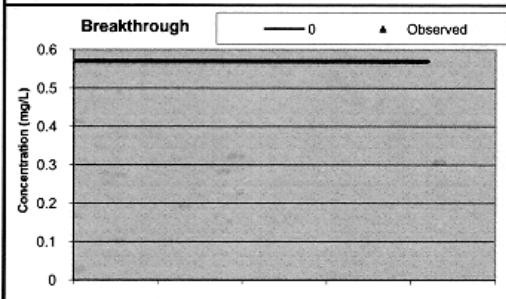
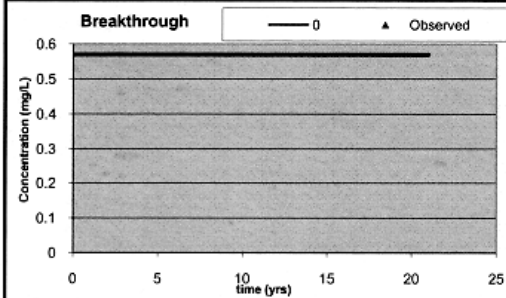
Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	7.0921E-15	1.466E-13	8.83E-13	2.46E-12	4.08E-12	4.72E-12
50	0.00038265	0.0041311	0.0040106	0.00209101	0.00084435	0.0002991	9.82E-05	3.07E-05	9.27E-06	2.74E-06
0	3.4502557	0.91571264	0.2430339	0.06450122	0.01711719	0.0045415	0.001205	0.000319	8.46E-05	2.24E-05
50	0.00038265	0.0041311	0.0040106	0.00209101	0.00084435	0.0002991	9.82E-05	3.07E-05	9.27E-06	2.74E-06
100	0	0	0	0	7.0921E-15	1.466E-13	8.83E-13	2.46E-12	4.08E-12	4.72E-12

**Naphthalene Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data				Site ID 02131 Site Name One Accord	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	
0	0.57	0.57	0	0.57	0.57	0	0.57	
10.96		0.263	2.1		0.570		0.570	
21.92		0.122	4.2		0.570		0.570	
32.88		0.056	6.3		0.570		0.570	
43.84		0.026	8.4		0.570		0.570	
54.8		0.012	10.5		0.570		0.570	
65.76	0.005	0.005	12.6		0.570		0.570	
76.72		0.002	14.7		0.570		0.570	
87.68		0.001	16.8		0.570		0.570	
98.64		0.000	18.9		0.570		0.570	
109.6		0.000	21		0.570		0.570	

Model Calibration Parameters			
t <sub>1/2</sub>	1.99 yrs	λ	0.34824 yr <sup>-1</sup>
v <sub>x</sub>	10 ft/yr		
R	1.000		
v <sub>R</sub>	3.23 ft/yr	C <sub>source</sub>	0.57 mg/L
L <sub>p</sub>	109.6 ft	t <sub>sim</sub>	21 yrs
α <sub>x</sub>	7.527211 ft		
α <sub>y</sub>	0.752721 ft		
α <sub>z</sub>	1E-99 ft		



Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	4.94E-15	1.766E-13	1.82E-12	8.58E-12	2.36E-11	4.35E-11
50	2.9193E-05	0.00054833	0.00092597	0.00083924	0.00058813	0.0003602	0.000203	0.000107	5.35E-05	2.53E-05
0	0.26321816	0.12154352	0.05611185	0.02588782	0.01192283	0.0054689	0.002488	0.001115	0.000488	0.000207
50	2.9193E-05	0.00054833	0.00092597	0.00083924	0.00058813	0.0003602	0.000203	0.000107	5.35E-05	2.53E-05

UST Permit # 02131  
 Site Name: One Accord

SSTLs

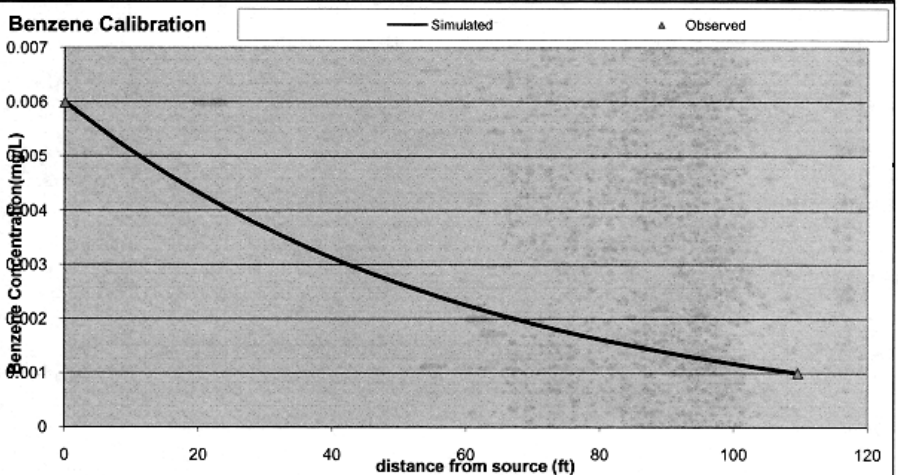
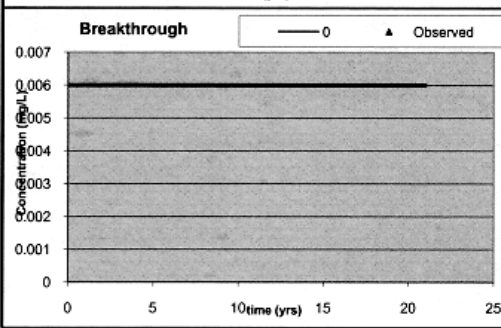
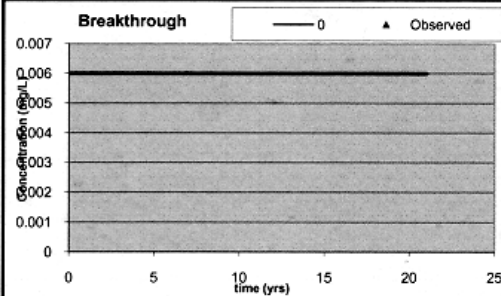
t 1000 yrs

SSTLs in mg/L		RBSLs (mg/L):			0.005	1.000	0.700	10.000	0.040	0.025		
MW #	x (ft)	y (ft)	z (ft)	Benzene SSTL	Toluene SSTL	Ethylbenzene SSTL	Xylenes SSTL	MtBE SSTL	Naphthalene SSTL			
MW-2	386.6	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
DW-1	353.3	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
MW-20	386.6	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
RW-2	360	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
RW-3	353.3	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
MW-1R	373.3	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
MW-20	386.6	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
MW-16	426.6	0	0	>99999	>99999	>99999	>99999	>99999	>99999			
				$\lambda$ (yr <sup>-1</sup> ):	1.155	2.235	1.260	1.238	1.386	0.348		
				R:	1.110	1.181	1.239	1.869	1.000	1.000		
				Pure Substance Solubility:	1750	526	169	175	5110	31		
				Effective Solubility:	44.39	26.54	3.7	21.68	173	6.7		

<b>Domenico Model</b>			<b>Transport Parameters</b>			<b>Simulation Time</b>																																																								
UST # 02131 Site Name: One Accord Modeler: Matt Wykel Date: 4.22.2019			<i>Dec/BTEX</i> x <sub>max</sub> 109.6 ft y <sub>max</sub> 100 ft z 0 ft Source Width 70 ft Source Thickness 20 ft  Plume Length 109.6 ft α <sub>x</sub> 7.527211 ft α <sub>y</sub> 0.752721 ft α <sub>z</sub> 1.00E-99 ft			t <sub>sim</sub> 21 yrs																																																								
<b>Groundwater Flow Parameters</b>			<b>Retarded Velocity (ft/yr)</b>			<b>Aquifer Characteristics</b>																																																								
K 0.249 ft/yr dh/dx 0.0097 θ 0.25 dec. % v <sub>x</sub> 21 ft/yr			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>CoC</th> <th>C<sub>source</sub> (mg/L)</th> <th>K<sub>oc</sub> (L/kg)</th> <th>CoC</th> <th>R</th> <th>v<sub>R</sub></th> </tr> </thead> <tbody> <tr><td>Benzene</td><td>0.006</td><td>81</td><td>Benzene</td><td>1.110</td><td>18.92</td></tr> <tr><td>Toluene</td><td></td><td>133</td><td>Toluene</td><td>1.181</td><td>17.78</td></tr> <tr><td>Ethylbenzene</td><td></td><td>176</td><td>Ethylbenzene</td><td>1.239</td><td>16.94</td></tr> <tr><td>Xylenes</td><td></td><td>639</td><td>Xylenes</td><td>1.869</td><td>11.24</td></tr> <tr><td>Naphthalene</td><td></td><td>1543</td><td>Naphthalene</td><td>3.098</td><td>6.78</td></tr> <tr><td>MtBE</td><td></td><td>11</td><td>MtBE</td><td>1.015</td><td>20.69</td></tr> <tr><td>EDB</td><td></td><td>28</td><td>EDB</td><td>1.038</td><td>20.23</td></tr> <tr><td>1,2-DCA</td><td></td><td>17.5</td><td>1,2-DCA</td><td>1.024</td><td>20.51</td></tr> </tbody> </table>			CoC	C <sub>source</sub> (mg/L)	K <sub>oc</sub> (L/kg)	CoC	R	v <sub>R</sub>	Benzene	0.006	81	Benzene	1.110	18.92	Toluene		133	Toluene	1.181	17.78	Ethylbenzene		176	Ethylbenzene	1.239	16.94	Xylenes		639	Xylenes	1.869	11.24	Naphthalene		1543	Naphthalene	3.098	6.78	MtBE		11	MtBE	1.015	20.69	EDB		28	EDB	1.038	20.23	1,2-DCA		17.5	1,2-DCA	1.024	20.51	ρ <sub>d</sub> 1.7 kg/L f <sub>oc</sub> 0.0002		
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$C(x, y, z, t) = \left(\frac{C_0}{8}\right) \exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1 - \sqrt{1 + \frac{4\lambda\alpha_x}{v}}\right)\right] \operatorname{erfc}\left[\frac{x - vt\sqrt{1 + \frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right] \left\{ \operatorname{erf}\left[\frac{y + \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] - \operatorname{erf}\left[\frac{y - \frac{Y}{2}}{2\sqrt{\alpha_y x}}\right] \right\} \left\{ \operatorname{erf}\left[\frac{z + Z}{2\sqrt{\alpha_z x}}\right] - \operatorname{erf}\left[\frac{z - Z}{2\sqrt{\alpha_z x}}\right] \right\}$																																																														

**Benzene Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data				Site ID 02131 Site Name One Accord		
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Model Calibration Parameters	
0	0.006	0.006	0		0.006		0.006	t <sub>1/2</sub> 2 yrs	λ 0.3465 yr <sup>-1</sup>
10.96		0.005	2.1		0.006		0.006	v <sub>x</sub> 21 ft/yr	
21.92		0.004	4.2		0.006		0.006	R 1.110	
32.88		0.004	6.3		0.006		0.006	v <sub>R</sub> 18.916 ft/yr	C <sub>source</sub> 0.006 mg/L
43.84		0.003	8.4		0.006		0.006	L <sub>p</sub> 109.6 ft	t <sub>sim</sub> 21 yrs
54.8		0.002	10.5		0.006		0.006	α <sub>x</sub> 7.527211 ft	
65.76		0.002	12.6		0.006		0.006	α <sub>y</sub> 0.752721 ft	
76.72		0.002	14.7		0.006		0.006	α <sub>z</sub> 1E-99 ft	
87.68		0.001	16.8		0.006		0.006		
98.64		0.001	18.9		0.006		0.006		
109.6	0.001	0.001	21		0.006		0.006		



Source	10.96	21.92	32.88	43.84	54.8	65.76	76.72	87.68	98.64	109.6
100	0	0	0	0	1.0167E-15	6.623E-14	1.26E-12	1.1E-11	5.76E-11	2.1E-10
50	5.5648E-07	1.893E-05	5.7907E-05	9.513E-05	0.00012104	0.0001351	0.00014	0.000138	0.000131	0.000122
0	0.00501762	0.00419608	0.00350905	0.00293447	0.00245376	0.0020514	0.001714	0.001432	0.001195	0.000997
50	5.5648E-07	1.893E-05	5.7907E-05	9.513E-05	0.00012104	0.0001351	0.00014	0.000138	0.000131	0.000122
100	0	0	0	0	1.0167E-15	6.623E-14	1.26E-12	1.1E-11	5.76E-11	2.1E-10

UST Permit # 02131  
 Site Name: One Accord

SSTLs

t 1000 yrs

SSTLs in mg/L		RBSLs (mg/L): 0.005									
MW #	x (ft)	y (ft)	z (ft)	Benzene SSTL							
MW-20	386.6	0	0	3.214							
RW-2	360	0	0	2.049							
RW-3	353.3	0	0	1.829							
MW-1R	373.3	0	0	2.566							
MW-20	386.6	0	0	3.214							
MW-16	426.6	0	0	6.324							
				$\lambda$ (yr <sup>-1</sup> ):	0.347						
				R:	1.110						
				Pure Substance Solubility:	1750						
				Effective Solubility:	44.39						

10 ft. = 660 ft 60 ft 1 ft.  
 MT BE is not completely defined.

CRGS = 1, 2, 1b, RW-1, RW-2 RW-3.

Rock around 8's

MW-1 = worst case shallow well

DW-9 - DW-10 = Deep Well

**> RBSL**

The rest are below RBSLs or Non detect.  
 ⊗ = ideas for New deepwell.

= ON 15 MIBE  
 = BTEX is stuck in the source with MT BE rapidly moving east and down on

Need another APUR. *10' 11' 12' 13'*

Tier 2 data

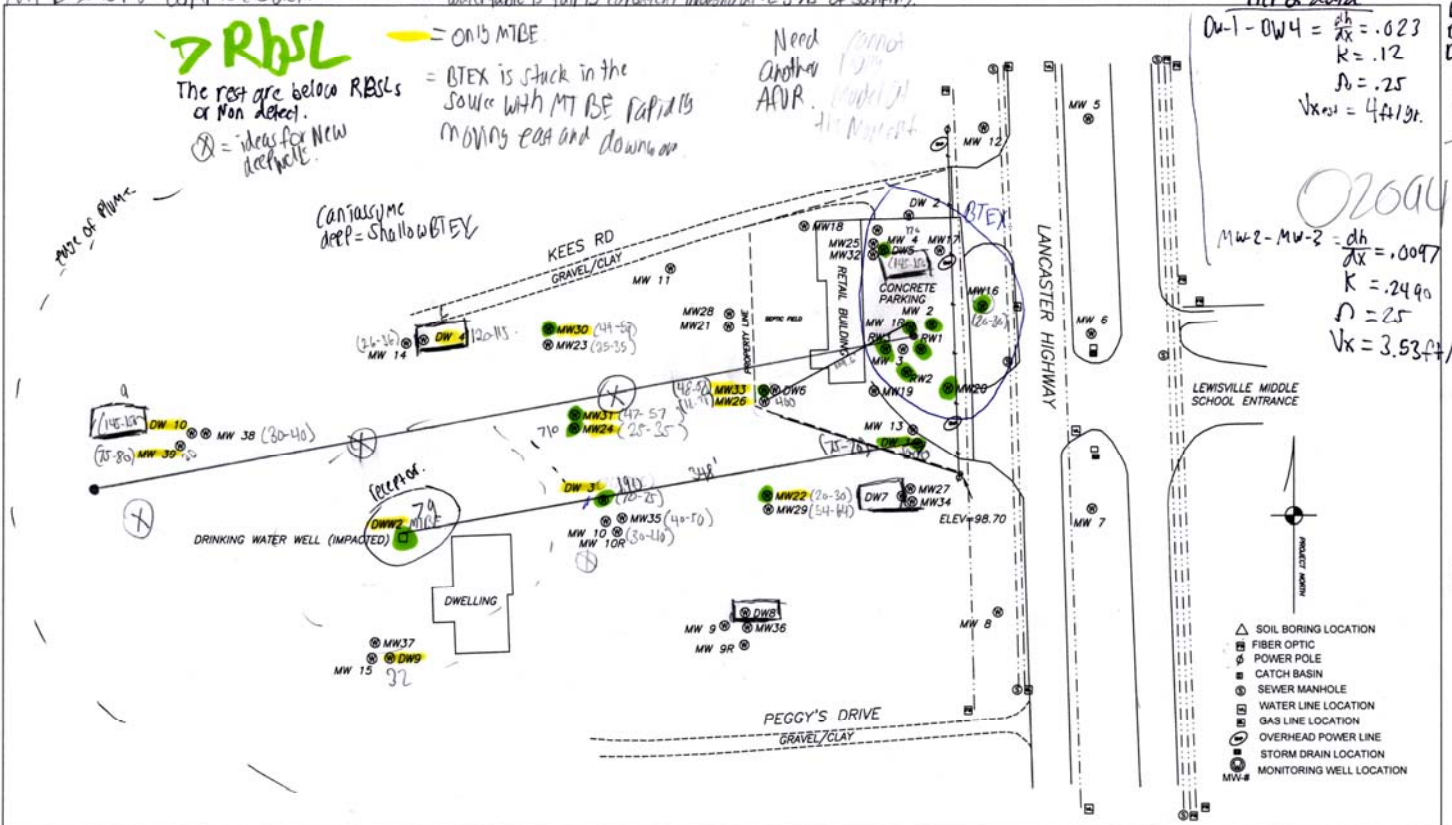
DW-1 - DW-4 =  $\frac{dh}{dx} = .023$   
 $K = .12$   
 $D = .25$   
 $V_{x_{est}} = 4 ft/yr.$

DW-1 - 70-75  
 DW-3 70-75  
 DW-4 120-115

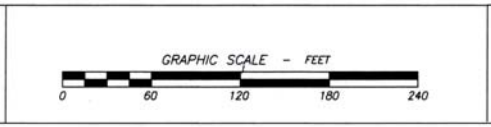
$R = \frac{dh}{dx}$

02604

MW-2 - MW-2 =  $\frac{dh}{dx} = .0097$   
 $K = .2490$   
 $D = .25$   
 $V_{x_{est}} = 3.53 ft/yr.$



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGE Moor, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP

$\frac{17}{60} = \frac{17}{60}$





## Owner/Operator Lead Form for Active Corrective Action

**Only complete this form if:** You are the legal owner of the existing or former underground storage tanks, **OR** are the legal owner's designated authorized representative.

I certify that I am the legal owner of record for the underground storage tanks identified below for the release date reported below or serve as the authorized representative for the owner. I wish for DHEC to post the technical specifications package for the active corrective action on the DHEC website and solicit bids from DHEC certified contractors to conduct the work by publishing a notice in the South Carolina Business Opportunities and to select my own corrective action contractor after bid solicitation results are received. I understand the lowest corrective action cost submitted in response to the solicitation will determine the reasonable or SUPERB-allowable cost. I understand if the selected contractor is not able to complete the required activities, I will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable or SUPERB-allowable cost is the maximum amount the SUPERB Account will pay for the active corrective action.

UST Permit #	02131	Release Report Date:	March 23, 2009
Facility Name:	One Accord Ministries		
Facility Address:	3570 Lancaster Hwy., Richburg, SC 29729		
Facility Phone Number:	803 371-6981 or 803 804-0253		
<u>Name of UST owner/former owner or authorized representative (Print):</u>		Angel Haugh	
Signature of UST owner/former owner or authorized representative:			8/6/19 Date
Affiliation (if applicable)		manager/owner	
Signature of Witness			8/6/19 Date
<b>Contact Info</b>			
Phone Numbers:	Home: 803 804-0253	Cell: 803-371-6981	
Email Address:	angel.haugh@gmail.com		

DHEC 3989 (01/2019)



RE: UST#02131 - One Accord, Tier II

Alex "Chip" Amos, PG <katawba@comporium.net>

Thu 4/6/2017 5:04 PM

Inbox

to: Mendenhall, Jeffery E. <MENDENJE@dhec.sc.gov>;



2 attachments (214 KB)

one accord addendum april 2017 2.pdf; One Accord Tier II Drawings Big Ed 2.pdf;

Ed: Let me give this another whirl now that I am jiving with you. Before I forget when you get home google Bon Qui Qui Complicated Order. It applies to this project LOL.

I have attached a map and CA in a PDF. 3 recovery wells 27 feet each (PRW1 to PRW3). 12 shallow wells with an average depth of 36 feet each (PMW16 to PMW27). 10 intermediate depth wells set on top of rock 75 feet each (PMW28-PMW37). 6 deep wells that I will try to install to 120 to match DW4 but we are looking for a fracture so I estimated them to be 150 ft each average (PDW5 to PDW9).

Sampling of new wells and gauging of wells previously installed.

Let me know if this gets you to your happy place.

---

**From:** Mendenhall, Jeffery E. [mailto:MENDENJE@dhec.sc.gov]  
**Sent:** Wednesday, April 05, 2017 8:09 AM  
**To:** katawba@comporium.net  
**Subject:** Re: UST#02131 - One Accord, Tier II

Alex,

The shallow/ intermediate and shallow/intermediate/deep locations on the map were meant to be well pairs and triplets. Sorry for the confusion of not labeling that on the color chart. Should bring the MW total to be added to some where around an additional 24-25 wells and the 3 recovery wells.

I'm sure that will change the addendum costs just a bit.

Thanks,  
Ed

**Ed Mendenhall**  
Hydrogeologist  
Underground Storage Tank Division  
**S.C. Dept. of Health & Environmental Control**  
Office: (803) 898-0586  
Fax: (803) 898-0673  
Connect: [www.scdhec.gov](http://www.scdhec.gov) [Facebook](#) [Twitter](#)



**ASSESSMENT COMPONENT COST AGREEMENT**

**SOUTH CAROLINA**

Department of Health and Environmental Control  
 Underground Storage Tank Management Division  
 State Underground Petroleum Environmental Response Bank Account  
 August 16, 2016

**Facility Name: One Accord**

**UST Permit #: 02131**

**Cost Agreement #:**

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan Preparation</b>				
A1. Site-specific Work Plan		each	\$150.00	\$0.00
B1. Tax Map		each	\$70.00	\$0.00
C1. Tier II or Comp. Plan /QAPP Appendix B		each	\$250.00	\$0.00
<b>2. A1. Receptor Survey *</b>				
		each	\$551.00	\$0.00
<b>3. Survey (500 ft x 500 ft)</b>				
A1. Comprehensive Survey		each	\$1,040.00	\$0.00
<b>B. Subsurface Geophysical Survey</b>				
1B. < 10 meters below grade		each	\$1,300.00	\$0.00
2B. > 10 meters below grade		each	\$2,310.00	\$0.00
C1. Geophysical UST or Drum Survey		each	\$910.00	\$0.00
<b>4. Mob/Demob</b>				
A1. Equipment	1	each	\$1,020.00	\$1,020.00
B1. Personnel	4	each	\$423.00	\$1,692.00
C1. Adverse Terrain Vehicle		each	\$500.00	\$0.00
<b>5. A1. Soil Borings (hand auger)*</b>				
		foot	\$5.00	\$0.00
<b>6. Soil Borings (requiring equipment, push technology, etc)* or Field Screening (including water sample, soil sample, soil gas sample, etc.)*</b>				
AA. Standard		per foot	\$15.00	\$0.00
C1. Fractured Rock		per foot	\$20.20	\$0.00
<b>7. A1. Soil Leachability Model</b>				
		each	\$60.00	\$0.00
<b>8. Abandonment (per foot)*</b>				
A1. 2" diameter or less		per foot	\$3.10	\$0.00
B1. Greater than 2" to 6" diameter		per foot	\$4.50	\$0.00
C1. Dug/Bored well (up to 6 feet diameter)		per foot	\$15.00	\$0.00
<b>9. Well Installation (per foot)*</b>				
A1. Water Table (hand augered)		per foot	\$10.60	\$0.00
B1. Water Table (drill rig)	1182	per foot	\$38.00	\$44,916.00
CC. Telescoping	900	per foot	\$50.00	\$45,000.00
DD. Rock Drilling		per foot	\$58.00	\$0.00
E1. 2" Rock Coring		per foot	\$30.90	\$0.00
G1. Rock Multi-sampling ports/screens		per foot	\$33.40	\$0.00
HH. Recovery Well (4" diameter)	81	per foot	\$45.00	\$3,645.00
II. Pushed Pre-packed screen (1.25" dia)		per foot	\$15.00	\$0.00
J1. Rotosonic (2" diameter)		per foot	\$44.00	\$0.00
K. Re-develop Existing Well		per foot	\$11.00	\$0.00
<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product *</b>				
A1. Groundwater Purge	31	per well/recept	\$60.00	\$1,860.00
B1. Air or Vapors		per receptor	\$12.00	\$0.00
C1. Water Supply		per well/recept	\$22.00	\$0.00
D1. Groundwater No Purge or Duplicate	3	per well/recept	\$28.00	\$84.00
E1. Gauge Well only	21	per well	\$7.00	\$147.00
F1. Sample Below Product		per well	\$12.00	\$0.00
G1. Passive Diffusion Bag		each	\$26.00	\$0.00
H1. Field Blank	1	each	\$24.60	\$24.60

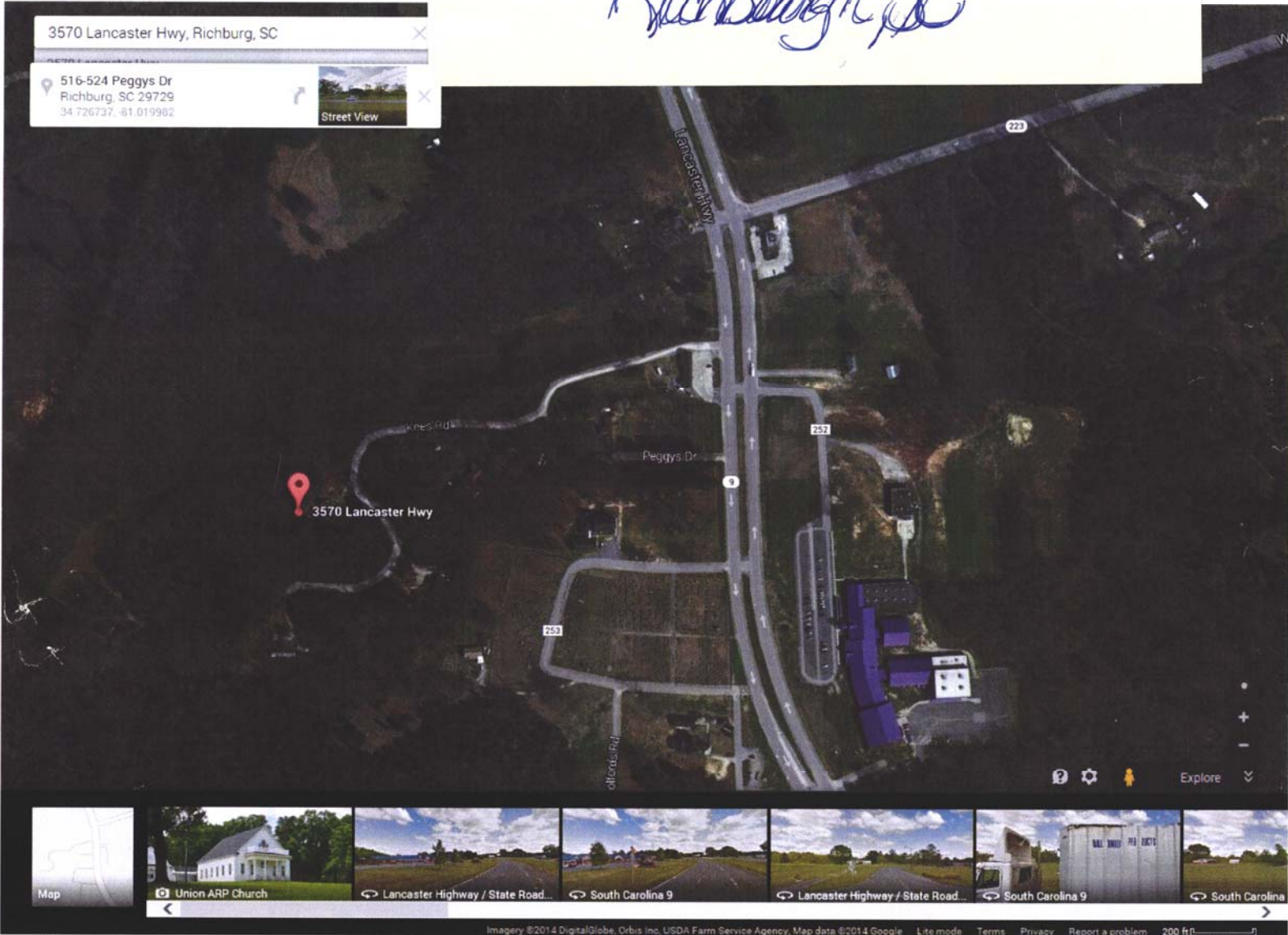
<b>11. Laboratory Analyses-Groundwater</b>					
A2. BTEXNM+Oxyg's+1,2 DCA+Eth(82)	35	per sample	\$122.00		\$4,270.00
AA1. Lead, Filtered		per sample	\$13.80		\$0.00
B2. Rush EPA Method 8260B (All of item A.)		per sample	\$153.60		\$0.00
C2. Trimethal, Butyl, and Isopropyl Benzenes		per sample	\$36.40		\$0.00
D1. PAH's	34	per sample	\$60.60		\$2,060.40
E1. Lead	34	per sample	\$16.00		\$544.00
F1. EDB by EPA 8011	34	per sample	\$45.20		\$1,536.80
FF1. EDB by EPA Method 8011 Rush		per sample	\$68.20		\$0.00
G1. 8 RCRA Metals		per sample	\$63.40		\$0.00
H1. TPH (9070)		per sample	\$41.00		\$0.00
II. pH		per sample	\$5.20		\$0.00
J1. BOD		per sample	\$20.00		\$0.00
PP. Ethanol		per sample	\$14.80		\$0.00
<b>11. Analyses-Drinking Water</b>					
L. BTEXNM+1,2 DCA (524.2)		per sample	\$124.05		\$0.00
M. 7-OXYGENATES & ETHANOL (8260B)		per sample	\$91.75		\$0.00
N. EDB (504.1)		per sample	\$79.50		\$0.00
O. RCRA METALS (200.8)		per sample	\$100.00		\$0.00
<b>11. Analyses-Soil</b>					
Q1. BTEX + Naphth.		per sample	\$64.00		\$0.00
R1. PAH's		per sample	\$64.04		\$0.00
S1. 8 RCRA Metals		per sample	\$56.40		\$0.00
U1. TPH-DRO (3550C/8015C)		per sample	\$40.00		\$0.00
V1. TPH- GRO (5030B/8015C)		per sample	\$35.96		\$0.00
W1. Grain size/hydrometer		per sample	\$104.00		\$0.00
X1. Total Organic Carbon		per sample	\$30.60		\$0.00
<b>11. Analyses-Air</b>					
Y1. BTEX + Naphthalene		per sample	\$216.00		\$0.00
<b>11. Analyses-Free Phase Product</b>					
Z1. Hydrocarbon Fuel Identification		per sample	\$357.00		\$0.00
<b>12. Aquifer Characterization</b>					
A1. Pumping Test*		per hour	\$23.00		\$0.00
B1. Slug Test*		per test	\$191.00		\$0.00
C1. Fractured Rock		per test	\$100.00		\$0.00
<b>13. A1. Free Product Recovery Rate Test*</b>					
		each	\$38.00		\$0.00
<b>14. Fate/Transport Modeling</b>					
A1. Mathematical Model		each	\$100.00		\$0.00
B1. Computer Model		each	\$100.00		\$0.00
<b>15. Risk Evaluation</b>					
A. Tier I Risk Evaluation		each	\$300.00		\$0.00
B1. Tier II Risk Evaluation		each	\$100.00		\$0.00
<b>16. A1. Subsequent Survey*</b>					
	1	each	\$260.00		\$260.00
<b>17. Disposal (gallons or tons)*</b>					
AA. Wastewater	350	gallon	\$0.56		\$196.00
BB. Free Product		gallon	\$0.50		\$0.00
C1. Soil Treatment/Disposal	20	ton	\$60.00		\$1,200.00
D1. Drilling fluids		gallon	\$0.42		\$0.00
<b>18. Miscellaneous (attach receipts)</b>					
		each	\$0.00		\$0.00

		each	\$0.00	\$0.00
		each	\$0.00	\$0.00
20. Tier I Assessment (Use DHEC 3665 form)		standard		\$0.00
21. IGWA (Use DHEC 3666 form)		standard		\$0.00
22. Corrective Action (Use DHEC 3667 form)		PFP Bid		\$0.00
<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>				
A1. 8-hour Event*		each	\$1,375.00	\$0.00
AA. 24-hour Event*		each	\$3,825.00	\$0.00
A3. 48-hour Event*		each	\$6,265.00	\$0.00
A4. 96-hour Event*		each	\$12,567.50	\$0.00
C1. Off-gas Treatment 8 hour		per event	\$122.50	\$0.00
C2. Off-gas Treatment 24 hour		per event	\$241.50	\$0.00
C3. Off-gas Treatment 48 hour		per event	\$327.00	\$0.00
C4. Off-gas Treatment 96 hour		per event	\$780.00	\$0.00
D. Site Reconnaissance		each	\$203.25	\$0.00
E1. Additional Hook-ups		each	\$25.75	\$0.00
F1. Effluent Disposal		gallon	\$0.44	\$0.00
G. AFVR Mobilization/Demobilization		each	\$391.50	\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>				
A1. New GAC System Installation*		each	\$1,900.00	\$0.00
BB. Refurbished GAC Sys. Install*		each	\$900.00	\$0.00
C1. Filter replacement/removal*		each	\$350.00	\$0.00
DD. GAC System removal, cleaning, & refurbishment*		each	\$275.00	\$0.00
E1. GAC System housing*		each	\$250.00	\$0.00
F. In-line particulate filter		each	\$150.00	\$0.00
G1. Additional piping & fittings		foot	\$1.50	\$0.00
<b>25. Well Repair</b>				
A1. Additional Copies of the Report Delivered		each	\$50.00	\$0.00
B1. Repair 2x2 MW pad*		each	\$50.00	\$0.00
C1. Repair 4x4 MW pad*		each	\$88.00	\$0.00
D1. Repair well vault*		each	\$118.00	\$0.00
F1. Replace well cover bolts		each	\$2.60	\$0.00
G. Replace locking well cap & lock		each	\$15.00	\$0.00
H1. Replace/Repair stick-up*		each	\$134.00	\$0.00
II. Convert Flush-mount to Stick-up*		each	\$150.00	\$0.00
J1. Convert Stick-up to Flush-mount*		each	\$130.00	\$0.00
K1. Replace missing/illegible well ID plate		each	\$12.00	\$0.00
<b>Report Prep &amp; Project Management</b>	12%	percent	\$108,455.80	\$13,014.70
<b>TOTAL</b>				<b>\$121,470.50</b>

Mr. Marion Lee

Come after

518 Peggsy Drive  
Richborough, SC







MAY 29 2020

ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729

Re: Site-Specific Work Plan (SSWP) Request for Groundwater Sampling  
One Accord Ministries, 3570 Lancaster Hwy., Richburg, SC  
UST Permit #02131  
Release reported March 23, 2009  
Monitoring Report received April 16, 2019  
Chester County

To Whom it May Concern:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report submitted by your contractor. The report documents petroleum chemicals in the soil and groundwater above Risk-Based Screening Levels (RBSLs).

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of groundwater sampling is necessary. The groundwater sampling must be conducted in accordance with the most recent revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan (ACQAP), and in compliance with all applicable regulations. A copy of the UST QAPP is available at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentCleanup/QualityAssurance/>.

Groundwater samples should be collected from all monitoring wells, water supply wells, and surface waters within a 1,000 foot radius of the site and analyzed for BTEX, Naphthalene, MtBE, 1,2-DCA, and 8 Oxygenates.

**Your contractor must complete the SSWP and submit it within 30 days from the date of this letter.** Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from DHEC must be issued before work begins.**

On all correspondence regarding this site, please reference UST Permit number referenced above. Should you have any questions regarding this correspondence, please feel free to contact me by phone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,



Matt Wykel, Hydrogeologist  
Corrective Action & Field Support Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical file





# Katawba Environmental, Inc.

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6/12/2020



Mr. Matt Wykel, Hydrogeologist  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE: SITE SPECIFIC WORK PLAN  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**

Dear Mr. Wykel:

Katawba Environmental, Inc. (Katawba) has prepared this Site Specific Work Plan for the above-referenced facility for your review. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC.**

Alex "Chip" Amos, PG  
Principal





Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Matt Wykel (SCDHEC Project Manager)
From: Alex Amos, PG (Contractor Project Manager)
Contractor: Katawba Environmental, Inc. UST Contractor Certification Number: 18

Facility Name: One Accord Ministries UST Permit #: 02131
Facility Address: 3570 Lancaster Highway, Richburg, SC 29729
Responsible Party: Angela Hough One Accord Ministries Phone: 803-804-0253
RP Address: Same
Property Owner (if different): Same
Property Owner Address: Same
Current Use of Property: Church Youth Group Ministries

Scope of Work (Please check all that apply)

- IGWA, Tier I, Tier II, Monitoring Well Installation, Groundwater Sampling, GAC, Other

Analyses (Please check all that apply)

- Groundwater/Surface Water: BTEXNMDCA, Oxygenates, EDB, PAH, Lead, 8 RCRA Metals, TPH, pH, BOD, Nitrate, Sulfate, Other, Methane, Ethanol, Dissolved Iron
Drinking Water Supply Wells: BTEXNMDCA, Oxygenates & Ethanol, Mercury, RCRA Metals, EDB
Soil: BTEXNM, PAH, Lead, RCRA Metals, Oil & Grease, TPH-DRO, TPH-GRO, Grain Size, TOC
Air: BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

Soil, 6 Water Supply Wells, Air, 2 Field Blank, 52 Monitoring Wells, Surface Water, 5 Duplicate, 2 Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.
# of shallow points proposed: Estimated Footage: feet per point
# of deep points proposed: Estimated Footage: feet per point
Field Screening Methodology:

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.
# of shallow wells: Estimated Footage: feet per point
# of deep wells: Estimated Footage: feet per point
# of recovery wells: Estimated Footage: feet per point
Comments, if warranted:

UST Permit #: 02131 Facility Name: One Accord Ministries

**Implementation Schedule** (Number of calendar days from approval)

Field Work Start-Up: 30 Days Field Work Completion: 60 days  
Report Submittal: 90 Days # of Copies Provided to Property Owners: 1

**Aquifer Characterization**

Pump Test:  Slug Test:  (Check one and provide explanation below for choice)

**Investigation Derived Waste Disposal**

Soil: \_\_\_\_\_ Tons Purge Water: 150 Gallons  
Drilling Fluids: \_\_\_\_\_ Gallons Free-Phase Product: \_\_\_\_\_ Gallons

**Additional Details For This Scope of Work**

For example, list wells to be sampled, wells to be abandoned/repared, well pads/bolts/caps to replace, details of AFVR event, etc.

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**

Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.

Name of Laboratory: \_\_\_\_\_  
SCDHEC Certification Number: \_\_\_\_\_  
Name of Laboratory Director: \_\_\_\_\_

NA Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.

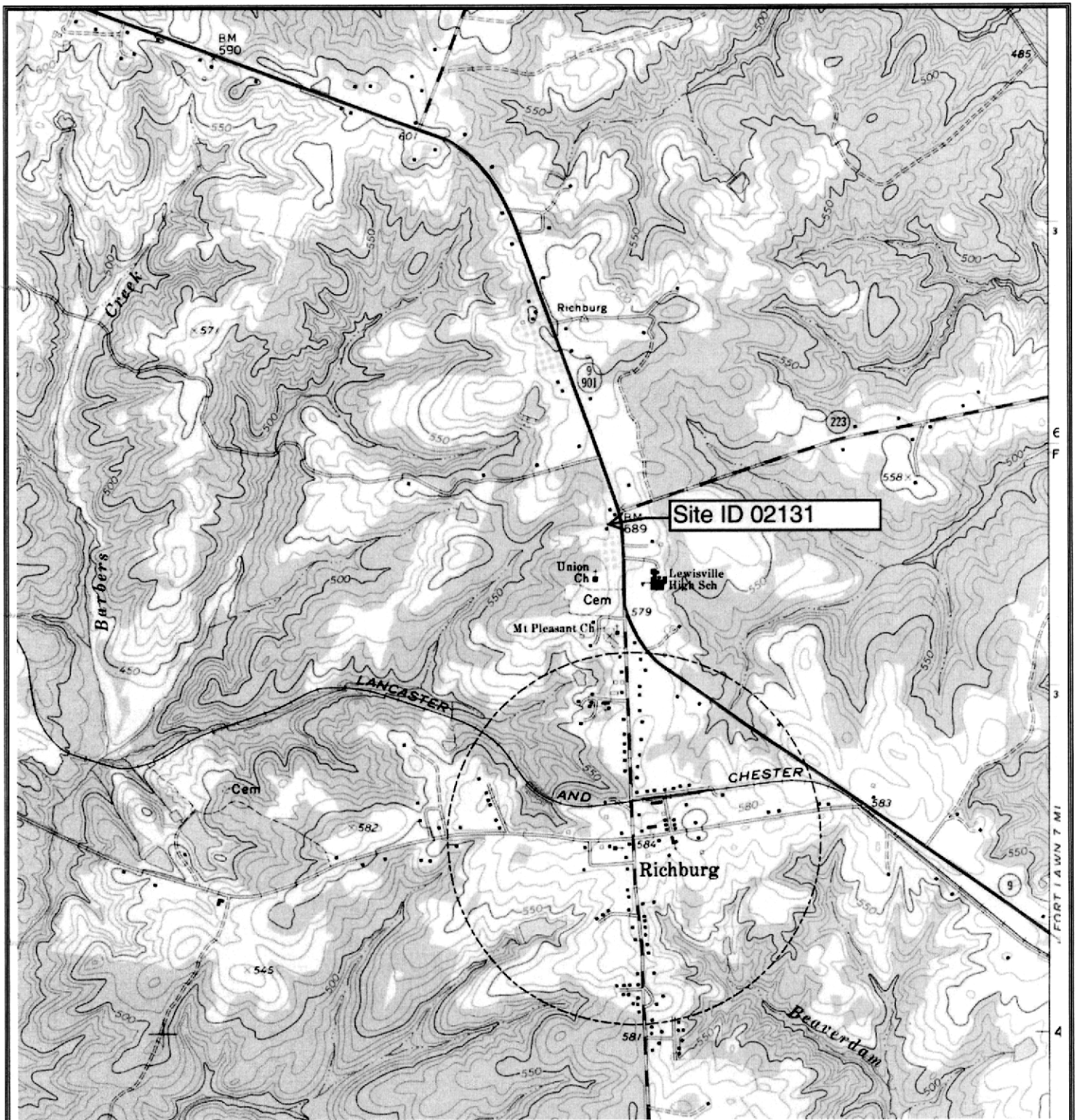
Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_

No Other variations from ACQAP. Please describe below.

**Attachments**

1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:

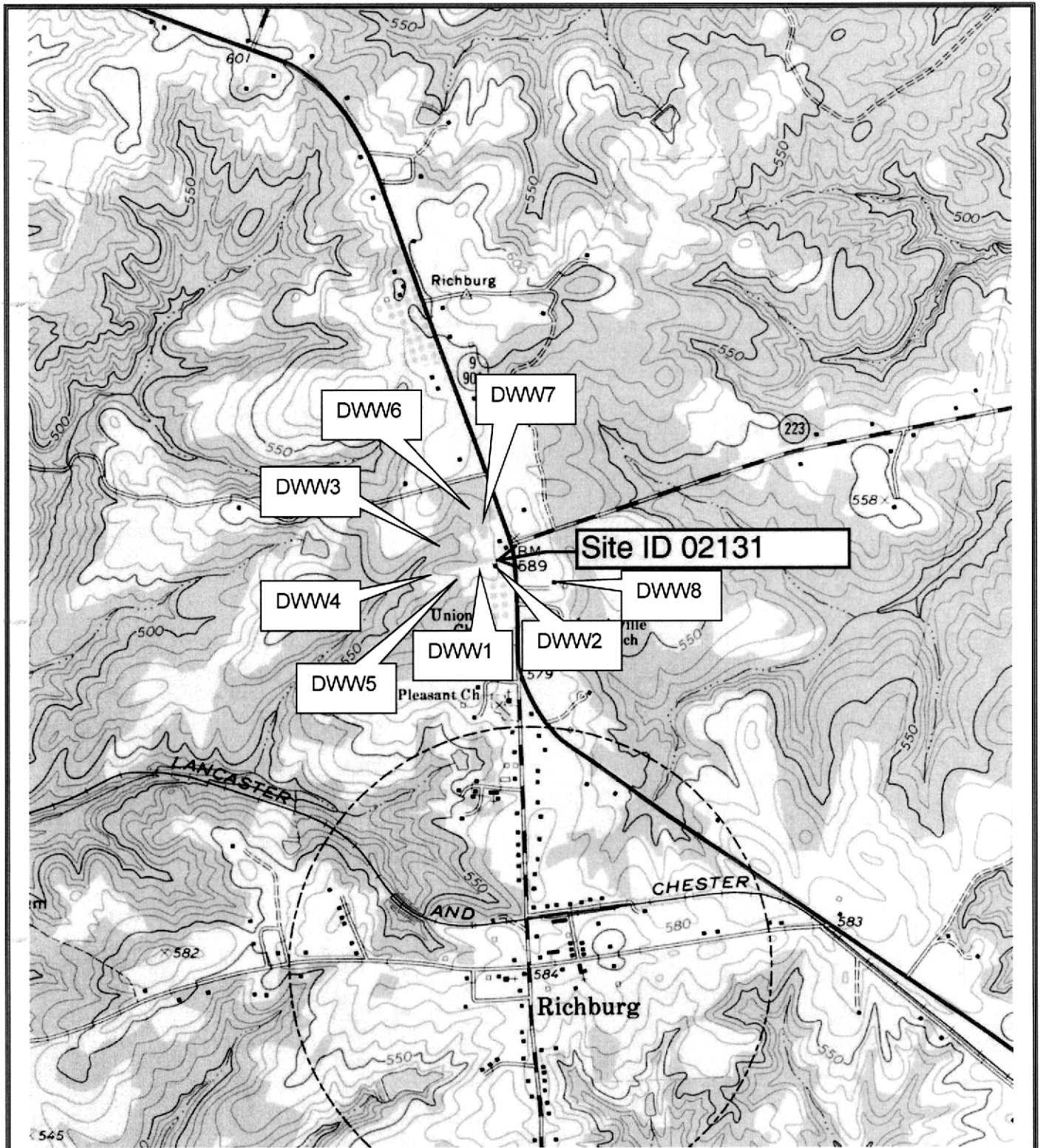
North Arrow	Proposed monitoring well locations
Location of property lines	Legend with facility name and address, UST permit number, and bar scale
Location of buildings	Streets or highways (indicate names and numbers)
Previous soil sampling locations	Location of all present and former ASTs and USTs
Previous monitoring well locations	Location of all potential receptors
Proposed soil boring locations	
3. Assessment Component Cost Agreement, SCDHEC Form D-3664



SCALE 1 INCH = 2000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

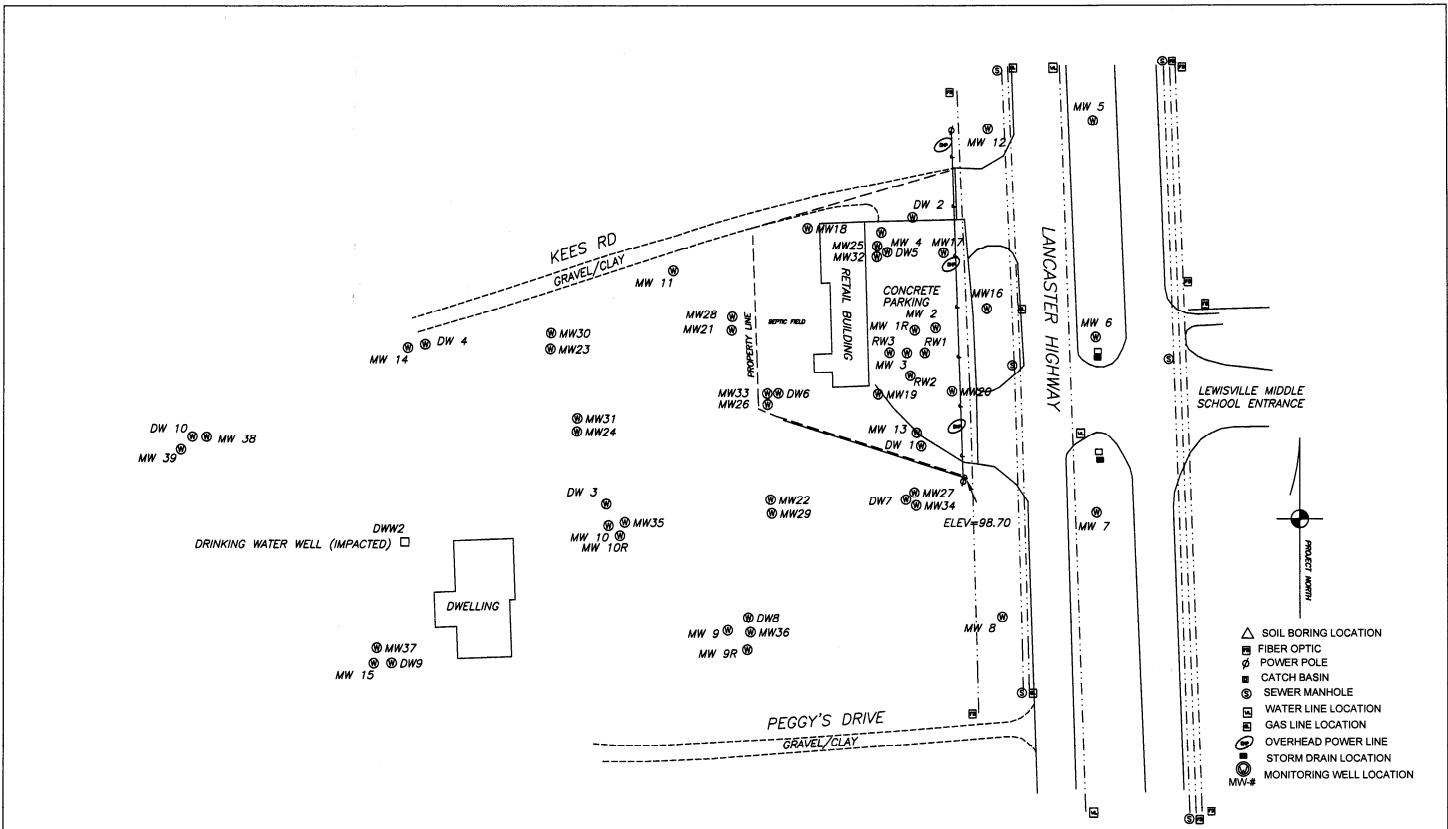
TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION



SCALE INCH = 1000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803) 327-0469 UCC#18

TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

**SAMPLING REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



**ASSESSMENT COMPONENT COST AGREEMENT  
SOUTH CAROLINA**

Department of Health and Environmental Control  
Underground Storage Tank Management Division  
State Underground Petroleum Environmental Response Bank Account  
January 1, 2020

Facility Name: One Accord  
UST Permit #: 02131 Cost Agreement #:

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>A. Plan Preparation</b>				
1. Site-specific Work Plan	1	each	\$160.05	\$160.05
2. Tax Map		each	\$74.69	\$0.00
3. Tier II or Comp. Plan /QAPP Appendix B		each	\$250.00	\$0.00
<b>B. Receptor Survey *</b>				
		each	\$587.92	\$0.00
<b>C. Survey (500 ft x 500 ft)</b>				
1. Comprehensive Survey Subsurface Geophysical Survey		each	\$1,109.68	\$0.00
2. < 10 meters below grade		each	\$1,387.10	\$0.00
3. > 10 meters below grade		each	\$2,464.77	\$0.00
4. Geophysical UST or Drum Survey		each	\$970.97	\$0.00
<b>D. Mob/Demob</b>				
1. Equipment		each	\$1,088.34	\$0.00
2. Personnel	2	each	\$451.34	\$902.68
3. Adverse Terrain Vehicle		each	\$533.50	\$0.00
<b>E.. Soil Borings (hand auger)*</b>				
		foot	\$5.34	\$0.00
<b>F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including water sample, soil sample, soil gas sample, etc.)*</b>				
1. Standard		per foot	\$16.01	\$0.00
2. Fractured Rock		per foot	\$21.55	\$0.00
<b>G. Soil Leachability Model</b>				
		each	\$64.02	\$0.00
<b>H. Abandonment (per foot)*</b>				
1. 2" diameter or less		per foot	\$3.31	\$0.00
2. Greater than 2" to 6" diameter		per foot	\$4.80	\$0.00
3. Dug/Bored well (up to 6 feet diameter)		per foot	\$16.00	\$0.00
<b>I. Well Installation (per foot)*</b>				
1. Water Table (hand augered)		per foot	\$11.31	\$0.00
2. Water Table (drill rig) 2" Diameter		per foot	\$40.55	\$0.00
3. Telescoping		per foot	\$53.35	\$0.00
4. Rock Drilling		per foot	\$61.89	\$0.00
5. 2" Rock Coring		per foot	\$32.97	\$0.00
6. Rock Multi-sampling ports/screens		per foot	\$35.64	\$0.00
7. Recovery Well (4" diameter)		per foot	\$48.02	\$0.00
8. Pushed Pre-packed screen (1.25" dia)		per foot	\$16.01	\$0.00
9. Rotasonic (2" diameter)		per foot	\$46.95	\$0.00
10. Re-develop Existing Well		per foot	\$11.74	\$0.00



<b>J. Groundwater Sample Collection / Gauge Depth to Water or Product *</b>				
1. Groundwater Purge	52	per well	\$64.02	\$3,329.04
2. Air or Vapors		sample	\$12.80	\$0.00
3. Water Supply Sample or Duplicate	7	sample	\$23.47	\$164.29
4. Groundwater No Purge or Duplicate or Grab	5	sample	\$29.88	\$149.40
5. Gauge Well only		sample	\$7.47	\$0.00
6. Sample Below Product		sample	\$12.80	\$0.00
7. Passive Diffusion Bag		sample	\$27.74	\$0.00
8. Field Blank	2	sample	\$26.25	\$52.50
9. Groundwater (low flow purge)		sample	\$97.10	\$0.00
10. Equipment Blank		sample	\$26.25	\$0.00
<b>K. Laboratory Analyses-Groundwater</b>				
1. BTEXNM+Oxyg's+1,2 DCA+Eth(8260B)	58	per sample	\$130.17	\$7,549.86
2. Lead, Filtered		per sample	\$14.72	\$0.00
3. Rush EPA Method 8260B		per sample	\$163.89	\$0.00
4. Trimethal, Butyl, and Isopropyl Benzenes		per sample	\$29.88	\$0.00
5. PAH's		per sample	\$64.66	\$0.00
6. Lead		per sample	\$17.07	\$0.00
7. EDB by EPA 8011		per sample	\$48.23	\$0.00
8. EDB by EPA Method 8011 Rush		per sample	\$72.77	\$0.00
9. 8 RCRA Metals		per sample	\$67.65	\$0.00
10. TPH (9070)		per sample	\$43.75	\$0.00
11. PH		per sample	\$5.55	\$0.00
12. BOD		per sample	\$21.34	\$0.00
13. Ethanol		per sample	\$15.79	\$0.00
<b>K. Analyses-Drinking Water</b>				
14. BTEXNM+1,2 DCA (524.2)	9	per sample	\$132.36	\$1,191.24
15. 7-OXYGENATES & ETHANOL (8260B)	9	per sample	\$97.90	\$881.10
16. EDB (504.1)		per sample	\$84.83	\$0.00
17. RCRA METALS (200.8)		per sample	\$106.70	\$0.00
<b>K. Analyses-Soil</b>				
18. BTEX + Naphth.		per sample	\$68.29	\$0.00
19. PAH's		per sample	\$68.33	\$0.00
20. 8 RCRA Metals		per sample	\$60.18	\$0.00
21. TPH-DRO (3550C/8015C)		per sample	\$42.68	\$0.00
22. TPH- GRO (5035B/8015C)		per sample	\$38.37	\$0.00
23. Grain size/hydrometer		per sample	\$110.97	\$0.00
24. Total Organic Carbon		per sample	\$32.65	\$0.00
<b>K. Analyses-Air</b>				
25. BTEX + Naphthalene		per sample	\$230.47	\$0.00
<b>K. Analyses-Free Phase Product</b>				
26. Hydrocarbon Fuel Identification		per sample	\$380.92	\$0.00
<b>L. Aquifer Characterization*</b>				
1. Pumping Test		per hour	\$24.54	\$0.00
2. Slug Test		per test	\$203.80	\$0.00
3. Fractured Rock		per test	\$106.70	\$0.00



<b>M. Free Product Recovery Rate Test*</b>		each	\$40.55	\$0.00
<b>N. Fate/Transport Modeling</b>				
1. Mathematical Model		each	\$106.70	\$0.00
2. Computer Model		each	\$106.70	\$0.00
<b>O. Risk Evaluation</b>				
1. Tier I Risk Evaluation		each	\$320.10	\$0.00
2. Tier II Risk Evaluation		each	\$106.70	\$0.00
<b>P. Subsequent Survey*</b>		each	\$260.00	\$0.00
<b>Q. Disposal (gallons or tons)*</b>				
1. Wastewater	150	gallon	\$0.60	\$90.00
2. Free Product		gallon	\$0.53	\$0.00
3. Soil Treatment/Disposal		ton	\$64.02	\$0.00
4. Drilling fluids		gallon	\$0.45	\$0.00
<b>R. Miscellaneous (attach receipts)</b>				
		each	\$0.00	\$0.00
		each	\$0.00	\$0.00
		each	\$0.00	\$0.00
<b>T. Tier I Assessment (Use DHEC 3665 form)</b>				
1. Southeast Region		standard	\$11,026.00	\$0.00
2. All Other Counties		standard	\$12,093.00	\$0.00
<b>U. IGWA (Use DHEC 3666 form)</b>				
1. Southeast Region		standard	\$3,803.00	\$0.00
2. All Other Counties		standard	\$4,123.00	\$0.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>		PFM Bid		\$0.00
<b>W. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>				
1. 8-hour Event*		per event	\$1,467.13	\$0.00
2. 24-hour Event*		per event	\$4,081.28	\$0.00
3. 48-hour Event*		per event	\$6,706.10	\$0.00
4. 96-hour Event*		per event	\$13,409.52	\$0.00
5. Off-gas Treatment 8 hour		per event	\$130.71	\$0.00
6. Off-gas Treatment 24 hour		per event	\$257.68	\$0.00
7. Off-gas Treatment 48 hour		per event	\$348.91	\$0.00
8. Off-gas Treatment 96 hour		per event	\$832.26	\$0.00
9. Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	\$430.00	\$0.00
10. Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	\$500.00	\$0.00
11. Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	\$1,000.00	\$0.00
12. Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	\$2,000.00	\$0.00
13. AFVR Effluent Disposal(w/chlorinated compounds)		gallon	\$0.50	\$0.00
14. AFVR Site Reconnaissance		each	\$216.87	\$0.00
15. Additional Hook-ups		each	\$27.48	\$0.00
16. AFVR Effluent Disposal		gallon	\$0.47	\$0.00
17. AFVR Mobilization/Demobilization		each	\$417.73	\$0.00
<b>X. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>				
1. New GAC System Installation*		each	\$2,027.30	\$0.00
2. Refurbished GAC Sys. Install*		each	\$960.30	\$0.00
3. Filter replacement/removal*		each	\$373.45	\$0.00

4. GAC System removal, cleaning, & refurbishment*		each	\$293.43	\$0.00
5. GAC System housing*		each	\$266.75	\$0.00
<b>Y. Well Repair</b>				
1. Additional Copies of the Report Delivered		each	\$53.35	\$0.00
2. Repair 2x2 MW pad*		each	\$53.35	\$0.00
3. Repair 4x4 MW pad*		each	\$93.90	\$0.00
4. Replace well vault*		each	\$125.91	\$0.00
5. Replace well cover bolts		each	\$2.77	\$0.00
6. Replace locking well cap & lock		each	\$16.00	\$0.00
7. Replace/Repair stick-up*		each	\$142.98	\$0.00
8. Convert Flush-mount to Stick-up*		each	\$160.05	\$0.00
9. Convert Stick-up to Flush-mount*		each	\$138.71	\$0.00
10. Replace missing/illegible well ID plate		each	\$12.80	\$0.00
<b>S. Report Prep &amp; Project Management</b>	12%	percent	\$14,470.16	\$1,736.42
<b>TOTAL</b>				<b>\$16,206.58</b>

DHEC D-4074 (1-2020) \*The appropriate mobilization cost can be added to complete these tasks, as necessary



JUL 14 2020

ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729

Re: **Site-Specific Work Plan Approval and Groundwater Sampling Notice to Proceed**  
One Accord Ministries, 3570 Lancaster Hwy., Richburg, SC  
UST Permit #02131; CA #62073  
Release #1 reported March 23, 2009  
Site Specific Work Plan received June 17, 2020  
Chester County

To Whom it May Concern:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed and approved the referenced Site Specific Work Plan (SSWP) submitted by your contractor. All work should be conducted in compliance with the most recent revision of the UST QAPP, your contractor's Annual Contractor Quality Assurance Plan, and all applicable regulations. A copy of the current revision of the UST QAPP is available at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentClean-up/QualityAssurance/>.

The groundwater sampling event should begin immediately upon receipt of this letter. The Cost Agreement number shown above has been approved for the amount shown on the enclosed cost agreement form.

**The contractor must provide notification to the UST Project Manager via email 4 days prior to initiation of any site rehabilitation activities. If there are any changes to the schedule, the UST Project Manager must be contacted within 24 hours of those changes.**

**-Please only purge wells that do not bracket the water table.**

Your contractor can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. **The Monitoring Report, contractor checklist (QAPP Appendix K), and invoice should be submitted to the UST Division within sixty (60) days of the date of this correspondence.** If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please note that sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that the SUPERB Account cannot compensate any costs that are not pre-approved. If for any reason additional tasks will be completed, these additional tasks, and the associated cost, must be pre-approved by the UST Division for the cost to be paid. The UST Division reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, the UST Division reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work.

Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a DHEC-certified site rehabilitation contractor as required by the SUPERB Site Rehabilitation and Fund Access Regulation, R.61-98.

The UST Division grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the Chemical of Concern (CoC) concentrations based on laboratory analysis is below Risk-Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence regarding this site, please reference UST Permit #02131. Should you have any questions regarding this correspondence, please feel free to contact me by phone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at [wykeljm@dhec.sc.gov](mailto:wykeljm@dhec.sc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Wykel", written in a cursive style.

Matt Wykel, Hydrogeologist  
Corrective Action & Field Support Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (w/enc)  
Technical file (w/enc)

# Approved Cost Agreement

62073

Facility: 02131 ONE ACCORD MINISTRIES

WYKELJM

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
A PLAN PREPARATION					
		1 SITE SPECIFIC WORK PLAN	1.0000	\$160.050	160.05
D MOB/DEMOB					
		2 PERSONNEL	2.0000	\$451.340	902.68
J SAMPLE COLLECTION					
		1 GROUND WATER PURGE	30.0000	\$64.020	1,920.60
		3 WATER SUPPLY SAMPLE/ DUPLICATE	29.0000	\$23.470	680.63
		4 GROUNDWATER NO-PURGE/DUPL/GRAB	5.0000	\$29.880	149.40
		8 FIELD BLANK	2.0000	\$26.250	52.50
K ANALYSES					
	DW DRINKING WATER	14 BTEXNM+1,2 DCA (524.2) WSW	9.0000	\$132.360	1,191.24
		15 OXYGENATES & ETHANOL 8260B WSW	9.0000	\$97.900	881.10
	GW GROUNDWATER	1 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	58.0000	\$130.170	7,549.86
Q DISPOSAL					
		1 WASTEWATER	100.0000	\$0.600	60.00
S REPORT PROJECT MANAGEMENT					
		S REPORT PREP & PROJ. MANAGEMENT	0.1200	\$13,548.060	1,625.77
<b>Total Amount</b>					<b>15,173.83</b>



# Katawba Environmental, Inc.

September 2, 2020

Mr. Matt Wykel  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE: Sampling Report  
One Accord Ministries  
UST Permit #02131 CA #62073  
3570 Lancaster Highway  
Richburg, South Carolina**



Dear Mr. Wykel:

Katawba Environmental, Inc. (Katawba) has prepared this Sampling Report for the above-referenced facility for your review. This Assessment was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated July 14, 2020.

It is recommended that multiple AFVR Events be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC. #18**

Alex W. Amos, CEO, PG  
Senior Consultant



*Sampling Report*  
**One Accord**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit #02131**



A handwritten signature in black ink, appearing to read "Alex W. Amos".

Alex W. Amos, CEO, PG  
Senior Consultant

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## **1.0 INTRODUCTION**

Katawba Environmental, Inc. has been contracted by Ms. Angel Hough to complete a Sampling Report for One Accord Ministries. The Subject Site (Site ID 02131) is located at 3570 Lancaster Highway in Richburg, South Carolina (Appendix A, Figure 1). The subject site currently operates as youth ministry for Union ARP Church. The facility no longer retails petroleum products.

The surrounding area is mixed residential and commercial development. The subject site is abutted by residential structures to the north, south, east and west. First Citizens Bank is located approximately 421 feet northeast, the entrance for Lewisville Middle school is located approximately 260 feet east and Union ARP Church is located approximately 560 feet southwest. The nearest permitted UST site appears to be in excess of 2500 feet from the subject site.

The release at the subject site was reported March 23, 2009. An Initial Groundwater Assessment was conducted in November 2012. A Tier I was conducted in March 2014. The findings of the Tier I indicated further assessment was warranted to delineate the vertical and horizontal extent of the petroleum hydrocarbon release. A Tier II Assessment conducted in 2017 indicated that the plume extends approximately 420 feet from the source in a west southwestern direction. The current assessment scope of work included a comprehensive sampling of all wells within the well network. Findings of this assessment scope of work are as follows.

- Monitoring wells MW1R, MW2, MW3, MW16, MW19, MW20, MW24, MW29, MW30, MW33, DW5, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Drinking water wells DWW1, DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.

## **1.1 Site Information**

The responsible party for the subject site is One Accord Ministries, PO Box 220, Richburg, South Carolina 29729. Angel Hough is the contact for One Accord Ministries and can be communicated with via mail or phone at (803) 804-0253. According to Chester County Tax Assessor records the parcel is currently owned by owned by Angela D. Hough and Melvin E. Hugh Sr. Survivorship, PO Box 220, Richburg, South Carolina 29729. The subject site is a square shaped parcel that is occupied by one primary structure and a storage unit in the rear of the facility. The subject site is listed with the Chester County Assessor's Office as TM 125-00-00-059-000.

## **2.0 Piezometric Data**

Figure 2 in Appendix A serves as the comprehensive site map showing the locations of the 52 monitoring wells located at the subject site. Piezometric data for all monitoring wells associated with the release at the One Accord Ministries site can be found in Table 1. Water levels were measured on 8/19/20. A piezometric map was created utilizing groundwater elevations measured during this scope of work is included as Figure 3 in Appendix A.

Depths to fluid measurements were collected relative to the top of casing for each well with the accuracy of measurements being within 0.01 foot or 1/8 inch. A hydrocarbon interface probe capable of detecting and measuring a hydrocarbon product thickness of 0.01 foot or 1/8 inch was used for depth to fluid measurements.

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	8/19/20	99.20	24-14	--	20.47	78.73
MW 2	8/19/20	99.04	28-18	--	20.93	78.11
MW 3	8/19/20	98.95	28-18	--	20.39	78.56
MW 4	8/19/20	99.30	28-18	--	21.60	77.70
MW 5	8/19/20	100.13	25-15	--	NL	NL
MW 6	8/19/20	98.09	24-14	--	NL	NL
MW 7	8/19/20	96.98	23-13	--	15.93	81.05
MW 8	8/19/20	95.83	23-13	--	19.05	76.78
MW 9R	8/19/20	103.90	37-27	--	28.85	75.05
MW 10 R	8/19/20	104.51	40-30	--	30.77	73.74
MW 11	8/19/20	99.24	29-19	--	NL	NL
MW 12	8/19/20	98.96	29-19	--	19.82	79.14
MW 13	8/19/20	98.51	26-16	--	23.74	74.77
MW 14	8/19/20	99.77	36-26	--	NL	NL
MW 15	8/19/20	105.72	40-30	--	36.17	69.55
MW 16	8/19/20	94.17	30-20	--	20.42	73.75
MW 17	8/19/20	98.62	30-20	--	21.70	76.92
MW 18	8/19/20	100.03	32-22	--	25.54	74.49
MW 19	8/19/20	99.24	32-22	--	21.52	77.72
MW 20	8/19/20	98.22	28-18	--	20.74	77.48
MW 21	8/19/20	98.84	35-25	--	25.86	72.98
MW 22	8/19/20	101.55	30-20	--	27.82	73.73
MW 23	8/19/20	99.18	35-25	--	24.80	74.38
MW 24	8/19/20	101.20	35-25	--	30.29	70.91
MW 25	8/19/20	99.37	30-20	--	26.52	72.85
MW 26	8/19/20	99.24	28-18	--	26.87	72.37

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 27	8/19/20	99.35	28-18	--	20.21	79.14
MW 28	8/19/20	99.25	59-49	--	25.61	73.64
MW 29	8/19/20	101.64	64-54	--	27.64	74.00
MW 30	8/19/20	99.41	59-49	--	25.89	73.52
MW 31	8/19/20	101.24	57-47	--	27.24	74.00
MW 32	8/19/20	99.18	56-46	--	21.73	77.45
MW 33	8/19/20	98.90	58-48	--	26.34	72.56
MW 34	8/19/20	99.28	56-46	--	20.87	78.41
MW 35	8/19/20	104.25	50-40	--	30.51	73.74
MW 36	8/19/20	103.59	59-49	--	28.74	74.85
MW 37	8/19/20	105.69	64-54	--	36.44	69.25
MW 38	8/19/20	99.63	40-30	--	27.39	72.24
MW 39	8/19/20	99.52	80-75	--	27.63	71.89
DW 1	8/19/20	98.42	75-70	--	18.34	80.08
DW 2	8/19/20	99.59	75-70	--	22.12	77.47
DW 3	8/19/20	104.30	75-70	--	30.82	73.48
DW 4	8/19/20	99.81	120-115	--	NL	NL
DW 5	8/19/20	99.52	150-145	--	21.74	77.78
DW 6	8/19/20	98.54	150-145	--	26.42	73.12
DW 7	8/19/20	99.32	150-145	--	20.43	78.89
DW 8	8/19/20	103.97	150-145	--	36.21	67.76
DW 9	8/19/20	105.79	150-145	--	35.29	70.50
DW 10	8/19/20	99.44	150-145	--	27.73	71.71
RW 1	8/19/20	98.90	29-19	--	20.72	78.18
RW 2	8/19/20	98.87	29-19	--	20.46	78.41
RW 3	8/19/20	99.01	29-19	--	20.87	78.14

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	8/19/20	99.20	24-14	--	20.47	78.73
	3/18/19			--	20.73	78.47
	7/7/18			--	21.98	77.22
	9/1/17			--	16.59	82.61
	3/13/17			--	21.93	77.27
	1/31/17			--	21.83	77.37
MW 1	12/18/13	UNK	29-19	--	NL	NL
	10/26/12			--	23.51	UNK
MW 2	8/19/20	99.04	28-18	--	20.93	78.11
	3/18/19			--	20.49	78.55
	7/7/18			--	21.86	77.18
	9/1/17			--	21.39	77.65
	3/13/17			--	21.74	77.30
	1/31/17			--	21.69	77.35
	12/18/13			--	18.48	80.56
MW 3	8/19/20	98.95	28-18	--	20.39	78.56
	3/18/19			--	21.31	77.64
	7/7/18			--	21.84	77.11
	9/1/17			--	22.17	76.78
	3/13/17			21.67	21.73	77.19
	1/31/17			21.70	21.76	77.19
	12/18/13			--	18.85	80.10
MW 4	8/19/20	99.30	28-18	--	21.60	77.70
	3/18/19			--	21.17	78.13
	7/7/18			--	21.93	77.37
	9/1/17			--	21.42	77.88
	3/13/17			--	21.32	77.98
	1/31/17			--	21.94	77.36
	12/18/13			--	19.48	79.82
MW 5	8/19/20	100.13	25-15	--	NL	NL
	3/18/19			--	16.31	83.82
	7/7/18			--	19.17	80.96
	9/1/17			--	18.10	82.03
	3/13/17			--	22.09	78.04
	1/31/17			--	22.71	77.42
MW 6	8/19/20	98.09	24-14	--	NL	NL
	3/18/19			--	16.93	81.86
	7/7/18			--	17.18	80.91
	3/13/17			--	20.44	77.65
	9/1/17			--	16.29	81.80
	1/31/17			--	20.79	77.30

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 7	8/19/20	96.98	23-13	--	15.93	81.05
	3/18/19			--	15.41	81.57
	7/7/18			--	16.13	80.85
	9/1/17			--	16.07	80.91
	1/31/17			--	19.86	77.12
	3/13/17			--	19.66	77.32
MW 8	8/19/20	95.83	23-13	--	19.05	76.78
	3/18/19			--	18.53	77.30
	7/7/18			--	19.87	75.96
	9/1/17			--	30.07	75.76
	1/31/17			--	19.16	76.67
	3/13/17			--	19.20	76.63
MW 9R	8/19/20	103.90	37-27	--	28.85	75.05
	3/18/19			--	29.73	74.17
	7/7/18			--	30.33	73.57
	9/1/17			--	24.97	73.58
	3/13/17			--	29.23	74.67
	3/3/17			--	29.37	74.53
MW 9	1/31/17	103.75	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 10 R	8/19/20	104.51	40-30	--	30.77	73.74
	3/18/19			--	30.47	74.04
	7/7/18			--	31.84	72.67
	9/1/17			--	30.89	73.62
	3/13/17			--	31.73	72.78
	3/3/17			--	31.58	72.93

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 10	1/31/17	104.68	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 11	8/19/20	99.24	29-19	--	NL	NL
	3/18/19			--	25.82	73.42
	7/7/18			--	26.57	72.67
	9/1/17			--	17.49	72.85
	3/13/17			--	25.63	73.61
	1/31/17			--	26.31	72.93
MW 12	8/19/20	98.96	29-19	--	19.82	79.14
	3/18/19			--	20.10	78.86
	7/7/18			--	20.73	78.23
	9/1/17			--	17.57	81.39
	3/13/17			--	20.59	78.37
	1/31/17			--	21.62	77.34
MW 13	8/19/20	98.51	26-16	--	23.74	74.77
	3/18/19			--	25.21	73.30
	7/7/18			--	24.26	74.25
	9/1/17			--	24.71	73.80
	3/13/17			--	21.20	77.31
	1/31/17			--	20.52	77.99
MW 14	8/19/20	99.77	36-26	--	NL	NL
	3/18/19			--	27.32	72.45
	7/7/18			--	27.84	71.93
	9/1/17			--	28.16	71.61
	3/13/17			--	27.24	72.53
	3/3/17			--	28.02	71.75
MW 15	8/19/20	105.72	40-30	--	36.17	69.55
	3/18/19			--	36.12	69.60
	7/6/18			--	37.89	67.83
	9/1/17			--	37.19	68.53
	3/13/17			--	36.72	69.00
	3/3/17			--	37.12	68.60
MW 16	8/19/20	94.17	30-20	--	20.42	73.75
	3/18/19			--	22.31	71.86
	7/7/18			--	21.73	72.44
	9/1/17			--	21.42	77.72

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 17	8/19/20	98.62	30-20	--	21.70	76.92
	3/18/19			--	21.29	77.33
	7/7/18			--	21.06	77.56
	9/1/17			--	21.57	77.05
MW 18	8/19/20	100.03	32-22	--	25.54	74.49
	3/18/19			--	20.98	79.05
	7/7/18			--	26.80	73.23
	9/1/17			--	25.61	74.42
MW 19	8/19/20	99.24	32-22	--	21.52	77.72
	3/18/19			--	21.35	77.89
	7/7/18			--	22.77	76.47
	9/1/17			--	23.25	75.99
MW 20	8/19/20	98.22	28-18	--	20.74	77.48
	3/18/19			--	22.31	75.91
	7/7/18			--	21.64	76.58
	9/1/17			--	21.59	76.63
MW 21	8/19/20	98.84	35-25	--	25.86	72.98
	3/18/19			--	20.94	77.90
	7/7/18			--	26.77	72.07
	9/1/17			--	27.03	71.81
MW 22	8/19/20	101.55	30-20	--	27.82	73.73
	3/18/19			--	27.17	74.38
	7/7/18			--	28.20	73.35
	9/1/17			--	28.15	73.40
MW 23	8/19/20	99.18	35-25	--	24.80	74.38
	3/18/19			--	26.22	72.96
	7/7/18			--	26.43	72.75
	9/1/17			--	27.00	72.18
MW 24	8/19/20	101.20	35-25	--	30.29	70.91
	3/18/19			--	27.37	76.83
	7/7/18			--	28.13	73.07
	9/1/17			--	28.43	72.77
MW 25	8/19/20	99.37	30-20	--	26.52	72.85
	3/18/19			--	20.17	73.83
	7/7/18			--	21.77	77.60
	9/1/17			--	21.59	77.78



Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 26	8/19/20	99.24	28-18	--	26.87	72.37
	3/18/19			--	26.83	72.41
	7/7/18			--	27.17	72.07
	9/1/17			--	26.93	72.31
MW 27	8/19/20	99.35	28-18	--	20.21	79.14
	3/18/19			--	21.73	77.62
	7/7/18			--	22.42	76.93
	9/1/17			--	18.21	81.14
MW 28	8/19/20	99.25	59-49	--	25.61	73.64
	3/18/19			--	25.63	73.62
	7/7/18			--	26.75	72.50
	9/1/17			--	27.18	72.07
MW 29	8/19/20	101.64	64-54	--	27.64	74.00
	3/18/19			--	26.84	74.80
	7/7/18			--	28.32	73.32
	9/1/17			--	28.49	73.15
MW 30	8/19/20	99.41	59-49	--	25.89	73.52
	3/18/19			--	25.17	74.24
	7/7/18			--	25.35	74.06
	9/1/17			--	26.85	72.56
MW 31	8/19/20	101.24	57-47	--	27.24	74.00
	3/18/19			--	27.07	74.17
	7/7/18			--	38.23	63.01
	9/1/17			--	28.40	72.84
MW 32	8/19/20	99.18	56-46	--	21.73	77.45
	3/18/19			--	21.47	77.71
	7/7/18			--	22.12	77.06
	9/1/17			--	21.60	77.58
MW 33	8/19/20	98.90	58-48	--	26.34	72.56
	3/18/19			--	27.49	71.41
	7/7/18			--	27.21	71.69
	9/1/17			--	27.13	71.77

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 34	8/19/20	99.28	56-46	--	20.87	78.41
	3/18/19			--	20.75	78.53
	7/7/18			--	21.94	77.34
	9/1/17			--	21.84	77.44
MW 35	8/19/20	104.25	50-40	--	30.51	73.74
	3/18/19			--	29.74	74.51
	7/7/18			--	31.00	73.25
	9/1/17			--	31.25	73.00
MW 36	8/19/20	103.59	59-49	--	28.74	74.85
	3/18/19			--	29.41	74.18
	7/7/18			--	30.26	73.33
	9/1/17			--	29.90	73.69
MW 37	8/19/20	105.69	64-54	--	36.44	69.25
	3/18/19			--	37.42	68.27
	7/6/18			--	38.90	66.79
	9/1/17			--	37.22	68.47
MW 38	8/19/20	99.63	40-30	--	27.39	72.24
	3/18/19			--	26.93	72.70
	7/6/18			--	28.16	71.47
MW 39	8/19/20	99.52	80-75	--	27.63	71.89
	3/18/19			--	27.64	71.88
	7/6/18			--	28.83	70.69
DW 1	8/19/20	98.42	75-70	--	18.34	80.08
	3/18/19			--	18.33	80.09
	7/6/18			--	17.43	80.99
	9/1/17			--	17.32	81.10
	3/13/17			--	21.36	77.06
	1/31/17			--	21.53	76.89
DW 2	8/19/20	99.59	75-70	--	22.12	77.47
	3/18/19			--	22.73	76.86
	7/6/18			--	17.64	81.95
	9/1/17			--	17.59	82.00
	3/13/17			--	21.70	77.89
	1/31/17			--	22.29	77.30
	DW 3			8/19/20	104.30	75-70
3/18/19		--	30.76	73.54		
7/6/18		--	31.34	72.96		
9/1/17		--	26.10	78.20		
3/13/17		--	32.47	71.83		
1/31/17		--	31.29	73.01		

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
DW 4	8/19/20	99.81	120-115	--	NL	NL
	3/18/19			--	27.31	72.50
	7/6/18			--	28.26	71.55
	9/1/17			--	28.30	71.51
	3/13/17			--	27.63	72.18
	1/31/17			--	28.05	71.76
DW 5	8/19/20	99.52	150-145	--	21.74	77.78
	3/18/19			--	21.43	78.09
	7/6/18			--	22.83	76.69
	9/1/17			--	21.61	77.91
DW 6	8/19/20	98.54	150-145	--	26.42	73.12
	3/18/19			--	28.33	70.21
	7/6/18			--	27.10	71.44
	9/1/17			--	27.17	71.37
DW 7	8/19/20	99.32	150-145	--	20.43	78.89
	3/18/19			--	18.39	80.93
	7/6/18			--	21.58	77.74
	9/1/17			--	21.40	77.92
DW 8	8/19/20	103.97	150-145	--	36.21	67.76
	3/18/19			--	37.43	66.54
	7/6/18			--	38.99	64.98
	9/1/17			--	30.51	73.46
DW 9	8/19/20	105.79	150-145	--	35.29	70.50
	3/18/19			--	36.89	68.90
	7/6/18			--	37.41	68.38
	9/1/17			--	37.12	68.67
DW 10	8/19/20	99.44	150-145	--	27.73	71.71
	3/18/19			--	28.74	70.70
	7/6/18			--	29.94	69.50
RW 1	8/19/20	98.90	29-19	--	20.72	78.18
	3/18/19			--	21.18	77.72
	7/6/18			--	21.33	77.57
	9/1/17			--	21.12	77.78
RW 2	8/19/20	98.87	29-19	--	20.46	78.41
	3/18/19			--	20.76	78.11
	7/6/18			--	21.67	77.20
	9/1/17			--	21.10	77.77
RW 3	8/19/20	99.01	29-19	--	20.87	78.14
	3/18/19			--	20.91	78.10
	7/6/18			--	21.73	77.28
	9/1/17			--	21.14	77.87

## **2.1 Groundwater Sampling**

Samples were collected from monitoring wells installed during prior rounds of assessment. Prior to sampling each well, depths to groundwater were measured utilizing an oil/water interface probe. These measurements were used to construct a piezometric map which is located in Appendix A, as Figure 3. Groundwater was evacuated from each well utilizing a battery operated Monsoon purge pump. As directed by SCDHEC all wells that did not screen the aquifer were purged three volumes prior to sampling. Sampling of wells located at the site was completed by utilizing a disposable bailer attached to a new non colored nylon line. Groundwater samples collected were placed into laboratory supplied containers and stored on ice for same day transport for analysis. Katawba personnel submitted all groundwater samples to Pace Analytical, 106 Vantage Point Drive, Cayce, SC 29033 to the attention of laboratory director Dan Wright who can be contacted at 803-791-9700. The results for the groundwater sampling analysis are as follows.

**TABLE 2 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	8/19/20	2200	7400	1000	6600	370	2200	NA	NA	NA	<100
MW 2	8/19/20	4600	26000	2400	26000	750	950	NA	NA	NA	<200
MW 3	8/19/20	85	290	17	520	8.7	180	NA	NA	NA	<5
MW 4	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 5	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 6	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 7	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 8	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 9R	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 10R	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 11	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 12	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
DUP	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 13	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 14	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW15	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 16	8/19/20	860	3000	510	3600	200	110	NA	NA	NA	<20
MW 17	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 18	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 19	8/19/20	630	2.4 J	<5	6.2	5.7	340	NA	NA	NA	<5
MW 20	8/19/20	1500	3300	610	5200	290	490	NA	NA	NA	<20
MW 21	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 22	8/18/20	<1	<1	<1	<1	<1	1.7	NA	NA	NA	<1
MW 23	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 24	8/18/20	<1	<1	<1	<1	<1	100	NA	NA	NA	<1
MW 25	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 26	8/19/20	<1	<1	<1	<1	<1	1.2	NA	NA	NA	<1
MW 27	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 28	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 29	8/19/20	<1	<1	<1	<1	<1	86	NA	NA	NA	<1
MW 30	8/18/20	<1	<1	<1	<1	<1	140	NA	NA	NA	<1
DUP	8/18/20	<1	<1	<1	<1	<1	150	NA	NA	NA	<1
MW 31	8/18/20	<1	<1	<1	<1	<1	6.5	NA	NA	NA	<1
MW 32	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 33	8/18/20	<5	<5	<5	<5	<5	530	NA	NA	NA	<5
MW 34	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 35	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 36	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 37	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 38	8/17/20	<1	<1	<1	<1	<1	9.0	NA	NA	NA	<1
DUP	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
MW 39	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
DW 1	8/17/20	<1	<1	<1	<1	<1	24	NA	NA	NA	<1
DW 2	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
DW 3	8/17/20	<1	<1	<1	<1	<1	6.7	NA	NA	NA	<1
DW 4	8/17/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
DW 5	8/17/20	3.2	0.41 J	5	3.8	1.3	110	NA	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 6	8/17/20	<1	<1	<1	<1	<1	1.8	NA	NA	NA	<1
DW 7	8/17/20	<1	<1	<1	<1	<1	2.4	NA	NA	NA	<1
DW 8	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
DW 9	8/17/20	<1	<1	<1	<1	<1	4.8	NA	NA	NA	<1
DW 10	8/17/20	<1	<1	<1	<1	<1	32	NA	NA	NA	<1
RW 1	8/19/20	<b>13000</b>	<b>35000</b>	<b>3400</b>	<b>19000</b>	<b>730</b>	<b>25000</b>	NA	NA	NA	<500
RW 2	8/19/20	<b>1400</b>	<b>2100</b>	490	2200	<b>120</b>	<b>1500</b>	NA	NA	NA	<20
RW 3	8/19/20	<b>3100</b>	<b>4600</b>	<b>1100</b>	6500	<b>370</b>	<b>2600</b>	NA	NA	NA	<50
DWW1	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	3.3	NA	NA	NA	<0.50
DWW2	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<b>71</b>	NA	NA	NA	<0.50
DWW3	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	NA	NA	NA	<0.50
DWW4	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	NA	NA	NA	<0.50
DWW5	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	3.0	NA	NA	NA	<0.50
DWW6	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50
DUP	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50
FB	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
FB2	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50
TB1	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
TB2	8/18/20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50

**TABLE 2 Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	8/19/20	300	<10000	<2000	<100	3500	900 J	410 J	<500
MW 2	8/19/20	460	<20000	<4000	<200	13000	260 J	1300 J	<1000
MW 3	8/19/20	15	<500	<100	<5	68 J	52	8.4 J	<25
MW 4	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
MW 6	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
MW 7	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 9R	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 10R	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
MW 12	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DUP	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5



Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 14	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
MW 15	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 16	8/19/20	65	<2000	<400	<20	1800	15 J	170 J	<100
MW 17	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	8/19/20	15	<500	<100	<5	1100	31 J	120	<25
MW 20	8/19/20	95	<2000	<400	<20	2700	38 J	270 J	<100
MW 21	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 23	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	8/18/20	<1	<100	<20	<1	<20	8.3 J	3.4 J	<5
MW 25	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 27	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	8/18/20	1.9	<100	<20	<1	<20	2.2 J	2.5 J	<5
MW 30	8/18/20	2.7	<100	<20	<1	<20	7.3 J	3.9 J	<5
DUP	8/18/20	2.4	<100	<20	<1	<20	8.0 J	4.5 J	<5
MW 31	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	8/18/20	6.7	<500	<100	<5	<100	57	5.7 J	<25
MW 34	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	8/18/20	<1	<100	<20	<1	<20	<10	0.51 J	<5
MW 38	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DUP	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	8/17/20	2.2	<100	<20	<1	<20	<10	<20	<5
DW 2	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 4	8/17/20	NL	NL	NL	NL	NL	NL	NL	NL
DW 5	8/17/20	1.8	76 J	<20	<1	33	13	17 J	<5
DW 6	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 7	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 8	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	8/17/20	0.61 J	<100	<20	<1	<20	<10	<20	<5
DW 10	8/17/20	<1	<100	<20	<1	<20	0.48 J	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RW 1	8/19/20	1500	<50000	<10000	<500	15000	5700	1500 J	<2500
RW 2	8/19/20	120	<2000	<400	<20	1100	430	160 J	<100
RW 3	8/19/20	240	<5000	<100	<50	3000	860	420 J	<250
DWW 1	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	8/19/20	0.84 J	<100	<20	<1	<20	0.42 J	0.41 J	<5
DWW 3	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
DUP	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
FB	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
FB 2	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
TB	8/17/20	<1	<100	<20	<1	<20	<10	0.59 J	<5
TB 2	8/19/20	<1	<100	<20	<1	<20	<10	0.89 J	<5

**TABLE 2A Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	8/19/20	2200	7400	1000	6600	370	2200	NA	NA	NA	<100
	3/19/19	8200	29000	2000	13000	570	4800	<0.022	NA	NA	<500
	7/7/18	20000	30000	96000	39000	38000	<5000	0.15JP	NA	NA	<5000
	1/31/17	11000	42000	2800	20000	750	5700	0.010 J	NA	NA	<500
MW 2	8/19/20	4600	26000	2400	26000	750	950	NA	NA	NA	<200
	3/19/19	7600	25000	1800	13000	510	1400	<2.0	NA	NA	<200
	7/7/18	11000	44000	4000	24000	1400	2000	<0.20	NA	NA	<500
	1/31/17	13000	41000	3200	20000	760	1800	<0.020	NA	NA	<500
MW 3	12/18/13	13000	44000	4200	22000	<500	3100	<0.020	16	780	<500
	8/19/20	85	290	17	520	8.7	180	NA	NA	NA	<5
	3/19/19	<1	<1	<1	<1	<1	0.54 J	<0.020	NA	NA	<1
	7/7/18	11000	43000	3300	21000	1500	1700	0.78 P	NA	NA	<500
MW 4	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP	FP	FP
	12/18/13	15000	44000	4600	23000	1400	31000	0.074	7.2	860	<1000
	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	12/18/13	<1	1	4600	23000	1400	31000	<0.020	9.7	<5	1
	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 5	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 6	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	0.67 J	<1	0.72 J	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	2.6	2.3	1	6.8	<1	3	0.047	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
MW15	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 16	8/19/20	860	3000	510	3600	200	110	NA	NA	NA	<20
	3/19/19	890	1900	270	1600	41	130	<0.020	NA	NA	<20
	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	1400	5500	290	3700	<50	79	<0.020	<10	NA	<50
MW 17	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	0.006J	NA	NA	<1
	9/1/17	2.4	9.3	<100	7.7	<1	<1	<0.019	12	NA	<1
MW 18	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	0.6	NA	<1
MW 19	8/19/20	630	2.4 J	<5	6.2	5.7	340	NA	NA	NA	<5
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	1.7	1.7	0.72	5.3	<1	2.3	<0.020	NA	NA	<1
	9/1/17	980	65	73	580	13	930	<0.019	<10	NA	<5
MW 20	8/19/20	1500	3300	610	5200	290	490	NA	NA	NA	<20
	3/19/19	2500	5600	780	5300	200	680	<0.020	NA	NA	<100
	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	160	410	63	280	4.6 J	97	<0.020	<10	NA	<5
MW 21	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	17	NA	<1
MW 22	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	52	<0.023	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	57	<0.024	NA	NA	<1
	9/1/17	55 J	<10	<10	<10	<10	950	<0.019	67	NA	<10

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 23	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	11	NA	<1
MW 24	8/18/20	<1	<1	<1	<1	<1	<b>100</b>	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<b>710</b>	<0.020	NA	NA	<1
	7/7/18	0.42 J	<1	<1	0.75 J	<1	0.80 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<b>70</b>	<0.019	6.4	NA	<1
MW 25	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	1.7	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 26	8/19/20	<1	<1	<1	<1	<1	1.2	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	19	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	4.1	<0.020	NA	NA	<1
	9/1/17	<b>110</b>	<20	<20	57	<20	<b>1800</b>	<0.019	38	NA	<20
MW 27	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 28	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	0.87 J	<1	<1	<1	<1	0.85 J	<0.019	<10	NA	<1
MW 29	8/19/20	<1	<1	<1	<1	<1	<b>86</b>	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	14	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<b>56</b>	<0.020	NA	NA	<1
	9/1/17	<10	<10	<10	<10	<10	<b>1100</b>	<0.019	<10	NA	<10



Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 30	8/18/20	<1	<1	<1	<1	<1	140	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	100	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	10	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	11	<0.019	<10	NA	<1
MW 31	8/18/20	<1	<1	<1	<1	<1	6.5	NA	NA	NA	<1
	3/19/19	<10	<10	<10	<10	<10	1400	<0.021	NA	NA	<10
	7/7/18	0.41 J	<1	<1	0.71 J	<1	0.80J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	7.2	<1	740	<0.019	<10	NA	<1
MW 32	8/19/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 33	8/18/20	<5	<5	<5	<5	<5	530	NA	NA	NA	<5
	3/19/19	<10	<10	<10	<10	<10	1200	<0.022	NA	NA	<10
	7/7/18	<10	<10	<10	<10	<10	820	<0.020	NA	NA	<10
	9/1/17	140	<20	<20	47	<20	2300	<0.019	<10	NA	<20

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 34	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 35	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	0.90 J	<0.019	<10	NA	<1
MW 36	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 37	8/18/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	0.77 J	<0.020	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.020	6.5	NA	<1
MW 38	8/17/20	<1	<1	<1	<1	<1	9.0	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 39	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/19/19	<1	<1	<1	<1	<1	20	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	16	<0.020	NA	NA	<1
DW 1	8/17/20	<1	<1	<1	<1	<1	24	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	9.3	<0.020	NA	NA	<1
	7/6/18	<b>290</b>	79	27	630	33	<b>340</b>	<0.020	NA	NA	<10
	1/31/17	<b>990</b>	200	100	1600	<b>37</b>	<b>1000</b>	<0.020	NA	NA	<10

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 2	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	8/17/20	<1	<1	<1	<1	<1	6.7	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<b>81</b>	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<b>280</b>	<0.020	NA	NA	<1
	1/31/17	<5	4.2 J	<5	<5	<5	<b>190</b>	<0.020	NA	NA	<5
DW 4	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
	3/18/19	<1	<1	<1	<1	<1	6	<0.020	NA	NA	<1
	7/7/18	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DW 5	8/17/20	3.2	0.41 J	5	3.8	1.3	<b>110</b>	NA	NA	NA	<1
	3/18/19	6.3	0.90 J	4.9	14	9.6	<b>170</b>	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<b>26</b>	4.7 J	5	46	30	<b>330</b>	<0.020	NA	NA	<5
DW 6	8/17/20	<1	<1	<1	<1	<1	1.8	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	2.6	<0.020	NA	NA	<1
	7/6/18	2.9	<1	<1	<1	<1	18	<0.019	NA	NA	<1
	9/1/17	<b>22</b>	<5	<5	28	18	<b>400</b>	<0.020	NA	NA	<5
DW 7	8/17/20	<1	<1	<1	<1	<1	2.4	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	0.88 J	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	1.9	<0.019	NA	NA	<1
	9/1/17	3.5	0.91 J	0.93 J	7.8	5.4	<b>40</b>	<0.19	NA	NA	<1
DW 8	8/17/20	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 9	8/17/20	<1	<1	<1	<1	<1	4.8	NA	NA	NA	<1
	3/18/19	<1	<1	<1	<1	<1	32	<0.020	NA	NA	<1
	7/6/18	<1	<1	<1	<1	<1	32	<0.019	NA	NA	<1
	9/1/17	<1	<1	<1	<1	<1	36	<0.019	NA	NA	<1
DW 10	8/19/20	<1	<1	<1	<1	<1	32	NA	NA	NA	<1
RW 1	8/19/20	<b>13000</b>	<b>35000</b>	<b>3400</b>	<b>19000</b>	<b>730</b>	<b>25000</b>	NA	NA	NA	<500
	3/19/19	<b>5400</b>	<b>7300</b>	<b>770</b>	4200	<b>140</b>	<b>13000</b>	<0.021	NA	NA	<100
	7/6/18	<b>10000</b>	<b>33000</b>	<b>3000</b>	<b>19000</b>	430 J	<b>6700</b>	<b>0.072 P</b>	NA	NA	<500
	9/1/17	<b>7700</b>	<b>12000</b>	<b>1800</b>	<b>9400</b>	<b>270</b>	<b>21000</b>	0.028	8.3	NA	<200
RW 2	8/19/20	<b>1400</b>	<b>2100</b>	490	2200	<b>120</b>	<b>1500</b>	NA	NA	NA	<20
	3/19/19	<b>7500</b>	<b>19000</b>	<b>1100</b>	7200	<b>210</b>	<b>19000</b>	<b>0.12 P</b>	NA	NA	<200
	7/6/18	<b>10000</b>	<b>32000</b>	<b>2900</b>	<b>19000</b>	430 J	<b>6600</b>	<b>0.077P</b>	NA	NA	<500
	9/1/17	<b>16000</b>	<b>49000</b>	<b>3700</b>	<b>19000</b>	<b>500</b>	<b>23000</b>	<b>0.12 P</b>	<10	NA	<500
RW 3	8/19/20	<b>3100</b>	<b>4600</b>	<b>1100</b>	6500	<b>370</b>	<b>2600</b>	NA	NA	NA	<50
	3/19/19	<b>3600</b>	<b>6900</b>	<b>740</b>	4600	<b>120</b>	<b>3000</b>	0.035 P	NA	NA	<100
	7/6/18	<b>10000</b>	<b>32000</b>	<b>3100</b>	<b>20000</b>	490	<b>7000</b>	<b>0.14 P</b>	NA	NA	<200
	9/1/17	<b>4600</b>	<b>6400</b>	<b>1200</b>	<b>11000</b>	<b>170</b>	<b>2500</b>	0.024P	<10	NA	<50
DWW1	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	3.3	NA	NA	NA	<0.50
	3/19/19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW2	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<b>71</b>	NA	NA	NA	<0.50
	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<b>79</b>	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<b>73</b>	<0.019	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<b>44</b>	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<b>71</b>	NA	NA	<5	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DWW3	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	NA	NA	NA	<0.50
	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	0.70	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	0.77	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW4	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	NA	NA	NA	<0.50
	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW5	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	3.0	NA	NA	NA	<0.50
	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	3.5	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
DWW6	8/19/20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<0.50
	3/19/19	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	7/6/18	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1

**TABLE 2A Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	8/19/20	300	<10000	<2000	<100	3500	900 J	410 J	<500
	3/19/19	640	<50000	<10000	<500	8900 J	1900 J	<10000	<2500
	7/7/18	<5000	<500000	<100000	<5000	<100000	<50000	<100000	<25000
	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	8/19/20	460	<20000	<4000	<200	13000	260 J	1300 J	<1000
	3/19/19	630	<20000	<4000	<200	21000	360 J	1800 J	<1000
	7/7/18	760	<50000	<10000	<500	24000	370 J	<10000	<2500
	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
MW 3	8/19/20	15	<500	<100	<5	68 J	52	8.4 J	<25
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	750	<50000	<10000	<500	24000	330 J	<10000	<2500
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
MW 4	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 8	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	8/19/20	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5





Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 16	8/19/20	65	<2000	<400	<20	1800	15 J	170 J	<100
	3/19/19	44	<2000	<400	<20	3300	<200	250 J	<100
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<50	<5000	<1000	<50	810 J	<500	<1000	<250
MW 17	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	8/19/20	15	<500	<100	<5	1100	31 J	120	<25
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	25	<10	13 J	<5
	9/1/17	38	<500	<100	<5	1700	59	220	<25
MW 20	8/19/20	95	<2000	<400	<20	2700	38 J	270 J	<100
	3/19/19	<100	<10000	<2000	<100	4700	<1000	<2000	<500
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<500	<100	<5	1200	5.7 J	140	<25
MW 21	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	4.4 J	<20	<5
	7/7/18	2.2	<100	<20	<1	<20	2.9 J	<20	<5
	9/1/17	32	<1000	<200	<10	290	55 J	<200	<50
MW 23	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 24	8/18/20	<1	<100	<20	<1	<20	8.3 J	3.4 J	<5
	3/19/19	12	<100	<20	<1	<20	75	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	36	<2000	<400	<20	<400	190 J	<400	<100
MW 27	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	8/18/20	1.9	<100	<20	<1	<20	2.2 J	2.5 J	<5
	3/19/19	<1	<100	<20	<1	<20	0.62 J	<20	<5
	7/7/18	2.2	<100	<20	<1	<20	2.7 J	<20	<5
	9/1/17	35	<1000	<200	<10	310	66 J	<200	<50
MW 30	8/18/20	2.7	<100	<20	<1	<20	7.3 J	3.9 J	<5
	3/19/19	<1	<100	<20	<1	<20	5.2 J	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	32	<1000	<200	<10	160 J	140	96 J	<50
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	17	<100	<20	<1	58	55	<20	<5

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Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	8/18/20	6.7	<500	<100	<5	<100	57	5.7 J	<25
	3/19/19	21	<1000	<200	<10	<200	150	<200	<50
	7/7/18	21	<1000	<200	<10	180 J	190	91 J	<50
	9/1/17	<20	<2000	<400	<20	<400	<220	<400	<100
MW 34	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	8/18/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	8/18/20	<1	<100	<20	<1	<20	<10	0.51 J	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 38	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
MW 39	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/7/18	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	0.63 J	<20	<5
	7/6/18	34	<1000	<200	<10	850	41 J	240	<50
	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	2.1	<100	<20	<1	<20	2.2 J	<20	<5
	7/6/18	5.8	<100	<20	<1	<20	6.3 J	9.5 J	<5
	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	8/17/20	NL	NL	NL	NL	NL	NL	NL	NL
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	8/17/20	1.8	76 J	<20	<1	33	13	17 J	<5
	3/19/19	3.1	<100	<20	<1	41	22	21	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	29000	<100	<5	68 J	35 J	44 J	<25
DW 6	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	1.5 J	<20	<5
	9/1/17	<5	16000	<100	<5	130	34 J	46 J	<25

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DW 7	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	2300	<20	<1	10 J	3.9 J	12 J	5
DW 8	8/17/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	8/19/20	0.61 J	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	9/1/17	<5	<500	<100	<5	<100	<50	<100	<25
DW 10	8/17/20	<1	<100	<20	<1	<20	0.48 J	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
RW 1	8/19/20	1500	<50000	<10000	<500	15000	5700	1500 J	<2500
	3/19/19	740	<10000	<2000	<100	8500	2300	970 J	<500
	7/6/18	660	<50000	<10000	<500	8100 J	1600 J	<10000	<2500
	9/1/17	910	<20000	<4000	<200	8500	2900	2000 J	<1000
RW 2	8/19/20	120	<2000	<400	<20	1100	430	160 J	<100
	3/19/19	920	<20000	<4000	<200	14000	3400	1700 J	<1000
	7/6/18	640	<50000	<10000	<500	7700 J	1500 J	<10000	<2500
	9/1/17	<500	<50000	<10000	<500	15000	4700 J	<10000	<2500
RW 3	8/19/20	240	<5000	<100	<50	3000	860	420 J	<250
	3/19/19	250	<10000	<2000	<100	5300	700 J	<2000	<500
	7/6/18	610	<20000	<4000	<200	8400	1700 J	<4000	<1000
	9/1/17	<50	<5000	<1000	<50	2700	470 J	<1000	<250

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DWW 1	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	NA	NA	NA	NA	NA	NA	NA	NA
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	8/19/20	0.84 J	<100	<20	<1	<20	0.42 J	0.41 J	<5
	3/19/19	<1	<100	<20	<1	<20	1.1 J	<20	<5
	7/6/18	<1	<100	<20	<1	<20	0.63 J	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
DWW 3	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	8/19/20	<1	<100	<20	<1	<20	<10	<20	<5
	3/19/19	<1	<100	<20	<1	<20	<10	<20	<5
	7/6/18	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5

## 2.3 RECEPTOR SURVEY

A receptor survey and drinking water well survey was conducted for the Tier II. Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, drainage ditch and two septic tanks were noted to be the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

**Table 4 Receptor Data One Accord Ministries Site ID 02131**

Receptor	Depth	Location	Assessed
Water Line	36 inches	Site E Row	Yes
Sewer Line	36 inches	Site E ROW	Yes
Phone Line	36 inches	Site E ROW	Yes
Gas Line	36 inches	Site E ROW	Yes
Septic Tank	36 inches	Site W Property Line	Yes
Septic Tank	36 inches	518 Peggy's Drive	No
DWW1	120 feet	533 Peggy's Drive	Yes
DWW2	110 feet	510 Peggy's Drive	Yes
DWW3	Unknown	568 Kee's Drive	Yes
DWW4	Unknown	603 Kee's Drive	No
DWW5	80 feet	583 Kee's Drive	Yes
DWW6	Unknown	843 Elliot Road	No
DWW7	Unknown	1719 Old Richburg	No
DWW8	Unknown	3571 Lancaster Hwy	No

**Table 4A Drinking Water Well Survey One Accord Ministries Site ID 02131**

1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
7	1719 OLD RICHBURG ROAD	JAMES KNOX	UNKNOWN	HOUSE	NO POWER NO CONTACT
8	3571 LANCASTER HWY	JOHN FAUST	UNKNOWN	HOUSE	NOT IN USE

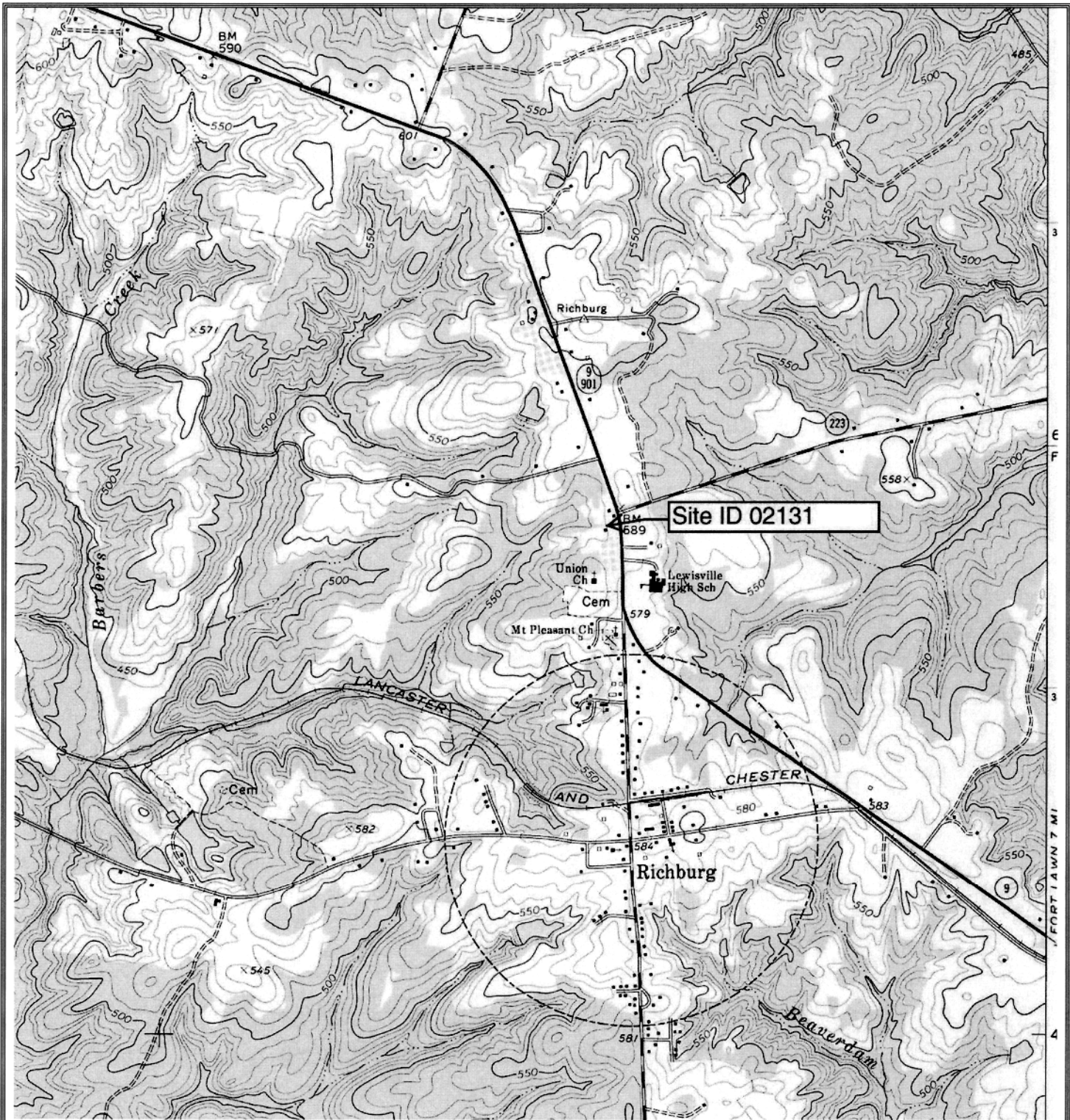


### **3.0 CONCLUSIONS**

Findings of the sampling event are as follows.

- Monitoring wells MW1R, MW2, MW3, MW16, MW19, MW20, MW24, MW29, MW30, MW33, DW5, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents
- Drinking water wells DWW1, DWW3, DWW4 and DWW5 contained trace amounts of MTBE below RBSL at the time the assessment was conducted.

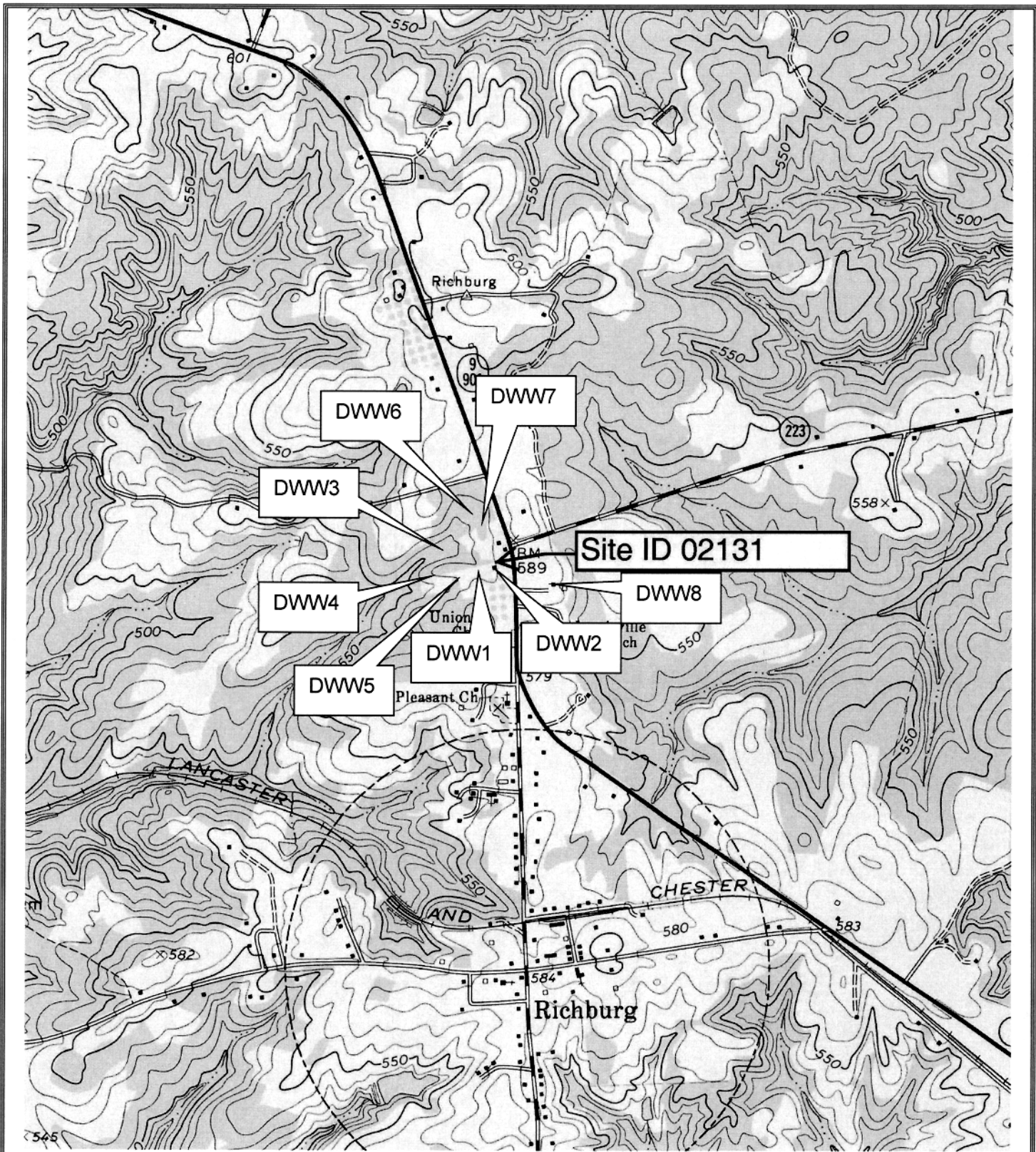
**APPENDIX A**  
**FIGURES**



SCALE INCH = 2000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

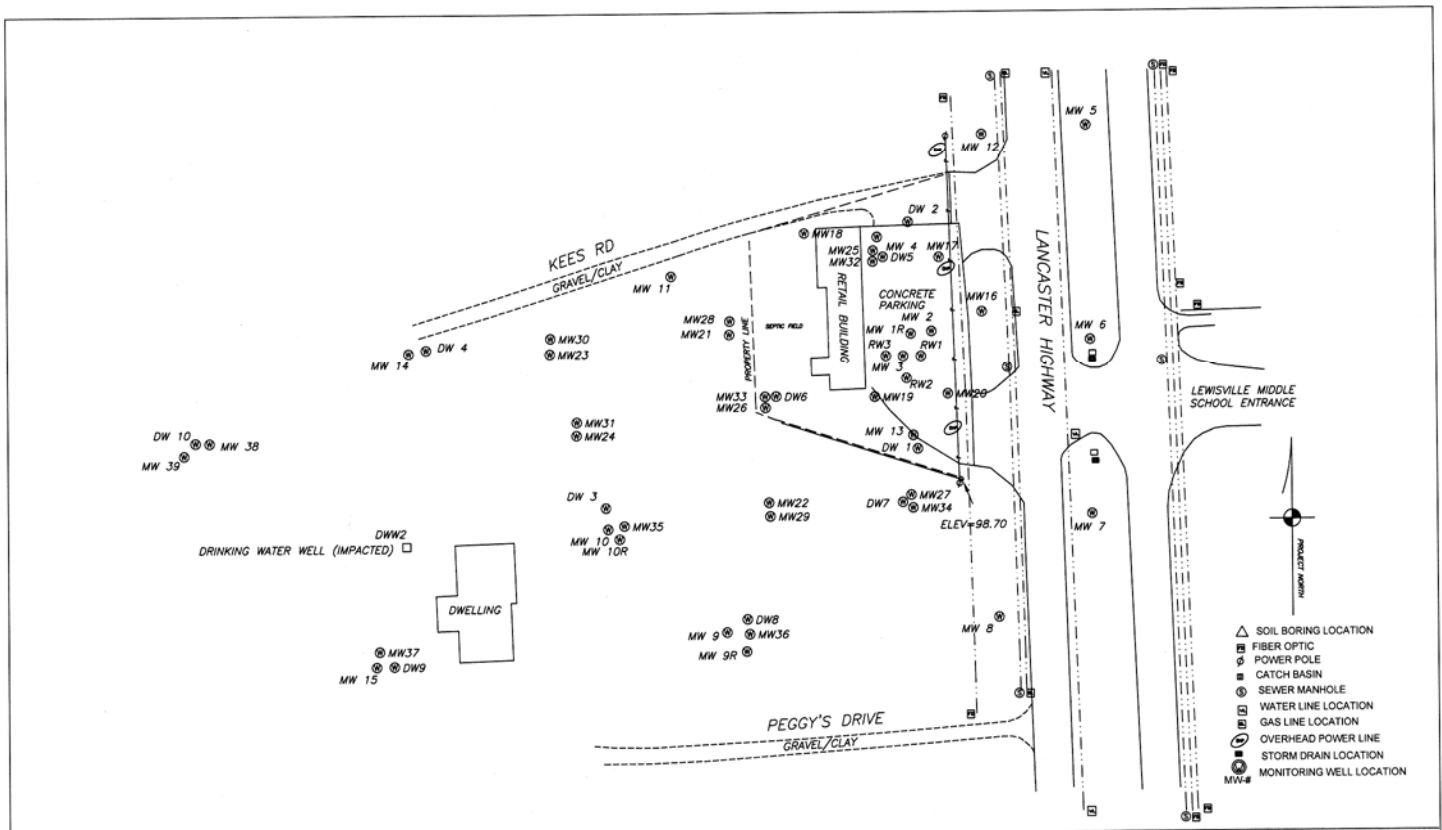
SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION



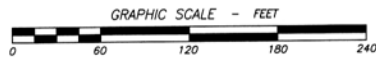
SCALE INCH = 1000 FT

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

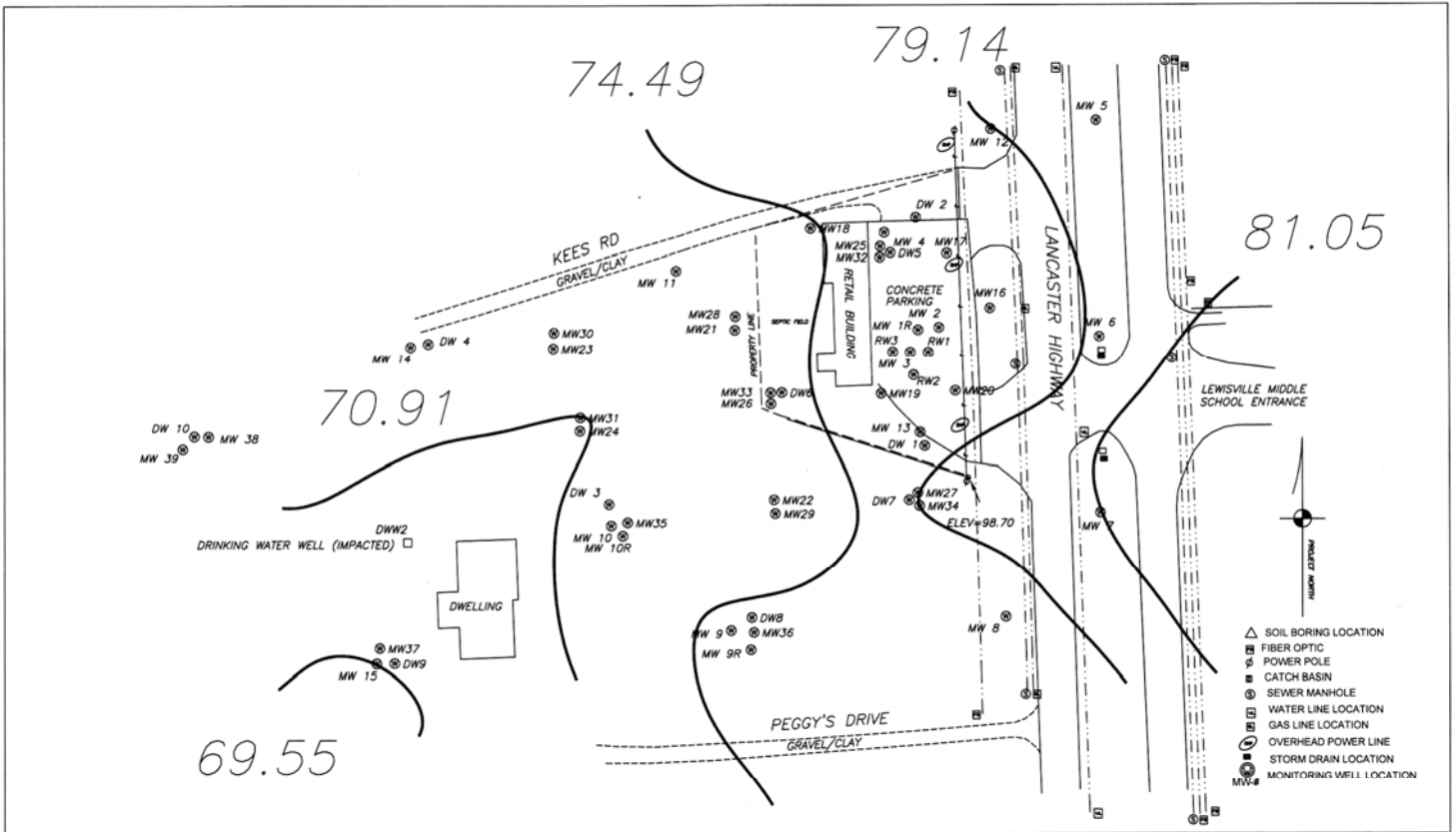
SAMPLING REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP



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 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP



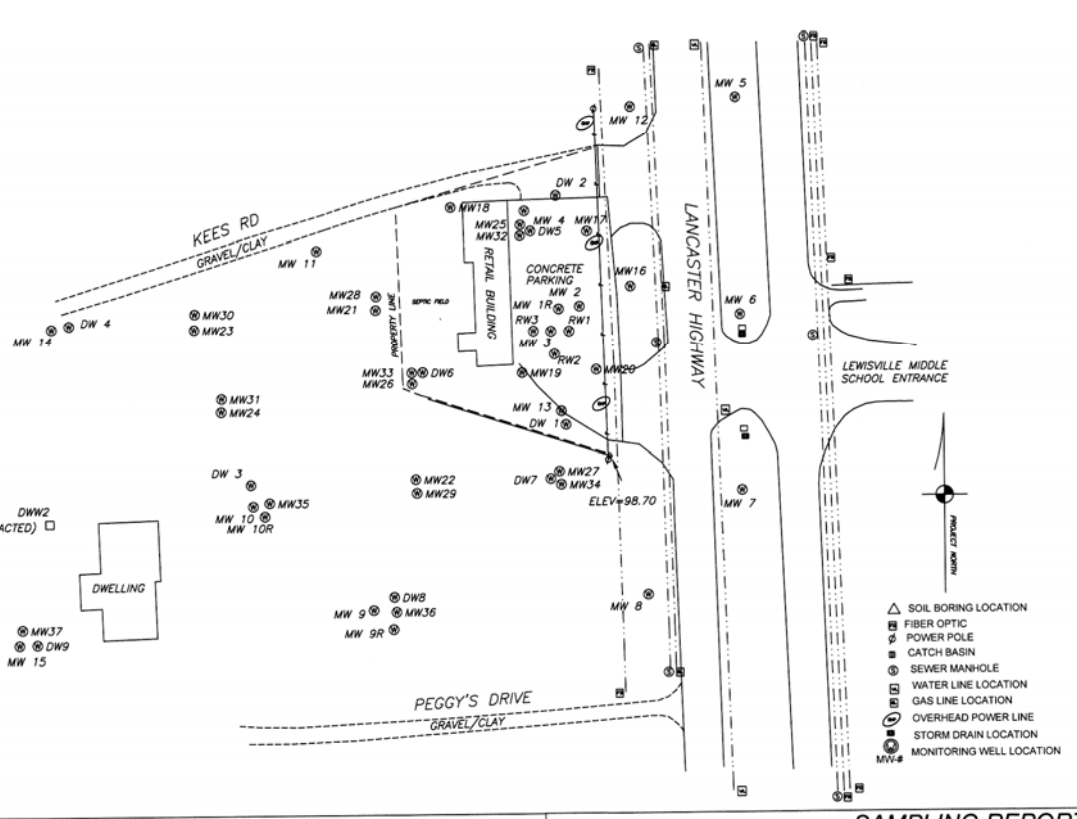
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 3 - PIEZOMETRIC MAP

**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

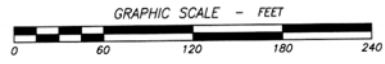
Sample ID	Date Sampled	Barrels	Volume	Flow-Rate (gpm)	Total Solids (ppm)	Hardness (ppm)	MSDS	ESD	Lead	As (ppb)	1,4 DCA (ppb)
MW 1	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 2	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 3	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 4	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 5	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 6	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 7	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 8	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 9	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 10	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 11	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 12	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 13	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 14	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 15	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 16	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 17	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 18	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 19	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 20	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 21	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 22	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 23	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 24	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 25	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 26	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 27	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 28	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 29	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 30	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 31	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 32	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 33	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 34	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 35	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 36	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 37	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 38	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
MW 39	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 1	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 2	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 3	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 4	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 5	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 6	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 7	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 8	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 9	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 10	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 11	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 12	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 13	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 14	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 15	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA



**TABLE 4 Drinking Water Well Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Barrels	Volume	Flow-Rate (gpm)	Total Solids (ppm)	Hardness (ppm)	MSDS	ESD	Lead	As (ppb)	1,4 DCA (ppb)
DW 1	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 2	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 3	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 4	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 5	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 6	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 7	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 8	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 9	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 10	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 11	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 12	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 13	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 14	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA
DW 15	8/15/02	2000	1000	50	2000	NA	NA	NA	NA	<0.2	NA

**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
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**SAMPLING REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - CONTAMINATION MAP

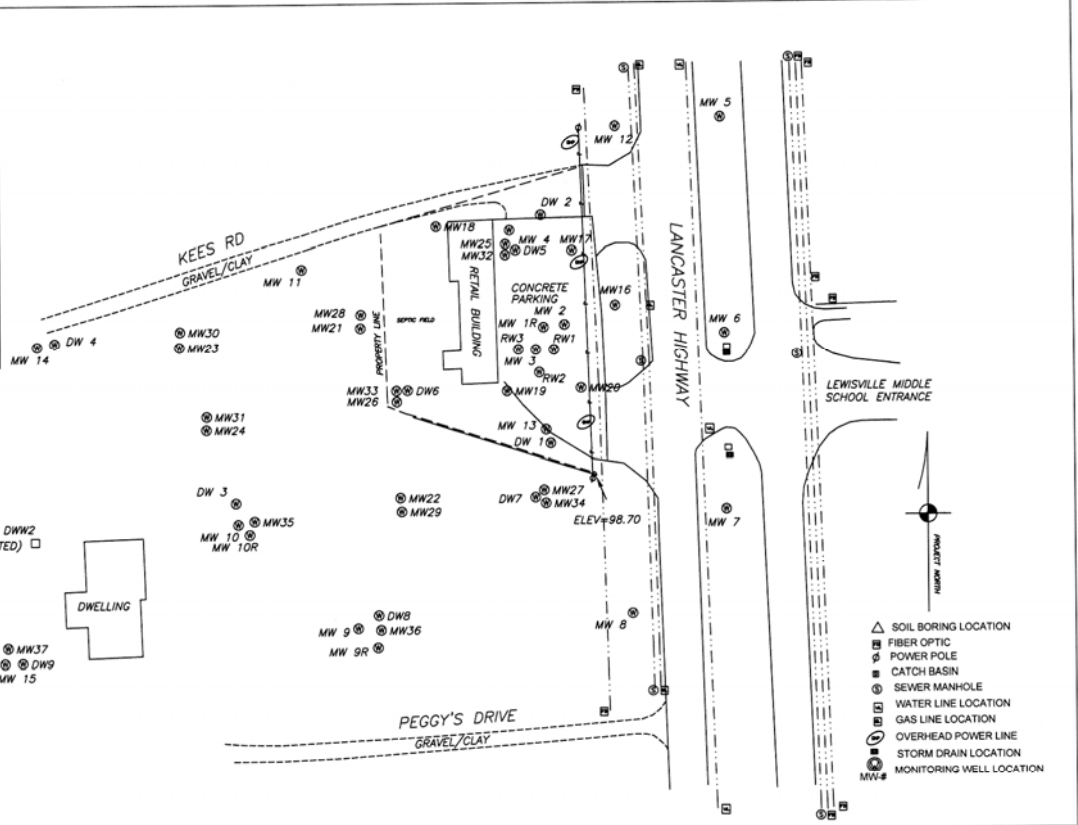


**TABLE 2 Groundwater Analytical Data One Accord Ministries Site ID 02131**

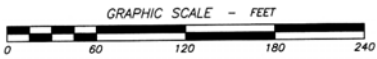
MW ID	DATE	Method of Sample (V/L)	Element (µg/L)	32 Dimensional (µg/L)	5 Amp (µg/L)	7 Amp (µg/L)	Telemetry (µg/L)	Telemetry (µg/L)	Telemetry (µg/L)	Lab. (µg/L)	Lab. (µg/L)
MW 1	8/19/00	SL	SL	SL	SL	SL	SL	SL	SL	SL	SL
MW 2	8/19/00	480	<20000	<4000	<200	2000	500.2	419.2	<100		
MW 3	8/19/00	16	<100	<100	<10	69.2	52	34.2	<25		
MW 4	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 5	8/19/00	NL	NL	NL	NL	NL	NL	NL	NL		
MW 6	8/19/00	NL	NL	NL	NL	NL	NL	NL	NL		
MW 7	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 8	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 9	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 10	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 11	8/19/00	NL	NL	NL	NL	NL	NL	NL	NL		
MW 12	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 13	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 14	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 15	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 16	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 17	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 18	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 19	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 20	8/19/00	95	<2000	<400	<20	1800	18.2	170.2	<100		
MW 21	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 22	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 23	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 24	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 25	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 26	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 27	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		

**DIAGNOSTIC WATER WELL (UNOCCUPIED)**

MW ID	DATE	Method of Sample (V/L)	Element (µg/L)	32 Dimensional (µg/L)	5 Amp (µg/L)	7 Amp (µg/L)	Telemetry (µg/L)	Telemetry (µg/L)	Telemetry (µg/L)	Lab. (µg/L)	Lab. (µg/L)
MW 28	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 29	8/19/00	1.8	<100	<20	<1	<20	22.2	33.2	<5		
MW 30	8/19/00	2.7	<100	<20	<1	<20	73.2	33.2	<5		
DUP	8/19/00	2.4	<100	<20	<1	<20	64.2	44.2	<5		
MW 31	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 32	8/19/00	8.7	<100	<20	<1	<20	87	37.2	<25		
MW 34	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 35	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 36	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 37	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 38	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DUP	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
MW 39	8/19/00	2.2	<100	<20	<1	<20	<10	<20	<5		
DW 2	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DW 3	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DW 4	8/19/00	NL	NL	NL	NL	NL	NL	NL	NL		
DW 5	8/19/00	1.8	76.2	<20	<1	39	13	17.2	<5		
DW 6	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DW 7	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DW 8	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		
DW 9	8/19/00	88.2	<100	<20	<1	<20	<10	<20	<5		
DW 10	8/19/00	41	<100	<20	<1	<20	<10	<20	<5		



**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



**SAMPLING REPORT**  
**ONE ACCORD SITE ID 02131**  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - CONTAMINATION MAP



**APPENDIX B**  
**ANALYTICAL DATA**



---

## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: One Accord

Lot Number: **VH20063**

Date Completed: 08/29/2020

08/31/2020 10:10 AM  
Approved and released by:  
Project Manager II: **Lucas Odom**



The electronic signature above is the equivalent of a handwritten signature  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
Tel 803-791-9700 Fax 803-791-9111 [www.pacelabs.com](http://www.pacelabs.com)

# PACE ANALYTICAL SERVICES, LLC

SC DHEC No 32010001

NELAC No E87653

NC DENR No 329

NC Field Parameters No 5639

## **Case Narrative Katawba Environmental, Inc. Lot Number: VH20063**

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Pace Analytical Services, LLC ("Pace") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Pace policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Pace Project Manager listed on the cover page.

VOCs by GC/MS

The following sample was received with headspace in the sample vial. VH20063-062. The vial with the least amount of headspace has been used for analysis.

# PACE ANALYTICAL SERVICES, LLC

## Sample Summary Katawba Environmental, Inc. Lot Number: VH20063

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131 MW1	Aqueous	08/19/2020 1349	08/20/2020
002	02131 MW2	Aqueous	08/19/2020 1318	08/20/2020
003	02131 MW3	Aqueous	08/19/2020 1423	08/20/2020
004	02131 MW4	Aqueous	08/19/2020 1029	08/20/2020
005	02131 MW7	Aqueous	08/19/2020 0838	08/20/2020
006	02131 MW8	Aqueous	08/19/2020 0730	08/20/2020
007	02131 MW9	Aqueous	08/19/2020 0810	08/20/2020
008	02131 MW10	Aqueous	08/19/2020 1451	08/20/2020
009	02131 MW12	Aqueous	08/19/2020 0917	08/20/2020
010	02131 MW12 Dup	Aqueous	08/19/2020 0919	08/20/2020
011	02131 MW13	Aqueous	08/18/2020 1359	08/20/2020
012	02131 MW15	Aqueous	08/18/2020 1241	08/20/2020
013	02131 MW16	Aqueous	08/19/2020 1142	08/20/2020
014	02131 MW17	Aqueous	08/19/2020 1102	08/20/2020
015	02131 MW18	Aqueous	08/18/2020 1327	08/20/2020
016	02131 MW19	Aqueous	08/19/2020 1219	08/20/2020
017	02131 MW20	Aqueous	08/19/2020 1252	08/20/2020
018	02131 MW21	Aqueous	08/18/2020 1055	08/20/2020
019	02131 MW22	Aqueous	08/18/2020 1610	08/20/2020
020	02131 MW23	Aqueous	08/18/2020 0819	08/20/2020
021	02131 MW24	Aqueous	08/18/2020 0913	08/20/2020
022	02131 MW25	Aqueous	08/19/2020 0956	08/20/2020
023	02131 MW26	Aqueous	08/18/2020 1024	08/20/2020
024	02131 MW27	Aqueous	08/18/2020 1438	08/20/2020
025	02131 MW28	Aqueous	08/18/2020 1136	08/20/2020
026	02131 MW29	Aqueous	08/18/2020 1649	08/20/2020
027	02131 MW30	Aqueous	08/18/2020 0741	08/20/2020
028	02131 MW30 Dup	Aqueous	08/18/2020 0743	08/20/2020
029	02131 MW31	Aqueous	08/18/2020 0847	08/20/2020
030	02131 MW32	Aqueous	08/19/2020 0917	08/20/2020
031	02131 MW33	Aqueous	08/18/2020 0945	08/20/2020
032	02131 MW34	Aqueous	08/18/2020 1527	08/20/2020
033	02131 MW35	Aqueous	08/18/2020 1758	08/20/2020
034	02131 MW36	Aqueous	08/18/2020 1834	08/20/2020
035	02131 MW37	Aqueous	08/18/2020 1159	08/20/2020
036	02131 MW38	Aqueous	08/17/2020 1847	08/20/2020
037	02131 MW38 Dup	Aqueous	08/17/2020 1849	08/20/2020
038	02131 MW39	Aqueous	08/17/2020 1927	08/20/2020
039	02131 DW1	Aqueous	08/17/2020 1803	08/20/2020
040	02131 DW2	Aqueous	08/17/2020 1533	08/20/2020
041	02131 DW3	Aqueous	08/17/2020 1007	08/20/2020
042	02131 DW5	Aqueous	08/17/2020 1649	08/20/2020
043	02131 DW6	Aqueous	08/17/2020 1251	08/20/2020
044	02131 DW7	Aqueous	08/17/2020 1407	08/20/2020
045	02131 DW8	Aqueous	08/17/2020 1138	08/20/2020

## Sample Summary (Continued)

Lot Number: VH20063

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
046	02131 DW9	Aqueous	08/17/2020 0849	08/20/2020
047	02131 DW10	Aqueous	08/17/2020 0727	08/20/2020
048	02131 RW1	Aqueous	08/19/2020	08/20/2020
049	02131 RW2	Aqueous	08/19/2020	08/20/2020
050	02131 RW3	Aqueous	08/19/2020	08/20/2020
051	02131 DWW1	Aqueous	08/19/2020 1658	08/20/2020
052	02131 DWW2	Aqueous	08/19/2020 1634	08/20/2020
053	02131 DWW3	Aqueous	08/19/2020 1725	08/20/2020
054	02131 DWW4	Aqueous	08/19/2020 1758	08/20/2020
055	02131 DWW5	Aqueous	08/19/2020 1746	08/20/2020
056	02131 DWW6	Aqueous	08/19/2020 1616	08/20/2020
057	02131 DWW6 Dup	Aqueous	08/19/2020 1618	08/20/2020
058	02131 FB1	Aqueous	08/19/2020 1624	08/20/2020
059	02131 FB2	Aqueous	08/19/2020 1630	08/20/2020
060	02131 TB	Aqueous	08/17/2020 1642	08/20/2020
061	02131 TB	Aqueous	08/18/2020 1642	08/20/2020
062	02131 TB	Aqueous	08/19/2020 1642	08/20/2020

(62 samples)

# PACE ANALYTICAL SERVICES, LLC

## Detection Summary Katawba Environmental, Inc. Lot Number: VH20063

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131 MW1	Aqueous	tert-Amyl alcohol (TAA)	8260D	3500		ug/L	9
001	02131 MW1	Aqueous	tert-Amyl methyl ether	8260D	900	J	ug/L	9
001	02131 MW1	Aqueous	Benzene	8260D	2200		ug/L	9
001	02131 MW1	Aqueous	Diisopropyl ether (IPE)	8260D	300		ug/L	9
001	02131 MW1	Aqueous	Ethylbenzene	8260D	1000		ug/L	9
001	02131 MW1	Aqueous	Methyl tertiary butyl ether	8260D	2200		ug/L	9
001	02131 MW1	Aqueous	Naphthalene	8260D	370		ug/L	9
001	02131 MW1	Aqueous	tert-butyl alcohol (TBA)	8260D	410	J	ug/L	9
001	02131 MW1	Aqueous	Toluene	8260D	7400		ug/L	9
001	02131 MW1	Aqueous	Xylenes (total)	8260D	6600		ug/L	9
002	02131 MW2	Aqueous	tert-Amyl alcohol (TAA)	8260D	13000		ug/L	10
002	02131 MW2	Aqueous	tert-Amyl methyl ether	8260D	260	J	ug/L	10
002	02131 MW2	Aqueous	Benzene	8260D	4600		ug/L	10
002	02131 MW2	Aqueous	Diisopropyl ether (IPE)	8260D	460		ug/L	10
002	02131 MW2	Aqueous	Ethylbenzene	8260D	2400		ug/L	10
002	02131 MW2	Aqueous	Methyl tertiary butyl ether	8260D	950		ug/L	10
002	02131 MW2	Aqueous	Naphthalene	8260D	750		ug/L	10
002	02131 MW2	Aqueous	tert-butyl alcohol (TBA)	8260D	1300	J	ug/L	10
002	02131 MW2	Aqueous	Toluene	8260D	26000		ug/L	10
002	02131 MW2	Aqueous	Xylenes (total)	8260D	26000		ug/L	10
003	02131 MW3	Aqueous	tert-Amyl alcohol (TAA)	8260D	68	J	ug/L	11
003	02131 MW3	Aqueous	tert-Amyl methyl ether	8260D	52		ug/L	11
003	02131 MW3	Aqueous	Benzene	8260D	85		ug/L	11
003	02131 MW3	Aqueous	Diisopropyl ether (IPE)	8260D	15		ug/L	11
003	02131 MW3	Aqueous	Ethylbenzene	8260D	17		ug/L	11
003	02131 MW3	Aqueous	Methyl tertiary butyl ether	8260D	180		ug/L	11
003	02131 MW3	Aqueous	Naphthalene	8260D	8.7		ug/L	11
003	02131 MW3	Aqueous	tert-butyl alcohol (TBA)	8260D	8.4	J	ug/L	11
003	02131 MW3	Aqueous	Toluene	8260D	290		ug/L	11
003	02131 MW3	Aqueous	Xylenes (total)	8260D	520		ug/L	11
013	02131 MW16	Aqueous	tert-Amyl alcohol (TAA)	8260D	1800		ug/L	21
013	02131 MW16	Aqueous	tert-Amyl methyl ether	8260D	15	J	ug/L	21
013	02131 MW16	Aqueous	Benzene	8260D	860		ug/L	21
013	02131 MW16	Aqueous	Diisopropyl ether (IPE)	8260D	65		ug/L	21
013	02131 MW16	Aqueous	Ethylbenzene	8260D	510		ug/L	21
013	02131 MW16	Aqueous	Methyl tertiary butyl ether	8260D	110		ug/L	21
013	02131 MW16	Aqueous	Naphthalene	8260D	200		ug/L	21
013	02131 MW16	Aqueous	tert-butyl alcohol (TBA)	8260D	170	J	ug/L	21
013	02131 MW16	Aqueous	Toluene	8260D	3000		ug/L	21
013	02131 MW16	Aqueous	Xylenes (total)	8260D	3600		ug/L	21
016	02131 MW19	Aqueous	tert-Amyl alcohol (TAA)	8260D	1100		ug/L	24
016	02131 MW19	Aqueous	tert-Amyl methyl ether	8260D	31	J	ug/L	24
016	02131 MW19	Aqueous	Benzene	8260D	630		ug/L	24
016	02131 MW19	Aqueous	Diisopropyl ether (IPE)	8260D	15		ug/L	24
016	02131 MW19	Aqueous	Methyl tertiary butyl ether	8260D	340		ug/L	24

## Detection Summary (Continued)

Lot Number: VH20063

Sample ID	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
016	02131 MW19	Aqueous	Naphthalene	8260D	5.7		ug/L	24
016	02131 MW19	Aqueous	tert-butyl alcohol (TBA)	8260D	120		ug/L	24
016	02131 MW19	Aqueous	Toluene	8260D	2.4	J	ug/L	24
016	02131 MW19	Aqueous	Xylenes (total)	8260D	6.2		ug/L	24
017	02131 MW20	Aqueous	tert-Amyl alcohol (TAA)	8260D	2700		ug/L	25
017	02131 MW20	Aqueous	tert-Amyl methyl ether	8260D	38	J	ug/L	25
017	02131 MW20	Aqueous	Benzene	8260D	1500		ug/L	25
017	02131 MW20	Aqueous	Diisopropyl ether (IPE)	8260D	95		ug/L	25
017	02131 MW20	Aqueous	Ethylbenzene	8260D	610		ug/L	25
017	02131 MW20	Aqueous	Methyl tertiary butyl ether	8260D	490		ug/L	25
017	02131 MW20	Aqueous	Naphthalene	8260D	290		ug/L	25
017	02131 MW20	Aqueous	tert-butyl alcohol (TBA)	8260D	270	J	ug/L	25
017	02131 MW20	Aqueous	Toluene	8260D	3300		ug/L	25
017	02131 MW20	Aqueous	Xylenes (total)	8260D	5200		ug/L	25
019	02131 MW22	Aqueous	Methyl tertiary butyl ether	8260D	1.7		ug/L	27
021	02131 MW24	Aqueous	tert-Amyl methyl ether	8260D	8.3	J	ug/L	29
021	02131 MW24	Aqueous	Methyl tertiary butyl ether	8260D	100		ug/L	29
021	02131 MW24	Aqueous	tert-butyl alcohol (TBA)	8260D	3.4	J	ug/L	29
023	02131 MW26	Aqueous	Methyl tertiary butyl ether	8260D	1.2		ug/L	31
026	02131 MW29	Aqueous	tert-Amyl methyl ether	8260D	2.2	J	ug/L	34
026	02131 MW29	Aqueous	Diisopropyl ether (IPE)	8260D	1.9		ug/L	34
026	02131 MW29	Aqueous	Methyl tertiary butyl ether	8260D	86		ug/L	34
026	02131 MW29	Aqueous	tert-butyl alcohol (TBA)	8260D	2.5	J	ug/L	34
027	02131 MW30	Aqueous	tert-Amyl methyl ether	8260D	7.3	J	ug/L	35
027	02131 MW30	Aqueous	Diisopropyl ether (IPE)	8260D	2.7		ug/L	35
027	02131 MW30	Aqueous	Methyl tertiary butyl ether	8260D	140		ug/L	35
027	02131 MW30	Aqueous	tert-butyl alcohol (TBA)	8260D	3.9	J	ug/L	35
028	02131 MW30 Dup	Aqueous	tert-Amyl methyl ether	8260D	8.0	J	ug/L	36
028	02131 MW30 Dup	Aqueous	Diisopropyl ether (IPE)	8260D	2.4		ug/L	36
028	02131 MW30 Dup	Aqueous	Methyl tertiary butyl ether	8260D	150		ug/L	36
028	02131 MW30 Dup	Aqueous	tert-butyl alcohol (TBA)	8260D	4.5	J	ug/L	36
029	02131 MW31	Aqueous	Methyl tertiary butyl ether	8260D	6.5		ug/L	37
031	02131 MW33	Aqueous	tert-Amyl methyl ether	8260D	57		ug/L	39
031	02131 MW33	Aqueous	Diisopropyl ether (IPE)	8260D	6.7		ug/L	39
031	02131 MW33	Aqueous	Methyl tertiary butyl ether	8260D	530		ug/L	39
031	02131 MW33	Aqueous	tert-butyl alcohol (TBA)	8260D	5.7	J	ug/L	39
035	02131 MW37	Aqueous	tert-butyl alcohol (TBA)	8260D	0.51	J	ug/L	43
036	02131 MW38	Aqueous	Methyl tertiary butyl ether	8260D	9.0		ug/L	44
037	02131 MW38 Dup	Aqueous	Methyl tertiary butyl ether	8260D	8.9		ug/L	45
039	02131 DW1	Aqueous	Diisopropyl ether (IPE)	8260D	2.2		ug/L	47
039	02131 DW1	Aqueous	Methyl tertiary butyl ether	8260D	24		ug/L	47
041	02131 DW3	Aqueous	Methyl tertiary butyl ether	8260D	6.7		ug/L	49
042	02131 DW5	Aqueous	tert-Amyl alcohol (TAA)	8260D	33		ug/L	50
042	02131 DW5	Aqueous	tert-Amyl methyl ether	8260D	13		ug/L	50
042	02131 DW5	Aqueous	Benzene	8260D	3.2		ug/L	50
042	02131 DW5	Aqueous	Diisopropyl ether (IPE)	8260D	1.8		ug/L	50
042	02131 DW5	Aqueous	Ethanol	8260D	76	J	ug/L	50
042	02131 DW5	Aqueous	Ethylbenzene	8260D	5.0		ug/L	50

## Detection Summary (Continued)

Lot Number: VH20063

Sample ID	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
042	02131 DW5	Aqueous	Methyl tertiary butyl ether	8260D	110		ug/L	50
042	02131 DW5	Aqueous	Naphthalene	8260D	1.3		ug/L	50
042	02131 DW5	Aqueous	tert-butyl alcohol (TBA)	8260D	17	J	ug/L	50
042	02131 DW5	Aqueous	Toluene	8260D	0.41	J	ug/L	50
042	02131 DW5	Aqueous	Xylenes (total)	8260D	3.8		ug/L	50
043	02131 DW6	Aqueous	Methyl tertiary butyl ether	8260D	1.8		ug/L	51
044	02131 DW7	Aqueous	Methyl tertiary butyl ether	8260D	2.4		ug/L	52
046	02131 DW9	Aqueous	Diisopropyl ether (IPE)	8260D	0.61	J	ug/L	54
046	02131 DW9	Aqueous	Methyl tertiary butyl ether	8260D	4.8		ug/L	54
047	02131 DW10	Aqueous	tert-Amyl methyl ether	8260D	0.48	J	ug/L	55
047	02131 DW10	Aqueous	Methyl tertiary butyl ether	8260D	32		ug/L	55
048	02131 RW1	Aqueous	tert-Amyl alcohol (TAA)	8260D	15000		ug/L	56
048	02131 RW1	Aqueous	tert-Amyl methyl ether	8260D	5700		ug/L	56
048	02131 RW1	Aqueous	Benzene	8260D	13000		ug/L	56
048	02131 RW1	Aqueous	Diisopropyl ether (IPE)	8260D	1500		ug/L	56
048	02131 RW1	Aqueous	Ethylbenzene	8260D	3400		ug/L	56
048	02131 RW1	Aqueous	Methyl tertiary butyl ether	8260D	25000		ug/L	56
048	02131 RW1	Aqueous	Naphthalene	8260D	730		ug/L	56
048	02131 RW1	Aqueous	tert-butyl alcohol (TBA)	8260D	1500	J	ug/L	56
048	02131 RW1	Aqueous	Toluene	8260D	35000		ug/L	56
048	02131 RW1	Aqueous	Xylenes (total)	8260D	19000		ug/L	56
049	02131 RW2	Aqueous	tert-Amyl alcohol (TAA)	8260D	1100		ug/L	57
049	02131 RW2	Aqueous	tert-Amyl methyl ether	8260D	430		ug/L	57
049	02131 RW2	Aqueous	Benzene	8260D	1400		ug/L	57
049	02131 RW2	Aqueous	Diisopropyl ether (IPE)	8260D	120		ug/L	57
049	02131 RW2	Aqueous	Ethylbenzene	8260D	490		ug/L	57
049	02131 RW2	Aqueous	Methyl tertiary butyl ether	8260D	1500		ug/L	57
049	02131 RW2	Aqueous	Naphthalene	8260D	120		ug/L	57
049	02131 RW2	Aqueous	tert-butyl alcohol (TBA)	8260D	160	J	ug/L	57
049	02131 RW2	Aqueous	Toluene	8260D	2100		ug/L	57
049	02131 RW2	Aqueous	Xylenes (total)	8260D	2200		ug/L	57
050	02131 RW3	Aqueous	tert-Amyl alcohol (TAA)	8260D	3000		ug/L	58
050	02131 RW3	Aqueous	tert-Amyl methyl ether	8260D	860		ug/L	58
050	02131 RW3	Aqueous	Benzene	8260D	3100		ug/L	58
050	02131 RW3	Aqueous	Diisopropyl ether (IPE)	8260D	240		ug/L	58
050	02131 RW3	Aqueous	Ethylbenzene	8260D	1100		ug/L	58
050	02131 RW3	Aqueous	Methyl tertiary butyl ether	8260D	2600		ug/L	58
050	02131 RW3	Aqueous	Naphthalene	8260D	370		ug/L	58
050	02131 RW3	Aqueous	tert-butyl alcohol (TBA)	8260D	420	J	ug/L	58
050	02131 RW3	Aqueous	Toluene	8260D	4600		ug/L	58
050	02131 RW3	Aqueous	Xylenes (total)	8260D	6500		ug/L	58
051	02131 DWW1	Aqueous	Methyl tertiary butyl ether	524.2	3.3		ug/L	59
052	02131 DWW2	Aqueous	Methyl tertiary butyl ether	524.2	71		ug/L	60
052	02131 DWW2	Aqueous	tert-Amyl methyl ether	8260D	0.42	J	ug/L	60
052	02131 DWW2	Aqueous	Diisopropyl ether (IPE)	8260D	0.84	J	ug/L	60
052	02131 DWW2	Aqueous	tert-butyl alcohol (TBA)	8260D	0.41	J	ug/L	60
053	02131 DWW3	Aqueous	Methyl tertiary butyl ether	524.2	1.1		ug/L	61
054	02131 DWW4	Aqueous	Methyl tertiary butyl ether	524.2	2.8		ug/L	62



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## Detection Summary (Continued)

Lot Number: VH20063

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
055	02131 DWW5	Aqueous	Methyl tertiary butyl ether	524 2	3 0		ug/L	63
060	02131 TB	Aqueous	tert-butyl alcohol (TBA)	8260D	0 59	J	ug/L	68
062	02131 TB	Aqueous	tert-butyl alcohol (TBA)	8260D	0 89	J	ug/L	70

(144 detections)

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	100	08/21/2020 1738	BWS		64283		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	3500		2000	800	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	900	J	1000	42	ug/L	1	
Benzene	71-43-2	8260D	2200		100	40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		500	200	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		100	40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	300		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		2000	800	ug/L	1	
Ethanol	64-17-5	8260D	ND		10000	5200	ug/L	1	
Ethylbenzene	100-41-4	8260D	1000		100	40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		100	40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	2200		100	40	ug/L	1	
Naphthalene	91-20-3	8260D	370		100	40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	410	J	2000	40	ug/L	1	
Toluene	108-88-3	8260D	7400		100	40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	6600		100	40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		107	70-130						
Bromofluorobenzene		105	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

Description **02131 MW2**Matrix **Aqueous**Date Sampled **08/19/2020 1318**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	200	08/21/2020 1804	BWS		64283		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	13000		4000	1600	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	260	J	2000	80	ug/L	1	
Benzene	71-43-2	8260D	4600		200	80	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		1000	400	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		200	80	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	460		200	80	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		4000	1600	ug/L	1	
Ethanol	64-17-5	8260D	ND		20000	10000	ug/L	1	
Ethylbenzene	100-41-4	8260D	2400		200	80	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		200	80	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	950		200	80	ug/L	1	
Naphthalene	91-20-3	8260D	750		200	80	ug/L	1	
tert-butyl alcohol (TBA)	75-85-0	8260D	1300	J	4000	80	ug/L	1	
Toluene	108-88-3	8260D	26000		200	80	ug/L	1	
Xylenes (total)	1330-20-7	8260D	26000		200	80	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		108	70-130						
Bromofluorobenzene		105	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services Inc)

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	08/22/2020 0230	JAN		64375

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	68	J	100	40	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	52		50	2.1	ug/L	1
Benzene	71-43-2	8260D	85		5.0	2.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		25	10	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	15		5.0	2.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		100	40	ug/L	1
Ethanol	64-17-5	8260D	ND		500	260	ug/L	1
Ethylbenzene	100-41-4	8260D	17		5.0	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		5.0	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	180		5.0	2.0	ug/L	1
Naphthalene	91-20-3	8260D	8.7		5.0	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	8.4	J	100	2.0	ug/L	1
Toluene	108-88-3	8260D	290		5.0	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	520		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		100	70-130
Bromofluorobenzene		95	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW4**Matrix **Aqueous**Date Sampled **08/19/2020 1029**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/22/2020 0035	JAN		64375		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		89	70-130						
Toluene-d8		101	70-130						
Bromofluorobenzene		95	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client <b>Katawba Environmental, Inc</b>	Laboratory ID <b>VH20063-005</b>
Description <b>02131 MW7</b>	Matrix <b>Aqueous</b>
Date Sampled <b>08/19/2020 0838</b>	
Date Received <b>08/20/2020</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2020 0057	JAN		64375

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		99	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2020 0118	JAN		64375

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		99	70-130
Bromofluorobenzene		96	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 MW9**Matrix **Aqueous**Date Sampled **08/19/2020 0810**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/22/2020 0143	JAN		64375		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		88	70-130						
Toluene-d8		99	70-130						
Bromofluorobenzene		93	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description **02131 MW10**Matrix **Aqueous**Date Sampled **08/19/2020 1451**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/22/2020 0208	JAN		64375		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		85	70-130						
Toluene-d8		101	70-130						
Bromofluorobenzene		97	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1118	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1 Q	% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		98	70-130
Bromofluorobenzene		93	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1139	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		99	70-130
Bromofluorobenzene		96	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of control      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1201	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		97	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1222	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		100	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	20	08/24/2020 1748	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	1800		400	160	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	15	J	200	8.4	ug/L	1
Benzene	71-43-2	8260D	860		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		100	40	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		20	8.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	65		20	8.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		400	160	ug/L	1
Ethanol	64-17-5	8260D	ND		2000	1000	ug/L	1
Ethylbenzene	100-41-4	8260D	510		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		20	8.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	110		20	8.0	ug/L	1
Naphthalene	91-20-3	8260D	200		20	8.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	170	J	400	8.0	ug/L	1
Toluene	108-88-3	8260D	3000		20	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	3600		20	8.0	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	99		70-130
Bromofluorobenzene	100		70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1244	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		97	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1306	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		100	70-130
Bromofluorobenzene		99	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	08/24/2020 1726	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	1100		100	40	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	31	J	50	2.1	ug/L	1
Benzene	71-43-2	8260D	630		5.0	2.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		25	10	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	15		5.0	2.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		100	40	ug/L	1
Ethanol	64-17-5	8260D	ND		500	260	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		5.0	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		5.0	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	340		5.0	2.0	ug/L	1
Naphthalene	91-20-3	8260D	5.7		5.0	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	120		100	2.0	ug/L	1
Toluene	108-88-3	8260D	2.4	J	5.0	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	6.2		5.0	2.0	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		97	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	20	08/24/2020 1809	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	2700		400	160	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	38	J	200	8.4	ug/L	1
Benzene	71-43-2	8260D	1500		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		100	40	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		20	8.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	95		20	8.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		400	160	ug/L	1
Ethanol	64-17-5	8260D	ND		2000	1000	ug/L	1
Ethylbenzene	100-41-4	8260D	610		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		20	8.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	490		20	8.0	ug/L	1
Naphthalene	91-20-3	8260D	290		20	8.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	270	J	400	8.0	ug/L	1
Toluene	108-88-3	8260D	3300		20	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	5200		20	8.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		102	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1327	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		99	70-130
Bromofluorobenzene		93	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1349	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>1.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1 Q	% Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		98	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1411	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		99	70-130
Bromofluorobenzene		96	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 MW24**Matrix **Aqueous**Date Sampled **08/18/2020 0913**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1432	KRB		64474		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>8.3</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>100</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260D</b>	<b>3.4</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		89	70-130						
Toluene-d8		100	70-130						
Bromofluorobenzene		97	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1454	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		100	70-130
Bromofluorobenzene		94	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1516	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>1.2</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4	89	70-130	
Toluene-d8	99	70-130	
Bromofluorobenzene	97	70-130	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1537	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4	94	70-130	
Toluene-d8	99	70-130	
Bromofluorobenzene	98	70-130	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1559	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		98	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1620	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	2.2	J	10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	1.9		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	86		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	2.5	J	20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		99	70-130
Bromofluorobenzene		95	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1643	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>7.3</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>2.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>140</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260D</b>	<b>3.9</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		100	70-130
Bromofluorobenzene		95	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1705	KRB		64474

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>8.0</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
<b>Dilsopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>2.4</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>150</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260D</b>	<b>4.5</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		101	70-130
Bromofluorobenzene		96	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/25/2020 0647	JAN		64524

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>6.5</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		105	70-130
Bromofluorobenzene		102	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Client **Katawba Environmental, Inc.**

Laboratory ID **VH20063-030**

Description **02131 MW32**

Matrix **Aqueous**

Date Sampled **08/19/2020 0917**

Date Received **08/20/2020**

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/25/2020 0713	JAN		64524

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	08/24/2020 1753	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		100	40	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>57</b>		<b>50</b>	<b>2.1</b>	<b>ug/L</b>	<b>1</b>
Benzene	71-43-2	8260D	ND		5.0	2.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		25	10	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	2.0	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>6.7</b>		<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		100	40	ug/L	1
Ethanol	64-17-5	8260D	ND		500	260	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		5.0	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		5.0	2.0	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>530</b>		<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		5.0	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	5.7	J	100	2.0	ug/L	1
Toluene	108-88-3	8260D	ND		5.0	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		104	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis



### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1101	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		100	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description: **02131 MW35**Matrix: **Aqueous**Date Sampled: **08/18/2020 1756**Date Received: **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1126	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		105	70-130						
Bromofluorobenzene		104	70-130						

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1152	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		102	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1217	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
<b>tert-butyl alcohol (TBA)</b>	<b>75-85-0</b>	<b>8260D</b>	<b>0.51</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		104	70-130						
Bromofluorobenzene		102	70-130						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1243	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>9.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		104	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 MW38 Dup**Matrix **Aqueous**Date Sampled **08/17/2020 1849**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1309	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>5.9</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		103	70-130						
Bromofluorobenzene		102	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1335	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 DW1**Matrix **Aqueous**Date Sampled **08/17/2020 1803**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1401	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>2.2</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>24</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		108	70-130						
Toluene-d8		104	70-130						
Bromofluorobenzene		105	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client <b>Katawba Environmental, Inc.</b>	Laboratory ID <b>VH20063-040</b>
Description <b>02131 DW2</b>	Matrix <b>Aqueous</b>
Date Sampled <b>08/17/2020 1533</b>	
Date Received <b>08/20/2020</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1427	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		102	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description **02131 DW3**Matrix **Aqueous**Date Sampled **08/17/2020 1007**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1452	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>6.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		106	70-130						
Toluene-d8		105	70-130						
Bromofluorobenzene		103	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1518	BWS		64467		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	33		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	13		10	0.42	ug/L	1
Benzene	71-43-2	8260D	3.2		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	1.8		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	76	J	100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	5.0		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	110		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	1.3		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	17	J	20	0.40	ug/L	1
Toluene	108-88-3	8260D	0.41	J	1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	3.8		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		107	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 DW6**Matrix **Aqueous**Date Sampled **08/17/2020 1251**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1544	BWS		64467
2	5030B	8260D	1	08/25/2020 2317	DJG		64685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>1.8</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>2</b>
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Run 1 Acceptance			Run 2 Acceptance		
	Q	% Recovery	Limits	Q	% Recovery	Limits
1,2-Dichloroethane-d4		107	70-130		90	70-130
Toluene-d8		105	70-130		99	70-130
Bromofluorobenzene		105	70-130		98	70-130

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2020 1610	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		10	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		50	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		10	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		10	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		10	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		10	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>2.4</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260D	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		10	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		10	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		104	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 DW8**Matrix **Aqueous**Date Sampled **08/17/2020 1138**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1636	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		104	70-130						
Bromofluorobenzene		102	70-130						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description **02131 DW9**Matrix **Aqueous**Date Sampled **08/17/2020 0849**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/24/2020 1702	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>0.61</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>4.8</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		107	70-130						
Toluene-d8		103	70-130						
Bromofluorobenzene		103	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description **02131 DW10**Matrix **Aqueous**Date Sampled **08/17/2020 0727**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260D	1	08/24/2020 1727	BWS		64467			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1		
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>0.48</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>		
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1		
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1		
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1		
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1		
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1		
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260D</b>	<b>32</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>		
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1		
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1		
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1		
Surrogate	Run 1	Acceptance								
	Q	% Recovery	Limits							
1,2-Dichloroethane-d4	105	70-130								
Toluene-d8	104	70-130								
Bromofluorobenzene	103	70-130								

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description **02131 RW1**Matrix **Aqueous**Date Sampled **08/19/2020**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	500	08/24/2020 1910	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	15000		10000	4000	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	5700		5000	210	ug/L	1	
Benzene	71-43-2	8260D	13000		500	200	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		2500	1000	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		500	200	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	1500		500	200	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		10000	4000	ug/L	1	
Ethanol	64-17-5	8260D	ND		50000	26000	ug/L	1	
Ethylbenzene	100-41-4	8260D	3400		500	200	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		500	200	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	25000		500	200	ug/L	1	
Naphthalene	91-20-3	8260D	730		500	200	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	1500	J	10000	200	ug/L	1	
Toluene	106-88-3	8260D	35000		500	200	ug/L	1	
Xylenes (total)	1330-20-7	8260D	19000		500	200	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		106	70-130						
Toluene-d8		104	70-130						
Bromofluorobenzene		102	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description **02131 RW2**

Matrix **Aqueous**

Date Sampled **08/19/2020**

Date Received **08/20/2020**

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	20	08/24/2020 1819	BWS		64467

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	1100		400	160	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	430		200	8.4	ug/L	1
Benzene	71-43-2	8260D	1400		20	8.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		100	40	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		20	8.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	120		20	8.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		400	160	ug/L	1
Ethanol	64-17-5	8260D	ND		2000	1000	ug/L	1
Ethylbenzene	100-41-4	8260D	490		20	8.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		20	8.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	1500		20	8.0	ug/L	1
Naphthalene	91-20-3	8260D	120		20	8.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	180	J	400	8.0	ug/L	1
Toluene	108-88-3	8260D	2100		20	8.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	2200		20	8.0	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 RW3**Matrix **Aqueous**Date Sampled **08/19/2020**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	50	08/24/2020 1844	BWS		64467		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	3000		1000	400	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	860		500	21	ug/L	1	
Benzene	71-43-2	8260D	3100		50	20	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		250	100	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		50	20	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	240		50	20	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		1000	400	ug/L	1	
Ethanol	64-17-5	8260D	ND		5000	2600	ug/L	1	
Ethylbenzene	100-41-4	8260D	1100		50	20	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		50	20	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	2600		50	20	ug/L	1	
Naphthalene	91-20-3	8260D	370		50	20	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	420	J	1000	20	ug/L	1	
Toluene	108-88-3	8260D	4600		50	20	ug/L	1	
Xylenes (total)	1330-20-7	8260D	6500		50	20	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		105	70-130						
Toluene-d8		104	70-130						
Bromofluorobenzene		102	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client **Katawba Environmental, Inc.**Laboratory ID **VH20063-051**Description **02131 DWW1**Matrix **Aqueous**Date Sampled **08/19/2020 1658**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524 2	524 2	1	08/26/2020 1205	TML		64741

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524 2</b>	<b>3.3</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		84	70-130
1,2-Dichlorobenzene-d4		83	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2020 1506	BWS		64283

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		106	70-130
Bromofluorobenzene		102	70-130

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description **02131 DWW2**Matrix **Aqueous**Date Sampled **08/19/2020 1634**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524 2	524 2	1	08/26/2020 1232	TML		64741
2	524 2	524 2	5	08/28/2020 1402	TML		65029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>71</b>		<b>2.5</b>	<b>2.0</b>	<b>ug/L</b>	<b>2</b>
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	1

Surrogate	Run 1		Acceptance		Run 2		Acceptance	
	Q	% Recovery	Limits	Q	% Recovery	Limits		
Bromofluorobenzene		80	70-130		102	70-130		
1,2-Dichlorobenzene-d4		83	70-130		102	70-130		

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2020 1531	BWS		64283

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260D</b>	<b>0.42</b>	<b>J</b>	<b>10</b>	<b>0.42</b>	<b>ug/L</b>	<b>1</b>
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
<b>Diisopropyl ether (IPE)</b>	<b>108-20-3</b>	<b>8260D</b>	<b>0.84</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260D</b>	<b>0.41</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Run 1		Acceptance	
	Q	% Recovery	Limits	
1,2-Dichloroethane-d4		104	70-130	
Toluene-d8		106	70-130	
Bromofluorobenzene		102	70-130	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	524 2	524 2	1	08/28/2020 1429	TML		65029		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	2	
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	2	
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	2	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524 2</b>	<b>1.1</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>2</b>	
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	2	
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	2	
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	2	
Surrogate	Q	Run 2 % Recovery	Acceptance Limits						
Bromofluorobenzene		100	70-130						
1,2-Dichlorobenzene-d4		100	70-130						

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/21/2020 1556	BWS		64283		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		103	70-130						
Toluene-d8		107	70-130						
Bromofluorobenzene		103	70-130						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description **02131 DWW4**Matrix **Aqueous**Date Sampled **08/19/2020 1758**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	524.2	524.2	1	08/28/2020 1456	TML		65029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524.2	ND		0.50	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.40	ug/L	2
Ethylbenzene	100-41-4	524.2	ND		0.50	0.40	ug/L	2
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>2.8</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>2</b>
Naphthalene	91-20-3	524.2	ND		0.50	0.40	ug/L	2
Toluene	108-88-3	524.2	ND		0.50	0.40	ug/L	2
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichlorobenzene-d4		100	70-130

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2020 1622	BWS		64283

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-85-0	8260D	ND		20	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		107	70-130
Bromofluorobenzene		104	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client <b>Katawba Environmental, Inc.</b>	Laboratory ID <b>VH20063-055</b>
Description <b>02131 DWW5</b>	Matrix <b>Aqueous</b>
Date Sampled <b>08/19/2020 1746</b>	
Date Received <b>08/20/2020</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524 2	524 2	1	08/26/2020 1352	TML		64741

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524 2</b>	<b>3.0</b>		<b>0.50</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		80	70-130
1,2-Dichlorobenzene-d4		85	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2020 0003	DJG		64373

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		104	70-130
Bromofluorobenzene		101	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client <b>Katawba Environmental, Inc.</b>	Laboratory ID <b>VH20063-056</b>
Description <b>02131 DWW6</b>	Matrix <b>Aqueous</b>
Date Sampled <b>08/19/2020 1616</b>	
Date Received <b>08/20/2020</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	524 2	524 2	1	08/28/2020 1523	TML		65029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	2
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	524 2	ND		0.50	0.40	ug/L	2
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	2
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	2
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichlorobenzene-d4		105	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2020 0029	DJG		64373

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		106	70-130
Bromofluorobenzene		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client <b>Katawba Environmental, Inc.</b>	Laboratory ID <b>VH20063-057</b>
Description <b>02131 DWW6 Dup</b>	Matrix <b>Aqueous</b>
Date Sampled <b>08/19/2020 1618</b>	
Date Received <b>08/20/2020</b>	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	524 2	524 2	1	08/28/2020 1550	TML		65029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	2
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	2
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	524 2	ND		0.50	0.40	ug/L	2
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	2
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	2
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichlorobenzene-d4		104	70-130

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2020 0055	DJG		64373

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		105	70-130
Bromofluorobenzene		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/25/2020 0024	JAN		64524		

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Run 1		Acceptance Limits
	Q	% Recovery	
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		101	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 FB2**Matrix **Aqueous**Date Sampled **08/19/2020 1630**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524 2	524 2	1	08/26/2020 1512	TML		64741		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	1	
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	1	
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524 2	ND		0.50	0.40	ug/L	1	
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	1	
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	1	
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		79	70-130						
1,2-Dichlorobenzene-d4		82	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/22/2020 0121	DJG		64373		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		104	70-130						
Toluene-d8		106	70-130						
Bromofluorobenzene		101	70-130						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

Description **02131 TB**Matrix **Aqueous**Date Sampled **08/17/2020 1642**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/25/2020 0049	JAN		64524		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1	
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1	
<b>tert-butyl alcohol (TBA)</b>	<b>75-85-0</b>	<b>8260D</b>	<b>0.59</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		106	70-130						
Toluene-d8		105	70-130						
Bromofluorobenzene		103	70-130						

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	524 2	524 2	1	08/26/2020 1539	TML		64741

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Benzene	71-43-2	524 2	ND		0.50	0.40	ug/L	1
1,2-Dichloroethane	107-06-2	524 2	ND		0.50	0.40	ug/L	1
Ethylbenzene	100-41-4	524 2	ND		0.50	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	524 2	ND		0.50	0.40	ug/L	1
Naphthalene	91-20-3	524 2	ND		0.50	0.40	ug/L	1
Toluene	108-88-3	524 2	ND		0.50	0.40	ug/L	1
Xylenes (total)	1330-20-7	524 2	ND		0.50	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		81	70-130
1,2-Dichlorobenzene-d4		85	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

Description **02131 TB**Matrix **Aqueous**Date Sampled **08/19/2020 1642**Date Received **08/20/2020****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260D	1	08/22/2020 0147	DJG		64373		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)		75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)		994-05-8	8260D	ND		10	0.42	ug/L	1
tert-Butyl formate (TBF)		762-75-4	8260D	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)		108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol		624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol		64-17-5	8260D	ND		100	52	ug/L	1
Ethyl-tert-butyl ether (ETBE)		637-92-3	8260D	ND		1.0	0.40	ug/L	1
<b>tert-butyl alcohol (TBA)</b>		<b>75-65-0</b>	<b>8260D</b>	<b>0.89</b>	<b>J</b>	<b>20</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		107	70-130						
Toluene-d8		105	70-130						
Bromofluorobenzene		104	70-130						

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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## QC Summary



## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64283-001

Matrix: Aqueous

Batch: 64283

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/21/2020 1038
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/21/2020 1038
Benzene	ND		1	1.0	0.40	ug/L	08/21/2020 1038
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/21/2020 1038
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/21/2020 1038
Ethanol	ND		1	100	52	ug/L	08/21/2020 1038
Ethylbenzene	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Naphthalene	ND		1	1.0	0.40	ug/L	08/21/2020 1038
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/21/2020 1038
Toluene	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		103	70-130				
Toluene-d8		109	70-130				
Bromofluorobenzene		104	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64283-002

Matrix: Aqueous

Batch: 64283

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	DII	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000	1		101	70-130	08/21/2020 0845
tert-Amyl methyl ether (TAME)	50	52	1		104	70-130	08/21/2020 0845
Benzene	50	50	1		101	70-130	08/21/2020 0845
tert-Butyl formate (TBF)	250	280	1		114	70-130	08/21/2020 0845
1,2-Dichloroethane	50	50	1		99	70-130	08/21/2020 0845
Diisopropyl ether (IPE)	50	53	1		105	70-130	08/21/2020 0845
3,3-Dimethyl-1-butanol	1000	1000	1		104	70-130	08/21/2020 0845
Ethanol	5000	5400	1		107	70-130	08/21/2020 0845
Ethylbenzene	50	52	1		103	70-130	08/21/2020 0845
Ethyl-tert-butyl ether (ETBE)	50	51	1		103	70-130	08/21/2020 0845
Methyl tertiary butyl ether (MTBE)	50	52	1		105	70-130	08/21/2020 0845
Naphthalene	50	52	1		104	70-130	08/21/2020 0845
tert-butyl alcohol (TBA)	1000	1000	1		100	70-130	08/21/2020 0845
Toluene	50	51	1		103	70-130	08/21/2020 0845
Xylenes (total)	100	100	1		103	70-130	08/21/2020 0845
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		100	70-130				
Toluene-d8		102	70-130				
Bromofluorobenzene		102	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64283-001

Matrix: Aqueous

Batch: 64283

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	DII	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/21/2020 1038
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/21/2020 1038
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/21/2020 1038
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/21/2020 1038
Ethanol	ND		1	100	52	ug/L	08/21/2020 1038
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/21/2020 1038
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/21/2020 1038

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		109	70-130
Bromofluorobenzene		104	70-130

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64283-002

Matrix: Aqueous

Batch: 64283

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	101	70-130	08/21/2020 0845
tert-Amyl methyl ether (TAME)	50	52		1	104	70-130	08/21/2020 0845
tert-Butyl formate (TBF)	250	280		1	114	70-130	08/21/2020 0845
Diisopropyl ether (IPE)	50	53		1	105	70-130	08/21/2020 0845
3,3-Dimethyl-1-butanol	1000	1000		1	104	70-130	08/21/2020 0845
Ethanol	5000	5400		1	107	70-130	08/21/2020 0845
Ethyl-tert-butyl ether (ETBE)	50	51		1	103	70-130	08/21/2020 0845
tert-butyl alcohol (TBA)	1000	1000		1	100	70-130	08/21/2020 0845
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		100	70-130				
Toluene-d8		102	70-130				
Bromofluorobenzene		102	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64373-001

Matrix: Aqueous

Batch: 64373

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/21/2020 2056
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/21/2020 2056
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/21/2020 2056
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/21/2020 2056
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/21/2020 2056
Ethanol	ND		1	100	52	ug/L	08/21/2020 2056
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/21/2020 2056
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/21/2020 2056
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		104	70-130				
Toluene-d8		106	70-130				
Bromofluorobenzene		103	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64373-002

Matrix: Aqueous

Batch: 64373

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	DII	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	100	70-130	08/21/2020 1952
tert-Amyl methyl ether (TAME)	50	52		1	103	70-130	08/21/2020 1952
tert-Butyl formate (TBF)	250	250		1	100	70-130	08/21/2020 1952
Diisopropyl ether (IPE)	50	50		1	101	70-130	08/21/2020 1952
3,3-Dimethyl-1-butanol	1000	1100		1	106	70-130	08/21/2020 1952
Ethanol	5000	4900		1	99	70-130	08/21/2020 1952
Ethyl-tert-butyl ether (ETBE)	50	49		1	99	70-130	08/21/2020 1952
tert-butyl alcohol (TBA)	1000	1000		1	100	70-130	08/21/2020 1952
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		102	70-130				
Toluene-d8		102	70-130				
Bromofluorobenzene		102	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note. Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64375-001

Matrix: Aqueous

Batch: 64375

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/21/2020 2227
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/21/2020 2227
Benzene	ND		1	1.0	0.40	ug/L	08/21/2020 2227
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/21/2020 2227
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/21/2020 2227
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/21/2020 2227
Ethanol	ND		1	100	52	ug/L	08/21/2020 2227
Ethylbenzene	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Naphthalene	ND		1	1.0	0.40	ug/L	08/21/2020 2227
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/21/2020 2227
Toluene	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/21/2020 2227
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		90	70-130				
Toluene-d8		101	70-130				
Bromofluorobenzene		99	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ84375-002

Matrix: Aqueous

Batch: 64375

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	920		1	92	70-130	08/21/2020 2128
tert-Amyl methyl ether (TAME)	50	47		1	94	70-130	08/21/2020 2128
Benzene	50	42		1	84	70-130	08/21/2020 2128
tert-Butyl formate (TBF)	250	180		1	71	70-130	08/21/2020 2128
1,2-Dichloroethane	50	43		1	87	70-130	08/21/2020 2128
Diisopropyl ether (IPE)	50	45		1	89	70-130	08/21/2020 2128
3,3-Dimethyl-1-butanol	1000	1100		1	108	70-130	08/21/2020 2128
Ethanol	5000	4700		1	93	70-130	08/21/2020 2128
Ethylbenzene	50	45		1	91	70-130	08/21/2020 2128
Ethyl-tert-butyl ether (ETBE)	50	44		1	87	70-130	08/21/2020 2128
Methyl tertiary butyl ether (MTBE)	50	44		1	87	70-130	08/21/2020 2128
Naphthalene	50	51		1	102	70-130	08/21/2020 2128
tert-butyl alcohol (TBA)	1000	950		1	95	70-130	08/21/2020 2128
Toluene	50	47		1	94	70-130	08/21/2020 2128
Xylenes (total)	100	92		1	92	70-130	08/21/2020 2128
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		83	70-130				
Toluene-d8		93	70-130				
Bromofluorobenzene		97	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MS

Sample ID: VH20063-003MS

Matrix: Aqueous

Batch: 64375

Prep Method 5030B

Analytical Method 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	68	5000	4600		5	92	70-130	08/22/2020 0255
tert-Amyl methyl ether (TAME)	52	250	290		5	94	70-130	08/22/2020 0255
Benzene	85	250	320		5	93	70-130	08/22/2020 0255
tert-Butyl formate (TBF)	ND	1300	160	N	5	13	70-130	08/22/2020 0255
1,2-Dichloroethane	ND	250	230		5	92	70-130	08/22/2020 0255
Diisopropyl ether (IPE)	15	250	260		5	97	70-130	08/22/2020 0255
3,3-Dimethyl-1-butanol	ND	5000	4900		5	98	70-130	08/22/2020 0255
Ethanol	ND	25000	22000		5	89	70-130	08/22/2020 0255
Ethylbenzene	17	250	280		5	106	70-130	08/22/2020 0255
Ethyl-tert-butyl ether (ETBE)	ND	250	220		5	89	70-130	08/22/2020 0255
Methyl tertiary butyl ether (MTBE)	180	250	390		5	84	70-130	08/22/2020 0255
Naphthalene	8 7	250	270		5	105	70-130	08/22/2020 0255
tert-butyl alcohol (TBA)	8 4	5000	5000		5	101	70-130	08/22/2020 0255
Toluene	290	250	550		5	105	70-130	08/22/2020 0255
Xylenes (total)	520	500	1100		5	106	70-130	08/22/2020 0255
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		89	70-130					
Toluene-d8		105	70-130					
Bromofluorobenzene		106	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MSD

Sample ID: VH20063-003MD

Matrix: Aqueous

Batch: 64375

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	DII	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	68	5000	4700		5	92	0.72	70-130	20	08/22/2020 0321
tert-Amyl methyl ether (TAME)	52	250	280		5	93	0.86	70-130	20	08/22/2020 0321
Benzene	85	250	310		5	91	1.7	70-130	20	08/22/2020 0321
tert-Butyl formate (TBF)	ND	1300	140	N	5	11	13	70-130	20	08/22/2020 0321
1,2-Dichloroethane	ND	250	230		5	91	0.53	70-130	20	08/22/2020 0321
Diisopropyl ether (IPE)	15	250	260		5	96	0.35	70-130	20	08/22/2020 0321
3,3-Dimethyl-1-butanol	ND	5000	4800		5	97	0.89	70-130	20	08/22/2020 0321
Ethanol	ND	25000	22000		5	86	3.3	70-130	20	08/22/2020 0321
Ethylbenzene	17	250	280		5	104	1.3	70-130	20	08/22/2020 0321
Ethyl-tert-butyl ether (ETBE)	ND	250	220		5	90	1.0	70-130	20	08/22/2020 0321
Methyl tertiary butyl ether (MTBE)	180	250	400		5	88	2.8	70-130	20	08/22/2020 0321
Naphthalene	8.7	250	270		5	104	0.86	70-130	20	08/22/2020 0321
tert-butyl alcohol (TBA)	8.4	5000	5000		5	100	0.32	70-130	20	08/22/2020 0321
Toluene	290	250	540		5	100	2.2	70-130	20	08/22/2020 0321
Xylenes (total)	520	500	1000		5	100	2.8	70-130	20	08/22/2020 0321
Surrogate	Q	% Rec	Acceptance Limit							
1,2-Dichloroethane-d4		88	70-130							
Toluene-d8		105	70-130							
Bromofluorobenzene		104	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note:** Calculations are performed before rounding to avoid round-off errors in calculated results

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64467-001

Matrix: Aqueous

Batch: 64467

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/24/2020 0956
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/24/2020 0956
Benzene	ND		1	1.0	0.40	ug/L	08/24/2020 0956
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/24/2020 0956
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/24/2020 0956
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/24/2020 0956
Ethanol	ND		1	100	52	ug/L	08/24/2020 0956
Ethylbenzene	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Naphthalene	ND		1	1.0	0.40	ug/L	08/24/2020 0956
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/24/2020 0956
Toluene	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/24/2020 0956
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		105	70-130				
Toluene-d8		104	70-130				
Bromofluorobenzene		104	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64467-002

Matrix: Aqueous

Batch: 64467

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	950		1	95	70-130	08/24/2020 0853
tert-Amyl methyl ether (TAME)	50	52		1	104	70-130	08/24/2020 0853
Benzene	50	49		1	98	70-130	08/24/2020 0853
tert-Butyl formate (TBF)	250	270		1	107	70-130	08/24/2020 0853
1,2-Dichloroethane	50	51		1	102	70-130	08/24/2020 0853
Diisopropyl ether (IPE)	50	50		1	99	70-130	08/24/2020 0853
3,3-Dimethyl-1-butanol	1000	990		1	99	70-130	08/24/2020 0853
Ethanol	5000	4600		1	91	70-130	08/24/2020 0853
Ethylbenzene	50	51		1	103	70-130	08/24/2020 0853
Ethyl-tert-butyl ether (ETBE)	50	49		1	97	70-130	08/24/2020 0853
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	08/24/2020 0853
Naphthalene	50	50		1	101	70-130	08/24/2020 0853
tert-butyl alcohol (TBA)	1000	940		1	94	70-130	08/24/2020 0853
Toluene	50	50		1	100	70-130	08/24/2020 0853
Xylenes (total)	100	100		1	103	70-130	08/24/2020 0853
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		104	70-130				
Toluene-d8		101	70-130				
Bromofluorobenzene		103	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MS

Sample ID: VH20063-031MS

Matrix: Aqueous

Batch: 64467

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	ND	5000	4700		5	94	70-130	08/24/2020 1935
tert-Amyl methyl ether (TAME)	57	250	330		5	111	70-130	08/24/2020 1935
Benzene	ND	250	270		5	107	70-130	08/24/2020 1935
tert-Butyl formate (TBF)	ND	1300	130	N	5	10	70-130	08/24/2020 1935
1,2-Dichloroethane	ND	250	280		5	111	70-130	08/24/2020 1935
Diisopropyl ether (IPE)	6 7	250	270		5	105	70-130	08/24/2020 1935
3,3-Dimethyl-1-butanol	ND	5000	5000		5	101	70-130	08/24/2020 1935
Ethanol	ND	25000	24000		5	94	70-130	08/24/2020 1935
Ethylbenzene	ND	250	280		5	112	70-130	08/24/2020 1935
Ethyl-tert-butyl ether (ETBE)	ND	250	260		5	102	70-130	08/24/2020 1935
Methyl tertiary butyl ether (MTBE)	530	250	800		5	108	70-130	08/24/2020 1935
Naphthalene	ND	250	260		5	106	70-130	08/24/2020 1935
tert-butyl alcohol (TBA)	5 7	5000	5400		5	108	70-130	08/24/2020 1935
Toluene	ND	250	270		5	109	70-130	08/24/2020 1935
Xylenes (total)	ND	500	560		5	112	70-130	08/24/2020 1935
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		111	70-130					
Toluene-d8		110	70-130					
Bromofluorobenzene		111	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MSD

Sample ID: VH20063-031MD

Matrix: Aqueous

Batch: 64467

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	ND	5000	4700		5	94	0.24	70-130	20	08/24/2020 2001
tert-Amyl methyl ether (TAME)	57	250	340		5	112	0.42	70-130	20	08/24/2020 2001
Benzene	ND	250	270		5	107	0.32	70-130	20	08/24/2020 2001
tert-Butyl formate (TBF)	ND	1300	120	N	5	9.5	9.5	70-130	20	08/24/2020 2001
1,2-Dichloroethane	ND	250	280		5	110	1.0	70-130	20	08/24/2020 2001
Diisopropyl ether (IPE)	6.7	250	270		5	104	1.3	70-130	20	08/24/2020 2001
3,3-Dimethyl-1-butanol	ND	5000	5100		5	102	0.74	70-130	20	08/24/2020 2001
Ethanol	ND	25000	24000		5	96	1.5	70-130	20	08/24/2020 2001
Ethylbenzene	ND	250	280		5	112	0.17	70-130	20	08/24/2020 2001
Ethyl-tert-butyl ether (ETBE)	ND	250	260		5	102	0.39	70-130	20	08/24/2020 2001
Methyl tertiary butyl ether (MTBE)	530	250	800		5	106	0.66	70-130	20	08/24/2020 2001
Naphthalene	ND	250	260		5	105	1.3	70-130	20	08/24/2020 2001
tert-butyl alcohol (TBA)	5.7	5000	5400		5	108	0.078	70-130	20	08/24/2020 2001
Toluene	ND	250	270		5	108	0.90	70-130	20	08/24/2020 2001
Xylenes (total)	ND	500	550		5	111	1.3	70-130	20	08/24/2020 2001
Surrogate	Q	% Rec	Acceptance Limit							
1,2-Dichloroethane-d4		111	70-130							
Toluene-d8		109	70-130							
Bromofluorobenzene		109	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64474-001

Matrix: Aqueous

Batch: 64474

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/24/2020 0957
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/24/2020 0957
Benzene	ND		1	1.0	0.40	ug/L	08/24/2020 0957
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/24/2020 0957
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/24/2020 0957
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/24/2020 0957
Ethanol	ND		1	100	52	ug/L	08/24/2020 0957
Ethylbenzene	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Naphthalene	ND		1	1.0	0.40	ug/L	08/24/2020 0957
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/24/2020 0957
Toluene	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/24/2020 0957
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		88	70-130				
Toluene-d8		101	70-130				
Bromofluorobenzene		97	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64474-002

Matrix: Aqueous

Batch: 64474

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	960		1	96	70-130	08/24/2020 0855
tert-Amyl methyl ether (TAME)	50	49		1	98	70-130	08/24/2020 0855
Benzene	50	47		1	94	70-130	08/24/2020 0855
tert-Butyl formate (TBF)	250	250		1	102	70-130	08/24/2020 0855
1,2-Dichloroethane	50	45		1	90	70-130	08/24/2020 0855
Diisopropyl ether (IPE)	50	49		1	98	70-130	08/24/2020 0855
3,3-Dimethyl-1-butanol	1000	1100		1	108	70-130	08/24/2020 0855
Ethanol	5000	4800		1	97	70-130	08/24/2020 0855
Ethylbenzene	50	50		1	100	70-130	08/24/2020 0855
Ethyl-tert-butyl ether (ETBE)	50	49		1	98	70-130	08/24/2020 0855
Methyl tertiary butyl ether (MTBE)	50	47		1	95	70-130	08/24/2020 0855
Naphthalene	50	51		1	103	70-130	08/24/2020 0855
tert-butyl alcohol (TBA)	1000	960		1	96	70-130	08/24/2020 0855
Toluene	50	51		1	102	70-130	08/24/2020 0855
Xylenes (total)	100	99		1	99	70-130	08/24/2020 0855
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		87	70-130				
Toluene-d8		99	70-130				
Bromofluorobenzene		102	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MS

Sample ID: VH20063-016MS

Matrix: Aqueous

Batch: 64474

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1100	5000	5900		5	96	70-130	08/24/2020 1831
tert-Amyl methyl ether (TAME)	31	250	270		5	95	70-130	08/24/2020 1831
Benzene	630	250	850		5	88	70-130	08/24/2020 1831
tert-Butyl formate (TBF)	ND	1300	83	N	5	6.6	70-130	08/24/2020 1831
1,2-Dichloroethane	ND	250	240		5	98	70-130	08/24/2020 1831
Diisopropyl ether (IPE)	15	250	270		5	100	70-130	08/24/2020 1831
3,3-Dimethyl-1-butanol	ND	5000	5400		5	108	70-130	08/24/2020 1831
Ethanol	ND	25000	24000		5	96	70-130	08/24/2020 1831
Ethylbenzene	ND	250	260		5	106	70-130	08/24/2020 1831
Ethyl-tert-butyl ether (ETBE)	ND	250	240		5	95	70-130	08/24/2020 1831
Methyl tertiary butyl ether (MTBE)	340	250	570		5	93	70-130	08/24/2020 1831
Naphthalene	5.7	250	270		5	105	70-130	08/24/2020 1831
tert-butyl alcohol (TBA)	120	5000	5600		5	109	70-130	08/24/2020 1831
Toluene	2.4	250	270		5	108	70-130	08/24/2020 1831
Xylenes (total)	6.2	500	540		5	106	70-130	08/24/2020 1831
Surrogate	Q	% Rec	Acceptance Limit					
1,2-Dichloroethane-d4		90	70-130					
Toluene-d8		108	70-130					
Bromofluorobenzene		105	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MSD

Sample ID: VH20063-016MD

Matrix: Aqueous

Batch: 64474

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1100	5000	5700		5	93	2.9	70-130	20	08/24/2020 1852
tert-Amyl methyl ether (TAME)	31	250	270		5	94	1.2	70-130	20	08/24/2020 1852
Benzene	630	250	840		5	85	1.0	70-130	20	08/24/2020 1852
tert-Butyl formate (TBF)	ND	1300	74	N	5	5.9	11	70-130	20	08/24/2020 1852
1,2-Dichloroethane	ND	250	240		5	96	2.1	70-130	20	08/24/2020 1852
Diisopropyl ether (IPE)	15	250	260		5	96	3.9	70-130	20	08/24/2020 1852
3,3-Dimethyl-1-butanol	ND	5000	5200		5	105	3.0	70-130	20	08/24/2020 1852
Ethanol	ND	25000	22000		5	89	6.9	70-130	20	08/24/2020 1852
Ethylbenzene	ND	250	260		5	102	3.6	70-130	20	08/24/2020 1852
Ethyl-tert-butyl ether (ETBE)	ND	250	230		5	93	2.4	70-130	20	08/24/2020 1852
Methyl tertiary butyl ether (MTBE)	340	250	570		5	90	1.3	70-130	20	08/24/2020 1852
Naphthalene	5.7	250	260		5	100	4.1	70-130	20	08/24/2020 1852
tert-butyl alcohol (TBA)	120	5000	5300		5	104	4.5	70-130	20	08/24/2020 1852
Toluene	2.4	250	260		5	102	5.6	70-130	20	08/24/2020 1852
Xylenes (total)	6.2	500	510		5	102	4.5	70-130	20	08/24/2020 1852
Surrogate	Q	% Rec	Acceptance Limit							
1,2-Dichloroethane-d4		87	70-130							
Toluene-d8		101	70-130							
Bromofluorobenzene		103	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64524-001

Matrix Aqueous

Batch: 64524

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	08/24/2020 2222
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	08/24/2020 2222
Benzene	ND		1	1.0	0.40	ug/L	08/24/2020 2222
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	08/24/2020 2222
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	08/24/2020 2222
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	08/24/2020 2222
Ethanol	ND		1	100	52	ug/L	08/24/2020 2222
Ethylbenzene	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Naphthalene	ND		1	1.0	0.40	ug/L	08/24/2020 2222
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	08/24/2020 2222
Toluene	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Xylenes (total)	ND		1	1.0	0.40	ug/L	08/24/2020 2222
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		106	70-130				
Toluene-d8		105	70-130				
Bromofluorobenzene		104	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note:** Calculations are performed before rounding to avoid round-off errors in calculated results

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64524-002

Matrix: Aqueous

Batch: 64524

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	920		1	92	70-130	08/24/2020 2116
tert-Amyl methyl ether (TAME)	50	51		1	102	70-130	08/24/2020 2116
Benzene	50	46		1	93	70-130	08/24/2020 2116
tert-Butyl formate (TBF)	250	260		1	102	70-130	08/24/2020 2116
1,2-Dichloroethane	50	50		1	100	70-130	08/24/2020 2116
Diisopropyl ether (IPE)	50	48		1	95	70-130	08/24/2020 2116
3,3-Dimethyl-1-butanol	1000	980		1	98	70-130	08/24/2020 2116
Ethanol	5000	4600		1	92	70-130	08/24/2020 2116
Ethylbenzene	50	48		1	96	70-130	08/24/2020 2116
Ethyl-tert-butyl ether (ETBE)	50	47		1	94	70-130	08/24/2020 2116
Methyl tertiary butyl ether (MTBE)	50	48		1	96	70-130	08/24/2020 2116
Naphthalene	50	50		1	100	70-130	08/24/2020 2116
tert-butyl alcohol (TBA)	1000	920		1	92	70-130	08/24/2020 2116
Toluene	50	47		1	94	70-130	08/24/2020 2116
Xylenes (total)	100	98		1	98	70-130	08/24/2020 2116
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		103	70-130				
Toluene-d8		96	70-130				
Bromofluorobenzene		99	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64685-001

Matrix: Aqueous

Batch: 64685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	08/25/2020 2136
Surrogate	Q	% Rec	Acceptance Limit				
1,2-Dichloroethane-d4		87	70-130				
Toluene-d8		101	70-130				
Bromofluorobenzene		97	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID VQ64685-002

Matrix: Aqueous

Batch: 64685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	DII	% Rec	% Rec Limit	Analysis Date
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	08/25/2020 2038
Surrogate	Q	% Rec			Acceptance Limit		
1,2-Dichloroethane-d4		82			70-130		
Toluene-d8		98			70-130		
Bromofluorobenzene		101			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note:** Calculations are performed before rounding to avoid round-off errors in calculated results

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ64741-001

Matrix: Aqueous

Batch: 64741

Prep Method: 524 2

Analytical Method: 524 2

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Benzene	ND		1	0.50	0.40	ug/L	08/26/2020 1139
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Naphthalene	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Toluene	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Xylenes (total)	ND		1	0.50	0.40	ug/L	08/26/2020 1139
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		90	70-130				
1,2-Dichlorobenzene-d4		83	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and  $\geq$  DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ64741-002

Matrix: Aqueous

Batch: 64741

Prep Method: 524 2

Analytical Method: 524 2

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	5.0	4.4		1	89	70-130	08/26/2020 1012
1,2-Dichloroethane	5.0	4.1		1	81	70-130	08/26/2020 1012
Ethylbenzene	5.0	4.2		1	84	70-130	08/26/2020 1012
Methyl tertiary butyl ether (MTBE)	5.0	3.6		1	71	70-130	08/26/2020 1012
Naphthalene	5.0	3.6		1	73	70-130	08/26/2020 1012
Toluene	5.0	4.3		1	86	70-130	08/26/2020 1012
Xylenes (total)	10	8.1		1	81	70-130	08/26/2020 1012
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		100	70-130				
1,2-Dichlorobenzene-d4		93	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and  $\geq$  DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - MB

Sample ID: VQ65029-001

Matrix: Aqueous

Batch: 65029

Prep Method: 524 2

Analytical Method: 524 2

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Benzene	ND		1	0.50	0.40	ug/L	08/28/2020 1326
1,2-Dichloroethane	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Ethylbenzene	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Naphthalene	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Toluene	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Xylenes (total)	ND		1	0.50	0.40	ug/L	08/28/2020 1326
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		99	70-130				
1,2-Dichlorobenzene-d4		107	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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## Volatile Organic Compounds by GC/MS - LCS

Sample ID: VQ65029-002

Matrix: Aqueous

Batch: 65029

Prep Method: 524 2

Analytical Method: 524 2

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Benzene	5.0	5.0		1	99	70-130	08/28/2020 1300
1,2-Dichloroethane	5.0	5.1		1	102	70-130	08/28/2020 1300
Ethylbenzene	5.0	5.2		1	103	70-130	08/28/2020 1300
Methyl tertiary butyl ether (MTBE)	5.0	4.9		1	99	70-130	08/28/2020 1300
Naphthalene	5.0	5.1		1	102	70-130	08/28/2020 1300
Toluene	5.0	5.4		1	108	70-130	08/28/2020 1300
Xylenes (total)	10	10		1	100	70-130	08/28/2020 1300
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		101	70-130				
1,2-Dichlorobenzene-d4		104	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the DL

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and ≥ DL

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

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**Chain of Custody  
and  
Miscellaneous Documents**



Chain of Custody Record

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Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 107312

Client: Katawba Ew, Report to Contact: Alex Amos, Address: 4278 Dye Rd, City: Edgewater, State: SC, Zip Code: 29712, Project Name: One Accord, P.O. No.: One Accord, Matrix: [blank], No. of Containers by Preservative Type: [blank]

Table with columns: Sample ID / Description, Date, Time, Matrix, No. of Containers by Preservative Type. Rows include samples 02131 MW1 through 02131 MW12 Dup.

Turn Around Time Required (Prior lab approval required for expedited TAT): 7 Day TAT, Sample Disposal: Return to Client, Possible Hazard Identification: Non-Hazardous, Laboratory received by: [Signature], Date: 8/20/20, Time: 16:00

Note: All samples are retained for four weeks from receipt unless other arrangements are made. LAB USE ONLY Received on ice (Circle) Yes No Ice Pack Receipt Temp: 1.9 °C

Page 99 of 105 Pace Analytical Services, LLC (Formerly Shealy Environmental Services, Inc.) 108 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com


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Number 107311

Client <b>Katawba Env</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.	
Address <b>4278 Dyer Rd</b>		Sampler's Signature <i>Billy Morris</i>		Analysis (Attach list if more space is needed)		Page <b>2</b> of <b>6</b>	
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>		Printed Name <b>Billy Morris</b>		 <b>VH20063</b> LID Remarks	
Project Name <b>One Accord</b>		R.O. No. <b>One Accord</b>		Matrix			
Sample ID / Description		Date	Time	No. of Containers by Preservative Type			
<b>02131 MW13</b>		<b>8-18-20</b>	<b>1359</b>	<b>X</b>		<b>X</b>	
<b>02131 MW15</b>		<b>8-18-20</b>	<b>1241</b>				
<b>02131 MW16</b>		<b>8-19-20</b>	<b>1142</b>				
<b>02131 MW17</b>		<b>8-19-20</b>	<b>1102</b>				
<b>02131 MW18</b>		<b>8-18-20</b>	<b>1327</b>				
<b>02131 MW19</b>		<b>8-19-20</b>	<b>1219</b>				
<b>02131 MW20</b>		<b>8-19-20</b>	<b>1252</b>				
<b>02131 MW21</b>		<b>8-18-20</b>	<b>1055</b>				
<b>02131 MW22</b>		<b>8-18-20</b>	<b>1610</b>				
<b>02131 MW23</b>		<b>8-18-20</b>	<b>819</b>	<b>X</b>		<b>X</b>	
Turn Around Time Required (Prior lab approval required for expedited TAT.)		Sample Disposal		Possible Hazard Identification		QC Requirements (Specify)	
<input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 DAY TAT</b>		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		<input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown			
1. Relinquished by <i>Billy Morris</i>		Date <b>8-20-20</b>	Time <b>8:24</b>	1. Received by <i>[Signature]</i>		Date <b>8-25-20</b>	Time <b>3:27</b>
2. Relinquished by <i>[Signature]</i>		Date <b>8-20-20</b>	Time <b>1610</b>	2. Received by		Date	Time
3. Relinquished by		Date	Time	3. Received by		Date	Time
4. Relinquished by		Date	Time	4. Laboratory received by <i>[Signature]</i>		Date <b>8/24/20</b>	Time <b>1610</b>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Refrigerated on ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (or Paste)		Receipt Temp. <b>19</b> °C	

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Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealyinc.com

Number 107310

Client: Katawba Co
Address: 4278 Old Rd
City: Edgecumbe
Project Name: On Accord
Report to Contact: Alex Amos
Sample's Signature: Billy Morris
Printed Name: Billy Morris

Table with columns: Sample ID / Description, Date, Time, Matrix, No. of Containers by Preservative Type. Rows include samples MW24 through MW32.

Turn Around Time Required, Sample Disposal, Possible Hazard Identification, QC Requirements (Priority). Includes signature of Billy Morris and date 8-20-20.

Note: All samples are retained for four weeks from receipt unless other arrangements are made.
DISTRIBUTION: WHITE & YELLOW-Return to Laboratory with Samples; PINK-Field/Client Copy



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 www.shealylab.com

Number 107309

Client <b>Ketawba Env</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.
Address <b>4278 Oye Rd</b>		Sampler's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>4</b> of <b>6</b>
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>		 <b>VH20063</b> LJO	
Project Name <b>One Accord</b>		Project No. <b>One Accord</b>		P.O. No. <b>One Accord</b>		

Sample ID / Description <small>(Containers for each sample may be combined on one line.)</small>	Date	Time	Lab. C. Container	Matrix											Remarks / Cooler I.D.		
				Asst	Water	Soil	Sludge	Rock	Ice	Other	Other	Other	Other	Other		Other	
02131 MW33	8-18-20	9:45	X														X
02131 MW34		15:27															
02131 MW35		17:58															
02131 MW36		18:34															
02131 MW37	8-18-20	11:59															
02131 MW38	8-17-20	18:47															
02131 MW38 Dup		18:49															
02131 MW39		19:27															
02131 DW1		18:03															
02131 DW2	8-17-20	15:33	X														X

Turn Around Time Required (Prior lab approval required for expedited IML)		Sample Disposal		Possible Hazard Identification				OO Requirements (Specify)	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush (Specify) <b>70-47X</b>	<input type="checkbox"/> Return to Client	<input type="checkbox"/> Dispose by Lab	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison	<input type="checkbox"/> Unknown	
1. Relinquished by <b>Billy Morris</b>	Date <b>8-20-20</b>	Time <b>8:24</b>	1. Received by	Date <b>8/20</b>	Time <b>8:24</b>				
2. Relinquished by	Date <b>8-20-20</b>	Time <b>16:00</b>	2. Received by	Date	Time				
3. Relinquished by	Date	Time	3. Received by	Date	Time				
4. Relinquished by	Date	Time	4. Laboratory received by	Date <b>8/20/20</b>	Time <b>16:00</b>				

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on Ice (Circle)  No  Yes  Receipt Temp **19** °C

PAGE ANALYTICAL SERVICES, LLC



Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 107308

Client: Kntanba Gw
Address: 4278 Dyc Rd
City: Edgemoor SC 29712
Project Name: One Accord
Report to Contact: Pedro Amos
Sample's Signature: Billy Morris
Printed Name: Billy Morris
Barcode: VH20063

Table with columns: Sample ID / Description, Date, Time, and various analysis parameters (Volatile, Semi-volatile, etc.). Rows include DW3, DW5, DW6, DW7, DW8, DW9, DW10, RW1, RW2, RW3.

Turn Around Time Required (Prior lab approval required for expedited TAT)
Sample Disposal: 70 days
Possible Hazard Identification: Not Hazard, Flammable, Skin Irritant, Poison, Unknown
QC Requirements (Specify):
1. Requisitioned by: Billy Morris
2. Received by: [Signature]
3. Received by: [Signature]
4. Laboratory received by: [Signature]

Note: All samples are retained for four weeks from receipt unless other arrangements are made.
LAR USE ONLY
Received on ice (Circle) [X] No Ice Pack
Receipt Temp: 19 °C





# Chain of Custody Record

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number **107307**

Pace Analytical Services, LLC (Formerly Shealy Environmental Services, Inc.)  
 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.paceelabs.com

Client <b>Katawba CW</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail <b>803-791-9700 / alex.amos@shealylab.com</b>		Quote No.	
Address <b>4278 Dyc Rd</b>		Sampler's Signature <b>Billy Morris</b>		Printed Name <b>Billy Morris</b>		Page <b>6</b> of <b>6</b>	
City <b>EDGEWOOD</b>		State <b>SC</b>		Zip Code <b>29712</b>		Barcode <b>VH20063</b>	
Project Name <b>DW Accord</b>		Project No. <b>DW Accord</b>		Matrix		No of Containers by Parameter Type	
Sample ID / Description <b>02131 DWw1</b>		Date <b>8-19-20</b>		Time <b>1658</b>		Matrix	
Sample ID / Description <b>02131 DWw2</b>		Date		Time <b>1634</b>		Matrix	
Sample ID / Description <b>02131 DWw3</b>		Date		Time <b>1725</b>		Matrix	
Sample ID / Description <b>02131 DWw4</b>		Date		Time <b>1758</b>		Matrix	
Sample ID / Description <b>02131 DWw5</b>		Date		Time <b>1746</b>		Matrix	
Sample ID / Description <b>02131 DWw6</b>		Date		Time <b>1616</b>		Matrix	
Sample ID / Description <b>02131 DWw6 DWP</b>		Date		Time <b>1618</b>		Matrix	
Sample ID / Description <b>02131 FB1</b>		Date		Time <b>1624</b>		Matrix	
Sample ID / Description <b>02131 FB2</b>		Date		Time <b>1630</b>		Matrix	
Sample ID / Description <b>02131 TB</b>		Date <b>8-19-20</b>		Time <b>1642</b>		Matrix	

Turn Around Time Required (Prior lab approval required for expedited TAT)  
 Standard  Rush (Specify) **7 DAY TAT**

Sample Disposal  
 Return to Client  Disposal by Lab

Possible Hazards Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison  Unknown

QC Requirements (Specify)

1. Relinquished by <b>Billy Morris</b>	Date <b>8-10-20</b>	Time <b>8:24</b>	1. Received by <b>[Signature]</b>	Date <b>8-20-20</b>	Time <b>1:20</b>
2. Relinquished by <b>[Signature]</b>	Date <b>8-20-20</b>	Time <b>1:40</b>	2. Received by <b>[Signature]</b>	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by <b>[Signature]</b>	Date <b>8/20/2020</b>	Time <b>1:10</b>

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on Ice (Circle)  No Ice Pack Receipt Temp. **1.9** °C

PACE ANALYTICAL SERVICES, LLC

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-1R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>24</u> ft          Depth to GW (DGW) <u>20.47</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.53</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>3.53 X 0.163</u> = <u>0.57</u> gals          3 Csg. Volumes = 3 X <u>0.57</u> = <u>1.72</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>1.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.5	1	1.75				
<b>Time (military)</b>	1332	1337	1342	1349				
<b>pH (s.u.)</b>	6.24	6.16	6.09	5.93				
<b>Specific Cond. (umhos/cm)</b>	197	196	195	194				
<b>Water Temp (°C)</b>	20.4	20.3	20.2	20.1				
<b>Turbidity (*)</b>	124	170	183	185				
<b>Dissolved Oxygen</b>	3.12	3.65	3.48	3.34				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>20.93</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.07</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.07 X 0.163</u> = <u>1.15</u> gals.          3 Csg. Volumes = 3 X <u>1.15</u> = <u>3.45</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.5				
<b>Time (military)</b>	1302	1308	1314	1318				
<b>pH (s.u.)</b>	6.32	6.24	6.17	6.09				
<b>Specific Cond. (umhos/cm)</b>	199	198	196	195				
<b>Water Temp (°C)</b>	20.6	20.5	20.3	20.1				
<b>Turbidity (*)</b>	138	157	169	171				
<b>Dissolved Oxygen</b>	3.42	3.36	3.29	3.18				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>20.39</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.61</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.61 X 0.163</u> = _____ gals          3 Csg. Volumes = 3 X <u>1.24</u> = <u>3.72</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.75</u> Gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	2.5	3.75				
<b>Time (military)</b>	1407	1412	1418	1423				
<b>pH (s.u.)</b>	6.19	6.08	5.93	5.86				
<b>Specific Cond. (umhos/cm)</b>	202	201	200	198				
<b>Water Temp (°C)</b>	20.3	20.2	20.1	20.0				
<b>Turbidity (*)</b>	131	161	178	179				
<b>Dissolved Oxygen</b>	3.81	3.77	3.63	3.52				

**South Carolina Department of Health and Environmental Control  
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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.25				
<b>Time (military)</b>	1013	1018	1024	1029				
<b>pH (s.u.)</b>	6.49	6.37	6.25	6.18				
<b>Specific Cond. (umhos/cm)</b>	110	109	108	107				
<b>Water Temp (°C)</b>	20.2	20.1	19.9	19.8				
<b>Turbidity (*)</b>	97.8	124	139	142				
<b>Dissolved Oxygen</b>	4.08	3.90	3.86	3.74				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no. <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-7</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>15.93</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.07</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>7.07 X 0.163</u> = <u>1.15</u> gals          3 Csg. Volumes = 3 X <u>1.15</u> = <u>3.45</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.5				
<b>Time (military)</b>	823	827	832	838				
<b>pH (s.u.)</b>	6.46	6.58	6.55	6.57				
<b>Specific Cond. (umhos/cm)</b>	203	196	193	192				
<b>Water Temp (°C)</b>	21.2	20.4	20.1	20.0				
<b>Turbidity (*)</b>	103	118	122	124				
<b>Dissolved Oxygen</b>	2.15	2.36	2.39	2.41				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no. <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>19.05</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.95</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>3.95 X 0.163 = 0.64</u> gals.          3 Csg Volumes = 3 X <u>0.64 = 1.93</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.75	1.5	2.25				
<b>Time (military)</b>	711	718	724	730				
<b>pH (s.u.)</b>	6.54	6.43	6.41	6.39				
<b>Specific Cond. (umhos/cm)</b>	157	162	167	168				
<b>Water Temp (°C)</b>	20.5	19.6	19.3	19.1				
<b>Turbidity (*)</b>	98.5	99.2	102	109				
<b>Dissolved Oxygen</b>	2.65	2.83	2.89	2.90				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-9</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>37</u> ft          Depth to GW (DGW) <u>28.85</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.15</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>8.15 X 0.163 = 1.32</u> gals          3 Csg Volumes = 3 X <u>1.32 = 3.98</u> gals (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	754	801	806	810				
<b>pH (s.u.)</b>	5.92	5.86	5.74	5.66				
<b>Specific Cond. (umhos/cm)</b>	49.2	48.7	47.5	46.3				
<b>Water Temp (°C)</b>	18.3	18.2	18.1	18.0				
<b>Turbidity (*)</b>	82.9	107	133	135				
<b>Dissolved Oxygen</b>	7.33	7.27	7.18	7.07				



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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3.5	4.75				
<b>Time (military)</b>	1436	1441	1447	1451				
<b>pH (s.u.)</b>	7.03	6.94	6.87	6.74				
<b>Specific Cond. (umhos/cm)</b>	27.3	26.5	25.6	24.8				
<b>Water Temp (°C)</b>	19.2	19.1	19.0	18.9				
<b>Turbidity (*)</b>	80.9	109	129	132				
<b>Dissolved Oxygen</b>	7.72	7.63	7.57	7.48				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	902	907	911	917				
<b>pH (s.u.)</b>	5.77	5.63	5.51	5.48				
<b>Specific Cond. (umhos/cm)</b>	197	196	195	194				
<b>Water Temp (°C)</b>	21.4	21.3	21.1	21.0				
<b>Turbidity (*)</b>	104	126	142	145				
<b>Dissolved Oxygen</b>	4.42	4.36	4.25	4.17				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.3	0.75	1.25				
<b>Time (military)</b>	1347	1351	1354	1359				
<b>pH (s.u.)</b>	6.13	6.05	5.75	5.86				
<b>Specific Cond. (umhos/cm)</b>	107	106	105	104				
<b>Water Temp (°C)</b>	20.2	20.1	19.9	19.8				
<b>Turbidity (*)</b>	124	138	147	151				
<b>Dissolved Oxygen</b>	3.27	3.18	3.09	2.95				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	1.5	2				
<b>Time (military)</b>	1226	1231	1237	1241				
<b>pH (s.u.)</b>	7.43	7.33	7.24	7.16				
<b>Specific Cond. (umhos/cm)</b>	42.1	41.7	40.8	39.4				
<b>Water Temp (°C)</b>	18.7	18.6	18.5	18.4				
<b>Turbidity (*)</b>	124	145	156	159				
<b>Dissolved Oxygen</b>	10.14	10.07	9.96	9.87				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	3.5	4.75				
<b>Time (military)</b>	1125	1132	1137	1142				
<b>pH (s.u.)</b>	6.43	6.37	6.24	6.18				
<b>Specific Cond. (umhos/cm)</b>	109	108	107	106				
<b>Water Temp (°C)</b>	21.2	21.1	20.9	20.6				
<b>Turbidity (*)</b>	129	147	167	169				
<b>Dissolved Oxygen</b>	4.62	4.58	4.46	4.39				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.25				
<b>Time (military)</b>	1046	1051	1057	1102				
<b>pH (s.u.)</b>	6.44	6.37	6.24	6.18				
<b>Specific Cond. (umhos/cm)</b>	114	113	112	111				
<b>Water Temp (°C)</b>	20.9	20.8	20.1	19.9				
<b>Turbidity (*)</b>	143	169	173	175				
<b>Dissolved Oxygen</b>	4.72	4.66	4.53	4.47				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	2.5	3.25				
<b>Time (military)</b>	1311	1316	1322	1327				
<b>pH (s.u.)</b>	5.32	5.24	5.16	5.05				
<b>Specific Cond. (umhos/cm)</b>	217	216	222	221				
<b>Water Temp (°C)</b>	21.4	21.1	20.4	20.1				
<b>Turbidity (*)</b>	112	135	157	162				
<b>Dissolved Oxygen</b>	4.93	4.84	4.77	4.65				

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<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-19</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>32</u> ft.          Depth to GW (DGW) <u>21.52</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>10.48 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>10.48 X 0.163 = 1.70</u> gals          3 Csg. Volumes = 3 X <u>1.70 = 5.12</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>5.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.75	3.5	5.25				
<b>Time (military)</b>	1203	1208	1213	1219				
<b>pH (s.u.)</b>	6.27	6.19	6.08	5.97				
<b>Specific Cond. (umhos/cm)</b>	131	130	128	126				
<b>Water Temp (°C)</b>	21.3	20.8	19.5	18.9				
<b>Turbidity (*)</b>	124	149	173	176				
<b>Dissolved Oxygen</b>	2.07	1.99	1.96	1.97				



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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no. <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-20</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft          Depth to GW (DGW) <u>20.74</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.26</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.26 X 0.163 = 1.18</u> gals          3 Csg Volumes = 3 X <u>1.18 = 3.55</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	2.5	3.75				
<b>Time (military)</b>	1238	1243	1247	1252				
<b>pH (s.u.)</b>	6.49	6.34	6.23	6.17				
<b>Specific Cond. (umhos/cm)</b>	173	172	171	170				
<b>Water Temp (°C)</b>	21.2	20.5	19.8	19.5				
<b>Turbidity (*)</b>	124	148	172	175				
<b>Dissolved Oxygen</b>	4.31	4.26	4.18	4.07				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 8/18/20  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Sunny  
 Ambient Air Temperature 89  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter. YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-21**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 25.86 ft

Length of Water Column (LWC=TWD-DGW) 9.14 FT

1 Csg Volume (LWC\*C) = 9.14 X 0.163 = 1.48 gals  
 3 Csg Volumes = 3 X 1.48 = 4.46 gals (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	1040	1046	1051	1055				
<b>pH (s.u.)</b>	5.61	5.52	5.43	5.37				
<b>Specific Cond. (umhos/cm)</b>	73.4	72.5	71.7	70.8				
<b>Water Temp (°C)</b>	19.2	19.1	19.0	18.9				
<b>Turbidity (*)</b>	144	161	174	176				
<b>Dissolved Oxygen</b>	3.45	3.37	3.21	3.19				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-22</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>27.82</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.18 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>2.18 X 0.163 = 0.35</u> gals.          3 Csg. Volumes = 3 X <u>0.35 = 1.06</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>1.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35	Purge Dry					
<b>Time (military)</b>	1554	1610						
<b>pH (s.u.)</b>	5.98	6.12						
<b>Specific Cond. (umhos/cm)</b>	128	132						
<b>Water Temp (°C)</b>	21.2	20.8						
<b>Turbidity (*)</b>	98.4	125						
<b>Dissolved Oxygen</b>	2.41	2.43						

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-23</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>35</u> ft          Depth to GW (DGW) <u>24.80</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>10.20 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>10.2 X 0.163 = 1.66</u> gals          3 Csg Volumes = 3 X <u>1.66 = 4.98</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.75	3.5	5				
<b>Time (military)</b>	803	808	812	819				
<b>pH (s.u.)</b>	6.18	6.06	5.94	5.88				
<b>Specific Cond. (umhos/cm)</b>	53.1	52.6	51.7	50.9				
<b>Water Temp (°C)</b>	19.3	19.2	19.0	19.0				
<b>Turbidity (*)</b>	143	157	168	172				
<b>Dissolved Oxygen</b>	9.37	9.24	9.18	9.07				

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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-24</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>35</u> ft.          Depth to GW (DGW) <u>30.29</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>4.71</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>4.71 X 0.163 = 0.76</u> gals.          3 Csg. Volumes = 3 X <u>0.76 = 2.30</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.75	1.5	2.5				
<b>Time (military)</b>	857	902	908	913				
<b>pH (s.u.)</b>	6.04	5.93	5.87	5.79				
<b>Specific Cond. (umhos/cm)</b>	43.5	42.1	41.7	40.9				
<b>Water Temp (°C)</b>	19.0	18.9	18.8	18.7				
<b>Turbidity (*)</b>	101	136	149	151				
<b>Dissolved Oxygen</b>	5.42	5.37	5.29	5.18				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.75	1.25	1.75				
<b>Time (military)</b>	941	946	950	956				
<b>pH (s.u.)</b>	6.34	6.21	6.18	6.07				
<b>Specific Cond. (umhos/cm)</b>	102	101	100	98.9				
<b>Water Temp (°C)</b>	20.1	19.8	19.5	19.3				
<b>Turbidity (*)</b>	96.7	108	124	126				
<b>Dissolved Oxygen</b>	3.24	3.16	3.09	2.94				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	Purge Dry						
<b>Time (military)</b>	1020	1024						
<b>pH (s.u.)</b>	6.78							
<b>Specific Cond. (umhos/cm)</b>	146							
<b>Water Temp (°C)</b>	21.1							
<b>Turbidity (*)</b>	89.4							
<b>Dissolved Oxygen</b>	2.13							

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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-27</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>20.21</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.79</u> FT</p> <p>1 Csg. Volume (LWC*C) = <math>7.79 \times 0.163 = 1.26</math> gals.          3 Csg. Volumes = <math>3 \times 1.26 = 3.80</math> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	2.50	4				
<b>Time (military)</b>	1421	1427	1432	1438				
<b>pH (s.u.)</b>	6.32	6.24	6.18	6.07				
<b>Specific Cond. (umhos/cm)</b>	352	355	354	353				
<b>Water Temp (°C)</b>	19.3	18.7	16.5	16.3				
<b>Turbidity (*)</b>	107	129	146	149				
<b>Dissolved Oxygen</b>	3.57	3.43	3.36	3.29				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-28</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>59</u> ft          Depth to GW (DGW) <u>25.61</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>33.39 FT</u></p> <p>1 Csg Volume (LWC*C) = <u>33.39 x 0.163 = 5.44</u> gals.          3 Csg Volumes = 3 X <u>5.44</u> = <u>16.32</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>16.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.5				
<b>Time (military)</b>	1117	1121	1129	1136				
<b>pH (s.u.)</b>	5.64	5.16	5.08	4.99				
<b>Specific Cond. (umhos/cm)</b>	102	101	100	99.5				
<b>Water Temp (°C)</b>	20.8	20.1	19.5	19.2				
<b>Turbidity (*)</b>	121	138	147	150				
<b>Dissolved Oxygen</b>	7.72	2.63	2.54	2.46				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-29</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>64</u> ft.          Depth to GW (DGW) <u>27.64</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>36.36</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>36.36 X 0.163</u> = <u>5.92</u> gals.          3 Csg. Volumes = 3 X <u>5.92</u> = <u>17.78</u> gals (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>18</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	18				
<b>Time (military)</b>	1626	1633	1641	1649				
<b>pH (s.u.)</b>	6.49	6.37	6.18	6.17				
<b>Specific Cond. (umhos/cm)</b>	32.4	31.7	30.9	29.4				
<b>Water Temp (°C)</b>	19.3	19.2	19.0	18.8				
<b>Turbidity (*)</b>	41.6	56.9	68.7	71.2				
<b>Dissolved Oxygen</b>	6.95	6.86	6.74	6.68				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-30</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>59</u> ft.          Depth to GW (DGW) <u>25.89</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>33.11</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>33.11</u> X <u>0.163</u> = <u>5.39</u> gals          3 Csg Volumes = 3 X <u>5.39</u> = <u>16.19</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>16.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.25				
<b>Time (military)</b>	719	726	734	741				
<b>pH (s.u.)</b>	5.39	5.24	5.08	5.09				
<b>Specific Cond. (umhos/cm)</b>	170	169	167	166				
<b>Water Temp (°C)</b>	21.0	20.8	20.6	20.4				
<b>Turbidity (*)</b>	36.5	35.3	34.7	33.2				
<b>Dissolved Oxygen</b>	4.69	4.54	4.43	4.37				

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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-31</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>57</u> ft          Depth to GW (DGW) <u>27.24</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>29.76</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>29.76 X 0.163 = 4.85</u> gals          3 Csg Volumes = 3 X <u>4.85 = 14.55</u> gals (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>15</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15				
<b>Time (military)</b>	826	832	841	847				
<b>pH (s.u.)</b>	5.77	5.63	5.54	5.48				
<b>Specific Cond. (umhos/cm)</b>	67.4	66.9	65.4	64.8				
<b>Water Temp (°C)</b>	18.5	18.4	18.1	18.2				
<b>Turbidity (*)</b>	103	132	141	145				
<b>Dissolved Oxygen</b>	4.86	4.73	4.66	4.56				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 8/19/20  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Sunny  
 Ambient Air Temperature 89  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

**Well # MW-32**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 56 ft.  
 Depth to GW (DGW) 21.73 ft

Length of Water Column (LWC=TWD-DGW) 34.27 FT

1 Csg. Volume (LWC\*C) =  $34.27 \times 0.163 = 5.58$  gals.  
 3 Csg. Volumes =  $3 \times 5.58 = 16.75$  gals. (Std Purge Volume)

Total Volume of Water Purged Before Sampling 16.75 gals

**Used purge pump to evacuate**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	16.75				
<b>Time (military)</b>	850	857	908	917				
<b>pH (s.u.)</b>	6.24	6.16	6.09	5.98				
<b>Specific Cond. (umhos/cm)</b>	37.4	36.5	35.7	34.6				
<b>Water Temp (°C)</b>	20.2	20.1	19.9	19.9				
<b>Turbidity (*)</b>	91.7	107	121	124				
<b>Dissolved Oxygen</b>	6.84	6.77	6.63	6.55				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.5				
<b>Time (military)</b>	924	930	937	945				
<b>pH (s.u.)</b>	6.44	6.37	6.25	6.18				
<b>Specific Cond. (umhos/cm)</b>	61.7	60.9	59.2	55.4				
<b>Water Temp (°C)</b>	19.3	19.2	19.1	19.0				
<b>Turbidity (*)</b>	81.2	94.7	103	105				
<b>Dissolved Oxygen</b>	6.23	6.14	6.08	5.93				

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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-34</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>56</u> ft.          Depth to GW (DGW) <u>20.87</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>35.13 FT</u></p> <p>1 Csg Volume (LWC*C) = <u>35.13 X 0.163 = 5.72</u> gals          3 Csg. Volumes = 3 X <u>5.72 = 17.17</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>17.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>																																																																							
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	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling																																																																								
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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-35</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>50</u> ft          Depth to GW (DGW) <u>30.51</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>19.59</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>19.59 X 0.163</u> = <u>3.19</u> gals.          3 Csg Volumes = 3 X <u>3.19</u> = <u>9.57</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>9.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	3.25	6.5	9.75				
<b>Time (military)</b>	1738	1745	1752	1758				
<b>pH (s.u.)</b>	6.49	6.37	6.24	6.18				
<b>Specific Cond. (umhos/cm)</b>	54.1	53.6	52.4	51.8				
<b>Water Temp (°C)</b>	19.1	18.5	18.3	18.6				
<b>Turbidity (*)</b>	93.8	107	128	133				
<b>Dissolved Oxygen</b>	6.44	6.32	6.25	6.16				



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<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-36</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>59</u> ft          Depth to GW (DGW) <u>28.74</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>30.26</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>30.26 X 0.163</u> = <u>4.93</u> gals.          3 Csg Volumes = 3 X <u>4.93</u> = <u>14.79</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>15</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15				
<b>Time (military)</b>	1813	1820	1828	1834				
<b>pH (s.u.)</b>	5.54	5.46	5.39	5.24				
<b>Specific Cond. (umhos/cm)</b>	162	161	160	159				
<b>Water Temp (°C)</b>	18.8	18.7	18.4	18.4				
<b>Turbidity (*)</b>	32.7	39.4	45.6	48.7				
<b>Dissolved Oxygen</b>	5.63	5.57	5.43	5.39				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/18/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-37</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>64</u> ft.          Depth to GW (DGW) <u>36.44</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>27.56</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>27.56 X 0.163</u> = <u>4.49</u> gals.          3 Csg Volumes = 3 X <u>4.49</u> = <u>13.47</u> gals (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>13.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	4.5	9	13.5				
<b>Time (military)</b>	1141	1147	1152	1159				
<b>pH (s.u.)</b>	7.38	7.24	7.18	7.09				
<b>Specific Cond. (umhos/cm)</b>	61.0	60.4	59.1	58.6				
<b>Water Temp (°C)</b>	18.5	18.4	18.3	18.2				
<b>Turbidity (*)</b>	101	129	146	150				
<b>Dissolved Oxygen</b>	8.77	8.64	8.52	8.45				

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/17/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter. <u>YSI</u>          serial no <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-38</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft          Depth to GW (DGW) <u>27.39</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>12.61</u> FT</p> <p>1 Csg Volume (LWC*C) = <u>12.61 X 0.163</u> = <u>2.05</u> gals.          3 Csg. Volumes = 3 X <u>2.05</u> = <u>6.16</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>6.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	2	4	6.25				
<b>Time (military)</b>	1829	1835	1841	1847				
<b>pH (s.u.)</b>	6.17	6.09	5.94	5.88				
<b>Specific Cond. (umhos/cm)</b>	122	121	131	130				
<b>Water Temp (°C)</b>	18.3	18.2	18.1	18.0				
<b>Turbidity (*)</b>	131	148	159	162				
<b>Dissolved Oxygen</b>	4.95	4.88	4.73	4.67				

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<p>Date (mm/dd/yy) <u>8/17/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-39</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>80</u> ft.          Depth to GW (DGW) <u>27.63</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>52.37</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>52.37</u> X <u>0.163</u> = <u>8.53</u> gals.          3 Csg Volumes = 3 X <u>8.53</u> = <u>25.60</u> gals (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>25.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	25.75				
<b>Time (military)</b>	1901	1907	1919	1927				
<b>pH (s.u.)</b>	6.19	6.08	5.91	5.86				
<b>Specific Cond. (umhos/cm)</b>	109	108	118	119				
<b>Water Temp (°C)</b>	18.8	18.5	18.4	18.4				
<b>Turbidity (*)</b>	20.3	49.8	57.3	60.8				
<b>Dissolved Oxygen</b>	2.92	2.87	2.73	2.66				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 8/17/20  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Sunny  
 Ambient Air Temperature 89  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter YSI  
 serial no 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # DW-1**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 75 ft  
 Depth to GW (DGW) 18.34 ft.

Length of Water Column (LWC=TWD-DGW) 56.66 FT

1 Csg Volume (LWC\*C) =  $56.66 \times 0.163 = 9.23$  gals.  
 3 Csg Volumes =  $3 \times 9.23 = 27.70$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 28 gals

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	9.5	19	28				
<b>Time (military)</b>	1730	1742	1754	1803				
<b>pH (s.u.)</b>	6.43	6.37	6.24	6.18				
<b>Specific Cond. (umhos/cm)</b>	122	133	132	131				
<b>Water Temp (°C)</b>	20.7	20.6	20.6	20.1				
<b>Turbidity (*)</b>	13.4	12.1	11.7	10.5				
<b>Dissolved Oxygen</b>	4.29	4.18	4.07	3.96				

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 General Weather Condition Sunny  
 Ambient Air Temperature 89  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter. YSI  
 serial no 08366812 serial no 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # DW-2**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 75 ft  
 Depth to GW (DGW) 22.12 ft.

Length of Water Column (LWC=TWD-DGW) 52.88 FT

1 Csg Volume (LWC\*C) = 52.88 X 0.163 = 8.61 gals.  
 3 Csg. Volumes = 3 X 8.61 = 25.85 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 26 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	9	18	26				
<b>Time (military)</b>	1504	1513	1521	1533				
<b>pH (s.u.)</b>	5.73	5.64	5.52	5.45				
<b>Specific Cond. (umhos/cm)</b>	209	208	219	218				
<b>Water Temp (°C)</b>	20.1	19.8	19.7	19.7				
<b>Turbidity (*)</b>	9.9	8.7	7.4	6.7				
<b>Dissolved Oxygen</b>	5.23	5.16	5.08	4.94				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	7	14	22				
<b>Time (military)</b>	941	950	958	1007				
<b>pH (s.u.)</b>	6.52	6.47	6.30	6.24				
<b>Specific Cond. (umhos/cm)</b>	63.1	62.6	61.7	60.5				
<b>Water Temp (°C)</b>	18.3	18.2	17.9	17.6				
<b>Turbidity (*)</b>	15.7	14.3	12.9	11.7				
<b>Dissolved Oxygen</b>	2.65	2.52	2.47	2.39				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	63				
<b>Time (military)</b>	1611	1622	1636	1649				
<b>pH (s.u.)</b>	6.14	6.06	5.93	5.85				
<b>Specific Cond. (umhos/cm)</b>	204	203	213	212				
<b>Water Temp (°C)</b>	20.4	19.3	18.0	17.8				
<b>Turbidity (*)</b>	8.6	7.9	6.3	5.1				
<b>Dissolved Oxygen</b>	6.18	6.07	5.93	5.86				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/17/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-6</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft          Depth to GW (DGW) <u>26.42</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>123.58</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>123.58</u> X <u>0.163</u> = <u>20.14</u> gals          3 Csg. Volumes = 3 X <u>20.14</u> = <u>60.43</u> gals. (Std Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>60.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	60.5				
<b>Time (military)</b>	1217	1228	1239	1251				
<b>pH (s.u.)</b>	6.57	6.24	6.16	6.05				
<b>Specific Cond. (umhos/cm)</b>	187	186	184	184				
<b>Water Temp (°C)</b>	20.9	20.6	19.5	19.1				
<b>Turbidity (*)</b>	9.8	8.9	7.6	6.5				
<b>Dissolved Oxygen</b>	8.37	8.24	8.18	8.07				

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<p>Date (mm/dd/yy) <u>8/17/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">pH Meter <u>Hannah</u></td> <td style="width: 50%;">Conductivity Meter <u>YSI</u></td> </tr> <tr> <td>serial no. <u>08366812</u></td> <td>serial no. <u>11G100871</u></td> </tr> <tr> <td>pH=4.0 <u>4.0=4.0</u></td> <td>Standard <u>10.0=10.0</u></td> </tr> <tr> <td>pH=7.0 <u>7.0=7.0</u></td> <td>Standard <u>100.0=100.0</u></td> </tr> <tr> <td>pH=10.0 <u>10.0=10.0</u></td> <td>Standard <u>1000.0=1000.0</u></td> </tr> </table> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> </table>	pH Meter <u>Hannah</u>	Conductivity Meter <u>YSI</u>	serial no. <u>08366812</u>	serial no. <u>11G100871</u>	pH=4.0 <u>4.0=4.0</u>	Standard <u>10.0=10.0</u>	pH=7.0 <u>7.0=7.0</u>	Standard <u>100.0=100.0</u>	pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>	Relinquished by	Date/Time	Received by	Date/Time	<p><b>Well # <u>DW-7</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>20.43</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>129.57 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>129.57 X 0.163 = 21.19</u> gals          3 Csg. Volumes = 3 X <u>21.19</u> = <u>63.35</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>63.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
pH Meter <u>Hannah</u>	Conductivity Meter <u>YSI</u>														
serial no. <u>08366812</u>	serial no. <u>11G100871</u>														
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pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>														
Relinquished by	Date/Time	Received by	Date/Time												

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	63.5				
<b>Time (military)</b>	1333	1348	1357	1407				
<b>pH (s.u.)</b>	6.10	6.05	5.93	5.88				
<b>Specific Cond. (umhos/cm)</b>	123	122	120	119				
<b>Water Temp (°C)</b>	21.4	21.3	21.2	21.1				
<b>Turbidity (*)</b>	11.7	10.5	9.6	8.4				
<b>Dissolved Oxygen</b>	4.17	4.09	3.93	3.87				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	19	38	56				
<b>Time (military)</b>	1102	1114	1125	1138				
<b>pH (s.u.)</b>	6.10	6.04	5.92	5.87				
<b>Specific Cond. (umhos/cm)</b>	155	154	144	143				
<b>Water Temp (°C)</b>	18.5	18.4	18.3	18.2				
<b>Turbidity (*)</b>	11.6	10.4	9.8	7.9				
<b>Dissolved Oxygen</b>	10.43	10.37	10.24	10.19				

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pH Meter <u>Hannah</u>	Conductivity Meter <u>YSI</u>																		
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pH=10.0 <u>10.0=10.0</u>	Standard <u>1000.0=1000.0</u>																		
Relinquished by	Date/Time	Received by	Date/Time																

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	19	38	56				
<b>Time (military)</b>	806	822	836	849				
<b>pH (s.u.)</b>	7.17	7.05	6.94	6.87				
<b>Specific Cond. (umhos/cm)</b>	106	105	115	114				
<b>Water Temp (°C)</b>	18.5	18.3	18.2	18.1				
<b>Turbidity (*)</b>	10.9	9.3	8.4	7.2				
<b>Dissolved Oxygen</b>	4.86	4.73	4.64	4.55				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	60				
<b>Time (military)</b>	648	703	715	727				
<b>pH (s.u.)</b>	6.38	6.21	6.15	6.06				
<b>Specific Cond. (umhos/cm)</b>	156	167	166	165				
<b>Water Temp (°C)</b>	20.2	20.0	19.9	19.6				
<b>Turbidity (*)</b>	9.7	8.4	7.3	6.8				
<b>Dissolved Oxygen</b>	2.36	2.23	2.18	2.09				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1747							
<b>pH (s.u.)</b>	6.38							
<b>Specific Cond. (umhos/cm)</b>	307							
<b>Water Temp (°C)</b>	19.7							
<b>Turbidity (*)</b>	145							
<b>Dissolved Oxygen</b>	2.38							

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1803							
<b>pH (s.u.)</b>	6.68							
<b>Specific Cond. (umhos/cm)</b>	364							
<b>Water Temp (°C)</b>	21.3							
<b>Turbidity (*)</b>	137							
<b>Dissolved Oxygen</b>	4.21							

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>8/19/20</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Sunny</u>          Ambient Air Temperature <u>89</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter <u>YSI</u>          serial no. <u>08366812</u> serial no <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft          Depth to GW (DGW) <u>20.87</u> ft</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.13</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>  </u> X <u>0.163</u> = <u>  </u> gals.          3 Csg. Volumes = 3 X <u>  </u> = <u>  </u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>  </u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol	2 <sup>nd</sup> vol	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol	Post	Sampling
<b>Volume Purged (gallons)</b>	0							
<b>Time (military)</b>	1854							
<b>pH (s.u.)</b>	6.59							
<b>Specific Cond. (umhos/cm)</b>	342							
<b>Water Temp (°C)</b>	21.7							
<b>Turbidity (*)</b>	121							
<b>Dissolved Oxygen</b>	2.32							



# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on eight (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>KATAUMNA ENVIRONMENTAL 4275 DYE RD EDGEWOOD SC 29712</i>				
4. Generator's Phone <i>(803) 417-4586</i>				
5. Transporter 1 Company Name <i>KATAUMNA ENVIRONMENTAL</i>	6. US EPA ID Number	A. State Transporter's ID		
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter 1 Phone		
9. Designated Facility Name and Site Address <i>HALL MOT 221 DAREN DRIVE CHARLOTTE NC</i>		C. State Transporter's ID		
		D. Transporter 2 Phone		
		E. State Facility's ID		
		F. Facility's Phone		

11. WASTE DESCRIPTION	12. Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
a. <i>Purge Water UST Site ONE ACCON, LANCASIE HT, RICHMOND SC</i>	1	Tote	149	Gms
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above	H. Handling Codes for Wastes Listed Above
15. Special Handling Instructions and Additional Information	

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name <i>Billy Morris</i>	Signature <i>Billy Morris</i>	Date Month Day Year <i>9   4   20</i>
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date Month Day Year
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date Month Day Year
19. Discrepancy Indication Space		
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.		
Printed/Typed Name <i>Mike Hinds</i>	Signature <i>Mike Hinds</i>	Date Month Day Year <i>9   4   20</i>

NON-HAZARDOUS WASTE



**APPENDIX D**  
**DISPOSAL MANIFESTS**

**APPENDIX E**  
**QAPP CHECKLIST**

QAPP Contractor Checklist One Accord Ministries Site ID 02131

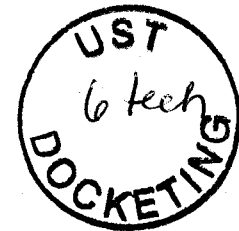
Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number	X		
3	Is name, address, & phone number of current property owner	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been	X		
16	Has the monitoring well installation and development dates been	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2			X
31	Have recommendations for further action been provided and	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk			X
37	Has the topographic map been provided with all required elements? (Figure	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements?	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?	X		
47	Have the soil boring/field screening logs been provided?	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided?	X		
52	Has all fate and transport modeling been provided? (Appendix I)	X		
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*



BRYAN SHANE  
 MIDLANDS ENVIRONMENTAL CONSULTANTS INC  
 PO BOX 854  
 LEXINGTON SC 29071

**FEB 16 2012**

Re: QAPP Contractor Addendum Directive for Small Scope Contract  
 Solicitation # 5400003229; PO# 4600117789

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct assessments at several facilities. Please submit the Site-specific Quality Assurance Project Plan for an IGWA, Tier I or Assessment Plan, and Assessment Component Cost Agreement as necessary, to my attention **within fifteen (15) days from the date of this correspondence**. Plan implementation shall not commence prior to receipt of written technical and financial approval from the Department. The facilities will be assigned a Cost Agreement (CA) numbers once the QAPP Contractor Addendum has been approved by the project manager. Please reference the CA numbers and Purchase Order # 4600117789 on the appropriate invoices submitted for payment. As specified in the referenced bid, **the completed invoice forms and associated reports (include contractor certification number) are expected on or before the designated due date (see below) after the technical and cost approval from the project manager.**

UST Permit #	Facility	ARRA	County	Project Manager	Work Scope	Due Date*
19386	Former Phillips 66 Station	Yes	Sumter	Art Shrader	Tier I Assessment	60 Days
02131	Fireball Service Station	No	Chester	Minda Hornosky	IGWA	60 Days
19412	Budget Inn	No	Edgefield	Maia Milenkova	IGWA	60 Days
15813	Continental Machine	No	Laurens	Staphanie Briney	Monitoring Well Installation	60 Days

\*From receipt of Notice to Proceed letter

Midland's Environmental Consultants, Inc. will perform services at the sites on behalf of the site's UST owners; however, payments will be made from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. The site's UST owners have no obligation for payment for this scope of work. **Please note, if there are any changes in the established cost agreement amounts (e.g., additional water**

**supply wells sampled, additional well footage, etc.) contact the site's project manager for technical and/or financial approval. Failure to do so prior to submittal of invoice may result in delay of payment.**

IGWA, Tier I or Assessment Plan, Implementation and Report submittal shall be performed in accordance with the referenced contract. Per Section 3.4.2., a late fee of \$50.00/day (not to exceed 20% of the cost agreement total) may be levied for each report submitted after the deadline established in the Notice to Proceed.

Under the terms of the American Recovery and Reinvestment Act (ARRA), the Department is required to pay funds for rehabilitation activities on or before September 30, 2012.

Please provide this office with a schedule of drilling dates and coordinate all work with me before commencing work at the facility. In accordance with the bid specification, a bi-monthly status report of the project should be provided by the 5<sup>th</sup> and 20<sup>th</sup> of each month via e-mail to my attention. If any quality assurance problems arise, you must contact me within 24 hours via phone or e-mail. If you have any questions or need further assistance, please contact me at (803) 896-6585.

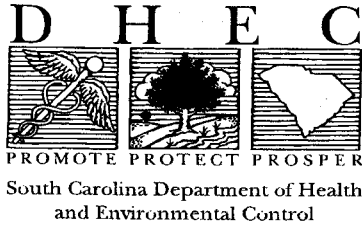
Sincerely,



Christopher S. Doll, P.G., Manager  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

Enc: Information Packets (02131, 15813, 19412, and 19386)

cc: Technical Files (02131, 15813, 19412, and 19386) with cover sheet & site maps.



**UNDERGROUND STORAGE TANK PROGRAM  
BUREAU OF LAND AND WASTE MANAGEMENT  
2600 Bull Street, Columbia, South Carolina 29201  
Telephone: 803-896-6240**

**MEMORANDUM**

TO: Bryan Shane, Midlands Environmental Consultants, Inc.

FROM: Minda Hornosky

RE: **NOTICE TO PROCEED**

Facility Name: Fireball Service Station

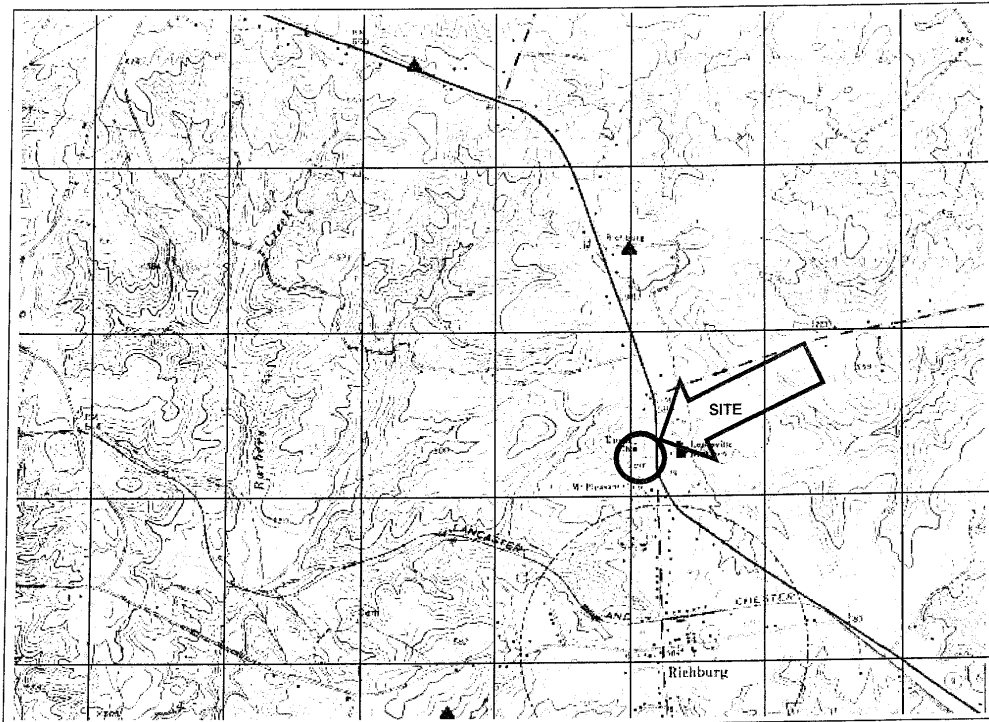
Permit Number: 02131

County: Chester

Work To Be Completed: Please install IGWA well near regular gasoline spill bucket at center UST in the tank basin. Also, please obtain ROE from current property owner. ROE from tank owner, topographic and site maps, data, copies of photos, and utility report are attached.

CA# 0





APPROXIMATE SCALE  
1 INCH EQUAL 2,000 FEET

UTM GRID AND 1983 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET



QUADRANGLE LOCATION

**RICHBURG, S. C.**  
N3437.5—W8100/7.5

1969

AMS 4753 II NE—SERIES V846

**NESCO**  
Environmental

PO BOX 78222  
CHARLOTTE, NC 28271  
(704) 442-1365

FIGURE 1

TOPOGRAPHIC LOCATION MAP

FIREBALL SERVICE STATION  
3570 LANCASTER HIGHWAY  
RICHBURG, SOUTH CAROLINA

**Domenico Model (Oxygenates)**

UST # 02131  
 Site Name: One Accord Ministries  
 Modeler: Matt Wykel  
 Date: 4.13.2021

**Transport Parameters**

x <sub>max</sub>	550	ft
y <sub>max</sub>	97	ft
z	0	ft
Source Width	70	ft
Source Thickness	20	ft
Plume Length	600	ft
α <sub>x</sub>	19.53555	ft
α <sub>y</sub>	1.953555	ft
α <sub>z</sub>	1.00E-99	ft

**Simulation Time**

t<sub>sim</sub> 21 yrs

**Groundwater Flow Parameters**

K	0.249	ft/yr
dh/dx	0.0097	
θ	0.25	dec. %
v <sub>x</sub>	22	ft/yr

**Aquifer Characteristics**

ρ <sub>a</sub>	1.7	kg/L
f <sub>oc</sub>	0.0002	

**Retarded Velocity (ft/yr)**

**Source Area CoC Data**

CoC	C <sub>source</sub> (mg/L)	K <sub>oc</sub> (L/kg)
tBA	2	1
tAA	29	1
DIPE	1.5	1.5
tAME	5.7	1.5
EtBE		1.5
Ethanol		0.5

CoC	R	v <sub>R</sub>
tBA	1.001	21.97
tAA	1.001	21.97
DIPE	1.002	21.96
tAME	1.002	21.96
EtBE	1.002	21.96
Ethanol	1.001	21.99

**Simulation Points for Breakthrough Curves**

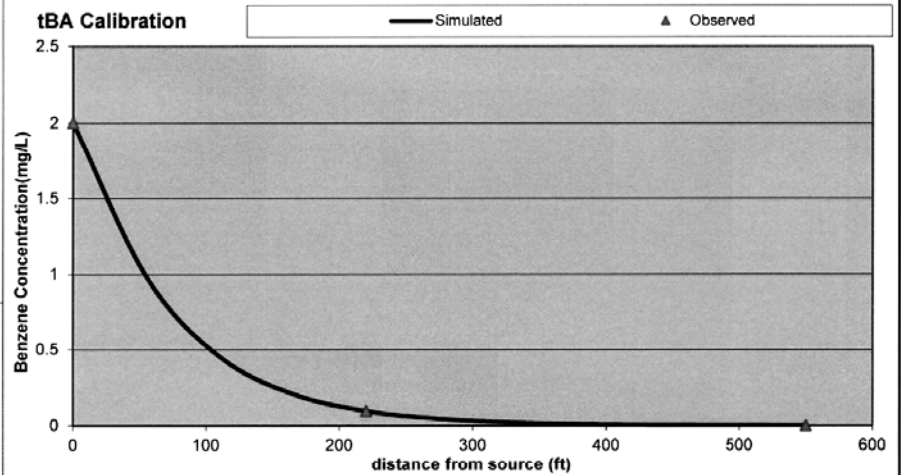
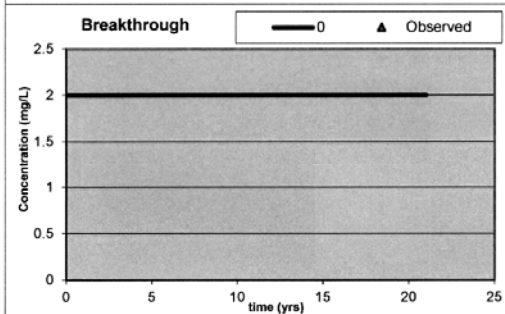
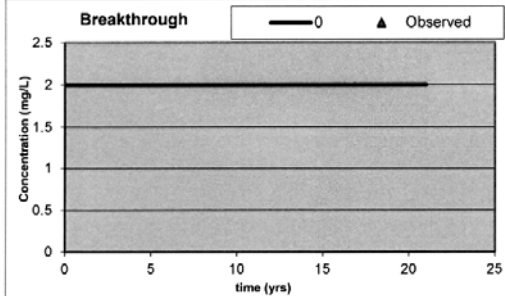
x		ft
y		ft
z		ft

x		ft
y		ft
z		ft

$$C(x, y, z, t) = \left( \frac{C_0}{8} \right) \exp \left[ \left( \frac{x}{2\alpha_x} \right) \left( 1 - \sqrt{1 + \frac{4\lambda\alpha_x}{v}} \right) \right] \operatorname{erfc} \left[ \frac{x - vt \sqrt{1 + \frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}} \right] \left\{ \operatorname{erf} \left[ \frac{y + \frac{Y}{2}}{2\sqrt{\alpha_y x}} \right] - \operatorname{erf} \left[ \frac{y - \frac{Y}{2}}{2\sqrt{\alpha_y x}} \right] \right\} \left\{ \operatorname{erf} \left[ \frac{z + Z}{2\sqrt{\alpha_z x}} \right] - \operatorname{erf} \left[ \frac{z - Z}{2\sqrt{\alpha_z x}} \right] \right\}$$

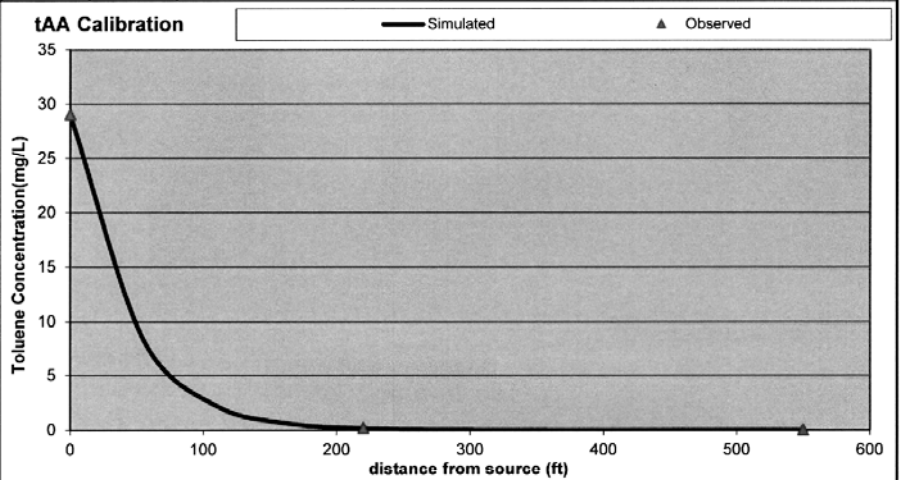
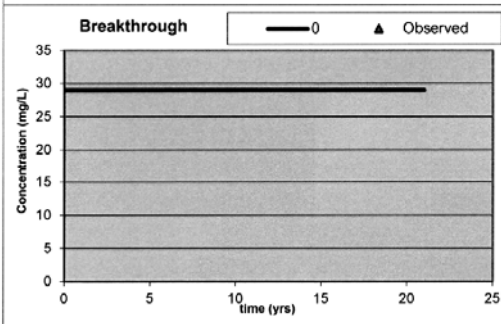
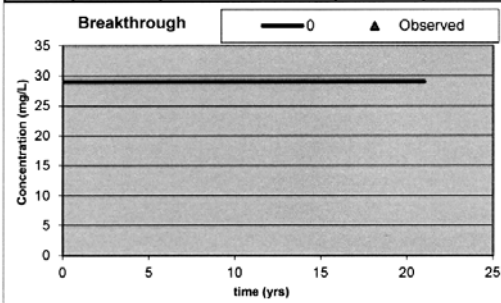


tBA Calibration								
Spatial Calibration Data (centerline)			Temporal Calibration Data					Site ID 02131
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name One Accord Ministries
0	2	2	0			0		<b>Model Calibration Parameters</b> t <sub>1/2</sub> 2.01 yrs      λ 0.34478 yr <sup>-1</sup> v <sub>x</sub> 22 ft/yr R 1.001 v <sub>R</sub> 21.970 ft/yr      C <sub>source</sub> 2 mg/L L <sub>p</sub> 600 ft      t <sub>sim</sub> 21 yrs α <sub>x</sub> 19.53555 ft α <sub>y</sub> 1.953555 ft α <sub>z</sub> 1E-99 ft
55		0.983	2.1		2.000		2.000	
110		0.455	4.2		2.000		2.000	
165		0.208	6.3		2.000		2.000	
220	0.096	0.096	8.4		2.000		2.000	
275		0.045	10.5		2.000		2.000	
330		0.021	12.6		2.000		2.000	
385		0.010	14.7		2.000		2.000	
440		0.005	16.8		2.000		2.000	
495		0.002	18.9		2.000		2.000	
550	0.00051	0.001	21		2.000		2.000	



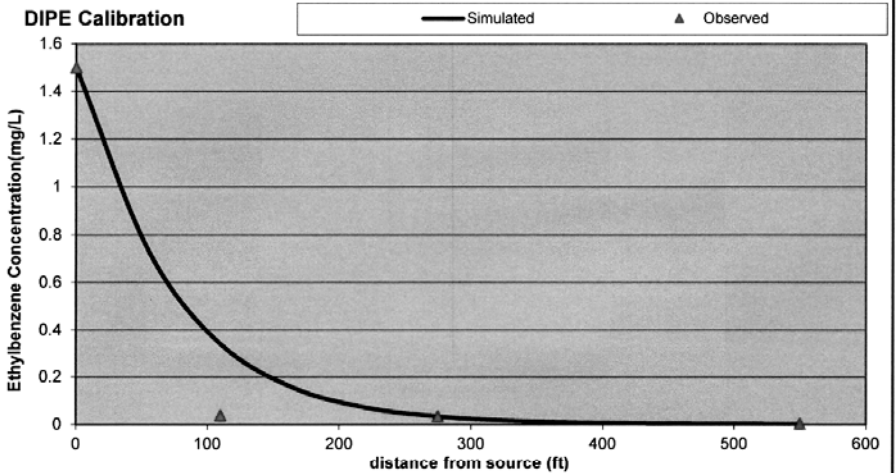
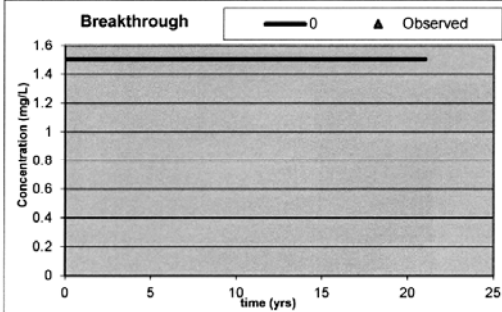
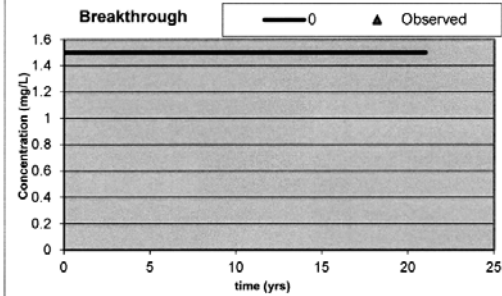
Source	55	110	165	220	275	330	385	440	495	550
97	1.1719E-05	0.00069657	0.00182886	0.0021564	0.00183064	0.001311	0.000846	0.000506	0.000283	0.000147
48.5	0.17862667	0.12883404	0.07434027	0.04011322	0.02095134	0.0107215	0.005394	0.002659	0.001272	0.000582
0	0.98349244	0.45473618	0.20826331	0.09608377	0.04470474	0.0209252	0.009807	0.004564	0.002083	0.000915
48.5	0.17862667	0.12883404	0.07434027	0.04011322	0.02095134	0.0107215	0.005394	0.002659	0.001272	0.000582
97	1.1719E-05	0.00069657	0.00182886	0.0021564	0.00183064	0.001311	0.000846	0.000506	0.000283	0.000147

IAA Calibration									
Spatial Calibration Data (centerline)			Temporal Calibration Data					Site ID 02131	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name	One Accord Ministries
0	29	29	0	29	29	29	29	Model Calibration Parameters	
55		8.320	2.1		29.000		29.000	t <sub>1/2</sub>	0.98 yrs
110		2.244	4.2		29.000		29.000	v <sub>x</sub>	22 ft/yr
165		0.600	6.3		29.000		29.000	R	1.001
220	0.16	0.161	8.4		29.000		29.000	v <sub>R</sub>	21.970 ft/yr
275		0.044	10.5		29.000		29.000	L <sub>p</sub>	600 ft
330		0.012	12.6		29.000		29.000	α <sub>x</sub>	19.53555 ft
385		0.003	14.7		29.000		29.000	α <sub>y</sub>	1.953555 ft
440		0.001	16.8		29.000		29.000	α <sub>z</sub>	1E-99 ft
495		0.000	18.9		29.000		29.000	C <sub>source</sub>	29 mg/L
550	0.0002	0.000	21		29.000		29.000	t <sub>sim</sub>	21 yrs
								λ	0.70714 yr <sup>-1</sup>



Source	55	110	165	220	275	330	385	440	495	550
97	9.9139E-05	0.00343787	0.00526625	0.00362337	0.001796	0.0007524	0.000286	0.000102	3.46E-05	1.14E-05
48.5	1.5110974	0.63585408	0.21406516	0.06740174	0.02055496	0.0061536	0.001821	0.000534	0.000156	4.5E-05
0	8.31988209	2.24432803	0.59970079	0.16144835	0.04385897	0.01201	0.00331	0.000917	0.000255	7.08E-05
48.5	1.5110974	0.63585408	0.21406516	0.06740174	0.02055496	0.0061536	0.001821	0.000534	0.000156	4.5E-05
97	9.9139E-05	0.00343787	0.00526625	0.00362337	0.001796	0.0007524	0.000286	0.000102	3.46E-05	1.14E-05

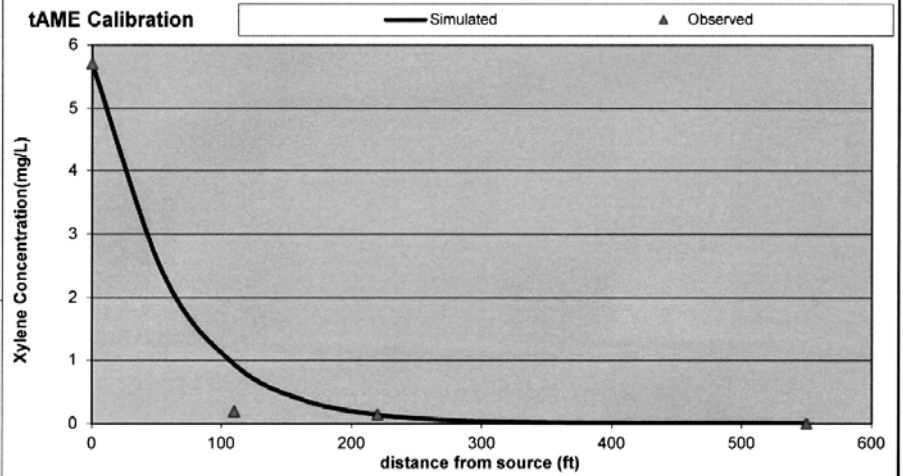
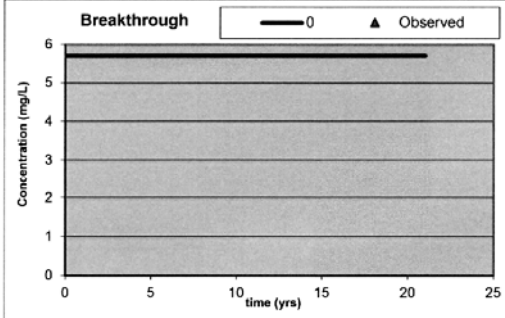
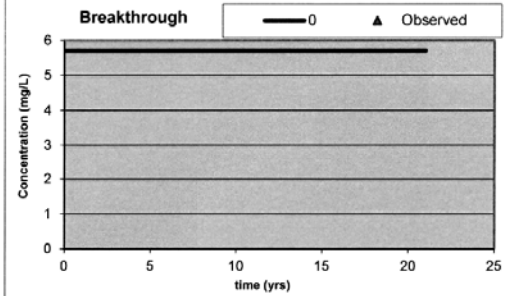
DIPE Calibration								
Spatial Calibration Data (centerline)			Temporal Calibration Data					Site ID 02131
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name One Accord Ministries
0	1.5	1.5	0		1.5		1.5	<b>Model Calibration Parameters</b> t <sub>1/2</sub> 2 yrs      λ 0.3465 yr <sup>-1</sup> v <sub>x</sub> 22 ft/yr R 1.002 v <sub>R</sub> 21.955 ft/yr      C <sub>source</sub> 1.5 mg/L L <sub>p</sub> 600 ft α <sub>x</sub> 19.53555 ft      t <sub>sim</sub> 21 yrs α <sub>y</sub> 1.953555 ft α <sub>z</sub> 1E-99 ft
55		0.735	2.1		1.500		1.500	
110	0.036	0.339	4.2		1.500		1.500	
165		0.155	6.3		1.500		1.500	
220		0.071	8.4		1.500		1.500	
275	0.032	0.033	10.5		1.500		1.500	
330		0.015	12.6		1.500		1.500	
385		0.007	14.7		1.500		1.500	
440		0.003	16.8		1.500		1.500	
495		0.002	18.9		1.500		1.500	
550	0.00084	0.001	21		1.500		1.500	



Source	55	110	165	220	275	330	385	440	495	550
97	8.7606E-06	0.000519	0.0013582	0.0015962	0.00135064	0.0009641	0.00062	0.00037	0.000206	0.000107
48.5	0.1335307	0.09599289	0.05520857	0.02969239	0.01545785	0.0078847	0.003954	0.001943	0.000927	0.000423
0	0.73520059	0.33881915	0.1546661	0.07112261	0.03298306	0.0153886	0.007189	0.003336	0.001518	0.000665
48.5	0.1335307	0.09599289	0.05520857	0.02969239	0.01545785	0.0078847	0.003954	0.001943	0.000927	0.000423
97	8.7606E-06	0.000519	0.0013582	0.0015962	0.00135064	0.0009641	0.00062	0.00037	0.000206	0.000107

**tAME Calibration**

Spatial Calibration Data (centerline)			Temporal Calibration Data				Site ID	02131	
x	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	t (yrs)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	C <sub>obs</sub> (mg/L)	C <sub>sim</sub> (mg/L)	Site Name	One Accord Ministries
0	5.7	5.7	0		5.7		5.7	<b>Model Calibration Parameters</b>  $t_{1/2}$ 1.55 yrs $\lambda$ 0.4471 yr <sup>-1</sup> $v_x$ 22 ft/yr $R$ 1.002 $v_R$ 21.955 ft/yr      C <sub>source</sub> 5.7 mg/L $L_p$ 600 ft $\alpha_x$ 19.53555 ft      t <sub>sim</sub> 21 yrs $\alpha_y$ 1.953555 ft $\alpha_z$ 1E-99 ft	
55		2.375	2.1		5.700		5.700		
110	0.19	0.931	4.2		5.700		5.700		
165		0.361	6.3		5.700		5.700		
220	0.14	0.141	8.4		5.700		5.700		
275		0.056	10.5		5.700		5.700		
330		0.022	12.6		5.700		5.700		
385		0.009	14.7		5.700		5.700		
440		0.004	16.8		5.700		5.700		
495		0.001	18.9		5.700		5.700		
550	0.00048	0.001	21		5.700		5.700		



Source	55	110	165	220	275	330	385	440	495	550
97	2.8301E-05	0.00142537	0.00317116	0.00316879	0.00228078	0.0013867	0.000762	0.000391	0.00019	8.71E-05
48.5	0.43137047	0.26363077	0.12890289	0.05894558	0.02610317	0.0113408	0.00486	0.002055	0.000854	0.000345
0	2.37506293	0.93051842	0.36111979	0.14119318	0.0556974	0.0221339	0.008837	0.003528	0.001397	0.000542
48.5	0.43137047	0.26363077	0.12890289	0.05894558	0.02610317	0.0113408	0.00486	0.002055	0.000854	0.000345
97	2.8301E-05	0.00142537	0.00317116	0.00316879	0.00228078	0.0013867	0.000762	0.000391	0.00019	8.71E-05

SSTLs

t 1000 yrs

UST Permit # 02131  
Site Name: One Accord N

SSTLs in mg/L		RBSLs (mg/L):			1.400	0.240	0.150	0.128		
MW #	x (ft)	y (ft)	z (ft)	tBA SSTL	tAA SSTL	DIPE SSTL	tAME SSTL			
MW-1R	373.3			240.644	1598.938	26.365	67.724			
MW-2	386.6			288.305	2182.226	31.611	84.453			
RW-1	370			230.081	1480.117	25.202	64.111			
RW-2	360			200.794	1171.164	21.981	54.290			
RW-3	353.3			183.268	1001.025	20.055	48.562			
DW-1	353.3			183.268	1001.025	20.055	48.562			
DW-3	133.3			8.576	5.427	0.926	1.171			
DW-5	380			263.588	1870.214	28.890	75.693			
DW-6	273.3			61.115	152.444	6.656	12.727			
DW-7	340			152.838	732.823	16.711	38.908			
DW-9	80			4.027	1.512	0.433	0.468			
MW-16	419			447.155	4649.076	49.123	144.411			
MW-20	377			253.059	1743.497	27.731	72.016			
MW-33,26	258			49.448	106.172	5.380	9.833			
MW-31,24	135			8.786	5.653	0.949	1.206			
MW-22	245			41.282	78.037	4.488	7.894			
MW-30	174			15.267	14.395	1.653	2.357			
MW-20	386.6			288.305	2182.226	31.611	84.453			

			$\lambda$ (yr <sup>-1</sup> ):	0.345	0.707	0.347	0.447		
			R:	1.001	1.001	1.002	1.002		



OXY Model

Source

TABLE 3. Groundwater Analytical Data One Accord Site ID 02131

Sample No.	Date	Parameter	Units	Value	Method	Lab	Notes
MW-1R	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-2	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-3	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-16	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-14	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-20	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-22	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-24	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-26	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-28	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-29	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-30	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-31	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-33	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-37	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-38	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	

OXY impact wells  
 MW-1R MW-31 DW-2  
 MW-2 MW-33  
 MW-3 MW-37  
 MW-16 DW-1  
 MW-14 DW-3  
 MW-20 DW-5  
 MW-22 DW-6  
 MW-24 DW-7  
 MW-26 DW-9  
 MW-28 RW-1  
 MW-29 RW-2  
 MW-30 RW-3

Deepoxs model = shallow OXY model  
 due to the OXY plume diving as it  
 spreads WEA.

MW-2 TAA = 29000 TAA = 15000  
 DIPE = 950 DIPE = 1500  
 TAE = 2000 TAE = 5700  
 TBA = 1800 TBA = 2000

$\frac{3.7'' \times 240''}{240''} \times Vx = 22A1/4$   
 length of cable line = 55'

DW 10 403 TAE  
 MW 39

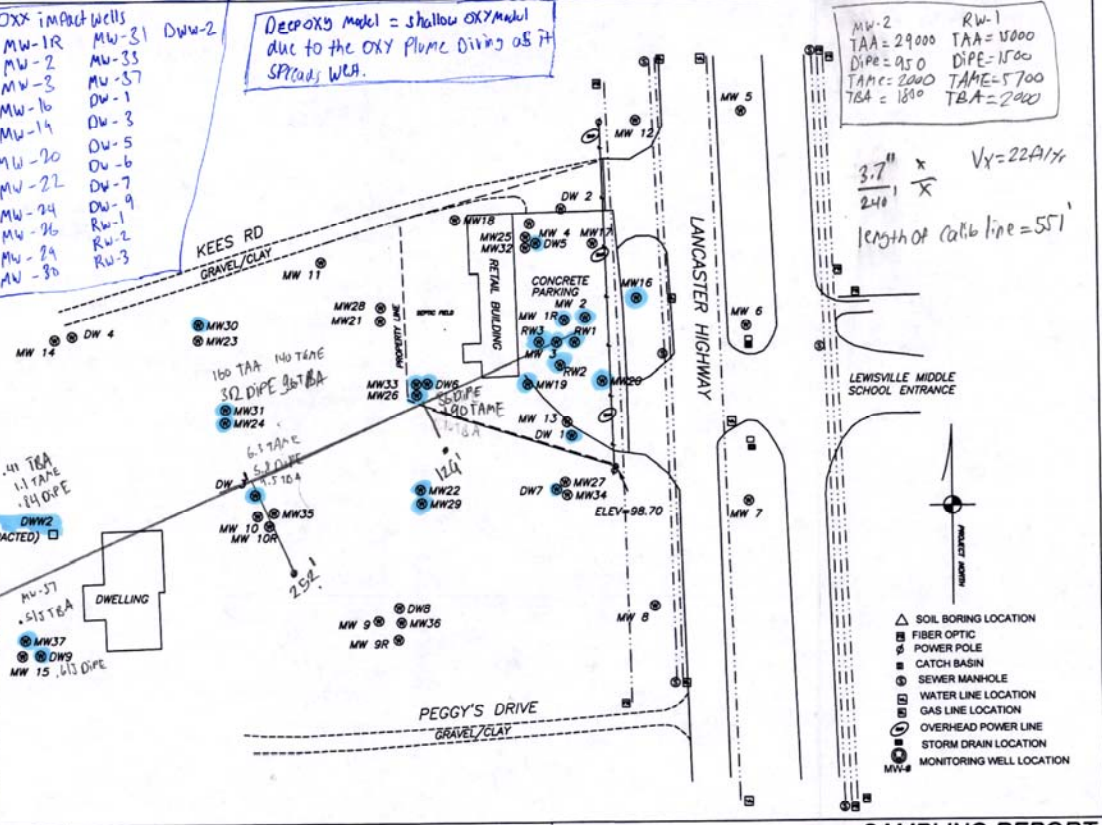
41 TAE  
 11 TAE  
 14 DIPE

DWW2  
 DRINKING WATER WELL (IMPACTED)

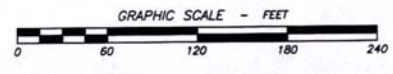
MW-37 513 TAE  
 MW-38  
 MW-39  
 MW 15 613 DIPE

Sample No.	Date	Parameter	Units	Value	Method	Lab	Notes
MW-37	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-38	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW-39	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	
MW 15	11/11/11	TOC	mg/L	1.1	TOC-OR	ES&S	

55'



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



SAMPLING REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - CONTAMINATION MAP

 **Midlands  
Environmental  
Consultants, Inc.**

February 28, 2012

Ms. Minda Hornosky, Hydrogeologist  
Assessment Section  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201



Subject: QAPP Contractor Addendum – Revision 0  
Fireball Service Station  
Richburg, South Carolina  
SCDHEC Site ID Number 02131  
MECI Project Number 12-3839  
Certified Site Rehabilitation Contractor UCC-0009



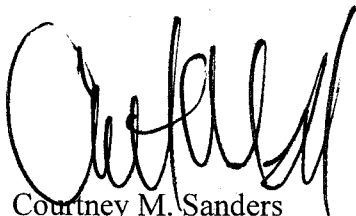
Dear Ms. Hornosky,

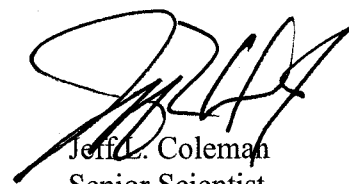
Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached QAPP Contractor Addendum for the referenced site.

On February 27, 2012, MECI personnel performed a site visit to the subject site to evaluate site conditions, attempt to locate monitoring wells and identify potential problems for future assessment activities.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,  
**Midlands Environmental Consultants, Inc.**

  
Courtney M. Sanders  
Staff Biologist

  
Jeff L. Coleman  
Senior Scientist

**Section A: Project Management**

**A1 Title and Approval Page**

Quality Assurance Project Plan  
Addendum to the SC DHEC UST Programmatic QAPP  
For  
Fireball Service Station, SCDHEC Site ID# 02131

---

3570 Lancaster Highway, Richburg, South Carolina

---

Prepared by:  
Courtney M. Sanders  
Staff Biologist  
Midlands Environmental Consultants, Inc.  
(Certified Site Rehabilitation Contractor UCC-0009)  
235-B Dooley Road  
Lexington, SC 29073  
(803)808-2043

---

Date: February 28, 2012

---

Approvals

Minda Hornosky  
SC DHEC Project Manager

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Courtney M. Sanders  
Contractor QA Manager

\_\_\_\_\_  
Signature

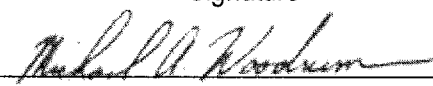
\_\_\_\_\_  
Date

Bryan T. Shane  
Site Rehabilitation Contractor

  
Signature

\_\_\_\_\_  
Date 2-29-12

Michael Woodrum  
Laboratory Director

  
Signature

\_\_\_\_\_  
Date 2/24/2012

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### A3 Distribution List

Name	Title	Organization/Address	Telephone Number	Fax Number	Email Address
Minda Hornosky	SC DHEC Technical Project Manager	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	hornosmj@dhec.sc.gov
Bryan T. Shane	Site Rehabilitation Contractor	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Courtney M. Sanders	Quality Assurance Officer	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Jeff L. Coleman	Field Manager	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	jlc@meci.net
Michael Woodrum	Laboratory Director	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Tommy Bolyard	Well Services/Driller	EDPS 17538 Greenhill Road Charlotte, NC 28278	704-607-7529	803-548-2233	EDPS@comporium.net

**Table 1A Addendum Distribution List**

### A4 Project Organization

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
Project Manager	Minda Hornosky	SCDHEC, UST Management Division, 2600 Bull St., Columbia, SC, 29201	803-896-6395	803-896-6245	hornosmj@dhec.sc.gov
Site Rehabilitation Contractor	Bryan T. Shane	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	bts@meci.net
Quality Assurance Officer	Courtney M. Sanders	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net
Field Manager	Jeff L. Coleman	Midlands Environmental Consultants, Inc.	803-808-2043	803-808-2048	jlc@meci.net

Role from the UST Master QAPP	Person in this Role for Project	Organization/Address	Telephone Number	Fax Number	Email Address
		235-B Dooley Road Lexington, SC 29073			
Analytical Laboratory Director	Michael Woodrum	Shealy Environmental Services, Inc. 106 Vantage Point Dr. West Columbia, SC 29172	803-791-9700	803-791-9111	mwoodrum@shealylab.com
Soil Boring and Monitoring Well Driller	Tommy Bolyard	EDPS 17538 Greenhill Road Charlotte, NC 28278	704-607-7529	803-548-2233	EDPS@comporium.net
Project Verifier	Courtney M. Sanders or Brendon P. Kelly	Midlands Environmental Consultants, Inc. 235-B Dooley Road Lexington, SC 29073	803-808-2043	803-808-2048	cms@meci.net

Table 2A Addendum Role Identification and Contact Information

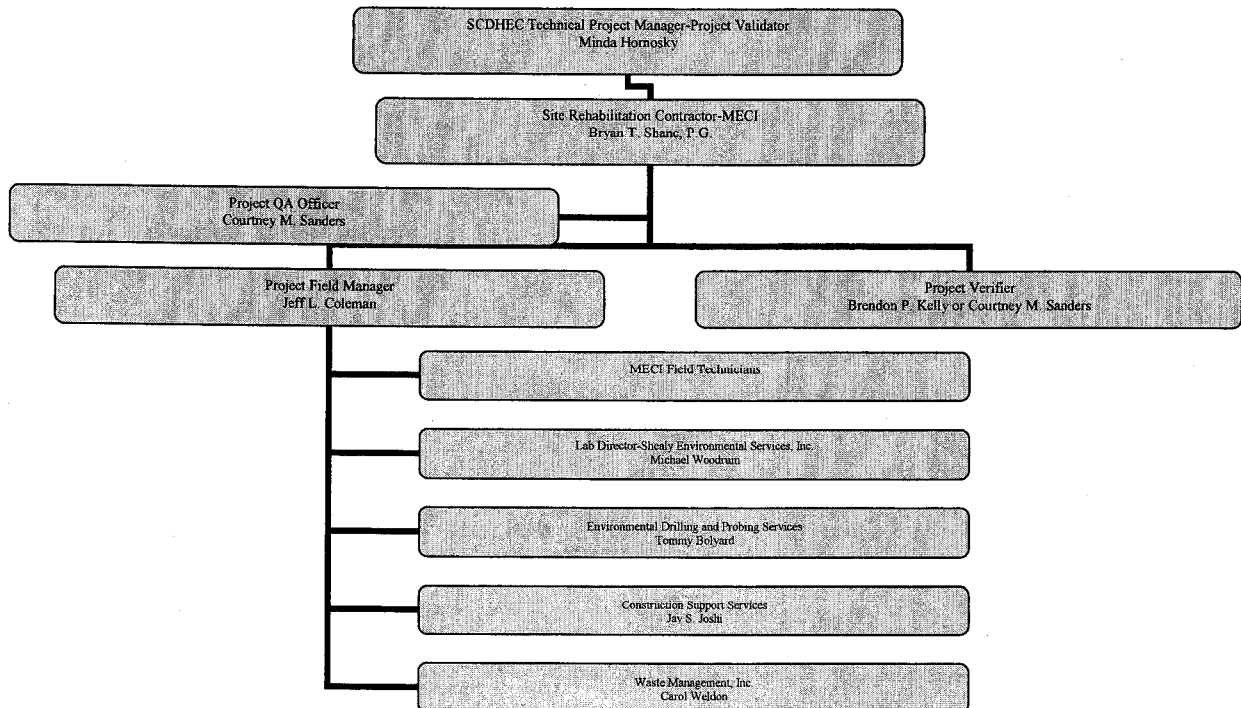


Figure 1A Organizational Chart

Project Manager (Minda Hornosky) – The project manager is responsible for direct oversight of contractors conducting assessment and site rehabilitation of releases at UST sites.

Site Rehabilitation Contractor (Bryan T. Shane, P.G.) – The Site Rehabilitation Contractor is an independent contractor responsible for managing and coordinating field and office activities needed for assessments or cleanup.

- Final Review of all work produced for a scope of work.
- Final say on technical interpretation of data.

Quality Assurance Officer (Courtney M. Sanders) – The Quality Assurance Officer is responsible for the oversight of all quality assurance activities associated with projects performed by the Site Rehabilitation Contractor.

- In charge of producing and maintaining the QAPPA for MECI.
- Reviews (and Audits, if necessary) all work produced in conjunction with a scope of work.
- Quality control of data entry and report preparation.

Field Manager (Jeff L. Coleman) –The field manager will oversee all work done on any given project.

- Assign, direct and oversee all field personnel working on each project.
- Responsible for coordinating with the SCDHEC project manager, should any problems or clarifications arise.
- Responsible for all reporting done in conjunction with field work.

Project Verifier (Courtney M. Sanders) – The project verifier is responsible for verifying the quality of data produced during a scope of work. This includes review of field work and laboratory reports for potential quality issues.

Well Driller (Tommy Bolyard) – The well driller is responsible for installing monitoring wells according to South Carolina Well Standards, R.61-71. The well driller is a subcontractor for MECI.

Field Technicians (various employees) – Responsible for all field activities for a given scope of work.

- Conduct all initial site visit, and record findings
- Conduct all field activities associated with a scope of work. All work will be conducted according to the MECI SOP. Will be responsible for reporting any potential problems or inconsistencies found during assessment activities.
- Completes the chain of custody upon completion of sampling event and delivers samples to lab or office for later lab pick-up

## **A5 Problem Definition/Background**

***Discuss the background (as much as is known) of the site and appropriate historical information, and why this site is being assessed.***

The subject site (Fireball Service Station) is located at 3570 Lancaster Highway, Richburg, Chester County, South Carolina. The subject site currently maintains one 3,000 gallon regular unleaded gasoline underground storage tank (UST), one 3,000 gallon plus gasoline UST, one 3,000 gallon premium gasoline

UST, one 4,000 gallon regular unleaded gasoline UST, and one 2,000 gallon diesel UST. These UST's were in compliance on December 20, 2011. The South Carolina Department of Health and Environmental Control reported and confirmed a release of petroleum product from the subject UST's in March of 2009. The subject site is currently rated a Class 5B.

The site is being assessed in conjunction with the SCDHEC Small Scope Assessment Contract (Solicitation # IFB-5400003229, PO# 4600117789).

***Please answer the following: Does this project fall under UST or Brownfields area?***

Underground Storage Tank Division

## **A6 Project/Task Description**

- 1. Summarize what is known about the work to be done. This can be a short sentence indicating what the Scope of this project is (see Master QAPP Section A6).***

The scope of this assessment will be to conduct an Initial Groundwater Assessment (IGWA).

The monitoring well installed in conjunction with the IGWA will be sampled according to SCDHEC guidelines set forth by Quality Assurance Program Plan For the Underground Storage Tank Management Division (June, 2011). All water supply wells and surface water bodies located within 500' feet of the subject site will be sampled and analyzed for BTEX, Naphth, MTBE, 1,2 DCA, 8 Oxygenates, Ethanol (EPA Method 8260B) and EDB (EPA Method 8011).

- 2. The work will begin within fourteen (14) days of receipt of approved QAPP contractors addendum after cost approval and the scope of work should be complete by sixty (60) days of receipt of approved QAPP contractors addendum.***
- 3. Are there are time or resource constraints? Include those factors that may interfere with the tentative schedule.***

Factors that may prevent schedule work will be, but not limited to, inclement weather, equipment malfunction, and machine failure.

## **A7 Data Quality Objectives (DQOs) and Data Quality Indicators (DQIs)**

The subject site is located at 3570 Lancaster Highway, Richburg, Chester County, South Carolina. The site is currently occupied by One Accord Ministries. The UST's are still in the ground, but all pumps have been removed.

The proposed work will be conducted on the property of 3570 Lancaster Highway (Chester County Tax Map# 125-00-00-059-000) in Richburg, SC.



## A8 Training and Certificates

Required training and licenses:

Title/Job	Name	Training Required	Date training received	Type of License	License Number
Principal Geologist	Bryan T. Shane, P.G.	Professional Geologist	10/30/1993	State of South Carolina	1102
Senior Scientist	Jeff Coleman	OSHA 40 hr HAZWOPER	7/27/2007	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	7/27/2011	N/A	N/A
Project Scientist	Brendon Kelly	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Geologist	John Bryant	OSHA 40 hr HAZWOPER	4/17/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/14/2010	N/A	N/A
Field Technician	Brian Owen	OSHA 40 hr HAZWOPER	8/21/2009	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Courtney Sanders	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Kyle Pudney	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Chris Lashley	OSHA 40 hr HAZWOPER	12/10/2010	N/A	N/A
		OSHA 8 hr HAZWOPER refresher	12/15/2011	N/A	N/A
Staff Biologist	Gavin Globensky	OSHA 40 hr HAZWOPER	7/29/2011	N/A	N/A
Lab Manager	Michael Woodrum	***	***	Lab Certification	SC 32010
Surveying Services	Jay S. Joshi	Tier A Land Surveyor Certification	6/1/1992	PLS	14811
Drilling Services	Tommy Bolyard - EDPS	SC Drillers Certification	8/24/2004	B	01846

Table 3A Required Training and Licenses

Brendon P. Kelly of Midlands Environmental Consultants, Inc. is responsible to ensuring that personnel participating in this project receive the proper training. All training records will be stored in the following location: 235-B Dooley Road, Lexington, SC 29073.

**It is understood that training records will be produced if requested by SC DHEC.**

The Following Laboratory(ies) will be used for this Project:

**Commercial Lab(s)**

Full Name of the Laboratory Shealy Environmental Services, Inc.  
Name of Lab Director Michael Woodrum  
SC DHEC Certification Number 32010  
Parameters this Lab will analyze for this project:

Samples Collected for Soil Test Borings and Groundwater Monitoring Wells constructed in conjunction with the IGWA will be analyzed for the following parameters:

**SOILS**

-BTEX, Naphth, MTBE (5035/8260B)  
-PAH's (8270D)  
-Total Lead (6010C)

**GROUNDWATER**

-BTEX, Naphth, MTBE (8260B)  
-1,2 DCA (8260B)  
-EDB (8011)  
-Total Lead (6010C)  
- PAH's (8270D)

Additionally, all water supply wells or relevant surface waters located within 500' feet of the subject site with be analyzed for BTEX, Naphth, MTBE, 1,2 DCA, 8 Oxygenates, Ethanol (EPA Method 8260B) and EDB (EPA Method 8011).

Please note: SC DHEC may require that the contractor submit some or all of the Laboratory's SOPs as part of this QAPP.

**A9 Documents and Records**

*Personnel will receive the most current version of the QAPP Addendum via:  
(Check all that apply)*

US Mail     Courier     Hand delivered

Other (please specify): E-mailed electronic copies

Record	Produced By	Hardcopy/ Electronic	Storage Location For how long?	Archival
Instrument Raw Data	Target, Thermospec, or Iteva software	Hardcopy and Electronic	Hardcopy: Offsite storage for 7 yrs Electronic: Two external storage device backups – one offsite, one onsite storage for 10 yrs	Yes
Final Reports	LIMS	Electronic	Electronic: Two external storage device backups – one offsite, one onsite storage for 10 years	Yes
Field Work	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Chain of Custody	Field Staff	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
QAPP Addendum	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
Internal QC record	Brendon Kelly	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes
Sampling Report	Brendon Kelly	Hardcopy & Electronic	MECI office: 235B Dooley Road / Min. 5 years	Yes
1903 Water Well Record Form	EDPS	Hardcopy	MECI office: 235B Dooley Road / Min. 5 years	Yes

Table 4A Record Identification, Storage, and Disposal

## Section B Measurement/Data Acquisition

### B1 Sampling Process/Experimental Design

Item	Start Date	End Date	Comments
Site Reconnaissance	2/27/12	2/27/12	Already Completed
QAPP preparation	2/28/12	2/28/12	In progress
QAPP approval	2/29/12	3/21/12	Assuming three week turnaround
PUPs Request	3/22/12	3/27/12	Give 72 hours until PUPs ticket active
Monitoring Well Installation	3/28/12	4/4/12	One week to mobilize a drilling rig to the subject site. Drilling will take 1 day.
Monitoring well Sampling	4/5/12	4/19/12	Two Weeks on Analytical
Report Preparation	4/20/12	5/11/12	Three weeks to prepare/submit report

Table 5A Sampling Activities

### B2 Sampling Methods

Please note: The contractor must follow sampling protocols as given in the UST QAPP.

**Estimate the number of samples of each matrix that are expected to be collected:**

Soil \_\_\_\_\_ 1 \_\_\_\_\_

Ground Water from monitoring wells	_____ 1 _____
From Drinking/Irrigation water wells	_____
Field Duplicate Collection	_____ 2 _____
Field Blank Collection	_____ 2 _____
Trip Blank	_____ 2 _____
From surface water features	_____
Total number of samples	_____ 8 _____

Notes:

-One (1) soil sample set will be collected during the initial phase of the IGWA. One (1) monitoring well installed in conjunction with the IGWA will be sampled. Samples will be collected following the SCDHEC guidelines set forth by the Quality Assurance Program Plan For the Underground Storage Tank Management Division (June, 2011) (See **IGWA Sampling Design Process-Pages 56-58**).

-It is anticipated that two (2) field duplicates will be sampled. One duplicate will be collected during the collection of soil samples during the initial phase of the IGWA and one duplicate will be collected during the monitoring well sampling event.

-It is anticipated that two (2) field blanks will be collected. One field blank will be collected during the collection of soil samples during the initial phase of the IGWA and one field blank will be collected during the monitoring well sampling event.

- It is anticipated that two (2) trip blanks will be analyzed (1 per cooler utilized during Assessment activities). One cooler will be utilized during the collection of soil samples during the initial phase of the IGWA and one cooler will be collected during the monitoring well sampling event.

***For the sample matrices indicated above, please describe how samples will be collected and the equipment needed.***

Please see MECI SOP 4.1.1 (Soil Screening and Sampling), 4.2 (Monitoring Well Installation), 4.3 (Monitoring Well Sampling) for field procedures that we be utilized during the subject assessment.

***Will Sampling Equipment have to be cleaned and decontaminated or is everything disposable?***

All equipment, excluding electronic water level indicators, field probes and turbidity tubes, is disposable.

***If sampling equipment must be cleaned please give a detailed description of how this is done and the disposal of by-products from the cleaning and decontamination.***

Prior to usage of non-disposable equipment, it is decontaminated with isopropanol applied by a Teflon squeeze bottle and rinsed with analyte free water. This rinse water and all water produced during development is collected and run through a portable GAC (granulated activated carbon) unit.

All drilling equipment will be decontaminated according to MECI Standard Operating Procedures (4.2.10). All wastes derived by decontamination procedures will be collected and transported to a certified waste disposal facility along with drill cuttings (Waste Management Richland County Landfill, Elgin, SC).

***Identify any equipment and support facilities needed. This may include such things as Fed-ex to ship the samples, a Geoprobe, field analysis done by another contractor (who must be certified), and electricity to run sampling equipment.***

Environmental Drilling and Probing Services (EDPS) will mobilize a Geoprobe 6620 drilling rig to the subject site. All drilling activities will be performed under the supervision of a South Carolina Certified Well Driller and MECI field personnel (Tommy Bolyard, #B 01846).

Wells will be installed according to MECI Standard Operating Procedures (4.2., 4.2.2, 4.2.3 & 4.2.4) and in accordance with South Carolina Well Standards, R.61-71.

Drill cuttings will be disposed of by MECI personnel at Waste Management Richland County Landfill in Elgin, SC.

Following monitoring well installation, a subsequent survey will be conducted by MECI personnel.

***Address the actions to be taken when problems occur in the field, and the person responsible for taking corrective action and how the corrective action will be documented.***

Failure	Response	Documentation	Individual Responsible
Unable to gain access to drilling location	Attempt to create path to well location through vegetation, Utilize plywood boards to cross soft ground, contact SCDHEC project manager to discuss a potential change to the well location.	Record on field sheets, notify SCDHEC and Office.	Field Staff, Field Manager
Hitting a Utility Line while Drilling	Contact PUPS (Palmetto Utilities Protection Service), contact appropriate utility (if gas line is hit, notify fire department)	Record in field sheets, on PUPS ticket in office. Contact SCDHEC project manager to inform them of problem.	Field Staff, Field Manager
Drilling rig breaks down	Attempt to correct problem. If the problem cannot be determined, or cannot be fixed, discontinue drilling for the day. Drilling can continue once drill rig has	Record on field sheet, notify office staff.	Field Staff, Drill rig operator

	been fixed, or new drill rig is mobilized to the site		
Property Owner will not allow access onto property for drilling activities	Stop drilling. Attempt to discuss with property owner the need for the work. Inform SCDHEC project manager of the access issue. If no resolution can be made, discontinue drilling on the disputed property until access can be obtained or new well location is determined.	Document on field sheets (or QAPP, if access denied during QAPP site visit). Inform SCDHEC project manager immediately if any disputes arise.	Field Staff, Field Manager

Table 6A Field Corrective Action

### B3 Sample Handling and Custody

**1. How will the samples get from the Site to the Lab to ensure holding requirements are met?**

Following sample collection, the samples are immediately place in a laboratory provided cooler, pre-filled with wet ice obtained from the MECI office. Samples are transported to the MECI office once a sampling event is complete. A Chain of Custody (CoC) is filled out following the sampling event by the field staff. See attached CoC. If a lab provided courier is scheduled to visit the MECI offices the day following a sampling event, sampling coolers are repacked with wet ice, and left at the office for pick-up the following morning. If no courier is schedule to visit the MECI office the day following a sampling event, all sampling coolers are repacked with ice and are dropped off at a lab approved shipping company for overnight delivery to the lab.

**2. How will the contactors cool the samples and keep the samples cool?**

All samples are kept on wet ice, obtained from MECI office.

**3. How will the lab determine the temperature of the samples upon receipt? Will they be using a temperature blank?**

A calibrated thermometer and temperature blank will be used to document sample temperature. The temperature blank is immediately checked by the sample receiving technician upon arrival at the laboratory.

**4. Where will the samples be stored in the Lab once they are received?**

All samples are stored in clean refrigeration units monitored and maintained at 4 degrees C + or - 2 degrees. Volatile organic samples are stored separately form all other samples.

**5. Describe the chain of custody procedure and attach a copy of each chain of custody that will be used. If a Chain of Custody SOP exists from the Lab and the Contractor is willing to adhere to it, then this may be attached.**

A chain of custody (COC) will be filled out for each sampling event at each project site. COC to be signed by MECI and Shealy Environmental technician at time physical transfer of samples occurs to courier. Shealy uses the following COC procedures to protect sample integrity following pickup by their courier: A full time Sample Receiving Technician receives all samples and completes a Sample Receipt Checklist (SRC), which will identify any anomalies, if any exist the Sample Receiving Technician or Project Manager must resolve the deviation internally and/or notify the client to resolve the anomaly.

## B4 Analytical Methods

1. **Identify the SOPs which will be used to analyze the samples, the method which the SOP references and the equipment or instrumentation that is needed:**

Parameter	SOP ID*	Method Referenced	Equipment	Comments
BTEX+Naph+MTBE+Oxygentaes	S-VO-002	8260B	GC/MS	
PAH's	S-SV-021	8270D	GC/MS	
EDB	S-SV-012	8011	GC	
Lead,T.	S-IM-022	6010C	ICP	
Ferrous Iron	S-IN-009	SM 3500-FED	Spectrophotometer	
Nitrate	S-IN-042	353.2	Auto-analyzer/Lachate	
Sulfate	S-IN-010	300.0	Ion Chromatograph	
Methane	S-VO-004	RSK-175	GC	
TOC	S-IN-030	Walkley-Black	N/A	
DRO - TPH	S-SV-001	8015C	GC	
pH	Standard	MECI SOP 4.3.6	YSI 63	Place probe in sample and allow to equilibrate before recording reading
Conductivity	Standard	MECI SOP 4.3.6	YSI 63	
Dissolved Oxygen	Standard	MECI SOP 4.3.6	YSI 550A	
Temperature	Standard	MECI SOP 4.3.6	YSI 550A	
Turbidity	Standard	MECI SOP 4.3.6	60 cm Turbidity Tube	
PID reading	MECI SOP 4.2.2			Use MiniRae PID to obtain reading. Place probe into soil sample bag and record the highest reading.

Table 7A Analytical SOPs and Referenced Methods

- This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

Abbreviation	Lab Identification of this SOP	Full Name of the SOP
S-VO-002	S-VO-002	GC/MS VOLATILES ANALYSIS BASED ON EPA METHODS 8260B AND 624 PREPARED BY EPA METHODS 5030B, 5035 AND 3585
S-SV-021	S-SV-021	GC/MS ANALYSIS BASED ON EPA METHOD 8270D PREPARED BY EPA METHODS 3520C, 3550C AND 3580A

S-SV-012	S-SV-012	GC/ECD ANALYSIS OF EDB AND DBCP BASED ON METHOD 8011 & 504.1
S-IM-022	S-IM-022	INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPECTROSCOPY-PECTROMETRIC METHOD for TRACE ELEMENT ANALYSES METHOD 6010C
S-IN-009	S-IN-009	FERROUS IRON (PHENANTHROLINE METHOD) STANDARD METHOD 3500-Fe D
S-IN-042	S-IN-042	NITRATE+NITRITE NITROGEN BY EPA METHOD 353.2, NITRATE NITROGEN BY 353.2 SUBTRACTION, AND NITRITE NITROGEN BY EPA METHOD 353.2
S-IN-010	S-IN-010	INORGANIC ANIONS BY ION CHROMATOGRAPHY EPA METHOD 300.0 and SW-846 9056 and 9056A
S-VO-004	S-VO-004	STANDARD OPERATING PROCEDURE GC ANALYSIS BASED ON METHOD RSKSOP-175
S-IN-030	S-IN-030	TOTAL ORGANIC CARBON (TOC) WALKLEY-BLACK PROCEDURE
S-SV-001	S-SV-001	GC/FID DIESEL RANGE ORGANICS ANALYSIS BASED ON METHOD 8015B and/or 8015C PREPARED BY EPA METHODS 3520C, 3550C and 3580A
MECI SOP 4.2.2	MECI SOP 4.2.2	Drilling Standard operating procedures
MECI SOP 4.3.6	MECI SOP 4.3.6	Sampling Standard operating procedures

**Table 8A SOP Abbreviation Key**

- Identify procedures to follow when failures occur, identify the individual responsible for corrective action and appropriate documentation:

Failure	Response	Documented Where?	Individual Responsible
Field meters not working	Attempt to clean probes, recalibrate in the field.	Record on field sheets, notify office staff. Take meters out of rotation until problem identified and corrected.	Field Staff, Field Manager
COC or Sample Receiving issues	Call Client	Sample Receiving Checklist (SRC)	PM – Kelly Maberry <a href="mailto:kmaberry@shealylab.com">kmaberry@shealylab.com</a>
Analytical errors	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a>
QA/QC Failure	Corrective Action Form (CAF)	CAF filled out by PM	Lab Director –Michael Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:Jsavje@shealylab.com">Jsavje@shealylab.com</a>
On time	Corrective Action Form	CAF filled out by PM	Lab Director –Michael



delivery	(CAF)		Woodrum <a href="mailto:mwoodrum@shealylab.com">mwoodrum@shealylab.com</a> QA/QC Officer – Jami Savje <a href="mailto:Jsavje@shealylab.com">Jsavje@shealylab.com</a>
PID not functioning properly	Attempt to clean PID, recalibrate.	Record on field sheets, notify office staff. PID taken rotation until problem identified and corrected.	Field Staff, Field Manager

Table 9A Corrective Action Procedures

3. Identify sample disposal procedures.

Analysis	Matrix	Schedule for disposal	Method for disposal	Comments
BTEX+Naph+MTBE+Oxygenates	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
PAH's	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
EDB	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Lead	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Ferrous Iron	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	

Nitrate, Sulfate	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
Methane	Waters/Soils	Six Weeks	Tested for Hazardous Constituents and disposed as Hazardous or non-Hazardous waste.	
All	Water	On-Site	Portable Granulated Activated Carbon (GAC) Unit	All waste water produced from sampling and decontamination activities will be run through a GAC unit

**Table 10A Disposal Procedures**

4. Provide SOPs for the Kerr Method or the Ferrous Iron Method if these are parameters for this study. This can be attached or written here. If attached please note that it is an attachment and where it is located (if applicable).

**B5 Quality Control Requirements:**

All QC will follow the requirements laid out in Section B5 of the UST Programmatic QAPP.

**B6 Field Instrument and Equipment Testing, Inspection and Maintenance**

1. Identify all field and laboratory equipment needing periodic maintenance, the schedule for this, and the person responsible. Note the availability and location of spare parts.

Instrument	Serial Number	Type of Maintenance	Frequency	Parts needed/Location	Person responsible
Volatiles Mass Spec	Shealy SOP S-SV-021 Page 7	Change traps, clean ion source, replace filaments	Periodic	Laboratory	MSV Analyst
Semivolatiles Mass Spec	Shealy SOP S-SV-021 Page 7	Injection port maintenance, ion source maintenance, column replacement	Periodic	Laboratory	MSSV Analyst
ECD GC	Shealy SOP S-	Injection port	Periodic	Laboratory	GC Analyst

	SV-012 Page 5	maintenance, column replacement			
Dionex IC	Shealy SOP S-IN-010 Page 6	Replace auto sampler filter, tubing, line filter, sample Line and Waste Line, as needed. Check Reagent levels, flow rate, waste line.	Periodic	Laboratory	IC Analyst
ICP	Shealy SOP S-IM-005 Page 6 & 7	Clean Sample introduction system , auto sampler, torch, Change spray chamber, torch tubing, tubing	Periodic	Laboratory	ICP Analyst
Leeman Mercury Analyzer	Shealy SOP S-IM-006 Page 5	Clean GLS, Change Pump tubing, Nafion Dryer, Lamp	Periodic	Laboratory	Mercury Analyst
Flow Injection Analysis – Lachat 8000	Shealy SOP S-IN-042 Page 5	Replace sample and reagent lines, replace light source, re-wrap heating coil, replace column	Periodic/As Needed	Laboratory	Nitrate Analyst
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace probe tip	Yearly	Order from YSI	B. Kelly
YSI 63	09C 101302, 10K 101895, 07M 100905	Replace batteries	As Needed	In stock at office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
YSI 63	09C 101302, 10K 101895, 07M 100905	Check buffer solutions for expiration	Weekly	In stock at office	B. Kelly
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace membrane	4 to 8 weeks	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	Replace batteries	As Needed	In stock at office	Field Staff
YSI 550A	04L 2026AK, 08B 101407, 04A 0912AI	General inspection for wear and tear on equipment	Daily	Major fixes will be done out of office	Field Staff
Electronic Water Level Indicator	WLI-1, WLI-2, WLI-3	Inspection	Weekly	N/A	Field Staff
Oil/Water Interface probe	PLI-1, PLI-2, PLI-3, PLI-4	Inspection	Weely	N/A	Field Staff
Turbidity Tube	#1, #2, #3	General inspection for wear and tear on equipment, clarity of Secchi Disk	Daily	Tubes will be cleaned/fixd in office	Field Staff

MiniRae 3000	592-902491	Cleaning	Weekly	N/A	B. Kelly
MiniRae 3000	592-902491	Parts Inspection	As Needed	In stock at office	Field Staff

**Table 11A Instrument and Equipment Maintenance**

2. Identify the testing criteria for each lab or field instrument that is used to ensure the equipment is performing properly. Indicate how deficiencies, if found, will be resolved, re-inspections performed, and effectiveness of corrective action determined and documented. Give the person responsible for this

Instrument/Equipment & Serial Number	Type of Inspection	Requirement	Individual Responsible	Resolution of Deficiencies
Volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSV Analyst	Recalibration or instrument maintenance
Semi-volatiles Mass Spec Shealy SOP S-SV-021 Page 7	Daily calibration check	Method Requirements	MSSV Analyst	Recalibration or instrument maintenance
ECD GC Shealy SOP S-SV-012 Page 5	Daily calibration check	Method Requirements	GC Analyst	Recalibration or instrument maintenance
Dionex IC Shealy SOP S-IN-010 Page 6	Daily calibration check	Method Requirements	IC Analyst	Recalibration or instrument maintenance
ICP Shealy SOP S-IM-005 Page 6 & 7	Daily calibration check	Method Requirements	ICP Analyst	Recalibration or instrument maintenance
Leeman Mercury Analyzer Shealy SOP S-IM-006 Page 5	Daily calibration check	Method Requirements	Mercury Analyst	Recalibration or instrument maintenance
Flow Injection Analysis – Lachat 8000 Shealy SOP S-IN-042 Page 5	Daily and continuing calibration check	See calibration criteria	Nitrate Analyst	Recalibration or instrument maintenance
YSI 63 - 09C 101302, 10K 101895, 07M 100905	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
YSI 550A - 04L 2026AK, 08B 101407, 04A 0912AI	Daily calibration check	See calibration criteria	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer
MiniRae 3000 – 592-902491	Weekly calibration check	Within 5 ppm of 100 ppm standard. MiniRae 3000 does not need daily calibration according to Manufacturers guidelines	Field Staff	Recalibrate, general maintenance then recalibrate. Ship off for service by manufacturer

Electronic Water Level Indicator	Monthly	Checked vs. Standard - +/- 0.01 foot per 10 foot length	Field Staff	Ship off for service by manufacturer
Oil/Water Interface probe	Monthly	Checked vs. Standard - +/- 0.01 foot per 10 foot length	Field Staff	Ship off for service by manufacturer

Table 12A Instrument and Equipment Inspection

## B7 Instrument Calibration and Frequency

1. Identify equipment, tools, and instruments for field or lab work that should be calibrated and the frequency.
2. Describe how the calibrations should be performed and documented, indicating test criteria and standards or certified equipment.
3. Identify how deficiencies should be resolved and documented. Identify the person responsible for corrective action.

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
Volatiles Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by continuous calibration verification standard	Method Criteria	Detailed in SOP	MSV Analyst	S-VO-002
Semi-volatile Mass Spec	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	MSSV Analyst	S-SV-021
GC ECD	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	GC Analyst	S-SV-012
Dionex IC	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	IC Analyst	S-IN-010
ICP	Minimum of 3 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	ICP Analyst	S-IM-022
Cetac Mercury Analyzer	Minimum of 5 calibration standards for all compounds	When indicated by calibration verification standard	Method Criteria	Detailed in SOP	Mercury Analyst	S-IM-006
Lacaht QuickChem 8000	Minimum of 5 calibration standards	Daily or when indicated by calibration verification standard	Method Criteria	Detailed in SOP	Nitrate Analyst	S-IN-042

Instrument	Calibration Procedure	Frequency of Calibration	Acceptance Criteria	Corrective Action (CA)	Person Responsible for CA	SOP Reference*
YSI 63	pH Calibration	Daily	+/- 0.2 pH units	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 63	Conductivity Calibration	As directed by manufacturer	+/- 10 uS	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	DO calibration	Daily	+/- 0.25 mg/l	clean/replace probe tip, recalibrate	Field Staff	4.3.6
YSI 550A	Temperature Calibration	Daily	+/- 1 °C	clean/replace probe tip, recalibrate	Field Staff	4.3.6
MiniRae 3000	PID Calibration	Weekly	+/- 5 ppm	clean, recalibrate	Field Staff	***
Electronic Water Level Indicator	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***
Oil/Water Interface probe	Checked vs. Standard	Monthly	+/- 0.01 foot per 10 foot length	Replace probe tape	Field Staff	***

Table 13A Instrument Calibration Criteria and Corrective Action

\* This can be a full name of a SOP, an abbreviation, or a number. In the latter two cases, the abbreviation or number must be associated with the full name of the SOP. See also Table 8A SOP Abbreviation Key.

## B8 Inspection/Acceptance Requirements for Supplies and Consumables

1. Identify critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials.
2. Identify the individual(s) responsible for this.

Item	Vendor	Acceptance criteria	Handling/Storage Conditions	Person responsible for inspection and tracking.
Laboratory Chemicals	Fisher, VWR	Certificates of analysis and laboratory testing	Laboratory storage	Receiving and laboratory personnel
Laboratory standards	O2Si, Restek, High Purity, VHG, Supelco	Certificates of analysis and laboratory verifications	Vendor specific storage conditions	Laboratory Analysts
Sample Containers	Daniels Scientific, QEC	Certificates of analysis and laboratory testing	Bottle storage area	Sample receiving personnel
Clear, Disposable polyethylene Bailers	Preferred Pump	Individual sleeves intact, ball valve operational	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nylon Rope	Preferred Pump	Covered with plastic	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Nitrile Gloves	Preferred Pump	Unopened box, no holes	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
40 mL HCL	Shealy	Custody seal intact	Stored in Vehicle	B. Kelly, Field Staff

preserved amber vials	Environmental Services		Bay, Off of the ground	
250 mL HNO3 preserved metals vials	Shealy Environmental Services	Custody seal intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
Coolers	Shealy Environmental Services	Intact	Stored in Vehicle Bay, Off of the ground	B. Kelly, Field Staff
pH Buffer	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
Conductivity Standard	TRS Environmental, Enviroequipment	Within expiration date	Stored in calibration room	B. Kelly, Field Staff
DO Membranes	YSI, Enviroequipment	Clean, in box	Stored in calibration room	B. Kelly, Field Staff
Batteries	Any Store	Not previously used	Stored in calibration room	B. Kelly, Field Staff
PID Calibration Gas – Isobutylene	Enviroequipment	Not Depleted, within expiration date	Stored in calibration room	B. Kelly, Field Staff

Table 14A List of Consumables and Acceptance Criteria

### B9 Data Acquisition Requirements (Non-Direct Measurements)

1. Identify data sources, for example, computer databases or literature files, or models that should be accessed or used.
2. Describe the intended use of this information and the rationale for their selection, i.e., its relevance to project.
3. Indicate the acceptance criteria for these data sources and/or models.

Data Source	Used for	Justification for use in this project	Comments
Tier 1 and Tier 2 sampling and monitoring well installation reports	Historic groundwater and CoC concentration data. Lithology and well construction data from previous MWI's	Establish the type of drilling rig required, time for sampling and any other potential problems that may be encountered.	1903 forms from previous monitoring well installations will be used to estimate depth new monitoring wells..

Table 15A Non-Direct Measurements

4. Identify key resources/support facilities needed.

### B10 Data Management

1. Describe the data management scheme from field to final use and storage.

Following sample collection and chain of custody production, samples are shipped to the lab. Field work from the field staff is reviewed by the MECI project manager, and converted into digital form. All data entry is subsequently checked to validate the data entry. The original copies of the field work are stored in MECI files for a minimum of 5 years. Digital copies of the work are stored on the MECI server, which is backed up weekly, and stored for a minimum of 5 years. The digital copy of the field work is presented to SCDHEC with the final report.

2. How does the lab and field staff ensure that no unauthorized changes are made to the chain of custody, sampling notebooks, laboratory notebooks and computer records?

The laboratory maintains comprehensive Quality Control and Training Programs. All sample receipt data, sample log-in, and analytical data is peer reviewed, including review for inappropriate changes. Data management, review procedures and the Quality Systems Program are documented in the laboratory's Quality Manual and Standard Operating Procedures. The Quality Assurance Department oversees adherence to and review of these programs.

All MECI field work is produced using ink-pens. Any attempt to alter field data, after sampling is complete, can be readily identified. MECI keeps a carbon copy of the chain of custody after it is shipped to the lab. This copy is kept with the field work. If any change to the CoC are suspected, this original carbon copy can be use to identify potential changes.

3. How does the lab ensure that there are no errors in samples records including times when sample information is compiled, data calculated and/or transmitted?

Sample data acquisition software is reviewed periodically. The LIMS database is backed up daily and is able to be restored in the event of a system failure. These procedures are documented in laboratory SOP S-AD-003, LIMS. The IT Manager is responsible for these systems and procedures."

4. How will the data be archived once the report is produced? How can it be retrieved? (This applies to both electronic and hard copies).

Laboratory Hardcopy data stored off site is logged, maintained and archived by the Quality Assurance Department. Laboratory Electronic Data Reports are maintained through IT back up under the responsibility of the IT Systems Manager.

MECI keeps all field work and paper copies of reports in its in-house filing system. All paper copies are stored for a minimum of 5 years. Any file can be retrieved easily by going to the correct filing cabinet/box.

All electronic copies of reports generated are kept on the MECI server. This server is backed-up on a weekly basis. Any file stored on the MECI server can be retrieved instantly, by accessing the server. All electronic files are stored for a minimum of 5 years on the server.



## **Section C Assessment and Oversight**

### **C1 Assessment and Response Actions**

- 1. The Contractor is supposed to observe field personnel daily during sampling activities to ensure samples are collected and handled properly and report problems to DHEC within 24 hours. . Please state who is responsible for doing this and what observations will be made. Will this person have the authority to stop work if severe problems are seen?*

Field audits can be conducted on any field personnel at any time. MECI field audits can be conducted by the Field Manger, who will be responsible for ensuring that field personnel adhere to the QAPP. If during a random field audit, severe problems are found, work will be stopped by the field manager and the QA officer contacted to determine corrective action. All problems must be corrected prior to any additional work being performed. Should it be requested, an On-site Field Audit can be scheduled with the SCDHEC project manager.

- 2. The SCDHEC UST QAPP states that the Lab will receive an Offsite Technical System Audit. For this project, what assessments will be done on the Commercial Lab(s) that are being used—other than their certification audit? When or how often are these done? Who will the results be given to and who has the ability to stop work if problems are severe?*

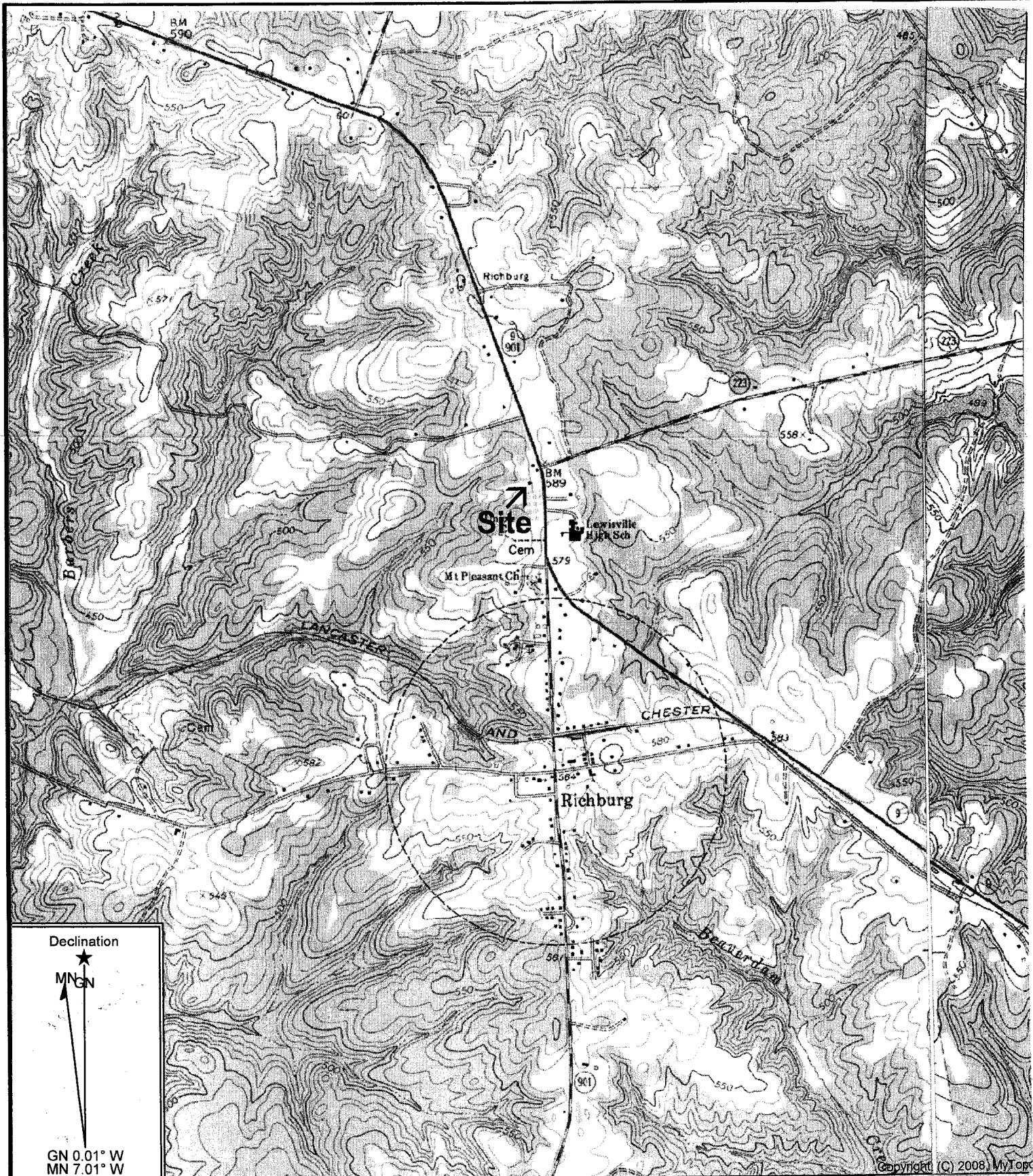
The laboratory participates in annual Proficiency Testing through an approved vendor, Wibby Environmental. Proficiency Testing results are provided to the Office of Environmental Laboratory Certification.

### **C2 Reports to Management**

See the SC DHEC UST Programmatic QAPP (UST Master QAPP).

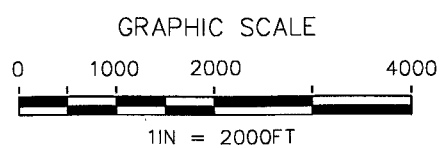
## **Section D Data Validation and Usability**

All field and laboratory data will be checked and verified by the project verifier (Brendon Kelly) prior to submission to SCDHEC.



Copyright (C) 2008, MyTopo

Declination  
 GN 0.01° W  
 MN 7.01° W

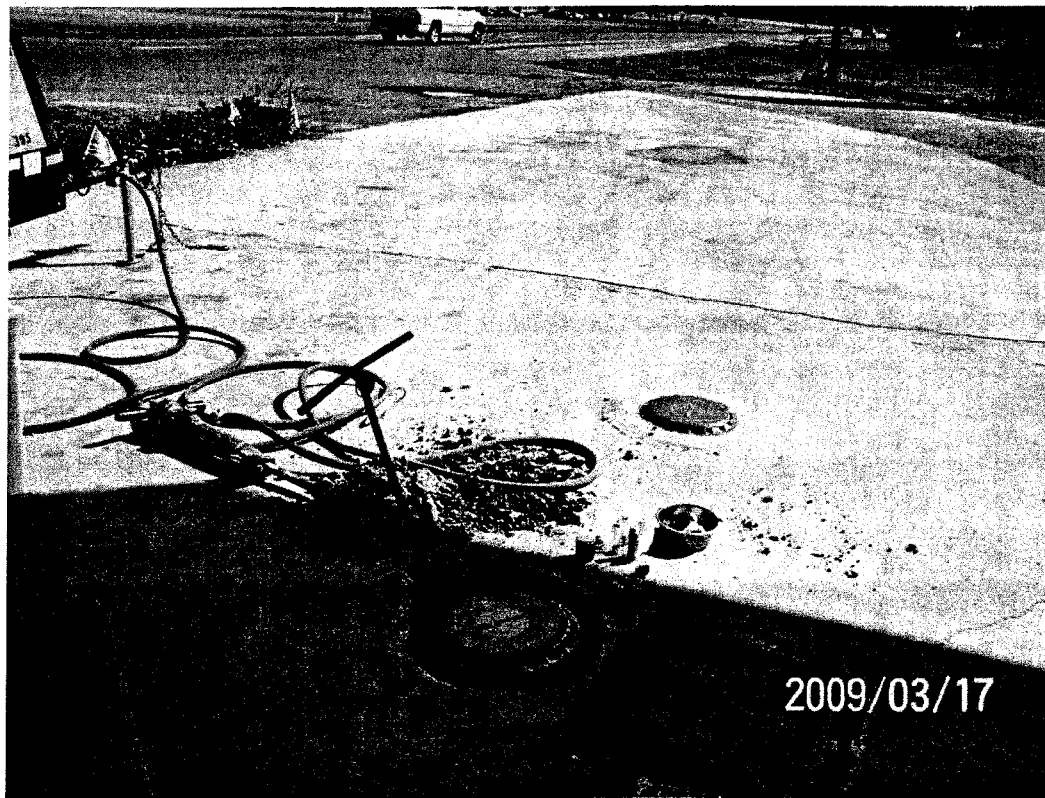


Reference: Richburg & Edgemoor, South Carolina  
 Fort Lawn and Catawba, South Carolina  
 USGS 7.5 Min. Quad  
 Contour Interval - 10 Feet

<p>Midlands Environmental Consultants, Inc.</p>	<p>Site Location</p>
<p>Fireball Service Station          3570 Lancaster Highway, Richburg, SC          SCDHEC Site ID* 02131</p>	
<p>Figure 1</p>	<p>MECI 12-3839</p>



Photograph 1 – View of spill bucket for 3,000-gallon regular gasoline UST.



Photograph 2 – View of spill bucket for 3,000-gallon regular gasoline UST. Hand auger has been advanced to sampling depth.



Photograph 3 – View of gasket which was removed from 4-inch diameter fill pipe. Note the similar dimensions of gasket to cap.



Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 12602

Form with sections for Client, Address, City, State, Zip Code, Project Name, Project Number, P.O. Number, Sample ID / Description, Date, Time, Matrix, Analysis, Turn Around Time Required, Sample Disposal, QC Requirements, Possible Hazard Identification, and a table for sample tracking.





C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

**CERTIFIED MAIL**  
**91 7199 9991 7030 0507 9810**

ATTN ANGELA HOUGH  
ONE ACCORD MINITRIES  
PO BOX 220  
RICHBURG SC 29729-0220

MAR 12 2012



Re: Determination of Financial Status  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit # 02131  
Release Reported March 23, 2009  
QAPP received March 5, 2012  
Chester County

Dear Ms. Hough:

Based on our March 7, 2012 telephone conversation, it is my understanding that you consider yourself unable to undertake certain federal and state regulatory assessment requirements for your underground storage tank (UST) system. In order for the Underground Storage Tank Management Division to evaluate your financial ability, you must provide the following information:

1. Complete the enclosed form entitled "Underground Storage Tank Owner/Operator".
2. Complete the enclosed form entitled, "Individual Ability To Pay Claim". Please read the accompanying instructions carefully. All information must be current. Department staff may verify any of the information provided. Please note the signature page includes a perjury clause.
3. Submit copies of your last three years (12/31/2008, 12/31/2009, 12/31/2010) of federal tax returns.
4. Complete the enclosed IRS form 4506-T. Form 4506-T authorizes the South Carolina Department of Health and Environmental Control to receive confidential information from the IRS regarding your tax return for the period listed.
5. Submit copies of the bank statements for your personal savings and checking accounts for the last 6 months. Also, if you have separate accounts for your business, submit copies of the bank statements for your business checking and savings accounts for the last 6 months.
6. If you feel there is any additional information to support your claim, please include it as an attachment.

**Your response is due on or before April 15, 2012.** If you do not provide the necessary documentation to support your claim of financial inability, the Division will have no choice but to find you financially able to conduct the necessary environmental activities as required by regulation. If the Division determines you are financially unable to conduct the required activities, this decision will not relieve you of any liabilities associated with assessment of the release from the UST system.

On all correspondence related to this site, please reference UST Permit # 02131. Questions should be addressed to the Project Manager, Minda Hornosky at (803) 896-6395 between 8:30 am and 5:00 pm Monday through Friday.

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
UST Management Division  
Bureau of Land and Waste Management

enc: UST Owner/Operator Form  
IRS Form 4506-T  
Financial Statement for Individuals

cc: Technical file (w/out enc.)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

MAY 24 2012



MS ANGELA HOUGH  
ONE ACCORD MINISTRIES  
PO BOX 220  
CHESTER SC 29729-0220

Re: QAPP Contractor Addendum Directive for IGWA  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131  
Release Reported March 23, 2009  
Site Check Report received March 23, 2009  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division (Division) of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the referenced report submitted by NESCO Environmental. The report documents BTEX and naphthalene in excess of risk based screening levels from the soil boring at the spill bucket for the 3000 gallon gasoline RUL tank.

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of an Initial Groundwater Assessment (IGWA) as outlined in the *Quality Assurance Program Plan (QAPP) for the Underground Storage Tank Management Division* is necessary. The IGWA must be conducted in accordance with the QAPP and in compliance with all applicable regulations once the site specific QAPP Contractor Addendum is approved. A copy of the QAPP is available at <http://www.scdhec.gov/environment/lwm/html/ust.htm>. **Your contractor must complete and submit the QAPP Contractor Addendum within thirty (30) days of the date of this letter.** The QAPP Addendum should include sampling of all water supply wells within 250 feet of this facility. **Please note that approval from the Division must be issued before work begins.**

**Please be aware that the release is not currently qualified for funding from the State Underground Petroleum Environmental Response Bank (SUPERB) Account. SUPERB funds cannot be expended for site rehabilitation until a completed SUPERB application is on file with the Division. The SUPERB application form should be completed and sent to this office to the attention of Denise Place. Our records indicate that a site rehabilitation contractor has not been selected for this release. The enclosed form should be completed and returned to my attention within fifteen (15) days of the date of this letter.** A list of certified contractors is enclosed for your information.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Agency by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.



On all correspondence regarding this site, please reference UST permit number 02131. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6395. I can also be reached by email at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov) or by fax at (803) 896-6245.

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: UST Owner/Operator Selection Form  
List of Certified Contractors

cc: NESCO Environmental, PO Box 78222, Charlotte, NC 28271 (without enc.)  
Technical file (with Owner/Operator Selection Form)

Return to Minda Hornosky

**UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET**

**1. CONTRACTOR OF CHOICE**

As the UST Owner/Operator of the UST Permit #02131, I would like to use the contractor or person(s)\* listed below and request that they represent me for:

IGWA  
 All future assessment scopes. \*\*

Name of Contractor/Person(s) \_\_\_\_\_

Address \_\_\_\_\_

Telephone Number \_\_\_\_\_ Certification # \_\_\_\_\_

Note: After September 20, 1997, rehabilitation activities must be performed by a SC Certified Site Rehabilitation Contractor.

\*indicate if the person listed is your own employee

\*\* if you would like the contractor to perform all future assessment activities at this and/or other UST sites that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below within the context of the letter.

**2. FINANCIAL OR FAMILIAL RELATIONSHIP**

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above?  Yes  No (please initial)

Financial Relationship: A connection or association through a material interest of sources of income, which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancée.

**3. PAYMENT**

The first \$25,000.00 in eligible site rehabilitation costs will be applied against the applicable SUPERB deductible, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

For eligible costs exceeding the \$25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (check one)

For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.

For eligible costs exceeding the deductible, I request that payment be made directly to the contractor.

(Note: all costs must receive prior financial approval from the Department regardless of payment option.)

Underground Storage Tank Owner/Operator Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Date Signed \_\_\_\_\_

BOARD:  
Paul C. Aughtry, III  
Chairman  
Edwin H. Cooper, III  
Vice Chairman  
Steven G. Kisner  
Secretary



C. Earl Hunter, Commissioner

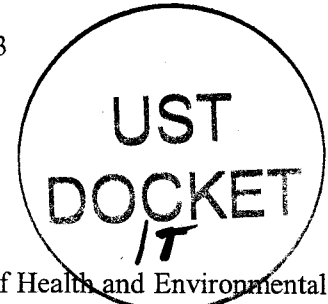
*Promoting and protecting the health of the public and the environment*

BOARD:  
Henry C. Scott  
M. David Mitchell, MD  
Glenn A. McCall  
Coleman F. Buckhouse, MD

MR LARRY TERRY  
FIREBALL SERVICE STATION  
3570 LANCASTER HIGHWAY  
RICHBURG SC 29729

APR 15 2009

Re: Initial Groundwater Assessment Directive  
Fireball Service Station, 3570 Lancaster Highway, Richburg, SC  
UST Permit # 02131; Cost Agreement # 35857; MWA # UMW-22703  
Release reported March 23, 2009  
Site Check received March 23, 2009  
Chester County



Dear Mr. Terry:

The Underground Storage Tank Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report and all information on-file for the referenced facility. The report indicates that Chemicals of Concern (CoCs) are present in the soil at concentrations that exceed the Risk-Based Screening Levels (RBSLs). To determine what risk the chemicals of concern may pose to the human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the Initial Groundwater Assessment (IGWA) document is necessary. The IGWA document may be obtained from our website at [www.scdhec.gov/eqc/admin/html/eqforms.html#land](http://www.scdhec.gov/eqc/admin/html/eqforms.html#land). Please note that only EPA Method 8260B for analysis of volatile organic hydrocarbons, EPA Method 8011 for EDB analysis, and EPA Method 7421 for lead analysis, as directed in the February 1, 2006 SUPERB Allowable Costs Document, will be accepted.

Our records indicate that a contractor has not been selected to perform assessment activities at this facility. Please indicate your choice of contractor on the enclosed Owner/Operator Information Sheet. Also, please fill out the enclosed insurance form for SUPERB qualification. The enclosed forms should be completed and returned to the Program to my attention within **fifteen days** of the date of this letter. **Please be aware that the release cannot be qualified for SUPERB and SUPERB funds cannot be expended for site rehabilitation until a completed Insurance Statement Form is on-file with the Program.**

According to Program records, the release at the facility was reported to SCDHEC on March 23, 2009. In accordance with Section 44-2-40(D) of the SUPERB Act, Kershaw County Medical Center, is responsible for the first \$25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the \$25,000 deductible, the Program has pre-approved costs for implementing the IGWA and has assigned Cost Agreement # 35857 for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Program has pre-approved a total of \$1545.00 for implementation of the IGWA. The total includes costs for completion of up to 25 feet of permanent monitoring well footage. Additional monitoring well footage can be billed at the SUPERB allowable rate of \$38 per foot provided that the cost is pre-approved by the Program. Upon receipt of a report of findings, and a completed IGWA invoice with all necessary supporting documentation, up to \$1545.00 will be applied towards the \$25,000 deductible. The report and invoice should be submitted to the Program within 60 days of the date of this correspondence.

**UNDERGROUND STORAGE TANK PROGRAM  
BUREAU OF LAND AND WASTE MANAGEMENT  
2600 Bull Street, Columbia, SC 29201**



**SUPERB Account Application**

Pursuant to the State Underground Petroleum Environmental Response Bank (SUPERB) Act 44-2-130(E)(1): "An owner or operator of an underground storage tank or his agent seeking to qualify for compensation from the SUPERB Account for site rehabilitation shall submit a written application to the department."

Permit #: 02131 Facility Name: Fireball Service Station  
 Facility Address: 3570 Lancaster Hwy, Richburg, SC 29729  
 Owner Name: Harry Terry  
 Owner Address: 3570 Lancaster Highway Richburg, SC 29729  
 Owner Phone #: 803-789-5571

For the following section, circle YES or NO:

YES or NO I request compensation from the SUPERB Account for the release discovered/reported on \_\_\_\_\_.

According to department records, you/your company had Letter of Credit Autocancel your financial responsibility mechanism at the time the release was reported. If this information is inaccurate, please correct it by checking the appropriate mechanism below:

Letter of Credit    Insurance Policy    Self-Insurance    Surety Bond    Guarantee

**INSURANCE STATEMENT**

This site is potentially eligible to receive state monies to assist in site rehabilitation. Before eligibility for the SUPERB funds can be determined, written confirmation of the existence or non-existence of an environmental insurance policy for this site is required. Please circle YES or  NO with regard to the following:

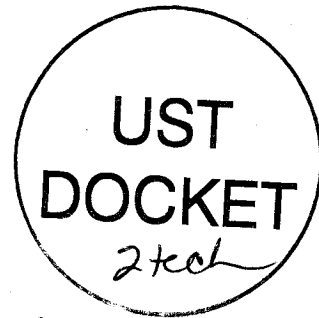
Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release?    YES or  NO

My policy provider is \_\_\_\_\_

The policy number is \_\_\_\_\_

The policy deductible is \_\_\_\_\_ Policy limit: \_\_\_\_\_

If you have this type of insurance, please include a copy of the policy with this report.



Owner Signature: [Signature]

Sworn before me this 24 day of April, 20 09

Date: 4-24-2009

[Signature]  
 Notary Public    (Signature)  
 for the State of South Carolina  
 (if other than South Carolina, affix seal)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

91 7199 9991 7030 0479 9979

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

AUG 09 2013



**Re: Notice of Alleged Violation**

One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131  
Release Reported Release reported March 23, 2009  
Tier I Directive dated April 15, 2013  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) directed you in April 2013 to complete a Tier I Assessment with the report due on June 15, 2013. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report on or before September 9, 2013. Should you not submit the report on or before this date, this office will initiate further enforcement action.**

On all correspondence regarding this site, please reference UST Permit #02131. If you have any questions concerning this correspondence, please call me at (803) 898-7542, e-mail me at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov), or fax me at (803)898-0673.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



South Carolina Department of Health and Environmental Control

UNDERGROUND STORAGE TANK MANAGEMENT DIVISION
BUREAU OF LAND AND WASTE MANAGEMENT

2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-2544
Fax (803) 898-0673



MEMORANDUM

To: Rob McDaniel, Manager
Enforcement Section

Date: September 9, 2013

Re: Enforcement Referral

Type: Technical (Tier I Assessment)

UST Permit #: 02131

Facility Name: One Accord Ministries

Owner/Operator: One Accord Ministries/Angela Hough (removed tanks)
PO Box 220, Richburg, SC
Phone # 803-804-0253

(when the release was reported) Fireball Service Station (Tank Owner)/Larry Terry (Operator)
3570 Lancaster Hwy, Richburg, SC
Phone # N/A

Regulatory Citation: Subpart F, Section 280.65 Investigation for soil and ground-water cleanup
of the South Carolina Underground Storage Tank Regulations, R. 61-92

Requested Action/Information: Approved QAPP and directed the Tier I Assessment for the release
reported on March 23, 2009. Assessment to be conducted with O/O's
money (\$25,000.00 deductible)

Additional Comments: Directed to complete a Tier I Assessment. Report was due on June 15, 2013.
Sent certified Notice of Alleged Violation letter on August 9, 2013. To date,
the report has not been received.

Are there any Tank Ownership Issues? : \_\_\_ Yes \_\_\_ X No If yes please explain.

Are there any other persons being dealt with other than the tank owner? \_\_\_ Yes \_\_\_ X No

Referred By: [Signature] Date: Sept 9, 2013

Section Manager's Approval: [Signature] Date: 09-13-13

Division Director's Approval: [Signature] Date: 9/17/13

cc: Technical File



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

91 7199 9991 7030 0479 9979

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

AUG 09 2013



**Re: Notice of Alleged Violation**

One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131  
Release Reported Release reported March 23, 2009  
Tier I Directive dated April 15, 2013  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) directed you in April 2013 to complete a Tier I Assessment with the report due on June 15, 2013. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report on or before September 9, 2013. Should you not submit the report on or before this date, this office will initiate further enforcement action.**

On all correspondence regarding this site, please reference UST Permit #02131. If you have any questions concerning this correspondence, please call me at (803) 898-7542, e-mail me at hornosms@dhec.sc.gov, or fax me at (803)898-0673.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



Hornosky, Minda <hornosms@dhec.sc.gov>

---

**One Accord Ministries #02131**

1 message

---

**Angel Hough** <angel.hough@gmail.com>  
To: "Hornosky, Minda" <hornosms@dhec.sc.gov>

Tue, Oct 1, 2013 at 1:31 PM

Good Afternoon Minda,

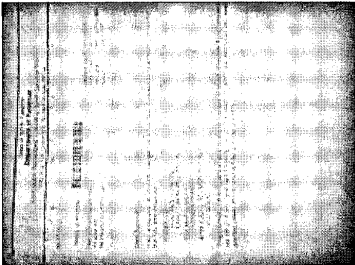
Just following up with you. I have called and left you a message on 9/9/2013 regards the letter you sent about the additional wells.

We have requested as a not profit ministries time for this. We do not have the financial ability to take care of this at this time.

Attached is where our church was waived for taxes on this property.

Thanks

--  
Angel D. Hough  
Love Never Fails!!



**Church Tax Waiver.jpg**  
5K



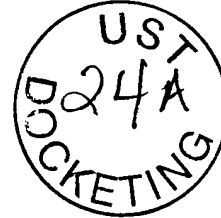




# Katawba Environmental, Inc.

3/22/2014

Ms. Beverly McLeod  
SCDHEC  
Enforcement Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708



1-000000-15  
3/6/14

**RE: TIER I  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**

Dear Ms. McLeod:

Katawba Environmental, Inc. (Katawba) has prepared this Groundwater Monitoring Report for the above-referenced facility for your review. This Tier I was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated April 15, 2013.

At the time sampling was conducted DWW-2 appeared to be impacted by MTBE at 71 ug/l. Further assessment may be warranted to define the vertical and horizontal extent of the petroleum hydrocarbon contaminant plume. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,

~~KATAWBA ENVIRONMENTAL, INC.~~

Alex W. Amos, PG  
Principal

Cc: One Accord Ministries, PO Box 220, Richburg, SC 29729.

**RECEIVED**

MAR 26 2014

SC DHEC - Bureau of  
Land & Waste Management



**TIER I ASSESSMENT**

**One Accord  
3570 Lancaster Highway  
Richburg, SC**

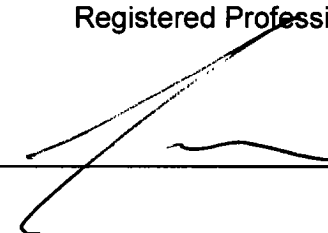
**Site ID# 02131**

This report has been prepared by:

Alex W. Amos, PG

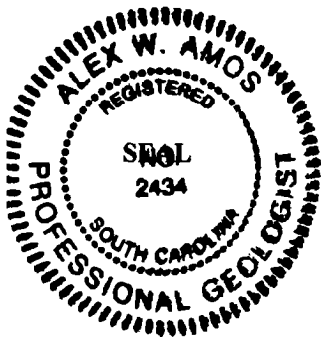
This report has been reviewed by:

Name Alex W. Amos, PG 2434 March 22, 2014  
Registered Professional Registration # Date

Signature 

REGISTERED  
PROFESSIONAL SEAL

SCDHEC Certification # 18



# **TIER I ASSESSMENT - REPORT OF FINDINGS**

## **I. INTRODUCTION**

### **A. Owner/Operator Information**

Name One Accord Ministries

Address PO Box 220, Richburg, South Carolina, 29729

Telephone (803) 804-0253

### **B. Property Owner Information**

Name (if different from above) Angela D and Melvin E Hough

Address PO Box 220, Richburg, South Carolina, 29729

Telephone Number (include area code) (803) 804-0253

### **C. Contractor Information**

Name Katawba Environmental, Inc. UCC #18

Address 4278 Dye Road, Edgemoor, SC 29712

Telephone Number (include area code) (803) 327-0469

### **D. Site Information**

Address 3570 Lancaster Highway, Richburg, South Carolina 29729 The site is a former garage and service station that no longer retails petroleum products. Currently the site is utilized for a Christian Ministries fellowship building. Chester County identifies the subject site as TM 125-00-00-059-000.

Description of adjacent land use (commercial, residential, rural, etc.) Include documentation (e.g. zoning regulations) as appropriate. The site is currently zoned commercial. The surrounding area is zoned commercial and residential with the potential for future commercial development. There is public water available to the subject site and surrounding sites. There however are not any laws against the installation of drinking water wells.

Predicted future land use (include site and adjacent area) The future use of the site and adjacent sites are to remain constant in the immediate future.

### **E. Site History**

Date Release Reported to SCDHEC March 23, 2009.

Estimated Quantity of Product Released Unknown

Cause of Release Overfill and spill over operating history of system

UST #	Product (gallons)	Date Installed	Currently In Use (Yes or No)	If not in use, Date Removed
1	4000 Gas	UNK	No	6/25/12
2	3000 Gas	UNK	No	6/25/12
3	3000 Gas	UNK	No	6/25/12
4	3000 Gas	UNK	No	6/25/12
5	2000 Diesel	UNK	No	6/25/12

Other Releases at this site? Yes \_\_\_\_\_ No X

If yes, Date Release Reported to SCDHEC \_\_\_\_\_

Status of Release Assessment

No Further Action Date \_\_\_\_\_

## II. SITE CHARACTERISTICS

### A. Site Geography

Describe the topography of the site and surrounding area (slope, vegetation, bodies of water, major land features, etc.) Site is in an area of rolling topographic relief. The site is occupied by one structure that measures approximately 3600 square feet. The remaining land mass associated with the site is covered with pavement. The site slopes to the south with the general vicinity topography sloping to the west.

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Mean Elevation of Site 585 Ft MSL

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### B. Exposure Analysis

Describe all potential receptors and preferential pathways within a 1000-foot radius of the site.

Description of Receptor	Distance/Direction from Site
DWW1	537 FEET SW
DWW2	399 FEET SW
DWW3	793 FEET SW
DWW4	993 FEET SW
DWW5	967 FEET SW
DWW6	989 FEET SW

Provide any additional comments necessary to complete the exposure analysis.

---

### C. Utilities Survey

List the utilities on-site, and adjacent to the site within a 250-foot radius, that could serve as exposure points or a preferential pathway.

Utility	On-Site or Distance/Direction from Site	Depth to Utility
Water Line	Onsite	36 IN
Septic Tank	Onsite	36 IN

Additional Comments: \_\_\_\_\_

---

**D. Site Geology**

Provide a brief description of the regional geology and hydrogeology: The subject site is located in the Piedmont Region of South Carolina. Geology in this region is characterized as clayey silty sand overlying saprolitic, granite formations. Groundwater in this region varies greatly depending on elevation.

---

Provide a brief description of the site-specific geology and stratigraphy The subject site is located in the Piedmont Region of South Carolina. Geology at the site consisted of reddish orange clayey to silty sand. The piezometric surface at the site was located at approximately 18 feet below grade at the site. The surficial aquifer was found in unconfined conditions.

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**E. Soil Boring Data**

Drilling Dates 12/12/13

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**Provide a brief justification of the location of the soil borings.**

SB-1 Background area boring

---

SB-2 UST basin boring

---

SB-3 UST basin boring

---

SB-4 Product line boring

---

SB-5 Product line boring

---

SB-6 Product line boring

---

SB-7 Product line boring

---

SB-8 Product line boring

---

**Borehole SB-1**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	4	CLAY Orange Sandy	Dry
20-25	18	SAND Red Orange Silty	Dry
25-28	86	SAND Red Orange Silty	Moist

**Borehole SB-2**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	6	CLAY Orange Sandy	Dry
20-25	11	SAND Red Orange Silty	Dry
25-28	64	SAND Red Orange Silty	Moist

**Borehole SB-3**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	4	CLAY Orange Sandy	Dry
20-25	27	SAND Red Orange Silty	Dry
25-28	37	SAND Red Orange Silty	Moist

**Borehole SB-4**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	0	CLAY Orange Sandy	Dry

**Borehole SB-5**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	2	CLAY Orange Sandy	Dry

**Borehole SB-6**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	163	CLAY Orange Sandy	Dry

**Borehole SB-7**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	3	CLAY Orange Sandy	Dry

**Borehole SB-8**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	0	CLAY Orange Sandy	Dry

**\* Indicates the drilling interval soil samples were collected from and submitted for laboratory analysis.**



Enter the soil analytical data for each soil boring for all CoC in the table below and on the following page. Enter the appropriate RBSL for the soil type from Tables 4 through 8 in SCDHEC Risk-Based Corrective Action (RBCA) for Petroleum Releases Guidance Document.

CoC	RBSL	SB-1	DUP	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	7	<6.8	<300	<6.2	<5.7	<5.8	<5.7	17	6.5	<6.3
Toluene	1450	<6.8	<300	<6.2	<5.7	<5.8	3.9	180	12	<6.3
Ethylbenzene	1150	<6.8	<300	<6.2	<5.7	<5.8	<5.7	95	<5.8	<6.3
Xylenes	14500	<6.8	<300	<6.2	<5.7	<5.8	8.5	780	32	<6.3
Naphthalene	36	<6.8	<300	<6.2	<5.7	<5.8	4.1	230/180	30	5.2
Benzo(a)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluorene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Phenanthrene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(k)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Chrysene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Dibenzo(a,h)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo (a) pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo (b) fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
GRO(EPA 8015M) mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOC (Background boring) mg/kg	NA	450	540	NA	NA	NA	NA	NA	NA	NA
Lead mg/kg	NA	12	13	2.0	19	17	19	6.2	14	31

\*Results given in ug/Kg unless otherwise noted. N/A = Not Analyzed

Discuss the horizontal and vertical extent of CoC in the soil. CoC soil contamination was above the RBSL in SB-6.

Additional Comments:

**F. Chemicals of Concern - Groundwater**

Provide well installation information in the table below.

MW#	Installation Date	Development Date	Sampling Date
MW-1	10/22/12	10/23/12	10/26/12
MW-2	2/12/13	2/13/13	12/18/13
MW-3	2/12/13	2/13/13	12/18/13
MW-4	2/12/13	2/13/13	12/18/13

Summarize the monitoring well and ground-water data in the table below.

MW#	Date	TOC Elevation (ft)*	Screened Interval (ft)	Depth to Water (ft)	Water Table Elevation (ft)*
MW1	12/18/13	UNK	29-19	NOT LOCATED	NO LOC
	10/26/12	UNK	29-19	23.51	UNK
MW2	12/18/13	99.04	28-18	18.48	80.56
MW3	12/18/13	98.95	28-18	18.85	80.10
MW4	12/18/13	99.30	28-18	19.48	79.82

Enter field data measurements (temperature, pH, conductivity) taken during well purging on the form provided. Complete for each well. (See groundwater sampling logs pages 11-14)

Enter dissolved oxygen measurements for each well in the table below.

MW#	MW-1	MW-2	MW-3	MW-4
Dissolved Oxygen (mg/l)	UNK	4.62	4.89	5.25

Enter the groundwater analytical data for each monitoring well for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (ug/L)	MW-1	MW-2	MW-3	MW-4	MW-4 D	FB	TB
Free Product Thickness	None	NO LOC	None	None	None	None	None	None
Benzene	5	NO LOC	13000	15000	<1	<1	<1	<1
Toluene	1,000	NO LOC	44000	44000	1	1	<1	<1
Ethylbenzene	700	NO LOC	4200	4600	<1	<1	<1	<1
Xylenes	10,000	NO LOC	22000	23000	18	19	<1	<1
MTBE	40	NO LOC	3100	31000	0.56	0.54	<1	<1
Naphthalene	25	NO LOC	<500/780	1400/860	0.90	0.94	<1	<1
1-2 DCA	NS	NO LOC	<500	<1000	1	1	<1	<1
Benzo(a)anthracene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Benzo(b)fluoranthene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Benzo(k)fluoranthene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Chrysene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Dibenz(a,h)anthracene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Ferrous Iron mg/l	N/A	NO LOC	NA	NA	NA	NA	NA	NA
Lead ug/l	15	NO LOC	16	7.2	9.7	4.4	7.4	NA
EDB ug/l	0.05	NO LOC	<0.020	0.074	<0.020	<0.020	<0.020	NA
Nitrates mg/l	N/A	NO LOC	0.0089	0.014	0.40	0.37	NA	NA
Sulfates mg/l	N/A	NO LOC	3.6	1.5	0.55	2.8	NA	NA
Methane	N/A	NO LOC	NA	NA	NA	NA	NA	NA

NA= Not analyzed for parameter. ND=Not detected at or above PQL. BOLD=Parameter exceeded RBSL

CoC	RBSL (ug/L)	DWW-1	DWW-2	DWW-3	DWW-4	DWW-5	DWW-6	
Free Product Thickness	None	None	None	None	None	None	None	
Benzene	5	<1	<1	<1	<1	<1	<1	
Toluene	1,000	<1	<1	<1	<1	<1	<1	
Ethylbenzene	700	<1	<1	<1	<1	<1	<1	
Xylenes	10,000	<1	<1	<1	<1	<1	<1	
MTBE	40	<1	71	<1	<1	<1	<1	
Naphthalene	25	<1	<1	<1	<1	<1	<1	
1-2 DCA	NS	<1	<1	<1	<1	<1	<1	
Benzo(a)anthracene	10	<5	<5	<5	<5	<5	<5	
Benzo(b)fluoranthene	10	<5	<5	<5	<5	<5	<5	
Benzo(k)fluoranthene	10	<5	<5	<5	<5	<5	<5	
Chrysene	10	<5	<5	<5	<5	<5	<5	
Dibenz(a,h)anthracene	10	<5	<5	<5	<5	<5	<5	
Ferrous Iron mg/l	N/A	NA	NA	NA	NA	NA	NA	
Lead ug/l	15	NA	NA	NA	NA	NA	NA	
EDB ug/l	0.05	NA	NA	NA	NA	NA	NA	
Nitrates mg/l	N/A	NA	NA	NA	NA	NA	NA	
Sulfates mg/l	N/A	NA	NA	NA	NA	NA	NA	
Methane	N/A	NA	NA	NA	NA	NA	NA	NA

Additional Comments: The highest concentrations were found in the area of MW-3.

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/18/13	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC
MW-2	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
MW-3	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
MW-4	12/18/13	<1	<100	<20	<1	<20	<10	10	<5
DUP	12/18/13	<1	<100	<20	<1	<20	<10	10	<5
DWW-1	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-2	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
DWW-3	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-5	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-6	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
TB	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
FB	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5

**G. Aquifer Characteristics**

Hydraulic Conductivity 0.2496 ft/day

Hydraulic Gradient 0.0097 ft/ft

Porosity 0.25 sand

Estimated Seepage Velocity 3.53 ft per year

Complete the slug test form and include in Appendix D of the report. Include all data, graphs, and equations used to derive the aquifer characteristics and hydrologic parameters (hydraulic conductivity, seepage velocity, hydraulic gradient, etc.) in Appendix D.

### **III. TIER I EVALUATION**

- A. **CURRENT LAND USE** – Identify any potential receptors or human exposure pathways (e.g. basement, contaminated soils from UST closures, etc.) within a 1000-foot radius for current land use. Complete the table below. Additional sheets may be attached if necessary.

<b>Media (for exposure)</b>	<b>Exposure Route</b>	<b>Pathway Selected for Evaluation (Yes or No)</b>	<b>Exposure point or Reason for Non-Selection</b>	<b>Data Requirements (IF pathway selected)</b>
Air	Inhalation	No		
	Explosion Hazard	No		
Ground-Water	Ingestion	Yes		6 Drinking Water Wells located within 1000 Feet
	Dermal Contact	No		
	Volatile Inhalation	No		
Surface Water	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
Surficial Soil	Ingestion	No	Surficial spill has not occurred	
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		
Subsurface Soil	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		

B. FUTURE LAND USE – Identify any potential receptors or human exposure pathways (e.g. basements, contaminates soils from UST closures, etc.) within a 1000-foot radius for projected future land use. Complete the table below. Additional sheets may be attached if necessary.

Media (for exposure)	Exposure Route	Pathway Selected for Evaluation (Yes or No)	Exposure Point or Reason for Non- Selection	Data Requirements (if pathway selected)
Air	Inhalation	No		
	Explosion Hazard	No		
Ground-Water	Ingestion	No		6 Drinking Water Wells located within 1000 Feet
	Dermal Contact	No		
	Volatile Inhalation	No		
Surface Water	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
Surficial Soil	Ingestion	No	No surficial contamination was noted on site.	
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching Groundwater	No		
Subsurface Soil	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		

Recommendations for further action A Tier II is recommended at the site to define the vertical and horizontal extent of the petroleum hydrocarbon plume.



**ONE ACCORD DRINKING WATER WELL CONTACT LIST**

DWW#	ADDRESS	OWNER	PHONE #	LOCATION	Notes:
1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN		HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN		HOUSE	NO CONTACT
7					
8					
9					
10					
11					
12					
13					

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 12/18/13  
 Field Personnel Billy May  
 General Weather Condition CLEAR  
 Ambient Air Temperature 48  
 Facility Name ONE ACCORD Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.1  
 pH=7.0 7.0=7.2 Standard 100.0=100.3  
 pH=10.0 10.0=10.1 Standard 1000.0=999.98

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW- 2**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 18.48 ft.  
 Length of Water Column (LWC=TWD-DGW) 9.52 ft.  
 1 Csg. Volume (LWC\*C) = 9.52 X 0.163 = 1.55 gals.  
 3 Csg. Volumes = 3 X 1.55 = 4.65 gals. (Std. Purge Volume)  
 Total Volume of Water Purged Before Samplin 5.0 gals.

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	5				
<b>Time (military)</b>	809	814	819	923				
<b>pH (s.u.)</b>	5.82	5.76	5.69	5.65				
<b>Specific Cond. (umhos/cm)</b>	101.2	42.1	41.3	40.5				
<b>Water Temp (°C)</b>	19.8	19.3	19.0	18.8				
<b>Turbidity (*)</b>	287	312	324	327				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	5.86	4.82	4.69	4.62				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 12/18/13  
 Field Personnel Billy May  
 General Weather Condition CLEAR  
 Ambient Air Temperature 48  
 Facility Name ONE ACCORD Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.1  
 pH=7.0 7.0=7.2 Standard 100.0=100.3  
 pH=10.0 10.0=10.1 Standard 1000.0=999.98

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW- 3**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 18.85 ft.

Length of Water Column (LWC=TWD-DGW) 9.15 ft.

1 Csg. Volume (LWC\*C) = 9.15 X 0.163 = 1.49 gals.  
 3 Csg. Volumes = 3 X 1.49 = 4.47 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Samplin 4.5 gals.

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	836	842	848	852				
<b>pH (s.u.)</b>	6.77	6.71	6.65	6.62				
<b>Specific Cond. (umhos/cm)</b>	106.1	68.2	67.0	65.9				
<b>Water Temp (°C)</b>	20.3	20.1	19.8	19.4				
<b>Turbidity (*)</b>	253	347	359	362				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	6.40	5.14	5.03	4.89				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>12/18/13</u>          Field Personnel <u>Billy May</u>          General Weather Condition <u>CLEAR</u>          Ambient Air Temperature <u>48</u>          Facility Name <u>ONE ACCORD</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.1</u>          pH=7.0 <u>7.0=7.2</u> Standard <u>100.0=100.3</u>          pH=10.0 <u>10.0=10.1</u> Standard <u>1000.0=999.98</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW- 4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>19.48</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.52</u> ft.</p> <p>1 Csg. Volume (LWC*C) = <u>8.52 X 0.163</u> = <u>1.38</u> gals.          3 Csg. Volumes = 3 X <u>1.38</u> = <u>4.16</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Samplin <u>4.5</u> gals.</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	753	758	804	808				
<b>pH (s.u.)</b>	6.15	6.12	6.06	6.01				
<b>Specific Cond. (umhos/cm)</b>	89.3	43.1	42.4	42.0				
<b>Water Temp (°C)</b>	20.8	20.4	20.1	19.8				
<b>Turbidity (*)</b>	281	313	324	326				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	5.67	5.32	5.28	5.25				

# **APPENDIX A**

## **Soil Boring Logs**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	1 Of 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>		<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	4
25					18
30				SAND RED ORANGE SILTY	86
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	2 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	6
25					11
30				SAND RED ORANGE SILTY	64
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	3 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	4
25					27
30				SAND RED ORANGE SILTY	37
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	4 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	0
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	5 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>		<b>Hole Diam.</b>	6 25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	2
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	6 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	163
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	7 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	3
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	8 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	0
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

## **APPENDIX B**

### **Monitoring Well Construction Logs**



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION: Name One Accord (last), (first). Address PO Box 220, City: Richburg, State: SC, Zip: 29729-0000. Telephone: Work: Home:
7. PERMIT NUMBER: 02131
8. USE: [ ] Residential, [ ] Public Supply, [ ] Process, [ ] Irrigation, [ ] Air Conditioning, [ ] Emergency, [ ] Test Well, [x] Monitor Well, [ ] Replacement
9. WELL DEPTH (completed): 28 ft. Date Started: 12/12/13, Date Completed: 12/12/13
10. CASING: [x] Threaded, [ ] Welded, Diam. 2, Type [x] PVC, [ ] Galvanized, [ ] Steel, [ ] Other, 2 in. to 18 ft depth
11. SCREEN: Type PVC, Diam.: 2 inch, Slot/Gauge: .01, Length: 10 feet, Set Between 28 ft. and 18 ft.
12. STATIC WATER LEVEL 18.48 ft below land surface after 24 hours
13. PUMPING LEVEL Below Land Surface na ft after na hrs. Pumping na G.P.M.
14. WATER QUALITY: Chemical Analysis [x] Yes, [ ] No, Bacterial Analysis [ ] Yes, [x] No
15. ARTIFICIAL FILTER (filter pack) [x] Yes, [ ] No, Installed from 28 ft. to 17 ft., Effective size 3, Uniformity Coefficient Coarse
16. WELL GROUTED? [x] Yes, [ ] No, Neat Cement [x] Neat Cement, [ ] Bentonite, [ ] Bentonite/Cement, [ ] Other, Depth From 16 ft. to 0 ft.
17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction, Type Petroleum, Well Disinfected [ ] Yes, [x] No
18. PUMP: Date installed, Not installed [x], Mfr. Name, Model No., H.P., Volts, Length of drop pipe, Capacity, gpm, TYPE [ ] Submersible, [ ] Jet (shallow), [ ] Turbine, [x] Jet (deep), [ ] Reciprocating, [ ] Centrifugal
19. WELL DRILLER: Tommy Bolyard, CERT. NO.: 1846, Address (Prnt): 17538 Greenhill Road, Charlotte, NC 28278, Telephone No.: 803 548 2253, Fax No:
20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: [Signature] Date: 12/30/13
6. TYPE: [ ] Mud Rotary, [ ] Jetted, [x] Bored, [x] Dug, [ ] Air Rotary, [ ] Driven, [ ] Cable tool, [ ] Other



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home

7. PERMIT NUMBER: 02131
8. USE:
Residential, Public Supply, Process, Irrigation, Air Conditioning, Emergency, Test Well, Monitor Well, Replacement

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 12/12/13
28 ft Date Completed: 12/12/13

10. CASING: Threaded, Welded
Diam: 2
Type: PVC, Galvanized, Steel, Other
2 in. to 18 ft. depth
Height: Above/Below Surface 2 inches
Weight lb./ft.
Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
MW-3

11. SCREEN:
Type: PVC Diam: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 28 ft. and 18 ft.
Sieve Analysis Yes (please enclose) No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 18.85 ft below land surface after 24 hours

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy and SAND Red Orange Silty.

13. PUMPING LEVEL Below Land Surface.
na ft after na hrs Pumping na G.P.M
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 28 ft to 17 ft
Effective size 3 Uniformity Coefficient Coarse

16. WELL GROUTED? Yes No
Neat Cement, Bentonite, Bentonite/Cement, Other
Depth: From 16 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed Not installed
Mfr Name Model No.:
H.P. Volts Length of drop pipe ft Capacity gpm
TYPE: Submersible, Jet (shallow), Turbine, Jet (deep), Reciprocating, Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 348 2233 Fax No:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief

Signed: [Signature] Date: 12/30/13
Well Driller

If D Level Driller, provide supervising driller's name:

5. REMARKS:

6. TYPE: Mud Rotary, Jetted, Bored, Dug, Air Rotary, Driven, Cable tool, Other





Water Well Record  
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name One Accord  
 (last) (first)  
 Address PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work \_\_\_\_\_ Home \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 12/12/13  
28 ft. Date Completed: 12/12/13

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-4

**10. CASING:**  Threaded  Welded  
 Diam: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in to 18 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height Above \_\_\_\_\_ Below   
 Surface 4 inches \_\_\_\_\_ ft  
 Weight \_\_\_\_\_ lb/ft.  
 Drive Shoe?  Yes  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 28 ft and 18 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Red Orange Silty	8	28

**12. STATIC WATER LEVEL** 19.48 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results

**15. ARTIFICIAL FILTER** (filter pack)  Yes  No  
 Installed from 28 ft to 17 ft  
 Effective size 3 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 16 ft to 0 ft

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed \_\_\_\_\_ Not installed   
 Mfr Name \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: Tommy Bolyard Date: 12/30/13  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:

## **APPENDIX C**

### **Laboratory Data**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **OL18080**  
Date Completed: **12/30/2013**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

• • • • •

# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

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## Case Narrative

### Katawba Environmental, Inc.

#### Lot Number: OL18080

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This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

#### GC/MS VOC

Sample -001 was initially analyzed at a dilution due to detections during screening. The sample was non-detect at the 50X dilution. An additional analysis was performed out of hold also yielding non-detect indicating that the screening data was inaccurate. The in hold run has been reported with a 50X dilution.

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Sample Summary Katawba Environmental, Inc. Lot Number: OL18080

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131-SB1	Solid	12/12/2013 0917	12/18/2013
002	02131-DUPSB1	Solid	12/12/2013 0919	12/18/2013
003	02131-SB2	Solid	12/12/2013 1047	12/18/2013
004	02131-SB3	Solid	12/12/2013 0958	12/18/2013
005	02131-SB4	Solid	12/12/2013 1139	12/18/2013
006	02131-SB5	Solid	12/12/2013 1226	12/18/2013
007	02131-SB6	Solid	12/12/2013 1509	12/18/2013
008	02131-SB7	Solid	12/12/2013 1210	12/18/2013
009	02131-SB8	Solid	12/12/2013 1402	12/18/2013
010	TRIP BLANK	Aqueous	12/18/2013	12/18/2013

(10 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: OL18080

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-SB1	Solid	TOC	Walkley-Black	450		mg/kg	5
001	02131-SB1	Solid	Lead	6010C	12	B	mg/kg	6
002	02131-DUPSB1	Solid	TOC	Walkley-Black	540		mg/kg	7
002	02131-DUPSB1	Solid	Lead	6010C	13	B	mg/kg	8
003	02131-SB2	Solid	Lead	6010C	2.0	B	mg/kg	10
004	02131-SB3	Solid	Lead	6010C	19	B	mg/kg	12
005	02131-SB4	Solid	Lead	6010C	17	B	mg/kg	14
006	02131-SB5	Solid	Naphthalene	8260B	4.1	J	ug/kg	15
006	02131-SB5	Solid	Toluene	8260B	3.9	J	ug/kg	15
006	02131-SB5	Solid	Xylenes (total)	8260B	8.5		ug/kg	15
006	02131-SB5	Solid	Lead	6010C	19	B	mg/kg	16
007	02131-SB6	Solid	Benzene	8260B	17		ug/kg	17
007	02131-SB6	Solid	Ethylbenzene	8260B	95		ug/kg	17
007	02131-SB6	Solid	Naphthalene	8260B	230		ug/kg	17
007	02131-SB6	Solid	Toluene	8260B	180		ug/kg	17
007	02131-SB6	Solid	Xylenes (total)	8260B	780		ug/kg	17
007	02131-SB6	Solid	Naphthalene	8270D	180	J	ug/kg	17
007	02131-SB6	Solid	Lead	6010C	6.2	B	mg/kg	18
008	02131-SB7	Solid	Benzene	8260B	6.5		ug/kg	19
008	02131-SB7	Solid	Naphthalene	8260B	30		ug/kg	19
008	02131-SB7	Solid	Toluene	8260B	12		ug/kg	19
008	02131-SB7	Solid	Xylenes (total)	8260B	32		ug/kg	19
008	02131-SB7	Solid	Lead	6010C	14	B	mg/kg	20
009	02131-SB8	Solid	Naphthalene	8260B	5.2	J	ug/kg	21
009	02131-SB8	Solid	Lead	6010C	31	B	mg/kg	22

(25 detections)

Description: **02131-SB1**Matrix: **Solid**Date Sampled: **12/12/2013 0917**% Solids: **79.9 12/18/2013 2304**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	12/26/2013 1625	HBB		37229

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TOC		Walkley-Bla	450		200	31	mg/kg	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1303	AAC		36880	4.62

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		6.8	1.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.8	2.3	ug/kg	1
Naphthalene	91-20-3	8260B	ND		6.8	2.3	ug/kg	1
Toluene	108-88-3	8260B	ND		6.8	2.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.8	3.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		97	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1325	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		410	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		410	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		410	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		410	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		410	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		410	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		410	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		410	34	ug/kg	1
Chrysene	218-01-9	8270D	ND		410	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		410	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		410	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		410	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		410	37	ug/kg	1
Naphthalene	91-20-3	8270D	ND		410	17	ug/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18080-001**Description: **02131-SB1**Matrix: **Solid**Date Sampled **12/12/2013 0917**% Solids: **79.9 12/18/2013 2304**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1325	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		52	22-109
Terphenyl-d14		81	41-120

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2028	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	12	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131-DUPSB1**Matrix: **Solid**Date Sampled: **12/12/2013 0919**% Solids: **80.3 12/18/2013 2304**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	12/26/2013 1625	HBB		37229

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TOC		Walkley-Bl	540		200	31	mg/kg	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	50	12/23/2013 2334	JJG		37067	5.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		300	67	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		300	100	ug/kg	2
Naphthalene	91-20-3	8260B	ND		300	100	ug/kg	2
Toluene	108-88-3	8260B	ND		300	100	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		300	180	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		82	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1445	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	29	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	27	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-002**

Description: **02131-DUPSB1**

Matrix: **Solid**

Date Sampled: **12/12/2013 0919**

% Solids: **80.3 12/18/2013 2304**

Date Received: **12/18/2013**

### Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1445	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		57	33-102
Nitrobenzene-d5		51	22-109
Terphenyl-d14		85	41-120

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2043	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	13	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1327	AAC		36880	4.99

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		6.2	1.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.2	2.1	ug/kg	1
Naphthalene	91-20-3	8260B	ND		6.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		6.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.2	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		95	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1511	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	29	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	27	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	33-102
Nitrobenzene-d5		51	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-003**

Description: **02131-SB2**

Matrix: **Solid**

Date Sampled: **12/12/2013 1047**

% Solids: **81.4 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2050	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	2.0	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1351	AAC		36880	5.52

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.7	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	1.9	ug/kg	1
Naphthalene	91-20-3	8260B	ND		5.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		5.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		93	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1537	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		410	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		410	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		410	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		410	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		410	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		410	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		410	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		410	34	ug/kg	1
Chrysene	218-01-9	8270D	ND		410	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		410	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		410	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		410	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		410	37	ug/kg	1
Naphthalene	91-20-3	8270D	ND		410	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		62	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-004**

Description: **02131-SB3**

Matrix: **Solid**

Date Sampled: **12/12/2013 0958**

% Solids: **79.0 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2101	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	19	B	0.62	0.12	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1415	AAC		36880	5.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.8	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.8	2.0	ug/kg	1
Naphthalene	91-20-3	8260B	ND		5.8	2.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.8	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.8	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		94	47-138
Toluene-d8		94	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1604	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		380	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		380	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		380	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		380	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		380	28	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		380	26	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		380	26	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		380	32	ug/kg	1
Chrysene	218-01-9	8270D	ND		380	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		380	26	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		380	12	ug/kg	1
Fluorene	86-73-7	8270D	ND		380	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		380	35	ug/kg	1
Naphthalene	91-20-3	8270D	ND		380	16	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		380	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		380	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-005**

Description: **02131-SB4**

Matrix: **Solid**

Date Sampled: **12/12/2013 1139**

% Solids: **83.1 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	2	12/23/2013 1928	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	17	B	1.1	0.21	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18080-006**Description: **02131-SB5**Matrix: **Solid**Date Sampled: **12/12/2013 1226**% Solids: **80.6 12/18/2013 2304**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1439	AAC		36880	5.48

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.7	1.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	1.9	ug/kg	1
Naphthalene	91-20-3	8260B	4.1	J	5.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	3.9	J	5.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	8.5		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		92	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1630	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		61	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-006**

Description: **02131-SB5**

Matrix: **Solid**

Date Sampled: **12/12/2013 1226**

% Solids: **80.6 12/18/2013 2304**

Date Received: **12/18/2013**

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2109	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	19	B	0.61	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-SB6**Matrix: **Solid**Date Sampled **12/12/2013 1509**% Solids: **75.8 12/18/2013 2304**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1837	AAC		36880	5.74

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	17		5.7	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	95		5.7	2.0	ug/kg	1
Naphthalene	91-20-3	8260B	230		5.7	2.0	ug/kg	1
Toluene	108-88-3	8260B	180		5.7	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	780		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		99	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1656	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		420	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		420	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		420	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		420	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		420	31	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		420	29	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		420	29	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		420	35	ug/kg	1
Chrysene	218-01-9	8270D	ND		420	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		420	28	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		420	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		420	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		420	38	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>180</b>	<b>J</b>	<b>420</b>	<b>18</b>	<b>ug/kg</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		420	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		420	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	33-102
Nitrobenzene-d5		65	22-109
Terphenyl-d14		80	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-007**

Description: **02131-SB6**

Matrix: **Solid**

Date Sampled: **12/12/2013 1509**

% Solids: **75.8 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2112	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	6.2	B	0.65	0.12	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1502	AAC		36880	5.46

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>6.5</b>		<b>5.8</b>	<b>1.3</b>	<b>ug/kg</b>	<b>1</b>
Ethylbenzene	100-41-4	8260B	ND		5.8	2.0	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>30</b>		<b>5.8</b>	<b>2.0</b>	<b>ug/kg</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>12</b>		<b>5.8</b>	<b>2.0</b>	<b>ug/kg</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>32</b>		<b>5.8</b>	<b>3.3</b>	<b>ug/kg</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		94	68-124

### Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1722	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		410	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		410	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		410	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		410	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		410	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		410	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		410	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		410	34	ug/kg	1
Chrysene	218-01-9	8270D	ND		410	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		410	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		410	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		410	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		410	37	ug/kg	1
Naphthalene	91-20-3	8270D	ND		410	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		52	33-102
Nitrobenzene-d5		46	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "V"

Client: **Katawba Environmental, Inc.**

Laboratory ID **OL18080-008**

Description: **02131-SB7**

Matrix: **Solid**

Date Sampled: **12/12/2013 1210**

% Solids: **79.3 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2116	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	14	B	0.61	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1526	AAC		36880	4.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		6.3	1.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	2.1	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>5.2</b>	<b>J</b>	<b>6.3</b>	<b>2.1</b>	<b>ug/kg</b>	<b>1</b>
Toluene	108-88-3	8260B	ND		6.3	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.3	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		93	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/24/2013 1010	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		390	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		390	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		390	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		390	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		390	28	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		390	26	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		390	26	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		390	32	ug/kg	1
Chrysene	218-01-9	8270D	ND		390	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		390	26	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		390	12	ug/kg	1
Fluorene	86-73-7	8270D	ND		390	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		390	35	ug/kg	1
Naphthalene	91-20-3	8270D	ND		390	16	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		390	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		390	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		56	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>OL18080-009</b>
Description: <b>02131-SB8</b>	Matrix: <b>Solid</b>
Date Sampled: <b>12/12/2013 1402</b>	% Solids: <b>82.2 12/18/2013 2304</b>
Date Received: <b>12/18/2013</b>	

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2120	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	31	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **TRIP BLANK**Matrix: **Aqueous**Date Sampled: **12/18/2013**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	12/20/2013 2308	PMM2		36919			
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene		71-43-2	8260B	ND		1.0	0.13	ug/L	1	
Ethylbenzene		100-41-4	8260B	ND		1.0	0.33	ug/L	1	
Naphthalene		91-20-3	8260B	ND		1.0	0.40	ug/L	1	
Toluene		108-88-3	8260B	ND		1.0	0.33	ug/L	1	
Xylenes (total)		1330-20-7	8260B	ND		1.0	0.33	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		82	70-130							
Bromofluorobenzene		84	70-130							
Toluene-d8		77	70-130							

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Shealy Environmental Services, Inc. 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com Level 1 Report 02-1



**Chain of Custody Record**

Shealy Environmental Services, Inc.  
 106 Vantage Point Drive  
 West Columbia, South Carolina 29172  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111  
 www.shealylab.com

Number 31958

**SHEALY ENVIRONMENTAL SERVICES, INC.**

Client: <b>Katq wbr</b>		Report to Contact: <b>Alex Amos</b>		Sampler (Printed Name): <b>Billy Morris</b>		Quote No.	
Address: <b>4278 Dyc Rd</b>		Telephone No. / Fax No. / Email		Waybill No.		Page <b>1</b> of <b>1</b>	
City: <b>Edgewater</b>	State: <b>SC</b>	Zip Code: <b>29712</b>	Preservative				
Project Name: <b>One Accord</b>			1. Uptox 4. HNO3 7. NaOH 2. NaOH/ZnA 5. HCl 3. H2SO4 6. Na Thio				
Project Number: <b>One Accord</b>		P.O Number: <b>One Accord</b>		Matrix			
Sample ID / Description (Containers for each sample may be combined on one line)		Date	Time	G-Grab	DW	WW	Other
				Ca/Composite			
							Analysis
							BTex Napth
							PAH
							Lead
							Toc
<b>02131-561</b>		<b>12-12-13</b>	<b>917</b>				X
<b>02131-0up581</b>			<b>919</b>				X
<b>02131-582</b>			<b>1047</b>				X
<b>02131-583</b>			<b>958</b>				X
<b>02131-584</b>			<b>1139</b>				X
<b>02131-585</b>			<b>1226</b>				X
<b>02131-586</b>			<b>1509</b>				X
<b>02131-587</b>			<b>1210</b>				X
<b>02131-588</b>		<b>12-12-13</b>	<b>1402</b>				X
Turn Around Time Required (Prior lab approval required for expedited TAT)		Sample Disposal		QC Requirements (Specify)		Possible Hazard Identification	
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Please Specify) <b>7 Day TAT</b>		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab				<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
1. Relinquished by / Sampler: <b>Billy Morris</b>		Date: <b>12-18-13</b>	Time: <b>1202</b>	1. Received by: <b>Mh Chapman</b>		Date: <b>12-18-13</b>	Time: <b>1711</b>
2. Relinquished by: <b>Mh Chapman</b>		Date: <b>12-18-13</b>	Time: <b>1505</b>	2. Received by: <b>Mh Chapman</b>		Date: <b>12-18-13</b>	Time: <b>1505</b>
3. Relinquished by: <b>[Signature]</b>		Date: <b>12-18-13</b>	Time: <b>1600</b>	3. Received by:		Date:	Time:
4. Relinquished by:		Date:	Time:	4. Laboratory Received by: <b>Kelly WP</b>		Date: <b>12-18-13</b>	Time: <b>1600</b>
<b>Note: All samples are retained for six weeks from receipt unless other arrangements are made.</b>				LAB USE ONLY		Received on Ice (Check) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ice Pack	
				Receipt Temp: <b>4.3</b> °C		Temp Blank <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **OL18078**  
Date Completed: **12/31/2013**

  
Lucas Odom  
Project Manager



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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No 329

NC Field Parameters No: 5639

## Case Narrative Katawba Environmental, Inc. Lot Number: OL18078

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### EDB by Microextraction

Sample -002 was qualified with a "P" as the relative percent difference (RPD) between the two GC columns exceeded method criteria. Per SCDHEC, the lower value has been reported.

### PAHs by GC/MS

The method blank associated with batch 37050 recovered two surrogates above method criteria. The associated samples were re-extracted out of hold. The second analysis recovered all surrogates within method criteria. All results were confirmed during the second analysis. The data has not been negatively impacted as all samples and other QC recovered the surrogates within limits indicating the problem was isolated to the Method Blank. The in hold run has been reported.

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: OL18078

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131-MW2	Aqueous	12/18/2013 0923	12/18/2013
002	02131-MW3	Aqueous	12/18/2013 0852	12/18/2013
003	02131-MW4	Aqueous	12/18/2013 0808	12/18/2013
004	02131-DUP MW4	Aqueous	12/18/2013 0810	12/18/2013
005	02131-DWW1	Aqueous	12/18/2013 0941	12/18/2013
006	02131-DWW2	Aqueous	12/18/2013 0956	12/18/2013
007	02131-DWW3	Aqueous	12/18/2013 1035	12/18/2013
008	02131-DWW4	Aqueous	12/18/2013 1013	12/18/2013
009	02131-DWW5	Aqueous	12/18/2013 1051	12/18/2013
010	02131-DWW6	Aqueous	12/18/2013 1117	12/18/2013
011	02131-FB	Aqueous	12/18/2013 1145	12/18/2013
012	02131-TB	Aqueous	12/18/2013 1156	12/18/2013

(12 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: OL18078

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-MW2	Aqueous	Nitrate - N	353.2	0.0089	J	mg/L	6
001	02131-MW2	Aqueous	Sulfate	300.0	3.6		mg/L	6
001	02131-MW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	15000		ug/L	6
001	02131-MW2	Aqueous	tert-Amyl methyl ether (TAME)	8260B	600	J	ug/L	6
001	02131-MW2	Aqueous	Benzene	8260B	13000		ug/L	6
001	02131-MW2	Aqueous	Diisopropyl ether (IPE)	8260B	860		ug/L	6
001	02131-MW2	Aqueous	Ethylbenzene	8260B	4200		ug/L	6
001	02131-MW2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	3100		ug/L	6
001	02131-MW2	Aqueous	Toluene	8260B	44000		ug/L	6
001	02131-MW2	Aqueous	Xylenes (total)	8260B	22000		ug/L	6
001	02131-MW2	Aqueous	Naphthalene	8270D	780		ug/L	7
001	02131-MW2	Aqueous	Lead	6010C	0.016		mg/L	7
002	02131-MW3	Aqueous	Nitrate - N	353.2	0.014	J	mg/L	8
002	02131-MW3	Aqueous	Sulfate	300 0	1.5		mg/L	8
002	02131-MW3	Aqueous	tert-Amyl alcohol (TAA)	8260B	29000		ug/L	8
002	02131-MW3	Aqueous	tert-Amyl methyl ether (TAME)	8260B	4200	J	ug/L	8
002	02131-MW3	Aqueous	Benzene	8260B	15000		ug/L	8
002	02131-MW3	Aqueous	Diisopropyl ether (IPE)	8260B	1700		ug/L	8
002	02131-MW3	Aqueous	Ethylbenzene	8260B	4600		ug/L	8
002	02131-MW3	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	31000		ug/L	8
002	02131-MW3	Aqueous	Naphthalene	8260B	1400		ug/L	8
002	02131-MW3	Aqueous	tert-butyl alcohol (TBA)	8260B	12000	J	ug/L	8
002	02131-MW3	Aqueous	Toluene	8260B	44000		ug/L	8
002	02131-MW3	Aqueous	Xylenes (total)	8260B	23000		ug/L	8
002	02131-MW3	Aqueous	Naphthalene	8270D	860		ug/L	9
002	02131-MW3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.074	P	ug/L	9
002	02131-MW3	Aqueous	Lead	6010C	0.0072	J	mg/L	9
003	02131-MW4	Aqueous	Nitrate - N	353.2	0.40		mg/L	10
003	02131-MW4	Aqueous	Sulfate	300.0	0.55	J	mg/L	10
003	02131-MW4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.56	J	ug/L	10
003	02131-MW4	Aqueous	Naphthalene	8260B	0.90	J	ug/L	10
003	02131-MW4	Aqueous	tert-butyl alcohol (TBA)	8260B	10	J	ug/L	10
003	02131-MW4	Aqueous	Toluene	8260B	1.0		ug/L	10
003	02131-MW4	Aqueous	Xylenes (total)	8260B	18		ug/L	10
003	02131-MW4	Aqueous	Lead	6010C	0.0097	J	mg/L	11
004	02131-DUP MW4	Aqueous	Nitrate - N	353.2	0.37		mg/L	12
004	02131-DUP MW4	Aqueous	Sulfate	300.0	2.8		mg/L	12
004	02131-DUP MW4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.54	J	ug/L	12
004	02131-DUP MW4	Aqueous	Naphthalene	8260B	0.94	J	ug/L	12
004	02131-DUP MW4	Aqueous	tert-butyl alcohol (TBA)	8260B	10	J	ug/L	12
004	02131-DUP MW4	Aqueous	Toluene	8260B	1.0		ug/L	12
004	02131-DUP MW4	Aqueous	Xylenes (total)	8260B	19		ug/L	12
004	02131-DUP MW4	Aqueous	Lead	6010C	0.0044	J	mg/L	13
005	02131-DWW1	Aqueous	Nitrate - N	353.2	0.42		mg/L	14
005	02131-DWW1	Aqueous	Sulfate	300.0	1.8		mg/L	14

## Executive Summary (Continued)

Lot Number: OL18078

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	02131-DWW2	Aqueous	Nitrate - N	353.2	0.48		mg/L	16
006	02131-DWW2	Aqueous	Sulfate	300.0	1.2		mg/L	16
006	02131-DWW2	Aqueous	tert-Amyl methyl ether (TAME)	8260B	1.8	J	ug/L	16
006	02131-DWW2	Aqueous	Diisopropyl ether (IPE)	8260B	2.2		ug/L	16
006	02131-DWW2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	71		ug/L	16
007	02131-DWW3	Aqueous	Nitrate - N	353.2	0.29		mg/L	18
007	02131-DWW3	Aqueous	Sulfate	300.0	0.91	J	mg/L	18
008	02131-DWW4	Aqueous	Nitrate - N	353.2	0.18		mg/L	20
008	02131-DWW4	Aqueous	Sulfate	300.0	8.0		mg/L	20
009	02131-DWW5	Aqueous	Nitrate - N	353.2	0.082		mg/L	22
009	02131-DWW5	Aqueous	Sulfate	300.0	8.8		mg/L	22
010	02131-DWW6	Aqueous	Nitrate - N	353.2	0.55		mg/L	24
010	02131-DWW6	Aqueous	Sulfate	300.0	3.4		mg/L	24
011	02131-FB	Aqueous	Nitrate - N	353.2	0.0016	J	mg/L	26
011	02131-FB	Aqueous	Sulfate	300.0	0.49	J	mg/L	26
011	02131-FB	Aqueous	Lead	6010C	0.0074	J	mg/L	27

(61 detections)

Description: **02131-MW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0923**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2202	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1133	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.0089	J	0.020	0.0013	mg/L 1
Sulfate			300.0	3.6		1.0	0.28	mg/L 1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	12/28/2013 0311	PMM2		37336

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	15000		10000	3400	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	600	J	5000	100	ug/L	1
Benzene	71-43-2	8260B	13000		500	66	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	500	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	74	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	860		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	500	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	17000	ug/L	1
Ethylbenzene	100-41-4	8260B	4200		500	170	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	100	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	3100		500	200	ug/L	1
Naphthalene	91-20-3	8260B	ND		500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	3400	ug/L	1
Toluene	108-88-3	8260B	44000		500	170	ug/L	1
Xylenes (total)	1330-20-7	8260B	22000		500	170	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1334	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		50	12	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		50	12	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131-MW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0923**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1334	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		50	11	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		50	6.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		50	5.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		50	6.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		50	8.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		50	10	ug/L	1
Chrysene	218-01-9	8270D	ND		50	7.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		50	13	ug/L	1
Fluoranthene	206-44-0	8270D	ND		50	14	ug/L	1
Fluorene	86-73-7	8270D	ND		50	14	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		50	23	ug/L	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>780</b>		<b>50</b>	<b>13</b>	<b>ug/L</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		50	12	ug/L	1
Pyrene	129-00-0	8270D	ND		50	31	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		100	37-129
Nitrobenzene-d5		97	38-127
Terphenyl-d14		66	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2305	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/23/2013 2035	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.016		0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-MW3**Matrix: **Aqueous**Date Sampled: **12/18/2013 0852**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2209	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1157	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.014	J	0.020	0.0013	mg/L	1
Sulfate		300.0	1.5		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1000	12/28/2013 0036	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	29000		20000	6700	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	4200	J	10000	200	ug/L	1
Benzene	71-43-2	8260B	15000		1000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5000	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1000	150	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	1700		1000	400	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	1000	ug/L	1
Ethanol	64-17-5	8260B	ND		100000	33000	ug/L	1
Ethylbenzene	100-41-4	8260B	4600		1000	330	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1000	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	31000		1000	400	ug/L	1
Naphthalene	91-20-3	8260B	1400		1000	400	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	12000	J	20000	6700	ug/L	1
Toluene	108-88-3	8260B	44000		1000	330	ug/L	1
Xylenes (total)	1330-20-7	8260B	23000		1000	330	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1400	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		50	12	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		50	12	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1400	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		50	11	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		50	6.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		50	5.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		50	6.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		50	8.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		50	10	ug/L	1
Chrysene	218-01-9	8270D	ND		50	7.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		50	13	ug/L	1
Fluoranthene	206-44-0	8270D	ND		50	14	ug/L	1
Fluorene	86-73-7	8270D	ND		50	14	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		50	23	ug/L	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>860</b>		<b>50</b>	<b>13</b>	<b>ug/L</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		50	12	ug/L	1
Pyrene	129-00-0	8270D	ND		50	31	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
2-Fluorobiphenyl		88	37-129
Nitrobenzene-d5		94	38-127
Terphenyl-d14		42	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2315	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
<b>1,2-Dibromoethane (EDB)</b>	<b>106-93-4</b>	<b>8011</b>	<b>0.074</b>	<b>P</b>	<b>0.020</b>	<b>0.020</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,1,1,2-Tetrachloroethane		72	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/23/2013 2101	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
<b>Lead</b>	<b>7439-92-1</b>	<b>6010C</b>	<b>0.0072</b>	<b>J</b>	<b>0.010</b>	<b>0.0019</b>	<b>mg/L</b>	<b>1</b>

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2211	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1221	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.40	0.020	0.0013	mg/L	1
Sulfate			300.0	0.55 J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2053	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.56</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>0.90</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260B</b>	<b>10</b>	<b>J</b>	<b>20</b>	<b>6.7</b>	<b>ug/L</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>1.0</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>18</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		102	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1918	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1918	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
2-Fluorobiphenyl	94		37-129
Nitrobenzene-d5	93		38-127
Terphenyl-d14	58		10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2326	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,1,1,2-Tetrachloroethane	84		57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/20/2013 2301	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0097	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DUP MW4**Matrix: **Aqueous**Date Sampled **12/18/2013 0810**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2212	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1245	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.37	0.020	0.0013	mg/L	1
Sulfate			300.0	2.8	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2115	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	0.54	J	1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	0.94	J	1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	10	J	20	6.7	ug/L	1
Toluene	108-88-3	8260B	1.0		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	19		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1945	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DUP MW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 0810**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1945	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		93	38-127
Terphenyl-d14		42	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2336	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		118	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3005A	6010C	1	12/23/2013 2109	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0044	J	0.010	0.0019	mg/L	2

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW1**Matrix: **Aqueous**Date Sampled: **12/18/2013 0941**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2213	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1309	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.42	0.020	0.0013	mg/L	1
Sulfate			300.0	1.8	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2137	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2011	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131-DWW1**Matrix: **Aqueous**Date Sampled: **12/18/2013 0941**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2011	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		91	38-127
Terphenyl-d14		98	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2346	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0956**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2214	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1334	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.48	0.020	0.0013	mg/L	1
Sulfate			300.0	1.2	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2159	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1.8	J	10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	2.2		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	71		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2037	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3520C	8270D	1	12/26/2013 2037	JCG	12/23/2013 1842	37050		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1	
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1	
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1	
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1	
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1	
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1	
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1	
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1	
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1	
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1	
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1	
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1	
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1	
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
2-Fluorobiphenyl		95	37-129						
Nitrobenzene-d5		92	38-127						
Terphenyl-d14		95	10-148						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	12/26/2013 2357	JCG	12/26/2013 1330	37189		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		99	57-137						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW3**Matrix: **Aqueous**Date Sampled: **12/18/2013 1035**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2215	KMB		36696
1		(Sulfate) 300.0	1	12/28/2013 0650	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.29		0.020	0.0013	mg/L	1
Sulfate		300.0	0.91	J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2222	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2103	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2103	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		91	38-127
Terphenyl-d14		95	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/27/2013 0007	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 1013**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2216	KMB		36696
1		(Sulfate) 300.0	1	12/28/2013 0802	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.18	0.020	0.0013	mg/L	1
Sulfate			300.0	8.0	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2244	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2130	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 1013**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2130	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
2-Fluorobiphenyl	93		37-129
Nitrobenzene-d5	92		38-127
Terphenyl-d14	97		10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1158	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,1,1,2-Tetrachloroethane	103		57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW5**Matrix: **Aqueous**Date Sampled: **12/18/2013 1051**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2231	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 0826	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.082	0.020	0.0013	mg/L	1
Sulfate			300.0	8.8	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2307	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		103	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2156	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131-DWW5**Matrix: **Aqueous**Date Sampled: **12/18/2013 1051**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2156	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		96	37-129
Nitrobenzene-d5		92	38-127
Terphenyl-d14		101	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1229	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW6**Matrix: **Aqueous**Date Sampled: **12/18/2013 1117**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2232	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 0939	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.55	0.020	0.0013	mg/L	1
Sulfate			300.0	3.4	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2329	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2222	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2222	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.82	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		97	37-129
Nitrobenzene-d5		96	38-127
Terphenyl-d14		102	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1239	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description **02131-FB**Matrix: **Aqueous**Date Sampled: **12/18/2013 1145**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2233	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 1003	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.0016 J	0.020	0.0013	mg/L	1
Sulfate			300.0	0.49 J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2008	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		89	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2248	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description **02131-FB**Matrix: **Aqueous**Date Sampled: **12/18/2013 1145**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2248	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.82	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		99	37-129
Nitrobenzene-d5		94	38-127
Terphenyl-d14		100	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1249	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/20/2013 2308	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0074	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2030	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		87	70-130

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Chain of Custody Record

Shealy Environmental Services, Inc.

106 Vantage Point Drive

West Columbia, South Carolina 29172

Telephone No. (803) 791-9700 Fax No. (803) 791-9111

www.shealylab.com

Number 31957

Client: <b>Katawba</b>		Report to Contact: <b>Alex Anos</b>		Sampler (Printed Name): <b>Billy Morris</b>		Quote No.	
Address: <b>4278 Dyc Rd</b>		Telephone No. / Fax No. / Email		Waybill No.		Page: <b>1 of 2</b>	
City: <b>Edgewater SC</b> State: <b>SC</b> Zip Code: <b>29712</b>		Preservative: 1. Unpres. 4. HNO3 7. NaOH 2. NaOH/ZnA 5. HCL 3. H2SO4 6. Na Flu.		Analysis: <b>BTEX NAPM MIBT 12 OCA Bory Ethanol</b>		Number of Containers	
Project Name: <b>One Accord</b>		Project Number: <b>One Accord</b>		Matrix: G=Global Ca=Composite GW DW WW S Other		Bottle (See Instructions on back): Preservative: Lot No.: <b>0618078</b>	
Sample ID / Description (Containers for each sample may be combined on one line)		Date	Time	G=Global Ca=Composite	GW DW WW S Other	Remarks / Cooler ID	
<b>02131-MW2</b>	<b>12-18-13</b>	<b>923</b>	<b>X</b>			<b>X</b>	
<b>02131-MW3</b>		<b>852</b>					
<b>02131-MW4</b>		<b>808</b>					
<b>02131-Dup MW4</b>		<b>810</b>					<b>X</b>
<b>02131-DW1</b>		<b>941</b>					
<b>02131-DW2</b>		<b>956</b>					
<b>02131-DW3</b>		<b>1035</b>					
<b>02131-DW4</b>		<b>1013</b>					
<b>02131-DW5</b>		<b>1051</b>					
<b>02131-DW6</b>	<b>12-18-13</b>	<b>1117</b>	<b>X</b>			<b>X X X X</b>	
Turn Around Time Required (Prior lab approval required for expedited TAT): <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Please Specify) <b>7 Day TAT</b>		Sample Disposal: <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		QC Requirements (Specify):		Possible Hazard Identification: <input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
1. Relinquished by / Sampler: <b>Billy Morris</b>		Date: <b>12-18-13</b>	Time: <b>12:30</b>	1. Received by: <b>M. Chapman</b>		Date: <b>12-18-13</b>	Time: <b>1811</b>
2. Relinquished by: <b>M. Chapman</b>		Date: <b>12-18-13</b>	Time: <b>1505</b>	2. Received by: <b>[Signature]</b>		Date: <b>12-18-13</b>	Time: <b>1505</b>
3. Relinquished by: <b>[Signature]</b>		Date: <b>12-17-13</b>	Time: <b>1600</b>	3. Received by:		Date:	Time:
4. Relinquished by:		Date:	Time:	4. Laboratory Received by: <b>[Signature]</b>		Date: <b>12-12-13</b>	Time: <b>1600</b>
<b>Note: All samples are retained for six weeks from receipt unless other arrangements are made.</b>				LAB USE ONLY Received on Ice (Check) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Ice Pack		Receipt Temp: <b>1.2</b> °C	Temp. Blank: <input type="checkbox"/> Y <input type="checkbox"/> N

ATSD 1600 1600

1.2 °C 10, 1.0



Chain of Custody Record

Shealy Environmental Services, Inc.
108 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 31956

Client: Katawbi, Report to Contact: Alex Amos, Sampler: Billy Morris, Quote No. 31956, Address: 4275 Dyc Rd, Edgemoor SC 29712, Project Name: One Accord, Sample ID: 02131-FB, Date: 12-18-13, Analysis: EDS, AAH, N. trace Sul, Lead, etc.

Shealy Environmental Services, Inc.
108 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax: (803) 791-9111 www.shealylab.com

SHEALY ENVIRONMENTAL SERVICES, INC.





Professional Service Industries, Inc  
 534 St Andrews Road, Suite C  
 Columbia, SC 29210

Phone (803) 776-6050  
 Fax (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-26-S1**

**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
 POST OFFICE BOX 11228  
 ROCK HILL, SC 29731

**CC:** ALEX AMOS

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**Project:** GRAIN SIZE ANALYSIS

*Vince Belitsos*  
 Approved Signatory Vince Belitsos (Staff Engineer)  
 Date of Issue 1/21/2014

## Sample Details

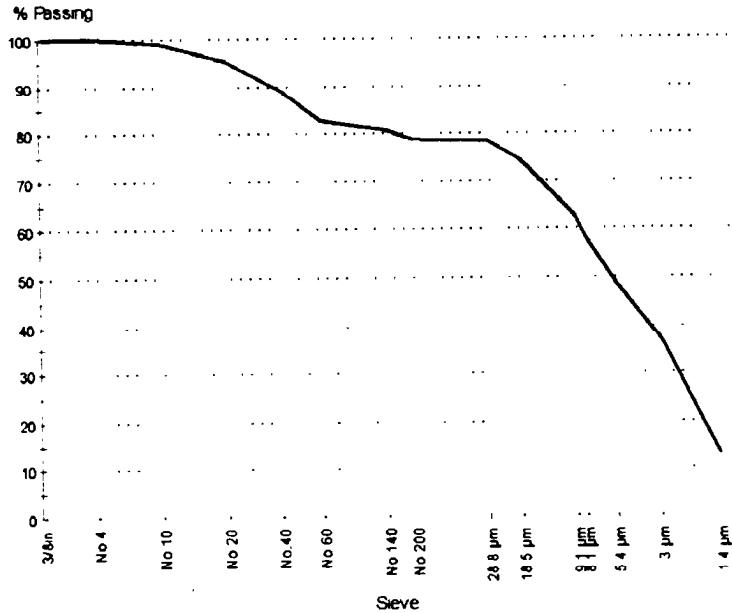
**Sample ID:** 0451102-26-S1  
**Client Sample ID:**  
**Date Sampled:** 01/03/14  
**Sampled By:** Client  
**Specification:** D422/T88 Part Size Analysis (Set #1)  
**Supplier:**  
**Source:**  
**Material:** Reddish Orange Silty SAND  
**Sampling Method:** Bulk Surface Sample  
**General Location:** One Accord MW4  
**Location:** One Accord MW4

## Sample Description:

**Grading:** ASTM D 422

**Drying by:** Natural  
**Date Tested:**

## Particle Size Distribution



Sieve Size	% Passing	Limits
3/8 in (9.5mm)	100	
No 4 (4.75mm)	100	
No 10 (2.0mm)	99	
No 20 (850µm)	95	
No 40 (425µm)	89	
No 60 (250µm)	83	
No 140 (106µm)	81	
No 200 (75µm)	79	
28.8 µm	78.3	
18.5 µm	74.4	
9.1 µm	62.6	
8.1 µm	58.6	
5.4 µm	48.7	
3.0 µm	37.1	
1.4 µm	13.0	

COBBLES	GRAVEL		SAND			FINES	
	Coarse (0.0%)	Fine (0.0%)	Coarse (1.1%)	Medium (9.7%)	Fine (10.5%)	Silt (32.0%)	Clay (46.8%)
(0.0%)	(0.0%)	(0.0%)	(1.1%)	(9.7%)	(10.5%)	(32.0%)	(46.8%)

**D85:** 0.2988    **D60:** 0.0084    **D50:** 0.0057  
**D30:** 0.0024    **D15:** 0.0015    **D10:** N/A



Professional Service Industries, Inc  
534 St Andrews Road, Suite C  
Columbia, SC 29210

Phone (803) 776-6050  
Fax (803) 772-2803

**Report No: MAT:0451102-26-S1**

**Issue No: 1**

# Material Test Report

**Client:** KATAWBA ENVIRONMENTAL  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**CC:** ALEX AMOS

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**Project:** GRAIN SIZE ANALYSIS

Approved Signatory Vince Belitsos (Staff Engineer)  
Date of Issue 1/21/2014

## Sample Details

**Sample ID:** 0451102-26-S1  
**Client Sample ID:**  
**Date Sampled:** 01/03/14  
**Sampled By:** Client  
**Specification:** D422/T88 Part Size Analysis (Set #1)

**Supplier:**  
**Source:**  
**Material:** Reddish Orange Silty SAND  
**Sampling Method:** Bulk Surface Sample  
**General Location:** One Accord MW4  
**Location:** One Accord MW4

## Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422		
Dispersion time (min)			
Shape			
Hardness			

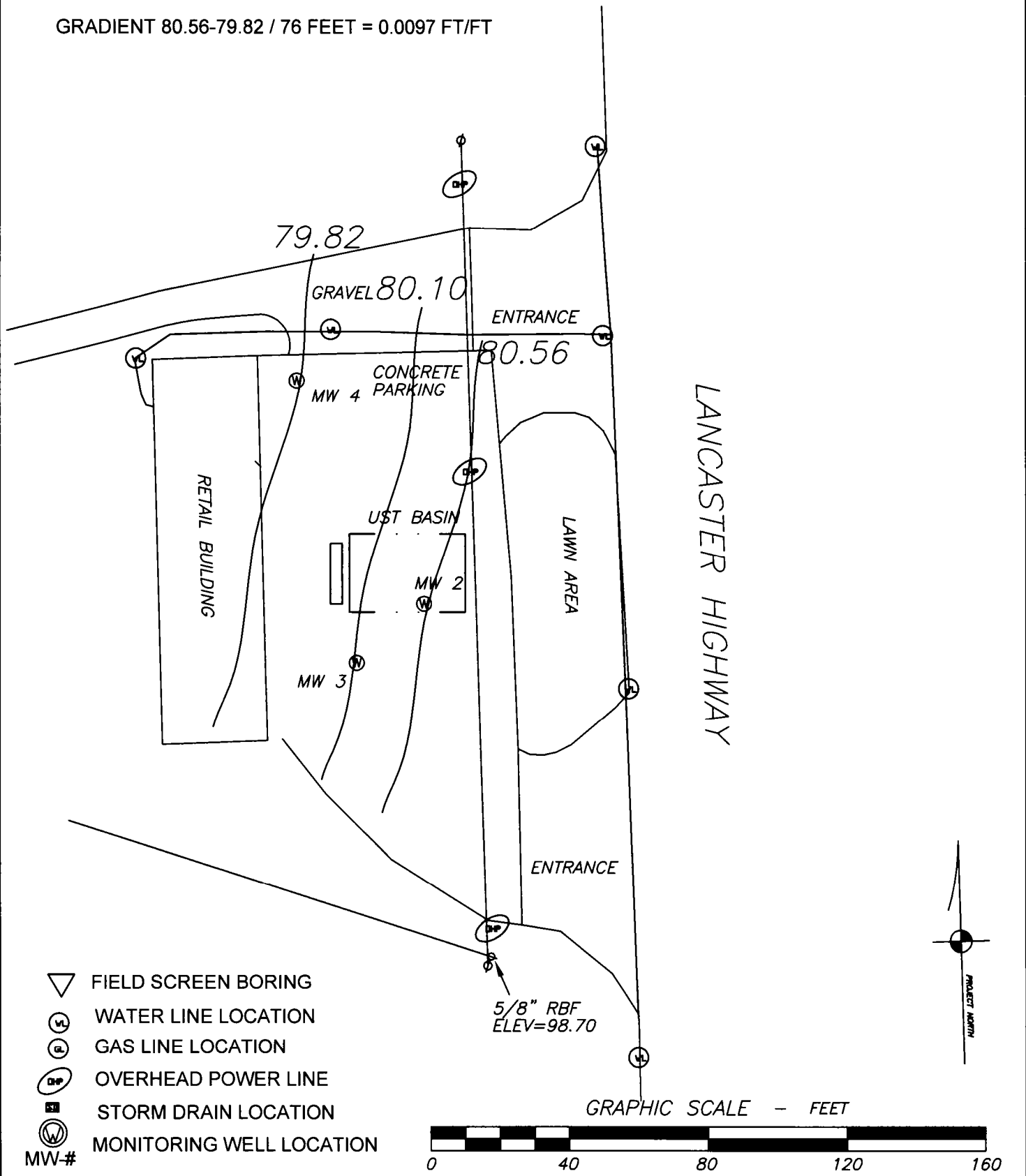
## Comments

N/A

## **APPENDIX D**

### **Aquifer Calculations**

GRADIENT 80.56-79.82 / 76 FEET = 0.0097 FT/FT



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

TIER I  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 AQUIFER CALCULATIONS

DATE: MARCH 2014  
 FIGURE D



**SOUTH CAROLINA**  
**Department of Health and Environmental Control**  
**Summary of Slug Test Form**

**Site Data**

UST Permit # 02131 County: CHESTER  
 Facility Name ONE ACROSS

**Slug Data**

See Appendix D Table \_\_\_\_\_ Figure \_\_\_\_\_ for a list of all data measurements.  
 (water level logs, etc.) (Complete as appropriate).

Water Level Recovery Data was measured by WATER LEVEL INDICATOR  
 (Hermit Data Logger, Manually with Water Level Indicator, etc.) (List Method).

Complete the following table for each well tested.

**COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED**

Slug Test Conducted in well(s) number	<u>MW2</u>	<u>MW3</u>		
Initial Rise/Drawdown in well (feet)	<u>0.45</u>	<u>1.35</u>		
Radius of Well Casing (feet)	<u>8.333</u>	<u>8.33<sup>-2</sup></u>		
Effective Radius of Well (feet)	<u>0.333</u>	<u>0.333</u>		
Static Saturated Aquifer Thickness (feet)	<u>30</u>	<u>30</u>		
Length of Well Screen (feet)	<u>10</u>	<u>10</u>		
Static Height of Water Column in Well (ft)	<u>18.40</u>	<u>18.35</u>		

**Calculations**

See Appendix D Table \_\_\_\_\_ Figure \_\_\_\_\_ for calculations. (Complete as appropriate).

The method for aquifer calculations was BOWEN-RICE

Calculated values by well were as follows:

Slug Test Conducted in well(s) number	<u>MW2</u>	<u>MW3</u>		
Hydraulic Conductivity	<u>5.62<sup>-2</sup></u>	<u>0.194</u>		

Thickness of the aquifer used to calculate hydraulic conductivity was 30 feet.

The aquifer is \_\_\_\_\_ confined \_\_\_\_\_ semi-confined  water table (Check as appropriate).

The estimated seepage velocity is 3.53 feet per year based on  
 a hydraulic conductivity of 0.2496, a hydraulic gradient of 0.0097, and  
 a porosity of 25 per cent for SAND soil (list type i.e., silty sand, clay, etc).

## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 12/20/13  
 Client: One Accord  
 Project Number: Tier I

Well Label: MW-2  
 Aquifer Thickness: 30. feet  
 Screen Length: 10. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.3333 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 9.6 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5 Seconds

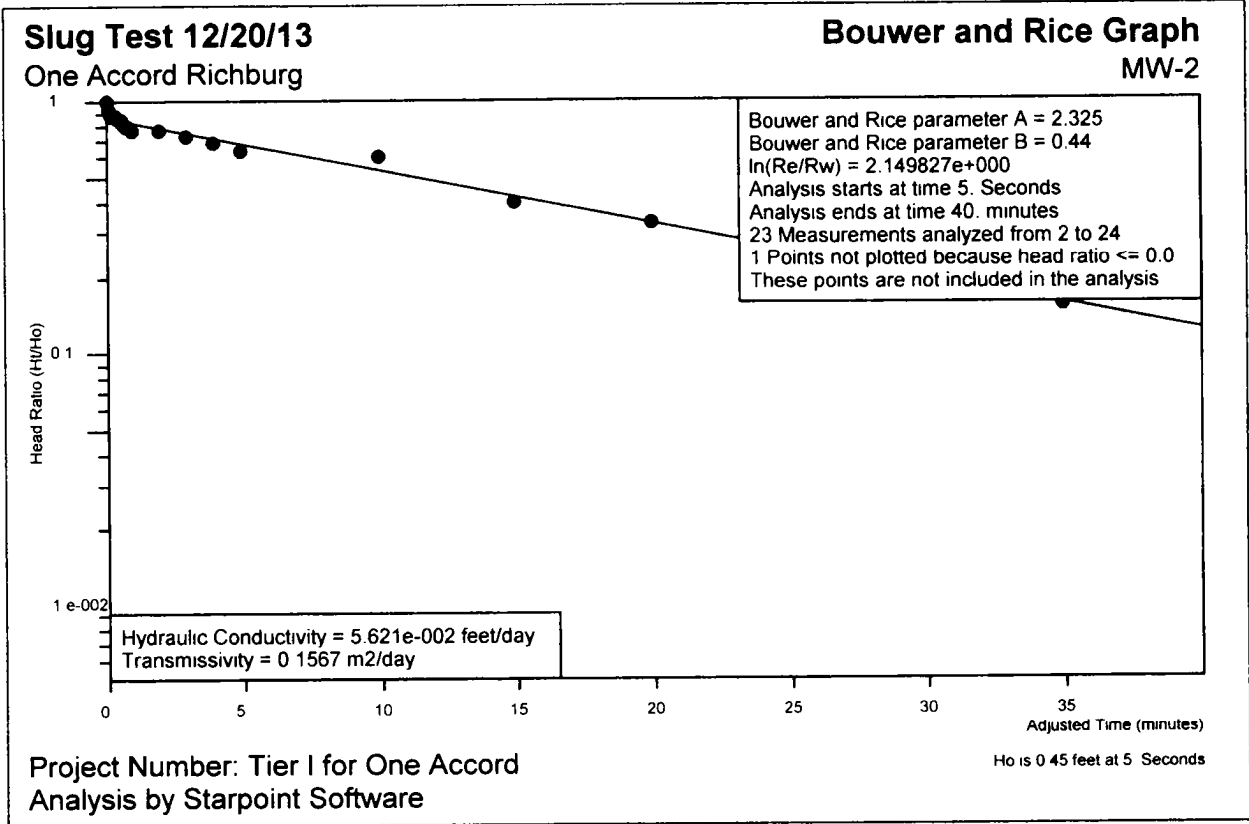
Test starts with trial 1

There are 24 time and drawdown measurements

Maximum head is 0.45 feet

Minimum head is 0 feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	0.45	0.45	1.
3	10.	5	0.42	0.42	0.9333
4	15	10.	0.4	0.4	0.8889
5	20.	15.	0.4	0.4	0.8889
6	25.	20.	0.4	0.4	0.8889
7	30.	25.	0.39	0.39	0.8667
8	35.	30	0.38	0.38	0.8444
9	40.	35.	0.38	0.38	0.8444
10	45.	40.	0.37	0.37	0.8222
11	50.	45.	0.36	0.36	0.8
12	55.	50.	0.36	0.36	0.8
13	60.	55.	0.35	0.35	0.7778
14	120.	115.	0.35	0.35	0.7778
15	180.	175.	0.33	0.33	0.7333
16	240.	235.	0.31	0.31	0.6889
17	300.	295.	0.29	0.29	0.6444
18	600.	595	0.27	0.27	0.6
19	900.	895.	0.18	0.18	0.4
20	1200	1195	0.15	0.15	0.3333
21	1500	1495	0.11	0.11	0.2444
22	1800	1795	0.1	0.1	0.2222
23	2100	2095	7.e-002	7.e-002	0.1556
24	2400	2395	0.	0.	0.



## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 12/20/13  
 Client: One Accord  
 Project Number: Tier I

Well Label: MW-3  
 Aquifer Thickness: 30. feet  
 Screen Length: 10. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.3333 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 9.65 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5 Seconds

Test starts with trial 1

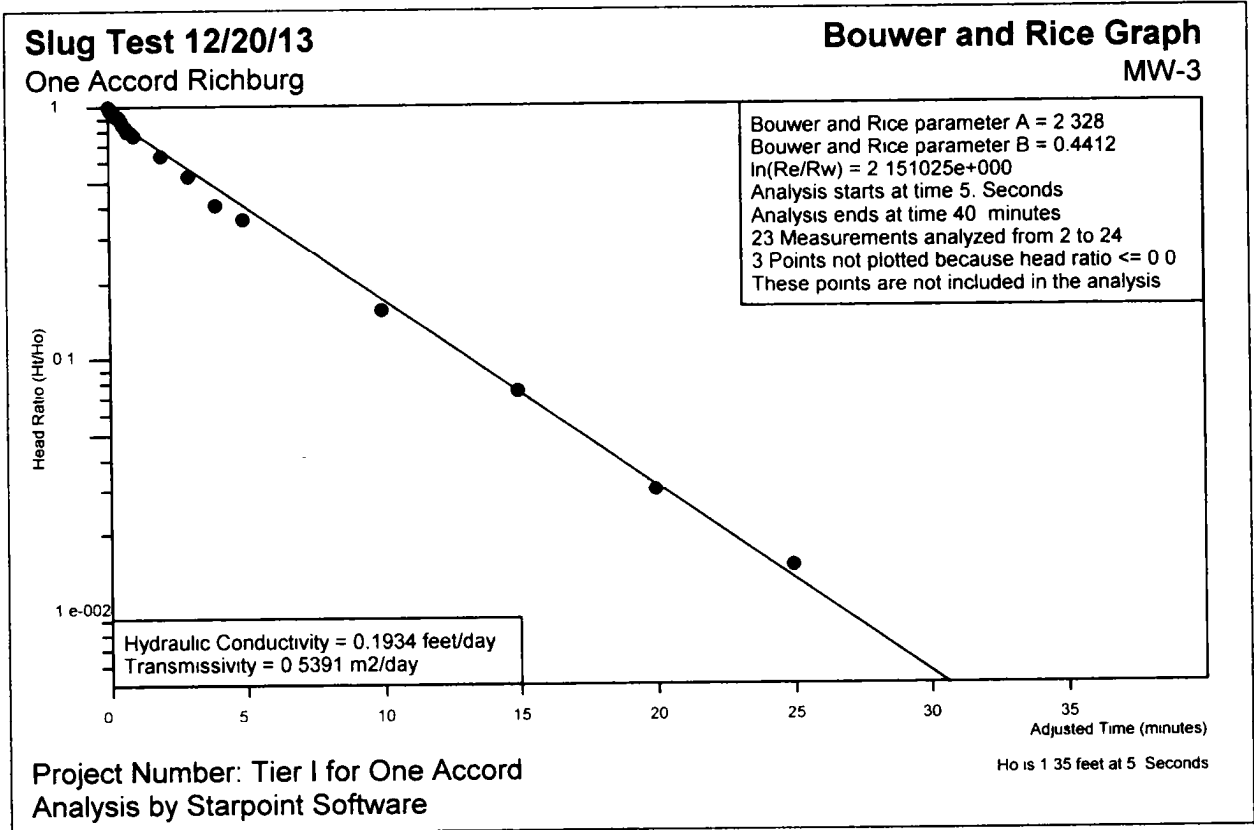
There are 24 time and drawdown measurements

Maximum head is 1.35 feet

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.35	1.35	1.
3	10.	5.	1.32	1.32	0.9778
4	15.	10.	1.3	1.3	0.963
5	20.	15.	1.27	1.27	0.9407
6	25.	20.	1.25	1.25	0.9259
7	30.	25.	1.23	1.23	0.9111
8	35.	30.	1.19	1.19	0.8815
9	40.	35.	1.15	1.15	0.8519
10	45.	40.	1.12	1.12	0.8296
11	50.	45.	1.09	1.09	0.8074
12	55.	50.	1.08	1.08	0.8
13	60.	55.	1.05	1.05	0.7778
14	120.	115.	0.86	0.86	0.637
15	180.	175.	0.71	0.71	0.5259
16	240.	235.	0.55	0.55	0.4074
17	300.	295.	0.48	0.48	0.3556
18	600.	595.	0.21	0.21	0.1556
19	900.	895.	0.1	0.1	7.407e-002
20	1200	1195	4.e-002	4.e-002	2.963e-002
21	1500	1495	2.e-002	2.e-002	1.481e-002
22	1800	1795	0.	0.	0.
23	2100	2095	0.	0.	0.
24	2400	2395	0.	0.	0.





## **APPENDIX E**

### **Waste Disposal**

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1 Generator ID Number	2 Page 1 of	3 Emergency Response Phone	4 Waste Tracking Number 012813
5 Generator's Name and Mailing Address Kite-wba Env. Remedial 4278 U.S. Rd Edgewood SC 29712 Generator's Phone 803-327-0409				Generator's Site Address (if different than mailing address)	
6 Transporter 1 Company Name Kite-wba Env				U.S. EPA ID Number	
7 Transporter 2 Company Name				U.S. EPA ID Number	
8 Designated Facility Name and Site Address Charlotte HazMat 221 Dalton Ave Charlotte NC Facility's Phone 704-332-5600				U.S. EPA ID Number	
9 Waste Shipping Name and Description			10 Containers	11 Total Quantity	12 Unit Wt/Vol
			No	Type	
1 Water/Petroleum mix US Mint Man #2 Darlington, SC			2	Totes	420 gal
2 Ponce Water South Sp LLC 610 S Ground Dr Sumter SC			1	Dr	43 gal
3 Ponce Water South #4 US TE LADSON SC			1	Tote	156 gal
4 Ponce Water Out Accid 3570 Lantern Hwy, Lancaster SC			2	Dr	94 gal
13 Special Handling Instructions and Additional Information Non-Haz UST Site					
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste					
Generator's/Officer's Printed/Typed Name x Billy May				Signature Billy May	Month Day Year 1 28 14
15 International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. <input type="checkbox"/> Port of entry/exit <input type="checkbox"/> Date leaving U.S.					
16 Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name x Billy May				Signature Billy May	Month Day Year 1 28 14
Transporter 2 Printed/Typed Name				Signature	Month Day Year
17 Discrepancy					
17a Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
17b Alternate Facility (or Generator) Manifest Reference Number U.S. EPA ID Number					
17c Signature of Alternate Facility (or Generator) Month Day Year					
18. Designated Facility Owner or Operator Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Mike Hinds				Signature Mike Hinds	Month Day Year 1 28 14



Richland County LF  
 1047 Highway Church Road  
 Elgin, SC, 29045  
 Ph: (803) 788-3054

Original  
 Ticket# 1286794

Customer Name EZPAYCREDITCARD EZPAY CREDIT Carrier CERT  
 Ticket Date 01/14/2014 Vehicle# D2  
 Payment Type Credit Card Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check# \*  
 Route Billing # 0000156  
 State Waste Code Gen EPA ID NR  
 Manifest 0  
 Destination  
 PO  
 Profile VA1052 (SOIL CONT W/PETROLEUM HYDROCARBONS)  
 Generator 126-KATAWBAENVIRONMENTAL KATAWBA ENVIRONMENTAL

Volume

	Time	Scale	ScaleMaster	Gross	54100 lb
In	01/14/2014 09:57:31	Scale2	Dwayne	Tare	24660 lb
Out	01/14/2014 12:01:27	Scale2	Dwayne	Net	29440 lb
				Tons	14.72

Comments

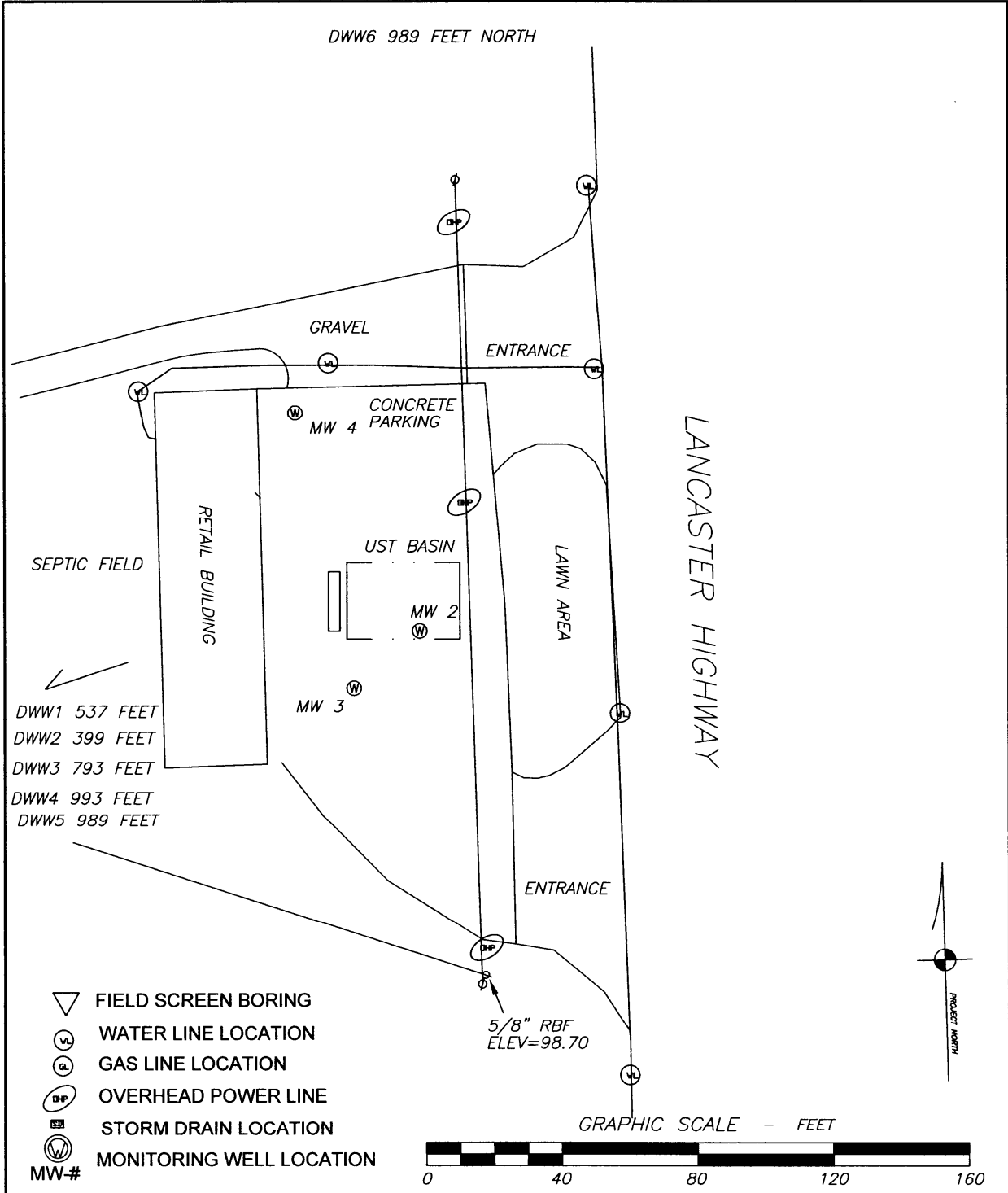
Product	LDX	Qty	UOM	Rate	Fee	Amount	Origin
1	Cont Soil Pet-Tons	100	14.72	Tons			12-CHESTER
2	FUEL-Fuel Surcharg	100	%				12-CHESTER
3	EVF-P-Standard Env	100	%				12-CHESTER
4	RCR-P-Regulatory C	100	%				12-CHESTER

Total Fees  
 Total Ticket

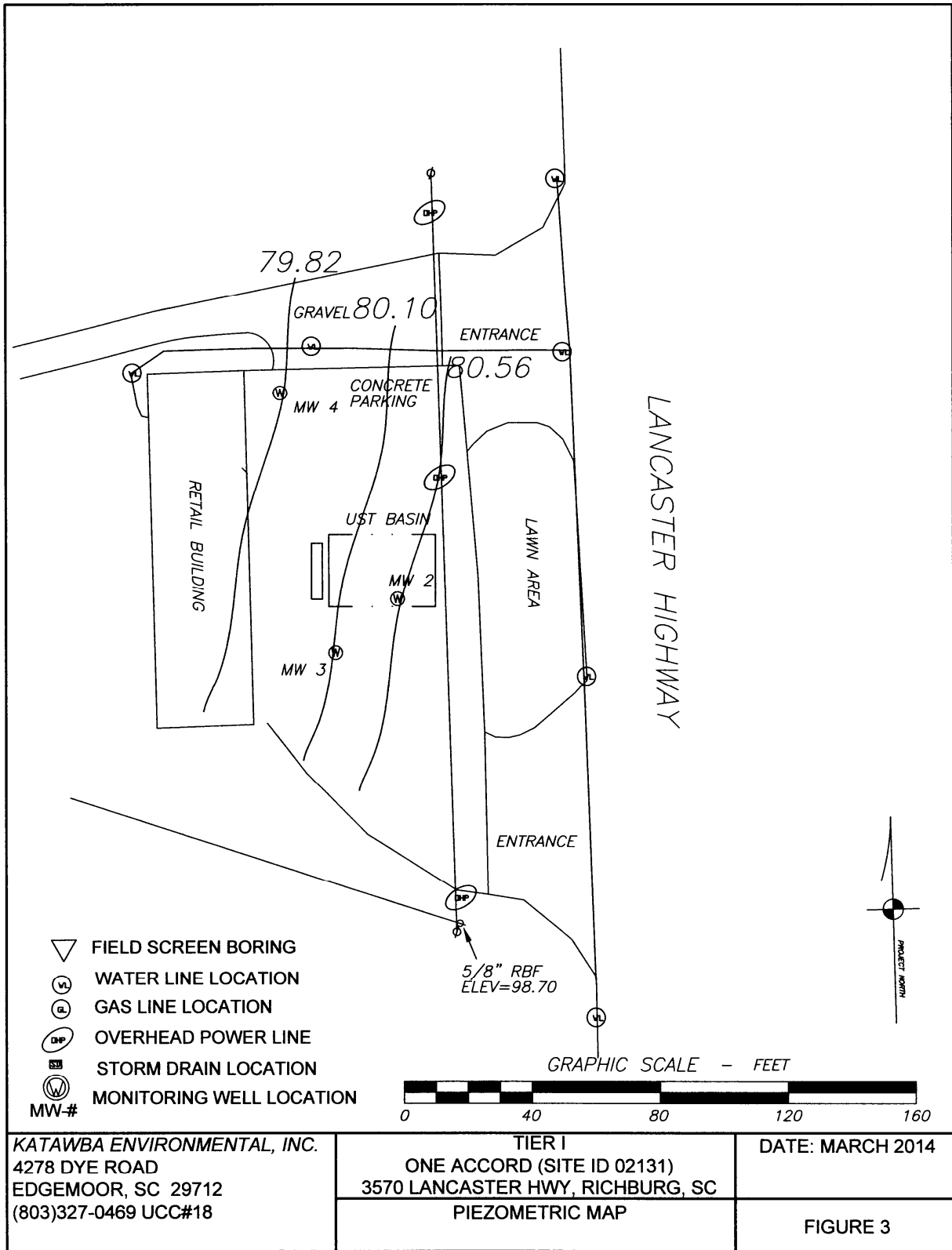
SIGNATURE *Kenneth A. [Signature]*

## **APPENDIX F**

### **Figures**



KATAWBA ENVIRONMENTAL, INC. 4278 DYE ROAD EDGEWOOD, SC 29712 (803)327-0469 UCC#18	TIER I ONE ACCORD (SITE ID 02131) 3570 LANCASTER HWY, RICHBURG, SC	DATE: MARCH 2014
	SITE MAP	FIGURE 2



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

TIER I  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 PIEZOMETRIC MAP

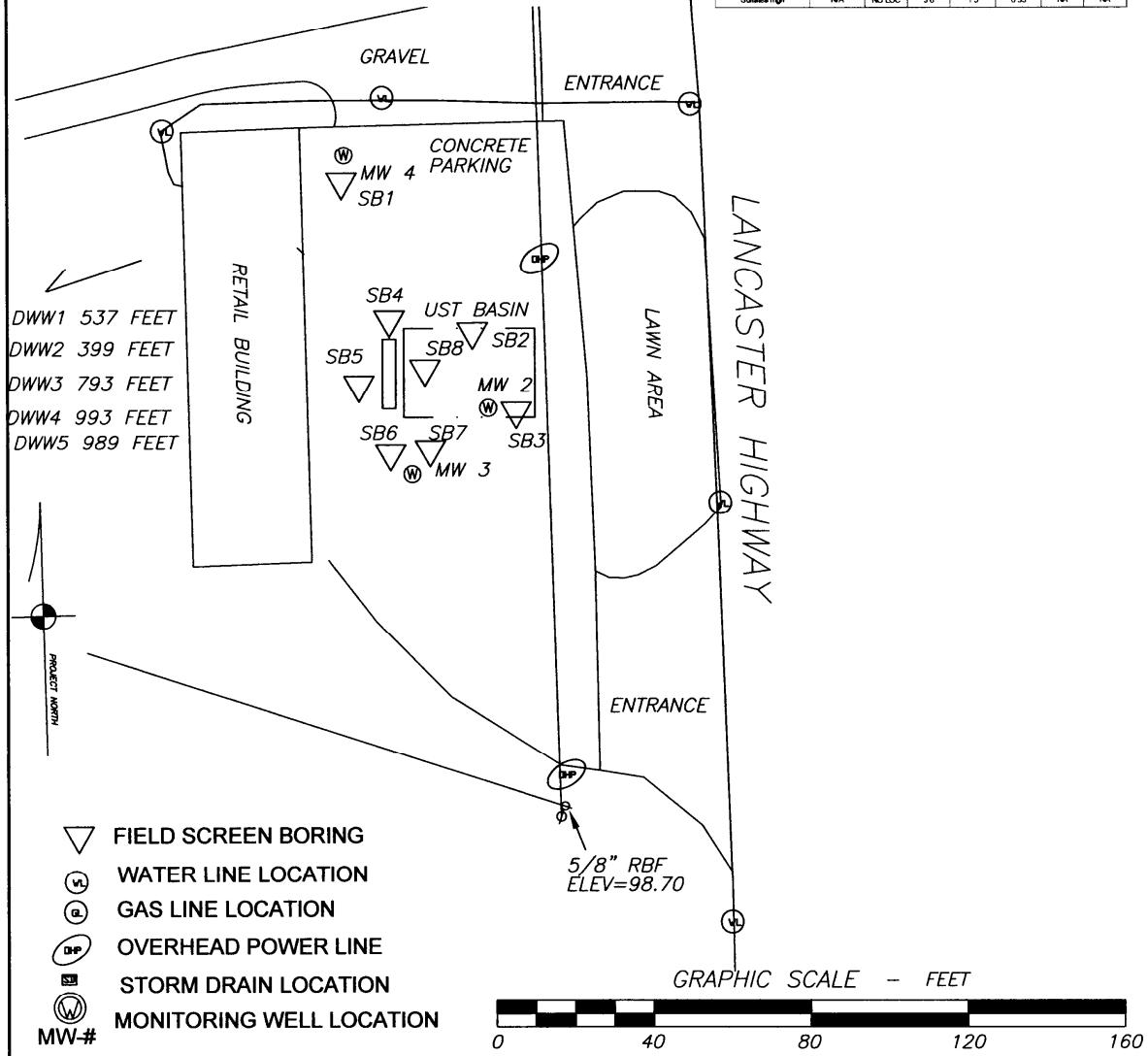
DATE: MARCH 2014

FIGURE 3

CoC	RBSL	SB-1	DUP	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	7	<6.8	<300	<6.2	<5.7	<5.8	<5.7	17	6.5	<6.3
Toluene	1460	<6.8	<300	<6.2	<5.7	<5.8	3.9	180	12	<6.3
Ethylbenzene	1160	<6.8	<300	<6.2	<5.7	<5.8	<5.7	95	<5.8	<6.3
Xylenes	1460	<6.8	<300	<6.2	<5.7	<5.8	8.5	780	32	<6.3
Naphthalene	36	<6.8	<300	<6.2	<5.7	<5.8	4.1	230/180	30	5.2
Benzo(a)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluorene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Phenanthrene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(k)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Chrysene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Dibenzo(a,h)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(a)pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
GRO(EPA 8015M) mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOC (background boring) mg/kg	NA	450	540	NA	NA	NA	NA	NA	NA	NA
Lead mg/kg	NA	12	13	2.0	19	17	19	6.2	14	31

DWW6 989 FEET NORTH

CoC	RBSL (mg/L)	MW-1	MW-2	MW-3	MW-4	DWW-1	DWW-2
Free Product Thickness	None	NO LOC	None	None	None	None	None
Benzene	5	NO LOC	13000	15000	<1	<1	<1
Toluene	1,000	NO LOC	44000	44000	<1	<1	<1
Ethylbenzene	700	NO LOC	4200	4600	<1	<1	<1
Xylenes	10,000	NO LOC	23000	23000	18	<1	<1
MTBE	40	NO LOC	3100	31000	0.56	<1	71
Naphthalene	25	NO LOC	<500/780	1400/800	0.90	<1	<1
1,2 DCA	NS	NO LOC	<500	<1000	1	<1	<1
Benzo(a)anthracene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzo(b)fluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzo(k)fluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Chrysene	10	NO LOC	<50	<50	<5.1	<5	<5
Dibenzo(a,h)anthracene	10	NO LOC	<50	<50	<5.1	<5	<5
Fluoranthene	NA	NO LOC	NA	NA	NA	NA	NA
Pyrene	15	NO LOC	95	7.2	9.7	NA	NA
Lead ug/l	0.05	NO LOC	<0.020	0.074	<0.020	NA	NA
Nitrate mg/l	NA	NO LOC	0.0089	0.074	0.40	NA	NA
Sulfate mg/l	NA	NO LOC	3.6	1.5	0.55	NA	NA



KATAWBA ENVIRONMENTAL, INC.  
4278 DYE ROAD  
EDGEMOOR, SC 29712  
(803)327-0469 UCC#18

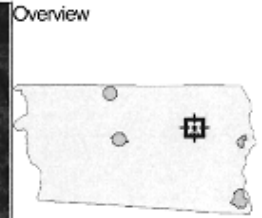
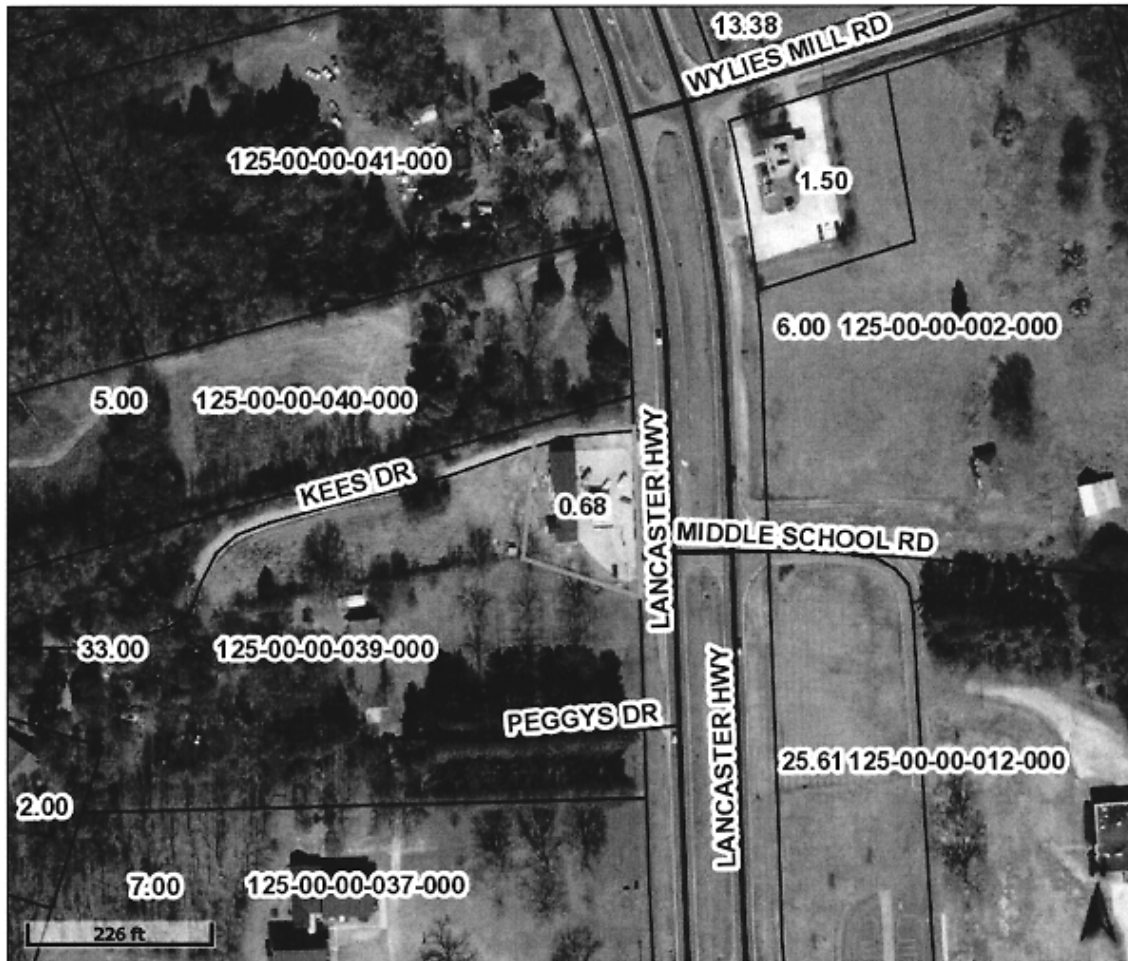
TIER I  
ONE ACCORD (SITE ID 02131)  
3570 LANCASTER HWY, RICHBURG, SC  
CONTAMINATION MAP

DATE: MARCH 2014  
FIGURE 4



## **APPENDIX G**

### **Tax Map Information**



- Legend**
- Roads**
- Secondary Road
  - SC Highway
- Other**
- Municipals
  - Parcels
  - County Boundary

<b>Parcel ID</b>	125-00-00-059-000	<b>Alternate ID</b>	n/a	<b>Owner Address</b>	HOUGH ANGELA D-SURVIVORSHIP HUGHES MELVIN E SR-SURVIVORSHI PO BOX 220 RICHBURG SC 29729
<b>Sec/Twp/Rng</b>	n/a	<b>Class</b>	EX		
<b>Property Address</b>		<b>Acreage</b>	n/a		
<b>District</b>	04				
<b>Brief Tax Description</b>	KEES SERVICE STATION (Note: Not to be used on legal documents)				

Last Data Upload: 3/13/2014 2:14:20 AM

ONE ACCORD TAX MAP

TM NUMBER	ADDRESS	OWNER	
125-00-00-059-000	3570 Lancaster Hwy	Angela and Melvin Hough	PO Box 220, Richburg, SC 29729
125-00-00-039-000	518 Peggys Drive	Marion Kee	518 Peggy's Drive, Richburg, SC 29729
125-00-00-020-000	3571 Lancaster Hwy	John Darnell Faust	3571 Lancaster Highway, Richburg, SC 29729
125-00-00-012-000	Lancaster Hwy	Chester County School Board	1 Hinton Street, Chester, SC 29706
125-00-00-040-000	Lancaster Hwy	James Gill Knox Life Estate	1719 Old Richburg Road, Chester, SC 29706

# **APPENDIX H**

## **Land Use**

## ZONING REGULATIONS

One Accord Site ID 021317 further identified by Chester County Tax ID 1250000059000 is zoned LC (Limited Commercial). A copy of the current zoning regulations were too lengthy for inclusion within this report. This designation does not prohibit the use of onsite drinking water wells or irrigation wells according to Chester County. The subject site is located in an area serviced by public water and sewer lines. No future development plans for the site include the installation of a drinking water or irrigation well.

**APPENDIX I**  
**QAPP CHECKLIST**

QUAPP Contractor Checklist

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?	X		
3	Is name, address, & phone number of current property owner provided?	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been detailed?	X		
16	Has the monitoring well installation and development dates been provided?	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the monitoring wells?	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?	X		
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?			X
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)	X		
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)	X		
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)	X		
37	Has the topographic map been provided with all required elements? (Figure 1)	X		
38	Has the site base map been provided with all required elements? (Figure 2)	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)			X
41	Have the geologic cross-sections been provided? (Figure 6)			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)	X		
47	Have the soil boring/field screening logs been provided? (Appendix D)	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			X
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided? (Appendix H)	X		
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		

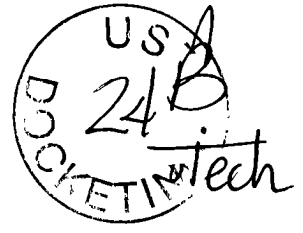


Bull



**UNDERGROUND STORAGE TANK MANAGEMENT DIVISION  
BUREAU OF LAND AND WASTE MANAGEMENT**

**2600 Bull Street  
Columbia, SC 29201  
Telephone (803) 898-2544  
Fax (803) 898-0673**



**MEMORANDUM**

**To:** Rob McDaniel, Manager  
Enforcement Section

**Date:** September 9, 2013

**Re:** Enforcement Referral

**Type:** Technical (Tier I Assessment)

encl. ID # 13-0357-UST  
Resolved 3-27-14

**UST Permit #:** 02131

**Facility Name:** One Accord Ministries

**Owner/Operator:** One Accord Ministries/Angela Hough (removed tanks)  
PO Box 220, Richburg, SC  
Phone # 803-804-0253

(when the release was reported) Fireball Service Station (Tank Owner)/Larry Terry (Operator)  
3570 Lancaster Hwy, Richburg, SC  
Phone # N/A

**Regulatory Citation:** Subpart F, Section 280.65 Investigation for soil and ground-water cleanup of the South Carolina Underground Storage Tank Regulations, R. 61-92

**Requested Action/Information:** Approved QAPP and directed the Tier I Assessment for the release reported on March 23, 2009. Assessment to be conducted with O/O's money (\$25,000.00 deductible)

**Additional Comments:** Directed to complete a Tier I Assessment. Report was due on June 15, 2013. Sent certified Notice of Alleged Violation letter on August 9, 2013. To date, the report has not been received.

Are there any Tank Ownership Issues? :      Yes   X   No If yes please explain.

Are there any other persons being dealt with other than the tank owner?      Yes   X   No

Referred By: Minda Brownlee Date: Sept 9, 2013

Section Manager's Approval: [Signature] Date: 09-13-13

Division Director's Approval: [Signature] Date: 9/17/13

cc: Technical File

**Report of Analysis**

**SC DHEC - UST Management**  
2600 Bull Street  
Columbia, SC 29201  
Attention: Debra Thoma



Project Name: **One Accord**  
Project Number: **UST Permit #02131/CA #47853**  
Lot Number: **PC28034**  
Date Completed: **03/31/2014**



  
**Kelly M. Maberry**  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.



# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

---

**Case Narrative**  
**SC DHEC - UST Management**  
**Lot Number: PC28034**

---

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

# SHEALY ENVIRONMENTAL SERVICES, INC.

---

## Sample Summary SC DHEC - UST Management Lot Number: PC28034

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	DW-1	Aqueous	03/28/2014 1410	03/28/2014
002	DW-1A	Aqueous	03/28/2014 1415	03/28/2014
003	Field Blk	Aqueous	03/28/2014 1400	03/28/2014
004	Trip Blk	Aqueous	03/28/2014	03/28/2014

(4 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Executive Summary SC DHEC - UST Management Lot Number: PC28034

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	DW-1	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	45		ug/L	5
002	DW-1A	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	44		ug/L	6

(2 detections)

Client: SC DHEC - UST Management

Laboratory ID: PC28034-001

Description: DW-1

Matrix: Aqueous

Date Sampled: 03/28/2014 1410

Date Received: 03/28/2014

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	5030B	8260B	1	03/29/2014 1404	ALL		43529				
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run			
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1			
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1			
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>45</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>			
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1			
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1			
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,2-Dichloroethane-d4		92	70-130								
Bromofluorobenzene		93	70-130								
Toluene-d8		101	70-130								

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: DW-1A

Matrix: Aqueous

Date Sampled: 03/28/2014 1415

Date Received: 03/28/2014

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/29/2014 1426	ALL		43529

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>44</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		101	70-130

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: Field Blk

Matrix: Aqueous

Date Sampled: 03/28/2014 1400

Date Received: 03/28/2014

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/29/2014 1320	ALL		43529

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		102	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: Trip Blk

Matrix: Aqueous

Date Sampled: 03/28/2014

Date Received: 03/28/2014

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	5030B	8260B	1	03/29/2014 1341	ALL		43529				
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run			
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1			
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1			
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1			
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1			
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1			
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,2-Dichloroethane-d4		93	70-130								
Bromofluorobenzene		94	70-130								
Toluene-d8		101	70-130								

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

## QC Summary

## Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ43529-001

Matrix: Aqueous

Batch: 43529

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Result	Q	DII	PQL	MDL	Units	Analysis Date
Benzene	ND		1	1.0	0.13	ug/L	03/29/2014 1128
Ethylbenzene	ND		1	1.0	0.33	ug/L	03/29/2014 1128
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	03/29/2014 1128
Naphthalene	ND		1	1.0	0.40	ug/L	03/29/2014 1128
Toluene	ND		1	1.0	0.33	ug/L	03/29/2014 1128
Xylenes (total)	ND		1	1.0	0.33	ug/L	03/29/2014 1128
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		95	70-130				
1,2-Dichloroethane-d4		96	70-130				
Toluene-d8		99	70-130				

## Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ43529-002

Matrix: Aqueous

Batch: 43529

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	DII	% Rec	% Rec Limit	Analysis Date
Benzene	50	54		1	107	70-130	03/29/2014 1001
Ethylbenzene	50	52		1	104	70-130	03/29/2014 1001
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	03/29/2014 1001
Naphthalene	50	54		1	108	70-130	03/29/2014 1001
Toluene	50	52		1	104	70-130	03/29/2014 1001
Xylenes (total)	100	110		1	106	70-130	03/29/2014 1001
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		93	70-130				
1,2-Dichloroethane-d4		93	70-130				
Toluene-d8		100	70-130				

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

Shealy Environmental Services, Inc.

106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

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Level 1 Report v2.1

## Volatile Organic Compounds by GC/MS - LCSD

Sample ID: PQ43529-003

Matrix: Aqueous

Batch: 43529

Prep Method: 5030B

Analytical Method: 8260B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Benzene	50	50		1	100	6.9	70-130	20	03/29/2014 1023
Ethylbenzene	50	50		1	100	4.3	70-130	20	03/29/2014 1023
Methyl tertiary butyl ether (MTBE)	50	46		1	91	7.1	70-130	20	03/29/2014 1023
Naphthalene	50	58		1	115	6.8	70-130	20	03/29/2014 1023
Toluene	50	51		1	101	2.8	70-130	20	03/29/2014 1023
Xylenes (total)	100	100		1	101	4.5	70-130	20	03/29/2014 1023
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		91	70-130						
1,2-Dichloroethane-d4		89	70-130						
Toluene-d8		100	70-130						

PQL = Practical quantitation limit

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**



Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 28073

Client: SCDEEC / 1st Div., 2600 Bull St., Columbia, SC 29201
Project Name: One Accord
Project Number: 02131
P.O. Number: 47853
Date: 3/28/14
Sample ID / Description: DW-1, DW-1A, Field BIK, Trip BIK
Time: 1410, 1415, 1400
Matrix: G, V, -
Analysis: BTEXNM
QC Requirements: 1. Received by, 2. Received by, 3. Received by, 4. Laboratory Received by
Date: 3/28/14, 3/28/14
Time: 16:00, 14:00
Receipt Temp: 5.5 °C

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

### Sample Receipt Checklist (SRC)

Client: SCDHEC Cooler Inspected by/date: ECP/28/14 Lot #: PC28034

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Airborne Exp <input type="checkbox"/> Other		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	1. Were custody seals present on the cooler?
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
2. If custody seals were present, were they intact and unbroken?		
Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt: <u>15615-8°C</u> / / °C / / °C / / °C		
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: #3 IR Gun Correction Factor: <u>+0.1</u> °C		
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other: _____ (For coolers received via commercial courier, PMs are to be notified immediately.)		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
4. Is the commercial courier's packing slip attached to this form?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
5. Were proper custody procedures (relinquished/received) followed?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
5a Were samples relinquished by client to commercial courier?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
6. Were sample IDs listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
7. Were sample IDs listed on all sample containers?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
8. Was collection date & time listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
9. Was collection date & time listed on all sample containers?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
10. Did all container label information (ID, date, time) agree with the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
11. Were tests to be performed listed on the COC?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
12. Did all samples arrive in the proper containers for each test?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
13. Did all containers arrive in good condition (unbroken, lids on, etc.)?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
14. Was adequate sample volume available?		
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
15. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
16. Were any samples containers missing?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
17. Were there any excess samples not listed on COC?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	NA <input type="checkbox"/>
18. Were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any VOA vials?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
19. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
20. Were all cyanide and/or sulfide samples received at a pH >12?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
21. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
22. Were collection temperatures documented on the COC for NC samples?		
Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
23. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
24. Was the quote number used taken from the container label?		
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH) using SR # _____		
Sample(s) _____ were received with bubbles >6 mm in diameter.		
Sample(s) _____ were received with TRC >0.2 mg/L (If #21 is No)		
SC Drinking Water Project Sample(s) pH verified to be >2 by _____ Date: _____		
Sample(s) _____ were not received at a pH of >2 and were adjusted accordingly using SR# _____		
Sample labels applied by: <u>ECP</u> Verified by: <u>[Signature]</u> Date: <u>3/28/14</u>		

Comments:  
 - 801 labeled by client on vials as DW-2 collected @ 1400  
 - 803 " " " as collected @ 1410

Tech.



### Site-Specific Work Plan for Approved ACQAP Underground Storage Tank Management Division

To: Minda Homosky (SCDHEC Project Manager)  
From: Bob Faller (Contractor Project Manager)  
Contractor: \_\_\_\_\_ UST Contractor Certification Number: \_\_\_\_\_

Facility Name: One Accord Ministries UST Permit #: 02131  
Facility Address: 3570 Lancaster Hwy, Richburg, SC  
Responsible Party: One Accord Ministries Phone: 803-804-0253  
RP Address: PO Box 220, Richburg, SC 29729-0220  
Property Owner (if different): \_\_\_\_\_  
Property Owner Address: \_\_\_\_\_  
Current Use of Property: Church

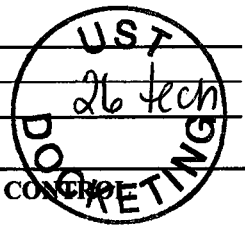
**Scope of Work** (Please check all that apply)  
 IGWA       Tier II       Groundwater Sampling       GAC  
 Tier I       Monitoring Well Installation       Other sample water supply well

**Analyses** (Please check all that apply)  
Groundwater/Surface Water:  
 BTEXNMDCA (8260B)       Lead       BOD       Methane  
 Oxygenates (8260B)       8 RCRA Metals       Nitrate       Ethanol  
 EDB (8011)       TPH       Sulfate       Dissolved Iron  
 PAH (8270D)       pH       Other \_\_\_\_\_  
Soil:  
 BTEXN       8 RCRA Metals       TPH-DRO (3550B/8015B)       Grain Size  
 PAH       Oil & Grease (9071)       TPH-GRO (5030B/8015B)       TOC  
Air:  
 BTEXN

**Sample Collection** (Estimate the number of samples of each matrix that are expected to be collected.)  
\_\_\_\_\_ Soil      1 Water Supply Wells      \_\_\_\_\_ Air      1 Field Blank  
\_\_\_\_\_ Monitoring Wells      \_\_\_\_\_ Surface Water      1 Duplicate      1 Trip Blank

**Field Screening Methodology**  
Estimate number and total completed depth for each point, and include their proposed locations on the attached map.  
# of shallow points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
# of deep points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
Field Screening Methodology: \_\_\_\_\_

**Permanent Monitoring Wells**  
Estimate number and total completed depth for each well, and include their proposed locations on the attached map.  
# of shallow wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
# of deep wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
# of recovery wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
Monitoring Well development method (consistent with SOP): \_\_\_\_\_  
Comments, if warranted:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



UST Permit #: 02131 Facility Name: One Accord Ministries

**Implementation Schedule** (Number of calendar days from approval)  
Field Work Start-Up: March 28, 2014 Field Work Completion: March 28, 2014  
Report Submittal: April 3, 2014 # of Copies Provided to Property Owners: 1

**Aquifer Characterization**  
Pump Test:  Slug Test:  (Check one and provide explanation below for choice)  
\_\_\_\_\_  
\_\_\_\_\_

**Investigation Derived Waste Disposal**  
Soil: \_\_\_\_\_ Tons Purge Water: \_\_\_\_\_ Gallons  
Drilling Fluids: \_\_\_\_\_ Gallons Free-Phase Product: \_\_\_\_\_ Gallons

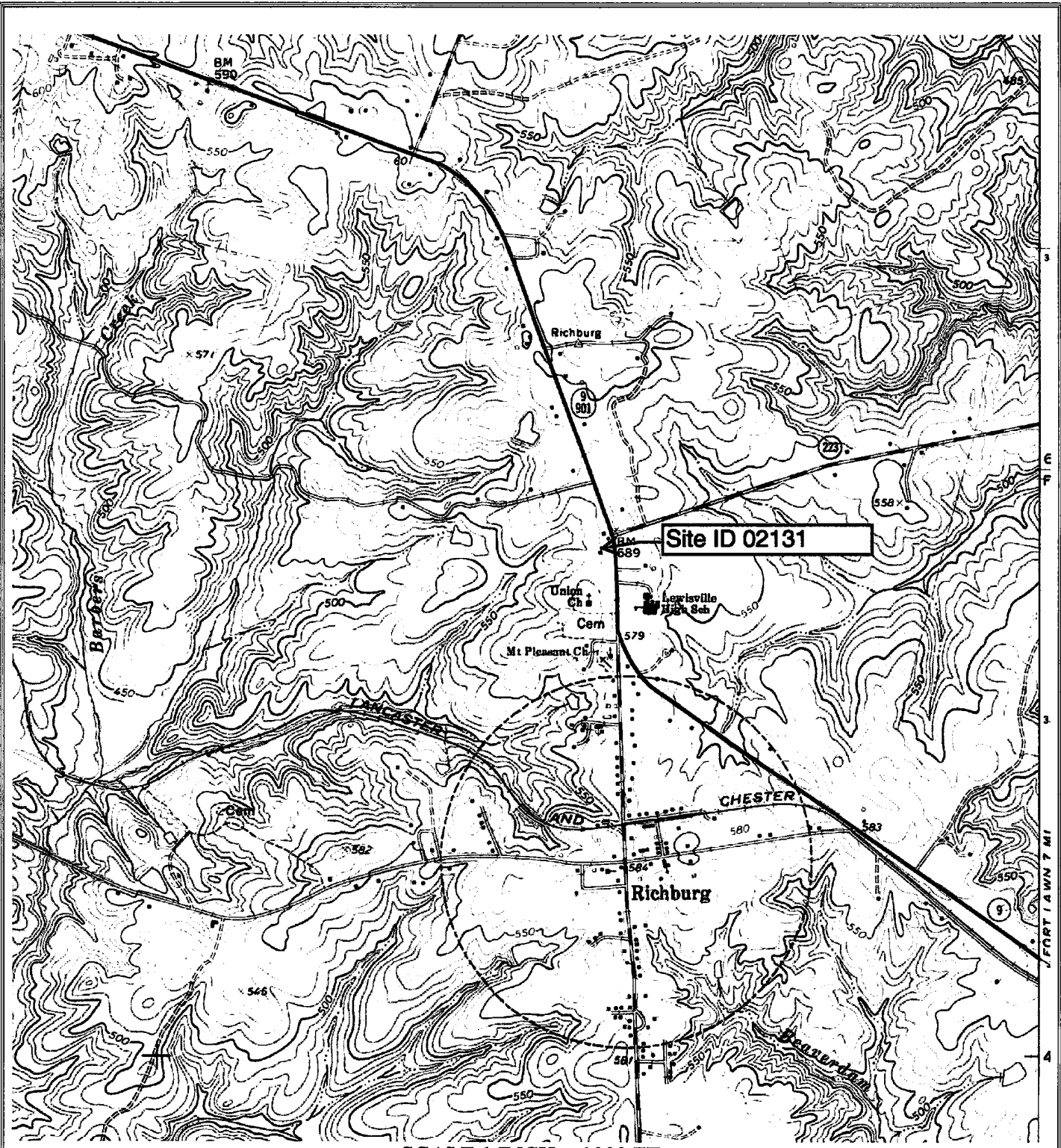
**Additional Details For This Scope of Work**  
For example, list wells to be sampled, wells to be abandoned/repared, well pads/bolts/caps to replace, details of AFVR event, etc.  
Water supply well DWW-2 to be sampled to confirm MTBE concentration from previous sampling event.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**  
Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.  
Name of Laboratory: Shealy Environmental Services  
SCDHEC Certification Number: 32010  
Name of Laboratory Director: Dan Wright  
  
\_\_\_\_ Well Driller as indicated in ACQAO? (Yes/No) If no, indicate driller information below.  
Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_  
  
\_\_\_\_ Other variations from ACQAP. Please describe below.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Attachments**

1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:  
North Arrow Proposed monitoring well locations  
Location of property lines Legend with facility name and address, UST permit number, and bar scale  
Location of buildings Streets or highways (indicate names and numbers)  
Previous soil sampling locations Location of all present and former ASTs and USTs  
Previous monitoring well locations Location of all potential receptors  
Proposed soil boring locations
3. Assessment Component Cost Agreement, SCDHEC Form D-3664





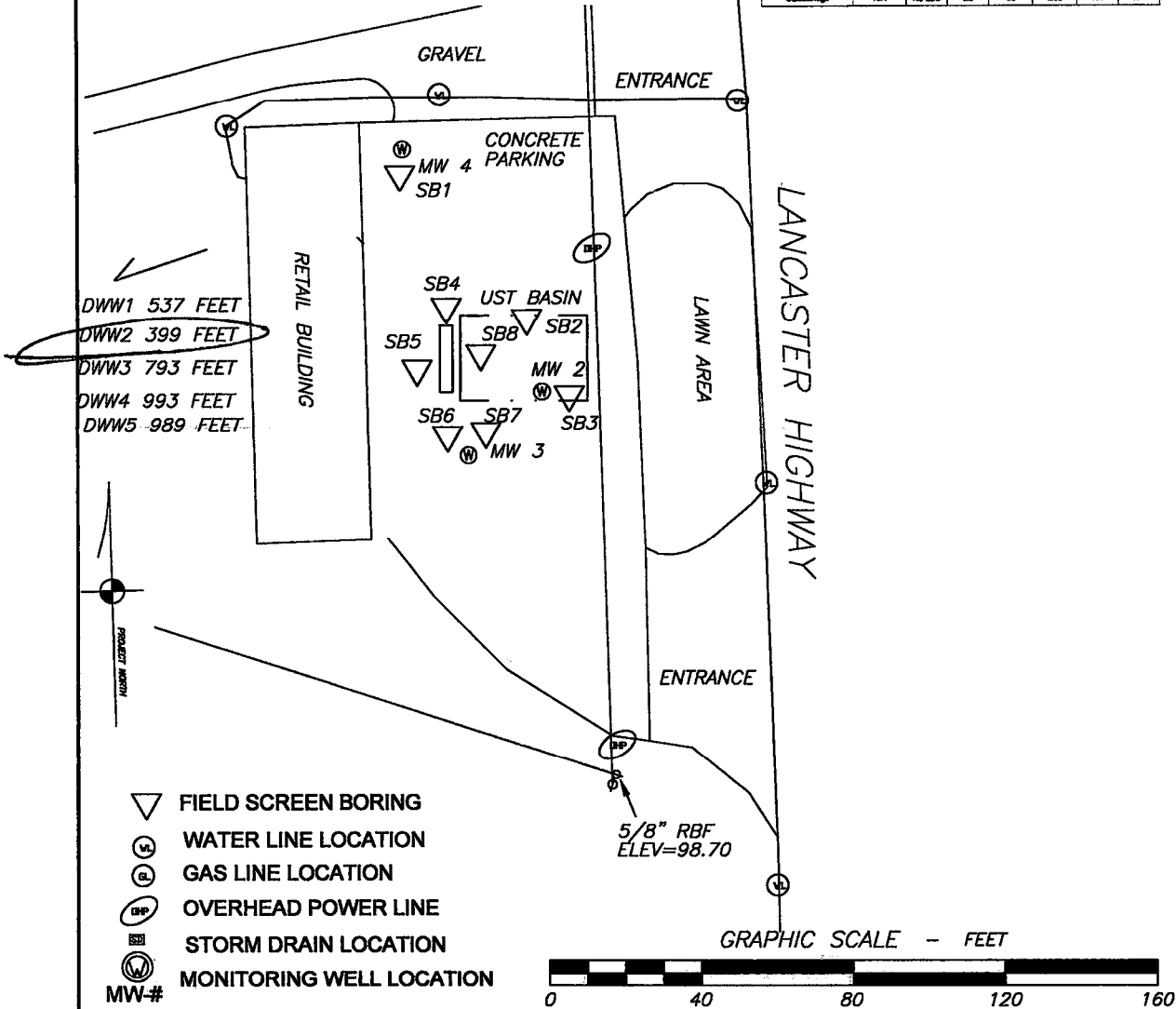
**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

TIER I  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HIGHWAY  
 RICHBURG, SOUTH CAROLINA  
 FIGURE 1- SITE MAP

CoC	RESL	SB-1	DUP	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	7	<8.9	<300	<8.2	<8.7	<8.9	<8.9	17	8.5	<8.3
Toluene	1450	<8.9	<300	<8.2	<8.7	<8.9	3.9	180	12	<8.3
Ethylbenzene	1180	<8.9	<300	<8.2	<8.7	<8.9	<5.7	85	<5.8	<8.3
Xylenes	14500	<8.9	<300	<8.2	<8.7	<8.9	8.5	780	32	<8.3
Naphthalene	39	<8.9	<300	<8.2	<8.7	<8.9	4.1	230180	30	5.1
Benzofluoranthene	65	<410	<400	<400	<410	<390	<400	<420	<410	<390
Fluorene	NA	<410	<400	<400	<410	<390	<400	<420	<410	<390
Phenanthrene	NA	<410	<400	<400	<410	<390	<400	<420	<410	<390
Benzobenzofluoranthene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Benzofluoranthene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Chrysene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Dibenzofluoranthene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Fluoranthene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Pyrene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Benzo (g) pyrene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
Benzo (b) fluoranthene	68	<410	<400	<400	<410	<390	<400	<420	<410	<390
GRO (EPA 816M) mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOC (Background boring) mg/kg	NA	450	540	NA	NA	NA	NA	NA	NA	NA
Lead mg/kg	NA	12	13	2.0	19	17	18	8.2	14	31

DWW6 989 FEET NORTH

CoC	RESL (mg/L)	MW-1	MW-2	MW-3	MW-4	DWW-1	DWW-2
Free Product Thickness	None	NO LOC	None	None	None	None	None
Benzene	5	NO LOC	1200	1500	<1	<1	<1
Toluene	1,000	NO LOC	4400	4400	1	<1	<1
Ethylbenzene	700	NO LOC	4200	4200	<1	<1	<1
Xylenes	10,000	NO LOC	2200	2200	18	<1	<1
NITB	40	NO LOC	3700	3700	0.88	<1	71
Naphthalene	26	NO LOC	<500/50	140000	0.90	<1	<1
1,2-DCB	16	NO LOC	<50	<100	1	<1	<1
Benzofluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzofluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzofluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Chrysene	10	NO LOC	<50	<50	<5.1	<5	<5
Dibenzofluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Perme Iron mg/l	NA	NA	NA	NA	NA	NA	NA
Lead mg/l	15	NO LOC	16	7.2	57	NA	NA
ECB mg/l	0.05	NO LOC	<0.020	0.024	<0.020	NA	NA
Nitrates mg/l	NA	NO LOC	0.0069	0.014	0.40	NA	NA
Sulfates mg/l	NA	NO LOC	3.6	1.8	0.58	NA	NA



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

TIER I  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 CONTAMINATION MAP

DATE: MARCH 2014

FIGURE 4

3570 Lancaster Hwy, Richburg, SC

516-524 Peggys Dr  
Richburg, SC 29729  
34.726737, -81.019382



Street View



Union ARP Church



Lancaster Highway / State Road...



South Carolina 9



Lancaster Highway / State Road...



South Carolina 9



South Carolina



# FAX COVER SHEET



P.O. Box 550 • 155 Wylie Street • Chester, SC 29706  
Tel: (803) 385-5123  
Fax: (803) 385-2066



**To:**

Alex Amos

**From:**

MARY Nell

**Fax:**

**Pages:**

**Phone:**

**Date:** 4-15-14

**Re:**

**Time:**

**Cc:**

- Urgent**
- For Review**
- Please Comment**
- Please Reply**

**Comments:**

Signed

IF YOU DO NOT RECEIVE ALL PAGES PLEASE CONTACT US IMMEDIATELY AT 803-385-5123.

# Chester Metropolitan District (803) 385 512

## Water Tap Application

Chester Metropolitan District  
P. O. Box 550  
CHESTER, S. C. 29706

Date \_\_\_\_\_, 20\_\_\_\_

Name of Applicant KATAWBA ENVIRONMENTAL  
ATTN: Alex Amos

Applicant's Address \_\_\_\_\_

Name & Address of Person Responsible for Bill \_\_\_\_\_

Location of Tap 529 Peggy's Dr, Richburg, SC 29970

Meter Size Applied For 3/4 "

Residential  Commercial \_\_\_\_\_ Business Type \_\_\_\_\_

Currently have Water Service \_\_\_\_\_ Sewer Service \_\_\_\_\_

Water Tap Fee Paid \$ 1,136.00 Date Paid \_\_\_\_\_, 20\_\_\_\_ Receipt # \_\_\_\_\_

Svc. Deposit Paid \$ 35.00 Date Paid \_\_\_\_\_, 20\_\_\_\_ Receipt # \_\_\_\_\_

Date Tap Completed \_\_\_\_\_, 20\_\_\_\_ Crew # \_\_\_\_\_

I agree to accept a refund or pay for an extension if unusual circumstances exist.

Mary Nell Mokegin  
Clerk Signature

\_\_\_\_\_  
Applicant's Signature

Sketch ATTN: Alex Ph 803-417 4568 FAX 1-843 225 1360

# Chester Metropolitan District (803) 385 5123

## Water Tap Application Chester Metropolitan District

P. O. Box 550  
CHESTER, S. C. 29706

Date April 15, 2014

Name of Applicant KATAWBA ENVIRONMENTAL  
ATTN: ALEX AMOS

Applicant's Address \_\_\_\_\_

Name & Address of Person Responsible for Bill \_\_\_\_\_

Location of Tap 510 Peggy's DR, Richburg, SC 29706

Meter Size Applied For 3/4"

Residential  Commercial \_\_\_\_\_ Business Type \_\_\_\_\_

Currently have Water Service No Sewer Service \_\_\_\_\_

Water Tap Fee Paid \$ 1,136.00 Date Paid \_\_\_\_\_, 20\_\_\_\_ Receipt # \_\_\_\_\_

Svc. Deposit Paid \$ 35.00 Date Paid \_\_\_\_\_, 20\_\_\_\_ Receipt # \_\_\_\_\_

Date Tap Completed \_\_\_\_\_, 20\_\_\_\_ Crew # \_\_\_\_\_

I agree to accept a refund or pay for an extension if unusual circumstances exist.

May Nell McKenzie  
Clerk Signature

\_\_\_\_\_  
Applicant's Signature

Sketch ATTN: Alex - Ph 803-417-4568 FAX 1(843) 225-1360

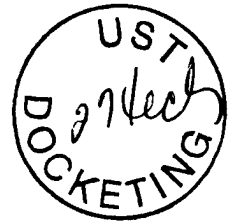


Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

KEVIN MORRISON  
MORRISON WELL DRILLING  
PO BOX 130  
RICHBURG SC 29729

JUN 10 2014



Re: Reimbursement for Plumbing Connection to Chester Metropolitan District  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131; CA #48282  
Kee Residence Located at 510 Peggy's Drive, Richburg, SC  
Kee Residence Located at 529 Peggy's Drive, Richburg, SC  
Chester County

Dear Mr. Morrison:

The Underground Storage Tank (UST) Management Division directed One Accord Ministries' contractor, Katawba Environmental, Inc, to conduct a Tier I Assessment at One Accord Ministries (formerly Fireball Service Station.) Laboratory results reported concentrations of MTBE above Risk-Based Screening Levels (RBSLs) in the water sample from the Kee's water supply well.

To provide safe drinking water, the UST Management Division will connect the Kee residences to municipal water. In order to be reimbursed for costs associated with connection from the water main tap to the Kee residences, please complete, sign, and return the attached invoice form. The highlighted areas on the first page must be completed in blue ink.

Thank you for your continued cooperation in this process. On all correspondence regarding this site, please reference UST permit number 02131. Please feel free to contact me at (803) 898-7542, fax me at (803) 898-0673 or e-mail me at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov) if you have questions or need additional information. If you have a question about the billing process, please contact Larry Sorrell at (803) 898-0618.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
UST Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement  
Assessment Component Invoice Form

cc: Mr. Kee, 510 Peggy's Drive, Richburg, SC 29729 (w/o enc)  
Mr. Kee, 529 Peggy's Drive, Richburg, SC 29729 (w/o enc)  
Technical File (w/o enc)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

TODD STEPHENSON  
CHESTER METROPOLITAN DISTRICT  
PO BOX 550  
CHESTER SC 29706

**JUN 12 2014**

Re: Reimbursement for Fees Paid to Chester Metropolitan District  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit # 02131; CA # 48274  
Kee Residence Located at 510 Peggy's Drive, Richburg, SC  
Kee Residence Located at 529 Peggy's Drive, Richburg, SC  
Chester County

Dear Mr. Stephenson:

The Underground Storage Tank (UST) Management Division directed Angela Hough, One Accord Ministries' contractor, Katawba Environmental, Incorporated, to conduct a Tier I Assessment at One Accord Ministries, former Fireball Service Station. The water supply well located at 510 Peggy's Drive was sampled and the laboratory results reported concentrations of MTBE above Risk-Based Screening Levels (RBSLs) in the water sample from the Kee's water supply well.

To provide safe drinking water, the UST Management Division will connect the Kee residences to municipal water. In order to be reimbursed for costs associated with this connection, please complete, sign, and return the attached invoice form. The highlighted areas on the first page must be completed in blue ink.

Thank you for your continued cooperation in this process. On all correspondence regarding this site, please reference UST permit number 02131. Please feel free to contact me at (803) 898-7542, fax me at (803) 898-0673 or e-mail me at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov) if you have questions or need additional information. If you have question about the billing process, please contact Larry Sorrell at (803) 898-0618.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement  
Assessment Component Invoice Form

cc: Mr. Kee, 510 Peggy's Drive, Richburg, SC 29729 (without enc.)  
Mr. Kee, 529 Peggy's Drive, Richburg, SC 29729 (without enc.)  
Technical File (without enc.)





**ASSESSMENT COMPONENT INVOICE**  
 SOUTH CAROLINA  
 Department of Health and Environmental Control (DHEC)  
 Underground Storage Tank Program

**ASSESSMENT COMPONENT INVOICE**

\*\*\*\*See Back of form for instruction \*\*\*\*

UST PERMIT # UST # 02131 COUNTY Chester  
 FACILITY NAME One Accord Ministries  
 STREET ADDRESS 3570 Lancaster Hwy, Richburg, SC  
 INVOICE # \_\_\_\_\_ COST AGREEMENT # 48274

For work performed during (specify time period) \_\_\_\_\_ to \_\_\_\_\_

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible obtaining this information, and any other information I may be aware of, I believe that the submitted information is true, accurate, and complete. I further agree, in accordance with any DHEC DHEC demand letter, to promptly repay any overpayment received.

**\*\*Please fill out BOTH the Contractor and Responsible Party Sections (original signatures). Also indicate the Payee by placing a check in the box next to the Contractor or Responsible Party.\*\***

Payee  
 CONTRACTOR

Name (Type or Print) \_\_\_\_\_

Company \_\_\_\_\_ Telephone Number \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Signature (please use non-black ink) \_\_\_\_\_ Title \_\_\_\_\_ Date Signed \_\_\_\_\_

Payee  
 OWNER OR OPERATOR/RESPONSIBLE PARTY Please attach copies of Cancelled Checks (front & back)

Name (type or Print) \_\_\_\_\_

Company \_\_\_\_\_ Telephone Number \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Signature (please use non-black ink) \_\_\_\_\_ Title \_\_\_\_\_ Date Signed \_\_\_\_\_

**If payment is to be sent to an address other than above, please indicate below:**

Name of Individual or Company (please print) \_\_\_\_\_ Signature (please use non-black ink) \_\_\_\_\_

Address (please print) \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

INVOICE AMOUNT: \$ \_\_\_\_\_

LESS SUBMITTED/PAID \_\_\_\_\_

WELL DRILLING COSTS: \$ \_\_\_\_\_

AMOUNT REQUESTED: \$ \_\_\_\_\_



Amount Requested is for Assessment activities as Defined in the SCDHEC Letter

INVOICE      INVOICE      INVOICE      INVOICE

# Instructions

Invoice Number	This is the number assigned by the Contractor for the invoice.
Cost Agreement # (CA#)	This is the authorization number assigned by the Department. This number may be found on the letter from the Department approving the scope of work
Contractor	This box is to be checked if payment is to be made to the Contractor
Owner or Operator/ Responsible Party	This box is to be checked if payment is to be made to the owner/operator of the underground storage tanks or their authorized agent.
Cancelled Checks	Copies of the front and back of the cancelled checks must be submitted to the Department if the Owner/Operator is the payee or if the cost is to be applied to a SUPERB deductible. The cancelled checks should be attached to the invoice form. If you have not received the cancelled check from your banking institution, you may request the Contractor to provide a notarized statement certifying the amount of payment that has been received
Amount Requested	This is the amount of financial compensation requested for the services performed. The amount requested may not exceed the amount approved by the Department for the tasks performed or the amount billed by the primary Contractor, whichever is less
W-9/Tax ID	Please submit a W-9, Tax Identification Number if one is not on file with DHEC. DHEC requires a W-9 before payment may be issued to a Contractor or Well Driller.
Base Price + amount from the Assessment Component Invoice	The base price is the standardized amount allowed for the Initial Ground-Water Assessment. Please attach the Assessment Component Invoice for any footage over 25 feet and sampling of any potential receptor (e g potable/irrigation wells, streams )
Total Amount Requested = base amount \$ _____ + \$ _____ Component Invoice amount	



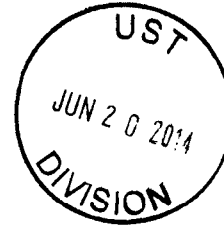
# Katawba Environmental, Inc.

3/22/2014

*W. Leode*  
Ms. Beverly McLeod  
SCDHEC  
Enforcement Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708



*Original received  
March 26, 2014*



*COPY Received  
June 20, 2014*

**RE: TIER I  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**



Dear Ms. McLeod:

Katawba Environmental, Inc. (Katawba) has prepared this Groundwater Monitoring Report for the above-referenced facility for your review. This Tier I was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated April 15, 2013.

At the time sampling was conducted DWW-2 appeared to be impacted by MTBE at 71 ug/l. Further assessment may be warranted to define the vertical and horizontal extent of the petroleum hydrocarbon contaminant plume. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,

~~KATAWBA ENVIRONMENTAL, INC.~~

*Alex W. Amos*  
Alex W. Amos, PG  
Principal

Cc: One Accord Ministries, PO Box 220, Richburg, SC 29729.



# TIER I ASSESSMENT

**One Accord  
3570 Lancaster Highway  
Richburg, SC**

**Site ID# 02131**

This report has been prepared by:

Alex W. Amos, PG

This report has been reviewed by:

Name Alex W. Amos, PG 2434 March 22, 2014  
Registered Professional Registration # Date

Signature 

REGISTERED  
PROFESSIONAL SEAL

SCDHEC Certification # 18



## **TIER I ASSESSMENT - REPORT OF FINDINGS**

### **I. INTRODUCTION**

#### **A. Owner/Operator Information**

Name One Accord Ministries

Address PO Box 220, Richburg, South Carolina, 29729

Telephone (803) 804-0253

#### **B. Property Owner Information**

Name (if different from above) Angela D and Melvin E Hough

Address PO Box 220, Richburg, South Carolina, 29729

Telephone Number (include area code) (803) 804-0253

#### **C. Contractor Information**

Name Katawba Environmental, Inc. UCC #18

Address 4278 Dye Road, Edgemoor, SC 29712

Telephone Number (include area code) (803) 327-0469

#### **D. Site Information**

Address 3570 Lancaster Highway, Richburg, South Carolina 29729 The site is a former garage and service station that no longer retails petroleum products. Currently the site is utilized for a Christian Ministries fellowship building. Chester County identifies the subject site as TM 125-00-00-059-000.

Description of adjacent land use (commercial, residential, rural, etc.) Include documentation (e.g. zoning regulations) as appropriate. The site is currently zoned commercial. The surrounding area is zoned commercial and residential with the potential for future commercial development. There is public water available to the subject site and surrounding sites. There however are not any laws against the installation of drinking water wells.

Predicted future land use (include site and adjacent area) The future use of the site and adjacent sites are to remain constant in the immediate future.

#### **E. Site History**

Date Release Reported to SCDHEC March 23, 2009.

Estimated Quantity of Product Released Unknown

Cause of Release Overfill and spill over operating history of system

UST #	Product (gallons)	Date Installed	Currently In Use (Yes or No)	If not in use, Date Removed
1	4000 Gas	UNK	No	6/25/12
2	3000 Gas	UNK	No	6/25/12
3	3000 Gas	UNK	No	6/25/12
4	3000 Gas	UNK	No	6/25/12
5	2000 Diesel	UNK	No	6/25/12

Other Releases at this site? Yes \_\_\_\_\_ No X

If yes, Date Release Reported to SCDHEC \_\_\_\_\_

Status of Release Assessment

No Further Action Date \_\_\_\_\_

**II. SITE CHARACTERISTICS**

**A. Site Geography**

Describe the topography of the site and surrounding area (slope, vegetation, bodies of water, major land features, etc.) Site is in an area of rolling topographic relief. The site is occupied by one structure that measures approximately 3600 square feet. The remaining land mass associated with the site is covered with pavement. The site slopes to the south with the general vicinity topography slopping to the west.

Mean Elevation of Site 585 Ft MSL

**B. Exposure Analysis**

Describe all potential receptors and preferential pathways within a 1000-foot radius of the site.

Description of Receptor	Distance/Direction from Site
DWW1	537 FEET SW
DWW2	399 FEET SW
DWW3	793 FEET SW
DWW4	993 FEET SW
DWW5	967 FEET SW
DWW6	989 FEET SW

Provide any additional comments necessary to complete the exposure analysis.

**C. Utilities Survey**

List the utilities on-site, and adjacent to the site within a 250-foot radius, that could serve as exposure points or a preferential pathway.

Utility	On-Site or Distance/Direction from Site	Depth to Utility
Water Line	Onsite	36 IN
Septic Tank	Onsite	36 IN

Additional Comments: \_\_\_\_\_

---

**D. Site Geology**

Provide a brief description of the regional geology and hydrogeology: The subject site is located in the Piedmont Region of South Carolina. Geology in this region is characterized as clayey silty sand overlying saprolitic, granite formations. Groundwater in this region varies greatly depending on elevation.

---

Provide a brief description of the site-specific geology and stratigraphy The subject site is located in the Piedmont Region of South Carolina. Geology at the site consisted of reddish orange clayey to silty sand. The piezometric surface at the site was located at approximately 18 feet below grade at the site. The surficial aquifer was found in unconfined conditions.

---

**E. Soil Boring Data**

Drilling Dates 12/12/13

---

**Provide a brief justification of the location of the soil borings.**

SB-1 Background area boring

SB-2 UST basin boring

SB-3 UST basin boring

SB-4 Product line boring

SB-5 Product line boring

SB-6 Product line boring

SB-7 Product line boring

SB-8 Product line boring

---



**Borehole SB-1**

Split Spoon Interval (ft.)	Field Screening Result (mg/kg)	Lithology	Soil Conditions
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	4	CLAY Orange Sandy	Dry
20-25	18	SAND Red Orange Silty	Dry
25-28	86	SAND Red Orange Silty	Moist

**Borehole SB-2**

Split Spoon Interval (ft.)	Field Screening Result (mg/kg)	Lithology	Soil Conditions
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	6	CLAY Orange Sandy	Dry
20-25	11	SAND Red Orange Silty	Dry
25-28	64	SAND Red Orange Silty	Moist

**Borehole SB-3**

Split Spoon Interval (ft.)	Field Screening Result (mg/kg)	Lithology	Soil Conditions
0-5	0	CLAY Orange Sandy	Dry
5-10	0	CLAY Orange Sandy	Dry
*10-15	0	CLAY Orange Sandy	Dry
15-20	4	CLAY Orange Sandy	Dry
20-25	27	SAND Red Orange Silty	Dry
25-28	37	SAND Red Orange Silty	Moist

**Borehole SB-4**

Split Spoon Interval (ft.)	Field Screening Result (mg/kg)	Lithology	Soil Conditions
0-5	0	CLAY Orange Sandy	Dry
*5-10	0	CLAY Orange Sandy	Dry

**Borehole SB-5**

Split Spoon Interval (ft.)	Field Screening Result (mg/kg)	Lithology	Soil Conditions
0-5	0	CLAY Orange Sandy	Dry
*5-10	2	CLAY Orange Sandy	Dry

**Borehole SB-6**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	163	CLAY Orange Sandy	Dry

**Borehole SB-7**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	3	CLAY Orange Sandy	Dry

**Borehole SB-8**

<b>Split Spoon Interval (ft.)</b>	<b>Field Screening Result (mg/kg)</b>	<b>Lithology</b>	<b>Soil Conditions</b>
0-5	0	CLAY Orange Sandy	Dry
*5-10	0	CLAY Orange Sandy	Dry

**\* Indicates the drilling interval soil samples were collected from and submitted for laboratory analysis.**

Enter the soil analytical data for each soil boring for all CoC in the table below and on the following page. Enter the appropriate RBSL for the soil type from Tables 4 through 8 in SCDHEC Risk-Based Corrective Action (RBCA) for Petroleum Releases Guidance Document.

CoC	RBSL	SB-1	DUP	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	7	<6.8	<300	<6.2	<5.7	<5.8	<5.7	17	6.5	<6.3
Toluene	1450	<6.8	<300	<6.2	<5.7	<5.8	3.9	180	12	<6.3
Ethylbenzene	1150	<6.8	<300	<6.2	<5.7	<5.8	<5.7	95	<5.8	<6.3
Xylenes	14500	<6.8	<300	<6.2	<5.7	<5.8	8.5	780	32	<6.3
Naphthalene	36	<6.8	<300	<6.2	<5.7	<5.8	4.1	230/180	30	5.2
Benzo(a)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluorene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Phenanthrene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(k)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Chrysene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Dibenzo(a,h)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo (a) pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo (b) fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
GRO(EPA 8015M) mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOC (Background boring) mg/kg	NA	450	540	NA	NA	NA	NA	NA	NA	NA
Lead mg/kg	NA	12	13	2.0	19	17	19	6.2	14	31

\*Results given in ug/Kg unless otherwise noted. N/A = Not Analyzed

Discuss the horizontal and vertical extent of CoC in the soil. CoC soil contamination was above the RBSL in SB-6.

Additional Comments:

**F. Chemicals of Concern - Groundwater**

Provide well installation information in the table below.

MMW#	Installation Date	Development Date	Sampling Date
MMW-1	10/22/12	10/23/12	10/26/12
MMW-2	2/12/13	2/13/13	12/18/13
MMW-3	2/12/13	2/13/13	12/18/13
MMW-4	2/12/13	2/13/13	12/18/13

Summarize the monitoring well and ground-water data in the table below.

MMW#	Date	TOC Elevation (ft)*	Screened Interval (ft)	Depth to Water (ft)	Water Table Elevation (ft)*
MMW1	12/18/13	UNK	29-19	NOT LOCATED	NO LOC
	10/26/12	UNK	29-19	23.51	UNK
MMW2	12/18/13	99.04	28-18	18.48	80.56
MMW3	12/18/13	98.95	28-18	18.85	80.10
MMW4	12/18/13	99.30	28-18	19.48	79.82

Enter field data measurements (temperature, pH, conductivity) taken during well purging on the form provided. Complete for each well. (See groundwater sampling logs pages 11-14)

Enter dissolved oxygen measurements for each well in the table below.

MMW#	MMW-1	MMW-2	MMW-3	MMW-4
Dissolved Oxygen (mg/l)	UNK	4.62	4.89	5.25

Enter the groundwater analytical data for each monitoring well for all CoC in the table below. If free product is present, indicate the measured thickness to the nearest 0.01 feet.

CoC	RBSL (ug/L)	MW-1	MW-2	MW-3	MW-4	MW-4 D	FB	TB
Free Product Thickness	None	NO LOC	None	None	None	None	None	None
Benzene	5	NO LOC	13000	15000	<1	<1	<1	<1
Toluene	1,000	NO LOC	44000	44000	1	1	<1	<1
Ethylbenzene	700	NO LOC	4200	4600	<1	<1	<1	<1
Xylenes	10,000	NO LOC	22000	23000	18	19	<1	<1
MTBE	40	NO LOC	3100	31000	0.56	0.54	<1	<1
Naphthalene	25	NO LOC	<500/780	1400/860	0.90	0.94	<1	<1
1-2 DCA	NS	NO LOC	<500	<1000	1	1	<1	<1
Benzo(a)anthracene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Benzo(b)fluoranthene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Benzo(k)fluoranthene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Chrysene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Dibenz(a,h)anthracene	10	NO LOC	<50	<50	<5.1	<5.1	<5.1	NA
Ferrous Iron mg/l	N/A	NO LOC	NA	NA	NA	NA	NA	NA
Lead ug/l	15	NO LOC	16	7.2	9.7	4.4	7.4	NA
EDB ug/l	0.05	NO LOC	<0.020	0.074	<0.020	<0.020	<0.020	NA
Nitrates mg/l	N/A	NO LOC	0.0089	0.014	0.40	0.37	NA	NA
Sulfates mg/l	N/A	NO LOC	3.6	1.5	0.55	2.8	NA	NA
Methane	N/A	NO LOC	NA	NA	NA	NA	NA	NA

NA= Not analyzed for parameter. ND=Not detected at or above PQL BOLD=Parameter exceeded RBSL

CoC	RBSL (ug/L)	DWW-1	DWW-2	DWW-3	DWW-4	DWW-5	DWW-6	
Free Product Thickness	None	None	None	None	None	None	None	
Benzene	5	<1	<1	<1	<1	<1	<1	
Toluene	1,000	<1	<1	<1	<1	<1	<1	
Ethylbenzene	700	<1	<1	<1	<1	<1	<1	
Xylenes	10,000	<1	<1	<1	<1	<1	<1	
MTBE	40	<1	71	<1	<1	<1	<1	
Naphthalene	25	<1	<1	<1	<1	<1	<1	
1-2 DCA	NS	<1	<1	<1	<1	<1	<1	
Benzo(a)anthracene	10	<5	<5	<5	<5	<5	<5	
Benzo(b)fluoranthene	10	<5	<5	<5	<5	<5	<5	
Benzo(k)fluoranthene	10	<5	<5	<5	<5	<5	<5	
Chrysene	10	<5	<5	<5	<5	<5	<5	
Dibenz(a,h)anthracene	10	<5	<5	<5	<5	<5	<5	
Ferrous Iron mg/l	N/A	NA	NA	NA	NA	NA	NA	
Lead ug/l	15	NA	NA	NA	NA	NA	NA	
EDB ug/l	0.05	NA	NA	NA	NA	NA	NA	
Nitrates mg/l	N/A	NA	NA	NA	NA	NA	NA	
Sulfates mg/l	N/A	NA	NA	NA	NA	NA	NA	
Methane	N/A	NA	NA	NA	NA	NA	NA	NA

Additional Comments: The highest concentrations were found in the area of MW-3.

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW-1	12/18/13	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC	NO LOC
MW-2	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
MW-3	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
MW-4	12/18/13	<1	<100	<20	<1	<20	<10	10	<5
DUP	12/18/13	<1	<100	<20	<1	<20	<10	10	<5
DWW-1	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-2	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
DWW-3	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-5	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
DWW-6	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
TB	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
FB	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5

**G. Aquifer Characteristics**

Hydraulic Conductivity 0.2496 ft/day  
Hydraulic Gradient 0.0097 ft/ft  
Porosity 0.25 sand  
Estimated Seepage Velocity 3.53 ft per year

Complete the slug test form and include in Appendix D of the report. Include all data, graphs, and equations used to derive the aquifer characteristics and hydrologic parameters (hydraulic conductivity, seepage velocity, hydraulic gradient, etc.) in Appendix D.



### **III. TIER I EVALUATION**

A. **CURRENT LAND USE** – Identify any potential receptors or human exposure pathways (e.g. basement, contaminated soils from UST closures, etc.) within a 1000-foot radius for current land use. Complete the table below. Additional sheets may be attached if necessary.

<b>Media (for exposure)</b>	<b>Exposure Route</b>	<b>Pathway Selected for Evaluation (Yes or No)</b>	<b>Exposure point or Reason for Non-Selection</b>	<b>Data Requirements (IF pathway selected)</b>
Air	Inhalation	No		
	Explosion Hazard	No		
Ground-Water	Ingestion	Yes		6 Drinking Water Wells located within 1000 Feet
	Dermal Contact	No		
	Volatile Inhalation	No		
Surface Water	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
Surficial Soil	Ingestion	No	Surficial spill has not occurred	
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		
Subsurface Soil	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		

B. FUTURE LAND USE – Identify any potential receptors or human exposure pathways (e.g. basements, contaminates soils from UST closures, etc.) within a 1000-foot radius for projected future land use. Complete the table below. Additional sheets may be attached if necessary.

Media (for exposure)	Exposure Route	Pathway Selected for Evaluation (Yes or No)	Exposure Point or Reason for Non- Selection	Data Requirements (if pathway selected)
Air	Inhalation	No		
	Explosion Hazard	No		
Ground-Water	Ingestion	No		6 Drinking Water Wells located within 1000 Feet
	Dermal Contact	No		
	Volatile Inhalation	No		
Surface Water	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
Surficial Soil	Ingestion	No	No surficial contamination was noted on site.	
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching Groundwater	No		
Subsurface Soil	Ingestion	No		
	Dermal Contact	No		
	Volatile Inhalation	No		
	Leaching to Groundwater	No		

Recommendations for further action A Tier II is recommended at the site to define the vertical and horizontal extent of the petroleum hydrocarbon plume.

ONE ACCORD DRINKING WATER WELL CONTACT LIST

DWW#	ADDRESS	OWNER	PHONE #	LOCATION	Notes:
1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN		HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN		HOUSE	NO CONTACT
7					
8					
9					
10					
11					
12					
13					

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 12/18/13  
 Field Personnel Billy May  
 General Weather Condition CLEAR  
 Ambient Air Temperature 48  
 Facility Name ONE ACCORD Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.1  
 pH=7.0 7.0=7.2 Standard 100.0=100.3  
 pH=10.0 10.0=10.1 Standard 1000.0=999.98

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW- 2**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 18.48 ft.

Length of Water Column (LWC=TWD-DGW) 9.52 ft.

1 Csg. Volume (LWC\*C) = 9.52 X 0.163 = 1.55 gals.  
 3 Csg. Volumes = 3 X 1.55 = 4.65 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Samplin 5.0 gals.

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	5				
<b>Time (military)</b>	809	814	819	923				
<b>pH (s.u.)</b>	5.82	5.76	5.69	5.65				
<b>Specific Cond. (umhos/cm)</b>	101.2	42.1	41.3	40.5				
<b>Water Temp (°C)</b>	19.8	19.3	19.0	18.8				
<b>Turbidity (*)</b>	287	312	324	327				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	5.86	4.82	4.69	4.62				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>12/18/13</u>          Field Personnel <u>Billy May</u>          General Weather Condition <u>CLEAR</u>          Ambient Air Temperature <u>48</u>          Facility Name <u>ONE ACCORD</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.1</u>          pH=7.0 <u>7.0=7.2</u> Standard <u>100.0=100.3</u>          pH=10.0 <u>10.0=10.1</u> Standard <u>1000.0=999.98</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW- 3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>18.85</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>9.15</u> ft.</p> <p>1 Csg. Volume (LWC*C) = <u>9.15 X 0.163 = 1.49</u> gals.          3 Csg. Volumes = 3 X <u>1.49 = 4.47</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Samplin <u>4.5</u> gals.</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	836	842	848	852				
<b>pH (s.u.)</b>	6.77	6.71	6.65	6.62				
<b>Specific Cond. (umhos/cm)</b>	106.1	68.2	67.0	65.9				
<b>Water Temp (°C)</b>	20.3	20.1	19.8	19.4				
<b>Turbidity (*)</b>	253	347	359	362				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	6.40	5.14	5.03	4.89				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 12/18/13  
 Field Personnel Billy May  
 General Weather Condition CLEAR  
 Ambient Air Temperature 48  
 Facility Name ONE ACCORD Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.1  
 pH=7.0 7.0=7.2 Standard 100.0=100.3  
 pH=10.0 10.0=10.1 Standard 1000.0=999.98

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW- 4**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 19.48 ft.

Length of Water Column (LWC=TWD-DGW) 8.52 ft.

1 Csg. Volume (LWC\*C) = 8.52 X 0.163 = 1.38 gals.  
 3 Csg. Volumes = 3 X 1.38 = 4.16 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Samplin 4.5 gals.

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	753	758	804	808				
<b>pH (s.u.)</b>	6.15	6.12	6.06	6.01				
<b>Specific Cond. (umhos/cm)</b>	89.3	43.1	42.4	42.0				
<b>Water Temp (°C)</b>	20.8	20.4	20.1	19.8				
<b>Turbidity (*)</b>	281	313	324	326				
<b>OVA Readings</b>								
<b>Dissolved Oxygen</b>	5.67	5.32	5.28	5.25				

## **APPENDIX A**

### **Soil Boring Logs**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	1 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
		<b>Diameter</b>	N/A		
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	4
25					18
30				SAND RED ORANGE SILTY	86
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	2 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	6
25					11
30				SAND RED ORANGE SILTY	64
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

**Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	3 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10					0
15					0
20				SAND RED ORANGE SILTY	4
25					27
30				SAND RED ORANGE SILTY	37
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	4 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	0
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	5 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	2
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	6 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	163
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	7 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	3
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	ONE ACCORD	<b>Inspector</b>	Billy May	<b>Boring No.</b>	
<b>Project Number</b>		<b>Weather</b>	Sunny	<b>Sheet</b>	8 <b>Of</b> 8
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	45	<b>Surface Elev.</b>	565 ft
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	10	<b>Date</b>	12/12/13
<b>Wt Hammer</b>		<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY ORANGE SANDY	0
10				CLAY ORANGE SANDY	0
15					
20					
25					
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) Sample collected from 10 feet BLS

## **APPENDIX B**

### **Monitoring Well Construction Logs**





Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State SC Zip: 29729-0000
Telephone Work: Home:

7. PERMIT NUMBER: 02131

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

9. WELL DEPTH (completed) Date Started: 12/12/13
28 ft Date Completed: 12/12/13

10. CASING: Threaded Welded
Diam 2
Type PVC Galvanized
Steel Other
2 in to 18 ft depth
Height: Above Below
Surface 4 inches
Weight lb./ft.
Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
MW-2

11. SCREEN:
Type PVC Diam 2 inch
Slot/Gauge .01 Length 10 feet
Set Between 28 ft. and 18 ft.
Sieve Analysis Yes (please enclose) No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 18.48 ft. below land surface after 24 hours

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy and SAND Red Orange Silty.

13. PUMPING LEVEL Below Land Surface
na ft after na hrs Pumping na G.P.M
Pumping Test. Yes No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 28 ft. to 17 ft.
Effective size 3 Uniformity Coefficient Coarse

16. WELL GROUDED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth From 16 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction
Type Petroleum
Well Disinfected Yes No Type Amount:

18. PUMP: Date installed Not installed
Mfr Name Model No.
H.P Volts Length of drop pipe ft Capacity gpm
TYPE Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level. A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No. 803 548 2255 Fax No.

5. REMARKS:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief
Signed [Signature] Date: 12/30/13
Well Driller

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool Other

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last)      (first)  
 Address: PO Box 220  
 City: Richburg      State: SC      Zip: 29729-0000  
 Telephone: Work:      Home

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg      Zip: 29729-0000  
 Latitude:      Longitude

**9. WELL DEPTH (completed)**      Date Started: 12/12/13  
 28 \_\_\_\_\_ ft      Date Completed: 12/12/13

**10. CASING:**  Threaded       Welded  
 Diam: 2 \_\_\_\_\_  
 Type:  PVC       Galvanized  
 Steel       Other  
 2 \_\_\_\_\_ in to 18 \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes       No

**3. PUBLIC SYSTEM NAME:** PUBLIC SYSTEM NUMBER:  
 MW-3

**11. SCREEN:**  
 Type: pvc      Diam: 2 inch  
 Slot/Gauge: .01      Length: 10 feet  
 Set Between 28 \_\_\_\_\_ ft and 18 \_\_\_\_\_ ft.      **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)       No

**4. ABANDONMENT:**  Yes       No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 18.85 \_\_\_\_\_ ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Red Orange Silty	8	28

**13. PUMPING LEVEL Below Land Surface.**  
 na \_\_\_\_\_ ft. after na \_\_\_\_\_ hrs Pumping na \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)       No  
 Yield: na \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes       No      Bacterial Analysis  Yes       No  
 Please enclose lab results

**15. ARTIFICIAL FILTER (filter pack)**  Yes       No  
 Installed from 28 \_\_\_\_\_ ft. to 17 \_\_\_\_\_ ft.  
 Effective size 3 \_\_\_\_\_      Uniformity Coefficient Coarse \_\_\_\_\_

**16. WELL GROUTED?**  Yes       No  
 Neat Cement       Bentonite       Bentonite/Cement       Other \_\_\_\_\_  
 Depth: From 16 \_\_\_\_\_ ft to 0 \_\_\_\_\_ ft

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 \_\_\_\_\_ ft. W \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes       No      Type \_\_\_\_\_      Amount: \_\_\_\_\_

**18. PUMP:** Date installed \_\_\_\_\_      Not installed   
 Mfr. Name: \_\_\_\_\_      Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_      Volts \_\_\_\_\_      Length of drop pipe \_\_\_\_\_ ft.      Capacity \_\_\_\_\_ gpm  
 TYPE  Submersible       Jet (shallow)       Turbine  
 Jet (deep)       Reciprocating       Centrifugal

**19. WELL DRILLER: Tommy Bolyard**      **CERT. NO.:** 1846  
 Address: (Print)      Level: A      B      C      D      (circle one)  
 17538 Greenhill Road           
 Charlotte, NC 28278  
 Telephone No. 803 548 2233      Fax No \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief

**5. REMARKS:**

Signed Tommy Bolyard      Date: 12/30/13  
 Well Driller

**6. TYPE:**  Mud Rotary       Jetted       Bored  
 Dug       Air Rotary       Driven  
 Cable tool       Other

If D Level Driller, provide supervising driller's name.



## **APPENDIX C**

### **Laboratory Data**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **OL18080**  
Date Completed: **12/30/2013**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report. Chain of Custody Record and Sample Receipt Checklist.

• • • • •

# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No. 5639

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## Case Narrative Katawba Environmental, Inc. Lot Number: OL18080

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This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### GC/MS VOC

Sample -001 was initially analyzed at a dilution due to detections during screening. The sample was non-detect at the 50X dilution. An additional undiluted analysis was performed out of hold also yielding non-detect indicating that the screening data was inaccurate. The in hold run has been reported with a 50X dilution.

# SHEALY ENVIRONMENTAL SERVICES, INC.

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**Sample Summary**  
**Katawba Environmental, Inc.**  
**Lot Number: OL18080**

<b>Sample Number</b>	<b>Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
001	02131-SB1	Solid	12/12/2013 0917	12/18/2013
002	02131-DUPSB1	Solid	12/12/2013 0919	12/18/2013
003	02131-SB2	Solid	12/12/2013 1047	12/18/2013
004	02131-SB3	Solid	12/12/2013 0958	12/18/2013
005	02131-SB4	Solid	12/12/2013 1139	12/18/2013
006	02131-SB5	Solid	12/12/2013 1226	12/18/2013
007	02131-SB6	Solid	12/12/2013 1509	12/18/2013
008	02131-SB7	Solid	12/12/2013 1210	12/18/2013
009	02131-SB8	Solid	12/12/2013 1402	12/18/2013
010	TRIP BLANK	Aqueous	12/18/2013	12/18/2013

(10 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc.

Lot Number: OL18080

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-SB1	Solid	TOC	Walkley-Black	450		mg/kg	5
001	02131-SB1	Solid	Lead	6010C	12	B	mg/kg	6
002	02131-DUPSB1	Solid	TOC	Walkley-Black	540		mg/kg	7
002	02131-DUPSB1	Solid	Lead	6010C	13	B	mg/kg	8
003	02131-SB2	Solid	Lead	6010C	2.0	B	mg/kg	10
004	02131-SB3	Solid	Lead	6010C	19	B	mg/kg	12
005	02131-SB4	Solid	Lead	6010C	17	B	mg/kg	14
006	02131-SB5	Solid	Naphthalene	8260B	4.1	J	ug/kg	15
006	02131-SB5	Solid	Toluene	8260B	3.9	J	ug/kg	15
006	02131-SB5	Solid	Xylenes (total)	8260B	8.5		ug/kg	15
006	02131-SB5	Solid	Lead	6010C	19	B	mg/kg	16
007	02131-SB6	Solid	Benzene	8260B	17		ug/kg	17
007	02131-SB6	Solid	Ethylbenzene	8260B	95		ug/kg	17
007	02131-SB6	Solid	Naphthalene	8260B	230		ug/kg	17
007	02131-SB6	Solid	Toluene	8260B	180		ug/kg	17
007	02131-SB6	Solid	Xylenes (total)	8260B	780		ug/kg	17
007	02131-SB6	Solid	Naphthalene	8270D	180	J	ug/kg	17
007	02131-SB6	Solid	Lead	6010C	6.2	B	mg/kg	18
008	02131-SB7	Solid	Benzene	8260B	6.5		ug/kg	19
008	02131-SB7	Solid	Naphthalene	8260B	30		ug/kg	19
008	02131-SB7	Solid	Toluene	8260B	12		ug/kg	19
008	02131-SB7	Solid	Xylenes (total)	8260B	32		ug/kg	19
008	02131-SB7	Solid	Lead	6010C	14	B	mg/kg	20
009	02131-SB8	Solid	Naphthalene	8260B	5.2	J	ug/kg	21
009	02131-SB8	Solid	Lead	6010C	31	B	mg/kg	22

(25 detections)



Client: <b>Katawba Environmental, Inc.</b>	Laboratory ID: <b>OL18080-001</b>
Description: <b>02131-SB1</b>	Matrix: <b>Solid</b>
Date Sampled: <b>12/12/2013 0917</b>	% Solids: <b>79.9 12/18/2013 2304</b>
Date Received: <b>12/18/2013</b>	

### Inorganic non-metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1		(TOC) Walkley-Black	1	12/26/2013 1625	HBB		37229			
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
TOC			Walkley-Bl	450		200	31	mg/kg	1	

### Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)		
1	5035	8260B	1	12/20/2013 1303	AAC		36880	4.62		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene		71-43-2	8260B	ND		6.8	1.5	ug/kg	1	
Ethylbenzene		100-41-4	8260B	ND		6.8	2.3	ug/kg	1	
Naphthalene		91-20-3	8260B	ND		6.8	2.3	ug/kg	1	
Toluene		108-88-3	8260B	ND		6.8	2.3	ug/kg	1	
Xylenes (total)		1330-20-7	8260B	ND		6.8	3.9	ug/kg	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		90	53-142							
Bromofluorobenzene		98	47-138							
Toluene-d8		97	68-124							

### Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	3550C	8270D	1	12/23/2013 1325	DRB1	12/20/2013 0944	36814			
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Acenaphthene		83-32-9	8270D	ND		410	12	ug/kg	1	
Acenaphthylene		208-96-8	8270D	ND		410	16	ug/kg	1	
Anthracene		120-12-7	8270D	ND		410	18	ug/kg	1	
Benzo(a)anthracene		56-55-3	8270D	ND		410	13	ug/kg	1	
Benzo(a)pyrene		50-32-8	8270D	ND		410	30	ug/kg	1	
Benzo(b)fluoranthene		205-99-2	8270D	ND		410	28	ug/kg	1	
Benzo(g,h,i)perylene		191-24-2	8270D	ND		410	28	ug/kg	1	
Benzo(k)fluoranthene		207-08-9	8270D	ND		410	34	ug/kg	1	
Chrysene		218-01-9	8270D	ND		410	13	ug/kg	1	
Dibenzo(a,h)anthracene		53-70-3	8270D	ND		410	27	ug/kg	1	
Fluoranthene		206-44-0	8270D	ND		410	13	ug/kg	1	
Fluorene		86-73-7	8270D	ND		410	16	ug/kg	1	
Indeno(1,2,3-c,d)pyrene		193-39-5	8270D	ND		410	37	ug/kg	1	
Naphthalene		91-20-3	8270D	ND		410	17	ug/kg	1	

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-001**

Description: **02131-SB1**

Matrix **Solid**

Date Sampled: **12/12/2013 0917**

% Solids: **79.9 12/18/2013 2304**

Date Received: **12/18/2013**

### Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1325	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		52	22-109
Terphenyl-d14		81	41-120

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2028	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	12	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18080-002**Description: **02131-DUPSB1**Matrix: **Solid**Date Sampled: **12/12/2013 0919**% Solids: **80.3 12/18/2013 2304**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	12/26/2013 1625	HBB		37229

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
TOC		Walkley-Bl	540		200	31	mg/kg	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	50	12/23/2013 2334	JJG		37067	5.12

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		300	67	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		300	100	ug/kg	2
Naphthalene	91-20-3	8260B	ND		300	100	ug/kg	2
Toluene	108-88-3	8260B	ND		300	100	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		300	180	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		81	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		82	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1445	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	29	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	27	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-002**

Description: **02131-DUPSB1**

Matrix: **Solid**

Date Sampled: **12/12/2013 0919**

% Solids: **80.3 12/18/2013 2304**

Date Received: **12/18/2013**

### Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1445	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		57	33-102
Nitrobenzene-d5		51	22-109
Terphenyl-d14		85	41-120

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2043	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	13	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18080-003**Description: **02131-SB2**Matrix **Solid**Date Sampled: **12/12/2013 1047**% Solids: **81.4 12/18/2013 2304**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1327	AAC		36880	4.99

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		6.2	1.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.2	2.1	ug/kg	1
Naphthalene	91-20-3	8260B	ND		6.2	2.1	ug/kg	1
Toluene	108-88-3	8260B	ND		6.2	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.2	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		95	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1511	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	29	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	27	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	33-102
Nitrobenzene-d5		51	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-003**

Description: **02131-SB2**

Matrix: **Solid**

Date Sampled: **12/12/2013 1047**

% Solids: **81.4 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2050	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	2.0	B	0.60	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1351	AAC		36880	5.52

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.7	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	1.9	ug/kg	1
Naphthalene	91-20-3	8260B	ND		5.7	1.9	ug/kg	1
Toluene	108-88-3	8260B	ND		5.7	1.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		93	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1537	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		410	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		410	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		410	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		410	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		410	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		410	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		410	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		410	34	ug/kg	1
Chrysene	218-01-9	8270D	ND		410	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		410	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		410	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		410	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		410	37	ug/kg	1
Naphthalene	91-20-3	8270D	ND		410	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		62	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-004**

Description: **02131-SB3**

Matrix: **Solid**

Date Sampled: **12/12/2013 0958**

% Solids: **79.0 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2101	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	19	B	0.62	0.12	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1415	AAC		36880	5.19

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.8	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.8	2.0	ug/kg	1
Naphthalene	91-20-3	8260B	ND		5.8	2.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.8	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		5.8	3.4	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	53-142
Bromofluorobenzene		94	47-138
Toluene-d8		94	68-124

## Semivolatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1604	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		380	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		380	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		380	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		380	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		380	28	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		380	26	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		380	26	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		380	32	ug/kg	1
Chrysene	218-01-9	8270D	ND		380	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		380	26	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		380	12	ug/kg	1
Fluorene	86-73-7	8270D	ND		380	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		380	35	ug/kg	1
Naphthalene	91-20-3	8270D	ND		380	16	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		380	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		380	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	33-102
Nitrobenzene-d5		58	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-005**

Description: **02131-SB4**

Matrix: **Solid**

Date Sampled: **12/12/2013 1139**

% Solids: **83.1 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	2	12/23/2013 1928	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	17	B	1.1	0.21	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-SB5**Matrix **Solid**Date Sampled: **12/12/2013 1226**% Solids: **80.6 12/18/2013 2304**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1439	AAC		36880	5.48

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		5.7	1.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.7	1.9	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>4.1</b>	<b>J</b>	<b>5.7</b>	<b>1.9</b>	<b>ug/kg</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>3.9</b>	<b>J</b>	<b>5.7</b>	<b>1.9</b>	<b>ug/kg</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>8.5</b>		<b>5.7</b>	<b>3.3</b>	<b>ug/kg</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		92	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1630	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		400	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		400	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		400	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		400	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		400	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		400	27	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		400	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		400	33	ug/kg	1
Chrysene	218-01-9	8270D	ND		400	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		400	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		400	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		400	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		400	36	ug/kg	1
Naphthalene	91-20-3	8270D	ND		400	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		400	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		400	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		68	33-102
Nitrobenzene-d5		61	22-109
Terphenyl-d14		79	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-006**

Description: **02131-SB5**

Matrix: **Solid**

Date Sampled: **12/12/2013 1226**

% Solids: **80.6 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2109	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	19	B	0.61	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1837	AAC		36880	5.74

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	17		5.7	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	95		5.7	2.0	ug/kg	1
Naphthalene	91-20-3	8260B	230		5.7	2.0	ug/kg	1
Toluene	108-88-3	8260B	180		5.7	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	780		5.7	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		99	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1656	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		420	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		420	17	ug/kg	1
Anthracene	120-12-7	8270D	ND		420	19	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		420	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		420	31	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		420	29	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		420	29	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		420	35	ug/kg	1
Chrysene	218-01-9	8270D	ND		420	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		420	28	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		420	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		420	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		420	38	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>180</b>	<b>J</b>	<b>420</b>	<b>18</b>	<b>ug/kg</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		420	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		420	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	33-102
Nitrobenzene-d5		65	22-109
Terphenyl-d14		80	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-007**

Description: **02131-SB6**

Matrix: **Solid**

Date Sampled: **12/12/2013 1509**

% Solids: **75.8 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2112	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	6.2	B	0.65	0.12	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1502	AAC		36880	5.46

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	6.5		5.8	1.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.8	2.0	ug/kg	1
Naphthalene	91-20-3	8260B	30		5.8	2.0	ug/kg	1
Toluene	108-88-3	8260B	12		5.8	2.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	32		5.8	3.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		94	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/23/2013 1722	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		410	13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		410	16	ug/kg	1
Anthracene	120-12-7	8270D	ND		410	18	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		410	14	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		410	30	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		410	28	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		410	28	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		410	34	ug/kg	1
Chrysene	218-01-9	8270D	ND		410	13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		410	27	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		410	13	ug/kg	1
Fluorene	86-73-7	8270D	ND		410	16	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		410	37	ug/kg	1
Naphthalene	91-20-3	8270D	ND		410	17	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		410	17	ug/kg	1
Pyrene	129-00-0	8270D	ND		410	18	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		52	33-102
Nitrobenzene-d5		46	22-109
Terphenyl-d14		81	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client **Katawba Environmental, Inc.**

Laboratory ID: **OL18080-008**

Description: **02131-SB7**

Matrix: **Solid**

Date Sampled **12/12/2013 1210**

% Solids: **79.3 12/18/2013 2304**

Date Received: **12/18/2013**

### ICP-AES

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3050B	6010C	1	12/20/2013 2116	CDF	12/19/2013 1955	36785

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	14	B	0.61	0.11	mg/kg	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18080-009**Description: **02131-SB8**Matrix: **Solid**Date Sampled **12/12/2013 1402**% Solids: **82.2 12/18/2013 2304**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/20/2013 1526	AAC		36880	4.86

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene	71-43-2	8260B	ND		6.3	1.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	2.1	ug/kg	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>5.2</b>	<b>J</b>	<b>6.3</b>	<b>2.1</b>	<b>ug/kg</b>	<b>1</b>
Toluene	108-88-3	8260B	ND		6.3	2.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		6.3	3.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		91	47-138
Toluene-d8		93	68-124

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550C	8270D	1	12/24/2013 1010	DRB1	12/20/2013 0944	36814

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		390	12	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		390	15	ug/kg	1
Anthracene	120-12-7	8270D	ND		390	17	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		390	13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		390	28	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		390	26	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		390	26	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		390	32	ug/kg	1
Chrysene	218-01-9	8270D	ND		390	12	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		390	26	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		390	12	ug/kg	1
Fluorene	86-73-7	8270D	ND		390	15	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		390	35	ug/kg	1
Naphthalene	91-20-3	8270D	ND		390	16	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		390	16	ug/kg	1
Pyrene	129-00-0	8270D	ND		390	17	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	33-102
Nitrobenzene-d5		56	22-109
Terphenyl-d14		89	41-120

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
 106 Vantage Point Drive  
 West Columbia, South Carolina 29172  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111  
 www.shealy.com

Number **31958**

## Chain of Custody Record

<b>Client:</b> Krotz wibes <b>Address:</b> 4218 Dye Rd <b>City:</b> Edgecombe SC 29712 <b>Project Name:</b> Dye Record <b>Sample Number:</b> Dye Record <b>Sample ID's (Description to column for each sample in table):</b> carb. jet, incite, jet		<b>Request to Contact:</b> Alex Ames <b>Telephone No. / Fax No. / Email:</b>		<b>Sampler (Printed Name):</b> Billy Morris <b>Wachill No.:</b>		<b>Container:</b> Page 1 of 1 Number of Containers Bottle (See instructions on back) Descriptive Lot No. 121180 (See tanks / Cooler ID)						
Sample ID's	Date	Preservative			Matrix			Analysis	Possible Hazard Identification	GC Requirements (5 sec. RT)	Date	Time
		1. Equi	2. HCl	3. HCl	4. HCl	5. HCl	6. HCl					
02131-561	12-12-13							X	X BTEX Depth	X	12-18-13	1911
02131-0mp581	919								X Lead	X	12-18-13	1911
02131-564	1041								X FRH	X	12-18-13	1911
02131-563	958								X TCC	X	12-18-13	1911
02131-564	1139										12-18-13	1911
02131-565	1226										12-18-13	1911
02131-566	1509										12-18-13	1911
02131-567	1210										12-18-13	1911
02131-568	1402										12-18-13	1911

**Note: All samples are retained for six weeks from receipt unless other arrangements are made.**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **OL18078**  
Date Completed: **12/31/2013**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report. Chain of Custody Record and Sample Receipt Checklist.

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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010

NELAC No. E87653

NC DENR No: 329

NC Field Parameters No. 5639

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## Case Narrative Katawba Environmental, Inc. Lot Number: OL18078

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This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### EDB by Microextraction

Sample -002 was qualified with a "P" as the relative percent difference (RPD) between the two GC columns exceeded method criteria. Per SCDHEC, the lower value has been reported.

### PAHs by GC/MS

The method blank associated with batch 37050 recovered two surrogates above method criteria. The associated samples were re-extracted out of hold. The second analysis recovered all surrogates within method criteria. All results were confirmed during the second analysis. The data has not been negatively impacted as all samples and other QC recovered the surrogates within limits indicating the problem was isolated to the Method Blank. The in hold run has been reported.

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: OL18078

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131-MW2	Aqueous	12/18/2013 0923	12/18/2013
002	02131-MW3	Aqueous	12/18/2013 0852	12/18/2013
003	02131-MW4	Aqueous	12/18/2013 0808	12/18/2013
004	02131-DUP MW4	Aqueous	12/18/2013 0810	12/18/2013
005	02131-DWW1	Aqueous	12/18/2013 0941	12/18/2013
006	02131-DWW2	Aqueous	12/18/2013 0956	12/18/2013
007	02131-DWW3	Aqueous	12/18/2013 1035	12/18/2013
008	02131-DWW4	Aqueous	12/18/2013 1013	12/18/2013
009	02131-DWW5	Aqueous	12/18/2013 1051	12/18/2013
010	02131-DWW6	Aqueous	12/18/2013 1117	12/18/2013
011	02131-FB	Aqueous	12/18/2013 1145	12/18/2013
012	02131-TB	Aqueous	12/18/2013 1156	12/18/2013

(12 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: OL18078

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131-MW2	Aqueous	Nitrate - N	353.2	0.0089	J	mg/L	6
001	02131-MW2	Aqueous	Sulfate	300.0	3.6		mg/L	6
001	02131-MW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	15000		ug/L	6
001	02131-MW2	Aqueous	tert-Amyl methyl ether (TAME)	8260B	600	J	ug/L	6
001	02131-MW2	Aqueous	Benzene	8260B	13000		ug/L	6
001	02131-MW2	Aqueous	Diisopropyl ether (IPE)	8260B	860		ug/L	6
001	02131-MW2	Aqueous	Ethylbenzene	8260B	4200		ug/L	6
001	02131-MW2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	3100		ug/L	6
001	02131-MW2	Aqueous	Toluene	8260B	44000		ug/L	6
001	02131-MW2	Aqueous	Xylenes (total)	8260B	22000		ug/L	6
001	02131-MW2	Aqueous	Naphthalene	8270D	780		ug/L	7
001	02131-MW2	Aqueous	Lead	6010C	0.016		mg/L	7
002	02131-MW3	Aqueous	Nitrate - N	353.2	0.014	J	mg/L	8
002	02131-MW3	Aqueous	Sulfate	300.0	1.5		mg/L	8
002	02131-MW3	Aqueous	tert-Amyl alcohol (TAA)	8260B	29000		ug/L	8
002	02131-MW3	Aqueous	tert-Amyl methyl ether (TAME)	8260B	4200	J	ug/L	8
002	02131-MW3	Aqueous	Benzene	8260B	15000		ug/L	8
002	02131-MW3	Aqueous	Diisopropyl ether (IPE)	8260B	1700		ug/L	8
002	02131-MW3	Aqueous	Ethylbenzene	8260B	4600		ug/L	8
002	02131-MW3	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	31000		ug/L	8
002	02131-MW3	Aqueous	Naphthalene	8260B	1400		ug/L	8
002	02131-MW3	Aqueous	tert-butyl alcohol (TBA)	8260B	12000	J	ug/L	8
002	02131-MW3	Aqueous	Toluene	8260B	44000		ug/L	8
002	02131-MW3	Aqueous	Xylenes (total)	8260B	23000		ug/L	8
002	02131-MW3	Aqueous	Naphthalene	8270D	860		ug/L	9
002	02131-MW3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.074	P	ug/L	9
002	02131-MW3	Aqueous	Lead	6010C	0.0072	J	mg/L	9
003	02131-MW4	Aqueous	Nitrate - N	353.2	0.40		mg/L	10
003	02131-MW4	Aqueous	Sulfate	300.0	0.55	J	mg/L	10
003	02131-MW4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.56	J	ug/L	10
003	02131-MW4	Aqueous	Naphthalene	8260B	0.90	J	ug/L	10
003	02131-MW4	Aqueous	tert-butyl alcohol (TBA)	8260B	10	J	ug/L	10
003	02131-MW4	Aqueous	Toluene	8260B	1.0		ug/L	10
003	02131-MW4	Aqueous	Xylenes (total)	8260B	18		ug/L	10
003	02131-MW4	Aqueous	Lead	6010C	0.0097	J	mg/L	11
004	02131-DUP MW4	Aqueous	Nitrate - N	353.2	0.37		mg/L	12
004	02131-DUP MW4	Aqueous	Sulfate	300.0	2.8		mg/L	12
004	02131-DUP MW4	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	0.54	J	ug/L	12
004	02131-DUP MW4	Aqueous	Naphthalene	8260B	0.94	J	ug/L	12
004	02131-DUP MW4	Aqueous	tert-butyl alcohol (TBA)	8260B	10	J	ug/L	12
004	02131-DUP MW4	Aqueous	Toluene	8260B	1.0		ug/L	12
004	02131-DUP MW4	Aqueous	Xylenes (total)	8260B	19		ug/L	12
004	02131-DUP MW4	Aqueous	Lead	6010C	0.0044	J	mg/L	13
005	02131-DWWW1	Aqueous	Nitrate - N	353.2	0.42		mg/L	14
005	02131-DWWW1	Aqueous	Sulfate	300.0	1.8		mg/L	14

## Executive Summary (Continued)

Lot Number: OL18078

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
006	02131-DWW2	Aqueous	Nitrate - N	353.2	0.48		mg/L	16
006	02131-DWW2	Aqueous	Sulfate	300.0	1.2		mg/L	16
006	02131-DWW2	Aqueous	tert-Amyl methyl ether (TAME)	8260B	1.8	J	ug/L	16
006	02131-DWW2	Aqueous	Diisopropyl ether (IPE)	8260B	2.2		ug/L	16
006	02131-DWW2	Aqueous	Methyl tertiary butyl ether (MTBE)	8260B	71		ug/L	16
007	02131-DWW3	Aqueous	Nitrate - N	353.2	0.29		mg/L	18
007	02131-DWW3	Aqueous	Sulfate	300.0	0.91	J	mg/L	18
008	02131-DWW4	Aqueous	Nitrate - N	353.2	0.18		mg/L	20
008	02131-DWW4	Aqueous	Sulfate	300.0	8.0		mg/L	20
009	02131-DWW5	Aqueous	Nitrate - N	353.2	0.082		mg/L	22
009	02131-DWW5	Aqueous	Sulfate	300.0	8.8		mg/L	22
010	02131-DWW6	Aqueous	Nitrate - N	353.2	0.55		mg/L	24
010	02131-DWW6	Aqueous	Sulfate	300.0	3.4		mg/L	24
011	02131-FB	Aqueous	Nitrate - N	353.2	0.0016	J	mg/L	26
011	02131-FB	Aqueous	Sulfate	300.0	0.49	J	mg/L	26
011	02131-FB	Aqueous	Lead	6010C	0.0074	J	mg/L	27

(61 detections)

Description: **02131-MW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0923**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2202	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1133	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.0089	J	0.020	0.0013	mg/L 1
Sulfate			300.0	3.6		1.0	0.28	mg/L 1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	500	12/28/2013 0311	PMM2		37336

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	15000		10000	3400	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	600	J	5000	100	ug/L	1
Benzene	71-43-2	8260B	13000		500	66	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	500	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		500	74	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	860		500	200	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	500	ug/L	1
Ethanol	64-17-5	8260B	ND		50000	17000	ug/L	1
Ethylbenzene	100-41-4	8260B	4200		500	170	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	100	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	3100		500	200	ug/L	1
Naphthalene	91-20-3	8260B	ND		500	200	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	3400	ug/L	1
Toluene	108-88-3	8260B	44000		500	170	ug/L	1
Xylenes (total)	1330-20-7	8260B	22000		500	170	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1334	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		50	12	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		50	12	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description **02131-MW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0923**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1334	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		50	11	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		50	6.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		50	5.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		50	6.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		50	8.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		50	10	ug/L	1
Chrysene	218-01-9	8270D	ND		50	7.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		50	13	ug/L	1
Fluoranthene	206-44-0	8270D	ND		50	14	ug/L	1
Fluorene	86-73-7	8270D	ND		50	14	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		50	23	ug/L	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>780</b>		<b>50</b>	<b>13</b>	<b>ug/L</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		50	12	ug/L	1
Pyrene	129-00-0	8270D	ND		50	31	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		100	37-129
Nitrobenzene-d5		97	38-127
Terphenyl-d14		66	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2305	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		108	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/23/2013 2035	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.016		0.010	0.0019	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-MW3**Matrix: **Aqueous**Date Sampled: **12/18/2013 0852**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2209	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1157	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Nitrate - N			353.2	0.014	J	0.020	0.0013	mg/L	1
Sulfate			300.0	1.5		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1000	12/28/2013 0036	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	29000		20000	6700	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	4200	J	10000	200	ug/L	1
Benzene	71-43-2	8260B	15000		1000	130	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5000	1000	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1000	150	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	1700		1000	400	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20000	1000	ug/L	1
Ethanol	64-17-5	8260B	ND		100000	33000	ug/L	1
Ethylbenzene	100-41-4	8260B	4600		1000	330	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1000	200	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	31000		1000	400	ug/L	1
Naphthalene	91-20-3	8260B	1400		1000	400	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	12000	J	20000	6700	ug/L	1
Toluene	108-88-3	8260B	44000		1000	330	ug/L	1
Xylenes (total)	1330-20-7	8260B	23000		1000	330	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1400	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		50	12	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		50	12	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-MW3**Matrix **Aqueous**Date Sampled: **12/18/2013 0852**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	10	12/30/2013 1400	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		50	11	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		50	6.0	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		50	5.0	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		50	6.0	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		50	8.0	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		50	10	ug/L	1
Chrysene	218-01-9	8270D	ND		50	7.0	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		50	13	ug/L	1
Fluoranthene	206-44-0	8270D	ND		50	14	ug/L	1
Fluorene	86-73-7	8270D	ND		50	14	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		50	23	ug/L	1
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8270D</b>	<b>860</b>		<b>50</b>	<b>13</b>	<b>ug/L</b>	<b>1</b>
Phenanthrene	85-01-8	8270D	ND		50	12	ug/L	1
Pyrene	129-00-0	8270D	ND		50	31	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		88	37-129
Nitrobenzene-d5		94	38-127
Terphenyl-d14		42	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2315	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.074	P	0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		72	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/23/2013 2101	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0072	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-MW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 0808**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2211	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1221	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.40		0.020	0.0013	mg/L	1
Sulfate		300.0	0.55	J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2053	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.56</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>0.90</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260B</b>	<b>10</b>	<b>J</b>	<b>20</b>	<b>6.7</b>	<b>ug/L</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>1.0</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>18</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		102	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1918	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-MW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 0808**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1918	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		94	37-129
Nitrobenzene-d5		93	38-127
Terphenyl-d14		58	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2326	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		84	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/20/2013 2301	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0097	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DUP MW4**Matrix **Aqueous**Date Sampled: **12/18/2013 0810**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2212	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1245	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.37		0.020	0.0013	mg/L	1
Sulfate		300.0	2.8		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2115	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.54</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>	<b>91-20-3</b>	<b>8260B</b>	<b>0.94</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260B</b>	<b>10</b>	<b>J</b>	<b>20</b>	<b>6.7</b>	<b>ug/L</b>	<b>1</b>
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>1.0</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>19</b>		<b>1.0</b>	<b>0.33</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1945	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DUP MW4**Matrix **Aqueous**Date Sampled: **12/18/2013 0810**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 1945	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		93	38-127
Terphenyl-d14		42	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2336	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		118	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	3005A	6010C	1	12/23/2013 2109	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0044	J	0.010	0.0019	mg/L	2

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "V"

Description: **02131-DWW1**Matrix: **Aqueous**Date Sampled: **12/18/2013 0941**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353 2	1	12/18/2013 2213	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1309	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.42		0.020	0.0013	mg/L	1
Sulfate		300.0	1.8		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2137	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2011	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description **02131-DWW1**Matrix: **Aqueous**Date Sampled **12/18/2013 0941**Date Received **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2011	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		91	38-127
Terphenyl-d14		98	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2346	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		107	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW2**Matrix: **Aqueous**Date Sampled: **12/18/2013 0956**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2214	KMB		36696
1		(Sulfate) 300.0	1	12/27/2013 1334	SMH		37301

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.48		0.020	0.0013	mg/L	1
Sulfate		300.0	1.2		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2159	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	1.8	J	10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	2.2		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	71		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2037	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW2**Matrix **Aqueous**Date Sampled: **12/18/2013 0956**Date Received **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2037	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		95	37-129
Nitrobenzene-d5		92	38-127
Terphenyl-d14		95	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/26/2013 2357	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.019	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		99	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW3**Matrix: **Aqueous**Date Sampled: **12/18/2013 1035**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353 2	1	12/18/2013 2215	KMB		36696
1		(Sulfate) 300 0	1	12/28/2013 0650	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.29		0.020	0.0013	mg/L	1
Sulfate		300.0	0.91	J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2222	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		99	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2103	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**Laboratory ID: **OL18078-007**Description: **02131-DWW3**Matrix: **Aqueous**Date Sampled: **12/18/2013 1035**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2103	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		91	38-127
Terphenyl-d14		95	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/27/2013 0007	JCG	12/26/2013 1330	37189

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		105	57-137

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWWW4**Matrix: **Aqueous**Date Sampled **12/18/2013 1013**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2216	KMB		36696
1		(Sulfate) 300.0	1	12/28/2013 0802	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N			353.2	0.18	0.020	0.0013	mg/L	1
Sulfate			300.0	8.0	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2244	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2130	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.0	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.0	1.2	ug/L	1

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW4**Matrix: **Aqueous**Date Sampled: **12/18/2013 1013**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2130	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.0	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.0	0.60	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.0	0.50	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.0	0.60	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.0	0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.0	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.0	0.70	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.0	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.0	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.0	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.0	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.0	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.0	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.0	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		93	37-129
Nitrobenzene-d5		92	38-127
Terphenyl-d14		97	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1158	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW5**Matrix: **Aqueous**Date Sampled: **12/18/2013 1051**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2231	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 0826	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.082		0.020	0.0013	mg/L	1
Sulfate		300.0	8.8		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2307	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		103	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2156	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description **02131-DWW5**Matrix: **Aqueous**Date Sampled: **12/18/2013 1051**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2156	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.81	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		96	37-129
Nitrobenzene-d5		92	38-127
Terphenyl-d14		101	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1229	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW6**Matrix: **Aqueous**Date Sampled: **12/18/2013 1117**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2232	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 0939	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.55		0.020	0.0013	mg/L	1
Sulfate		300.0	3.4		1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2329	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		100	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2222	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-DWW6**Matrix: **Aqueous**Date Sampled: **12/18/2013 1117**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2222	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.82	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		97	37-129
Nitrobenzene-d5		96	38-127
Terphenyl-d14		102	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1239	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-FB**Matrix: **Aqueous**Date Sampled: **12/18/2013 1145**Date Received: **12/18/2013****Inorganic non-metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/18/2013 2233	KMB		36697
1		(Sulfate) 300.0	1	12/28/2013 1003	SMH		37505

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Nitrate - N		353.2	0.0016	J	0.020	0.0013	mg/L	1
Sulfate		300.0	0.49	J	1.0	0.28	mg/L	1

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2008	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		10	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		10	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		10	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		10	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		10	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		10	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		89	70-130

**Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2248	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Acenaphthene	83-32-9	8270D	ND		5.1	1.2	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		5.1	1.2	ug/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-FB**Matrix: **Aqueous**Date Sampled: **12/18/2013 1145**Date Received: **12/18/2013****Semivolatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/26/2013 2248	JCG	12/23/2013 1842	37050

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Anthracene	120-12-7	8270D	ND		5.1	1.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		5.1	0.61	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		5.1	0.51	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		5.1	0.61	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		5.1	0.82	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		5.1	1.0	ug/L	1
Chrysene	218-01-9	8270D	ND		5.1	0.71	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		5.1	1.3	ug/L	1
Fluoranthene	206-44-0	8270D	ND		5.1	1.4	ug/L	1
Fluorene	86-73-7	8270D	ND		5.1	1.4	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		5.1	2.3	ug/L	1
Naphthalene	91-20-3	8270D	ND		5.1	1.3	ug/L	1
Phenanthrene	85-01-8	8270D	ND		5.1	1.2	ug/L	1
Pyrene	129-00-0	8270D	ND		5.1	3.2	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		99	37-129
Nitrobenzene-d5		94	38-127
Terphenyl-d14		100	10-148

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	12/29/2013 1249	JCG	12/27/2013 0933	37264

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.020	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

**ICP-AES**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010C	1	12/20/2013 2308	CDF	12/19/2013 1645	36758

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010C	0.0074	J	0.010	0.0019	mg/L	1

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131-TB**Matrix **Aqueous**Date Sampled: **12/18/2013 1156**Date Received: **12/18/2013****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/27/2013 2030	PMM2		37335

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	6.7	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.13	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.15	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	1.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	33	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.33	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	6.7	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.33	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.33	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		87	70-130

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Shealy Environmental Services, Inc.  
106 Vantage Point Drive  
West Columbia, South Carolina 29172  
Telephone No. (803) 791-9700 Fax No. (803) 791-9111  
www.shealylab.com

Number

**SHEALY Chain of Custody Record**

Client <i>Matthew B...</i>	Project Title <i>...</i>	Sample ID <i>...</i>	Date <i>...</i>
Project Location <i>...</i>	Project Number <i>...</i>	Project Name <i>...</i>	Project Description <i>...</i>
Project ID: Describe in detail the sample location and container used.		Project ID: Describe in detail the sample location and container used.	
<b>Analysis</b> BTEX, PCBs, PAHs, TOC, etc.			
Date of Receipt: <i>...</i>			
Date of Analysis: <i>...</i>			
Date of Report: <i>...</i>			

Sample ID	Date	Time	Analysis	Remarks
00131-MW2	12/18/13	7:03	X	
00131-MW3		8:26		
00131-MW4		9:03		
00131-Dugout		9:00		
00131-Dugout		9:41		
00131-Dugout		9:56		
00131-Dugout		10:53		
00131-Dugout		10:13		
00131-Dugout		10:51		
00131-Dugout	12/18/13	11:17	X	

1. Received by: <i>...</i>	Date: <i>12-18-13</i>	Time: <i>12:00</i>	Signature: <i>...</i>	Date: <i>12-18-13</i>	Time: <i>1:40</i>
2. Received by: <i>...</i>	Date: <i>12-18-13</i>	Time: <i>...</i>	Signature: <i>...</i>	Date: <i>...</i>	Time: <i>...</i>
3. Received by: <i>...</i>	Date: <i>12-18-13</i>	Time: <i>...</i>	Signature: <i>...</i>	Date: <i>...</i>	Time: <i>...</i>
4. Received by: <i>...</i>	Date: <i>12-18-13</i>	Time: <i>...</i>	Signature: <i>...</i>	Date: <i>...</i>	Time: <i>...</i>

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

**SHEALY ENVIRONMENTAL SERVICES, INC.**

Shealy Environmental Services, Inc.  
 108 Vantage Point Drive  
 West Columbia, South Carolina 29172  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111



**Chain of Custody Record**

Number

Client: <u>Katawbi</u>		Project No: <u>716</u>		Sample No: <u>1</u>	
Address: <u>4278 Old Rd</u>		City: <u>West Columbia</u>		State: <u>SC</u> Zip: <u>29172</u>	
Project Name: <u>Site Assess</u>		Phase: <u>Site Assess</u>		Date: <u>12-17-13</u>	
Project Address: <u>4278 Old Rd</u>		Project No: <u>716</u>		Sample No: <u>1</u>	
Sample Description Date Time	Date Time	Matrix	ANALYSIS	Method	
				Method	Method
<u>CC131-F6</u>	<u>12-18-13</u>	<u>1145</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>CC131-FB</u>	<u>12-18-13</u>	<u>1152</u>	<u>X</u>	<u>X</u>	<u>X</u>
1. Received by: <u>Tony RAT</u> Date: <u>12-18-13</u> Time: <u>12:30</u>		2. Released by: <u>M. Chapman</u> Date: <u>12-18-13</u> Time: <u>1:00</u>		3. Received by: <u>[Signature]</u> Date: <u>12-18-13</u> Time: <u>1:00</u>	
4. Released by: <u>[Signature]</u> Date: <u>12-18-13</u> Time: <u>1:00</u>		5. Received by: <u>[Signature]</u> Date: <u>12-18-13</u> Time: <u>1:00</u>		6. Released by: <u>[Signature]</u> Date: <u>12-18-13</u> Time: <u>1:00</u>	

**Note: All samples are retained for six weeks from receipt unless other arrangements are made.**

SHEALY ENVIRONMENTAL SERVICES, INC.





Professional Service Industries, Inc  
 534 St Andrews Road, Suite C  
 Columbia, SC 29210

Phone (803) 776-6050  
 Fax (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-26-S1**  
**Issue No: 1**

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced, except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report, to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.

*Vince Beltsos*  
 Approved Signatory Vince Beltsos (Staff Engineer)  
 Date of Issue 1/21/2014

**Client:** KATAWBA ENVIRONMENTAL  
 POST OFFICE BOX 11228  
 ROCK HILL, SC 29731

**CC:** ALEX AMOS

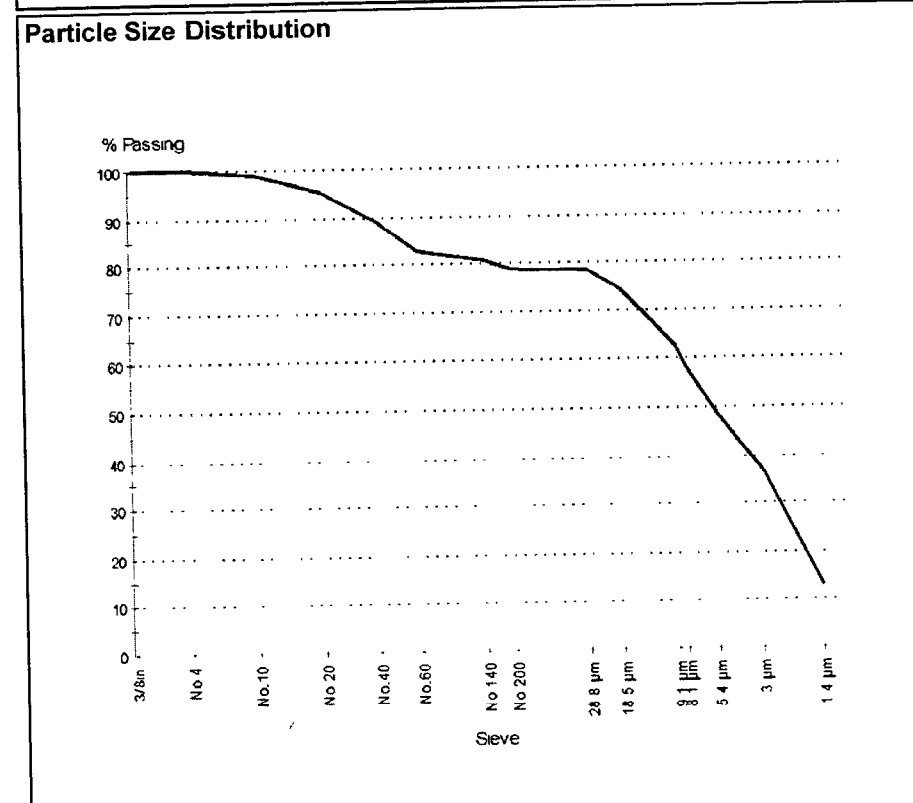
**Project:** GRAIN SIZE ANALYSIS

**Sample Details**

**Sample ID:** 0451102-26-S1  
**Client Sample ID:**  
**Date Sampled:** 01/03/14  
**Sampled By:** Client  
**Specification:** D422/T88 Part Size Analysis (Set #1)  
**Supplier:**  
**Source:**  
**Material:** Reddish Orange Silty SAND  
**Sampling Method:** Bulk Surface Sample  
**General Location:** One Accord MW4  
**Location:** One Accord MW4

**Sample Description:**

**Grading:** ASTM D 422  
**Drying by:** Natural  
**Date Tested:**



Sieve Size	% Passing	Limits
3/8in (9.5mm)	100	
No. 4 (4.75mm)	100	
No. 10 (2.0mm)	99	
No. 20 (850µm)	95	
No. 40 (425µm)	89	
No. 60 (250µm)	83	
No. 140 (106µm)	81	
No. 200 (75µm)	79	
28.8 µm	78.3	
18.5 µm	74.4	
9.1 µm	62.6	
8.1 µm	58.6	
5.4 µm	48.7	
3.0 µm	37.1	
1.4 µm	13.0	

**D85:** 0.2988    **D60:** 0.0084    **D50:** 0.0057  
**D30:** 0.0024    **D15:** 0.0015    **D10:** N/A

COBBLES		GRAVEL		SAND			FINES	
(0.0%)	Coarse (0.0%)	Fine (0.0%)	Coarse (1.1%)	Medium (9.7%)	Fine (10.5%)	Silt (32.0%)	Clay (46.8%)	



Professional Service Industries, Inc  
 534 St. Andrews Road, Suite C  
 Columbia, SC 29210

Phone (803) 776-6050  
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# Material Test Report

**Report No: MAT:0451102-26-S1**  
**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
 POST OFFICE BOX 11228  
 ROCK HILL, SC 29731

**CC:** ALEX AMOS

**Project:** GRAIN SIZE ANALYSIS

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*Vince Belitsos*  
 Approved Signatory Vince Belitsos (Staff Engineer)  
 Date of Issue 1/21/2014

## Sample Details

**Sample ID:** 0451102-26-S1  
**Client Sample ID:**  
**Date Sampled:** 01/03/14  
**Sampled By:** Client  
**Specification:** D422/T88 Part Size Analysis (Set #1)

**Supplier:**  
**Source:**  
**Material:** Reddish Orange Silty SAND  
**Sampling Method:** Bulk Surface Sample  
**General Location:** One Accord MW4  
**Location:** One Accord MW4

## Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422		
Dispersion time (min)			
Shape			
Hardness			

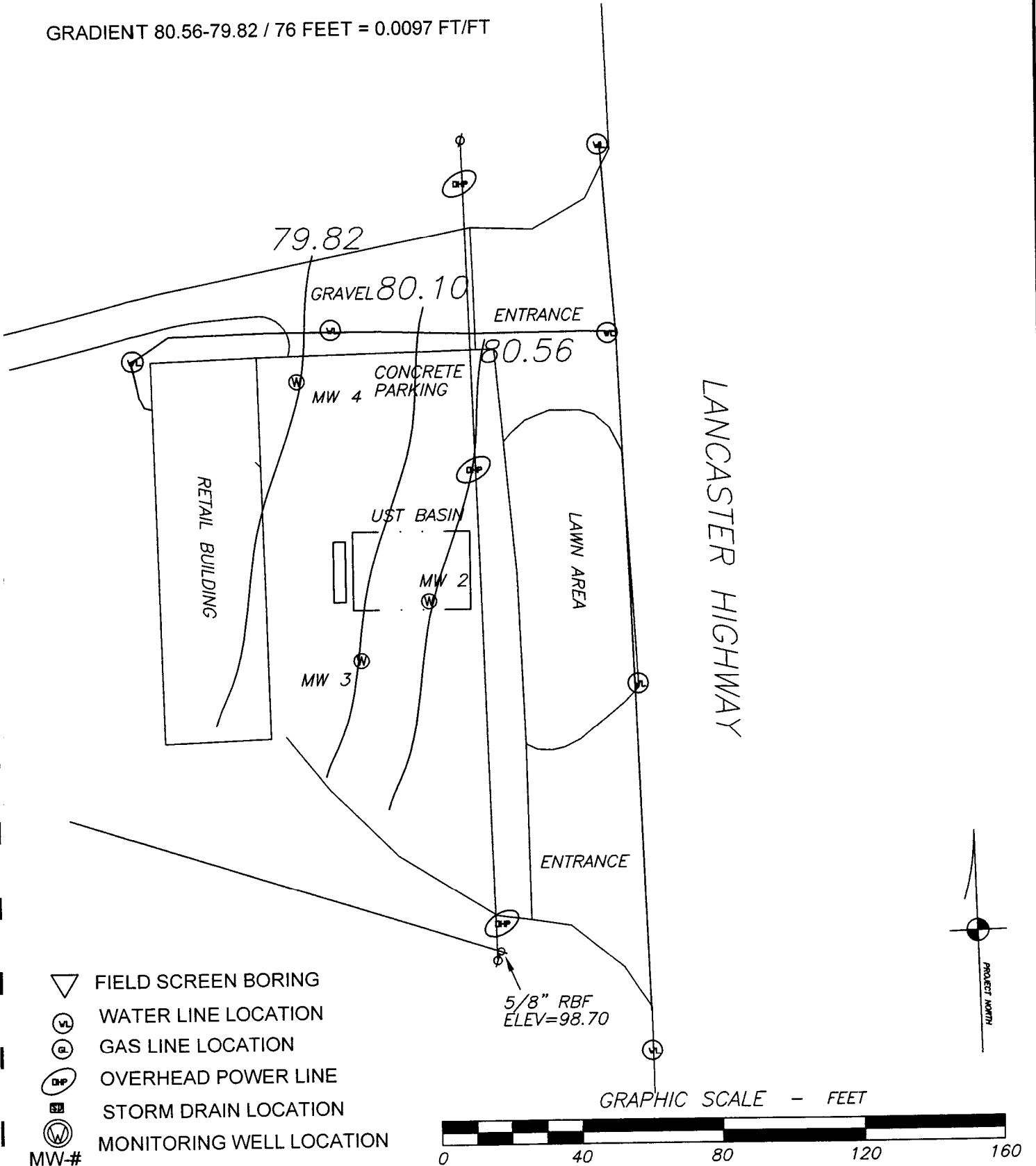
## Comments

N/A

## **APPENDIX D**

### **Aquifer Calculations**

GRADIENT 80.56-79.82 / 76 FEET = 0.0097 FT/FT



- ▽ FIELD SCREEN BORING
- ⊕ WATER LINE LOCATION
- ⊙ GAS LINE LOCATION
- ⊕ OHP OVERHEAD POWER LINE
- ⊕ STORM DRAIN LOCATION
- ⊕ MW-# MONITORING WELL LOCATION

KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

TIER I  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 AQUIFER CALCULATIONS

DATE: MARCH 2014  
 FIGURE D



**SOUTH CAROLINA**  
**Department of Health and Environmental Control**  
**Summary of Slug Test Form**

**Site Data**

UST Permit # 02131 County: CHESTER  
 Facility Name ONE Accord

**Slug Data**

See Appendix D Table \_\_\_\_\_ Figure \_\_\_\_\_ for a list of all data measurements.  
 (water level logs, etc.) (Complete as appropriate).

Water Level Recovery Data was measured by WATER LEVEL INDICATOR  
 (Hermit Data Logger, Manually with Water Level Indicator, etc.) (List Method).

Complete the following table for each well tested.

**COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED**

Slug Test Conducted in well(s) number	<u>MW2</u>	<u>MW3</u>		
Initial Rise/Drawdown in well (feet)	<u>0.45</u>	<u>1.35</u>		
Radius of Well Casing (feet)	<u>0.333</u>	<u>0.333</u>		
Effective Radius of Well (feet)	<u>0.333</u>	<u>0.333</u>		
Static Saturated Aquifer Thickness (feet)	<u>30</u>	<u>30</u>		
Length of Well Screen (feet)	<u>10</u>	<u>10</u>		
Static Height of Water Column in Well (ft)	<u>18.40</u>	<u>18.35</u>		

**Calculations**

See Appendix D Table \_\_\_\_\_ Figure \_\_\_\_\_ for calculations. (Complete as appropriate).

The method for aquifer calculations was Bowen-Rice

Calculated values by well were as follows:

Slug Test Conducted in well(s) number	<u>MW2</u>	<u>MW3</u>		
Hydraulic Conductivity	<u>5.62<sup>-2</sup></u>	<u>0.194</u>		

Thickness of the aquifer used to calculate hydraulic conductivity was 30 feet.

The aquifer is \_\_\_\_\_ confined \_\_\_\_\_ semi-confined  water table (Check as appropriate).

The estimated seepage velocity is 3.53 feet per year based on  
 a hydraulic conductivity of 0.2496, a hydraulic gradient of 0.0097, and  
 a porosity of 25 per cent for SAND soil (list type i.e., silty sand, clay, etc).

## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 12/20/13  
 Client: One Accord  
 Project Number: Tier I

---

Well Label: MW-2  
 Aquifer Thickness: 30. feet  
 Screen Length: 10. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.3333 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 9.6 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5. Seconds

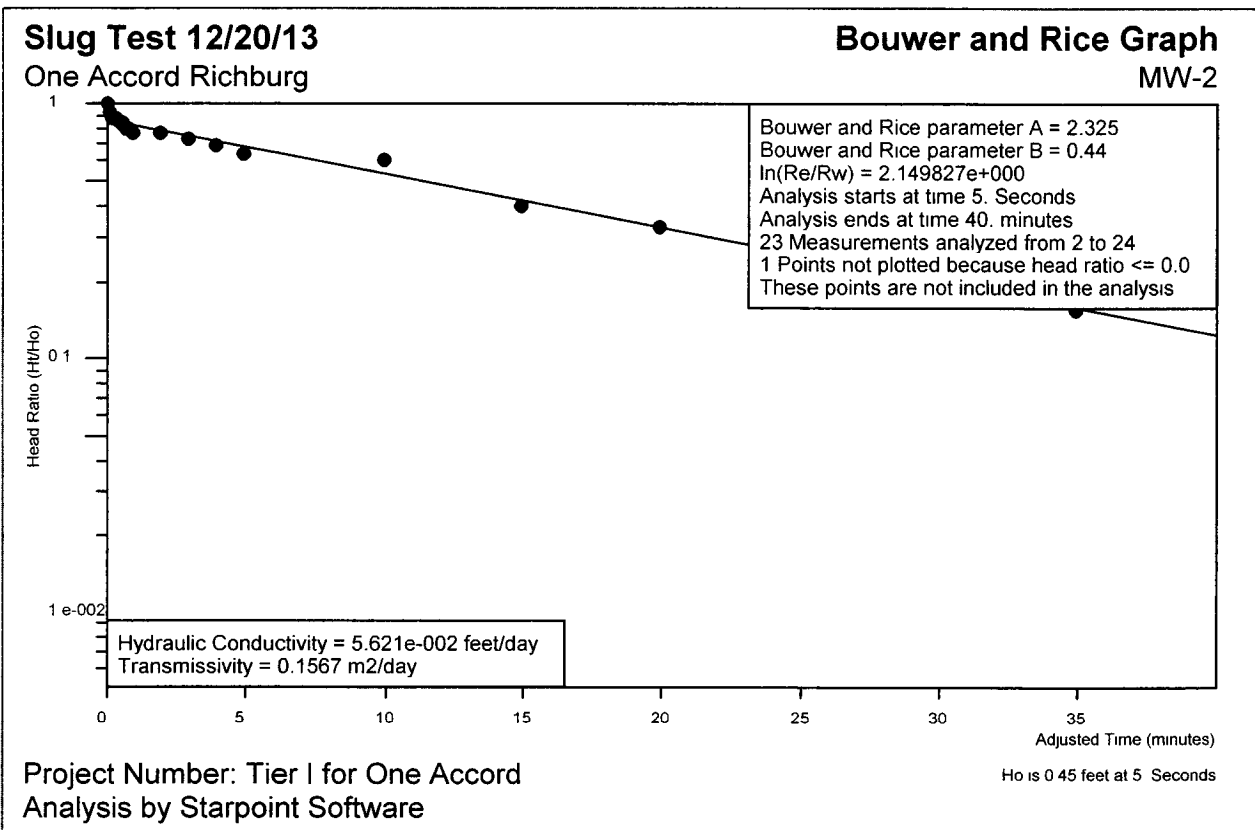
Test starts with trial 1

There are 24 time and drawdown measurements

Maximum head is 0.45 feet

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	0.45	0.45	1.
3	10.	5.	0.42	0.42	0.9333
4	15.	10.	0.4	0.4	0.8889
5	20.	15.	0.4	0.4	0.8889
6	25.	20.	0.4	0.4	0.8889
7	30.	25.	0.39	0.39	0.8667
8	35.	30.	0.38	0.38	0.8444
9	40.	35.	0.38	0.38	0.8444
10	45.	40.	0.37	0.37	0.8222
11	50.	45.	0.36	0.36	0.8
12	55.	50.	0.36	0.36	0.8
13	60.	55.	0.35	0.35	0.7778
14	120.	115.	0.35	0.35	0.7778
15	180.	175.	0.33	0.33	0.7333
16	240.	235.	0.31	0.31	0.6889
17	300.	295.	0.29	0.29	0.6444
18	600.	595.	0.27	0.27	0.6
19	900.	895.	0.18	0.18	0.4
20	1200	1195	0.15	0.15	0.3333
21	1500	1495	0.11	0.11	0.2444
22	1800	1795	0.1	0.1	0.2222
23	2100	2095	7.e-002	7.e-002	0.1556
24	2400	2395	0.	0.	0.



## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 12/20/13  
 Client: One Accord  
 Project Number: Tier I

---

Well Label: MW-3  
 Aquifer Thickness: 30. feet  
 Screen Length: 10. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.3333 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 9.65 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5. Seconds

Test starts with trial 1

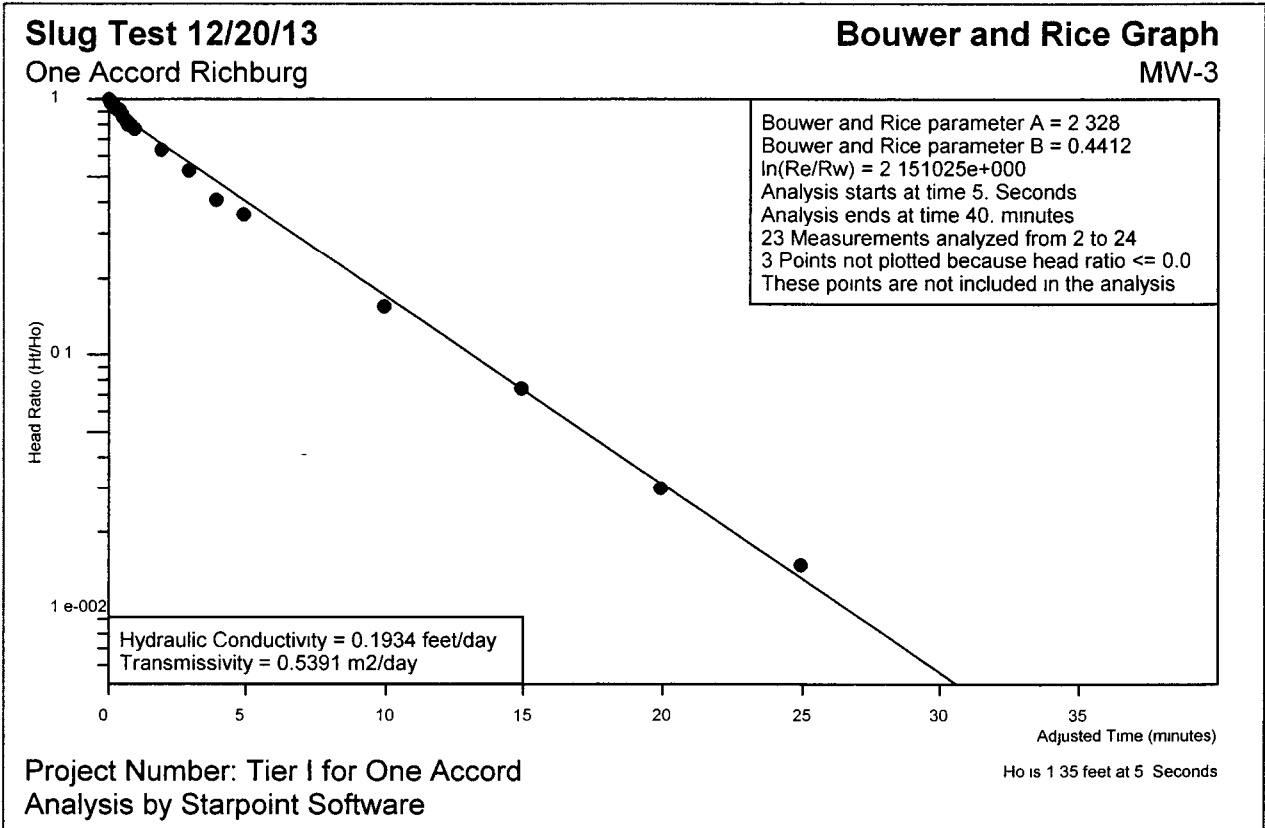
There are 24 time and drawdown measurements

Maximum head is 1.35 feet

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.35	1.35	1.
3	10.	5.	1.32	1.32	0.9778
4	15.	10.	1.3	1.3	0.963
5	20.	15.	1.27	1.27	0.9407
6	25.	20.	1.25	1.25	0.9259
7	30.	25.	1.23	1.23	0.9111
8	35.	30.	1.19	1.19	0.8815
9	40.	35.	1.15	1.15	0.8519
10	45.	40.	1.12	1.12	0.8296
11	50.	45.	1.09	1.09	0.8074
12	55.	50.	1.08	1.08	0.8
13	60.	55.	1.05	1.05	0.7778
14	120.	115.	0.86	0.86	0.637
15	180.	175.	0.71	0.71	0.5259
16	240.	235.	0.55	0.55	0.4074
17	300.	295.	0.48	0.48	0.3556
18	600.	595.	0.21	0.21	0.1556
19	900.	895.	0.1	0.1	7.407e-002
20	1200	1195	4.e-002	4.e-002	2.963e-002
21	1500	1495	2.e-002	2.e-002	1.481e-002
22	1800	1795	0.	0.	0.
23	2100	2095	0.	0.	0.
24	2400	2395	0.	0.	0.





## **APPENDIX E**

### **Waste Disposal**

NON-HAZARDOUS WASTE MANIFEST		1 Generator ID Number	2 Page 1 of	3 Emergency Response Phone	4. Waste Tracking Number 012813	
5 Generator's Name and Mailing Address Kitehawk Env. Remedial 4275 U.S. Rd Edgecombe, SC 29712 Generator's Phone: 803-327-0469				Generator's Site Address (if different than mailing address)		
6 Transporter 1 Company Name Kitehawk Env				U.S. EPA ID Number		
7 Transporter 2 Company Name				U.S. EPA ID Number		
8 Designated Facility Name and Site Address Charlotte HazMat 221 Dalton Ave Charlotte NC Facility's Phone: 704-332-5600				U.S. EPA ID Number		
9 Waste Shipping Name and Description		10 Containers		11 Total Quantity	12 Unit Wt/Vol	
		No	Type			
1 Water/Petroleum mix US Mint Man #2 Darlington, SC		2	Totes	420	gall	
2 Ponce Water South SP LLC 610 S Grand Du Sault SC		1	Dr	43	gall	
3 Ponce Water Sunny #4, US 78 Ladson SC		1	Tote	156	gall	
4 Ponce Water Old Accord 3570 Ladson Hwy, Ladson SC		2	Dr	94	gall	
13 Special Handling Instructions and Additional Information Non-Haz UST Site						
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Generator's/Officer's Printed/Typed Name Billy May				Signature Billy May		Month Day Year 1 28 14
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.						
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Billy May				Signature Billy May		Month Day Year 1 28 14
Transporter 2 Printed/Typed Name				Signature		Month Day Year
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
17b. Alternate Facility (or Generator)				Manifest Reference Number		
Facility's Phone				U.S. EPA ID Number		
17c. Signature of Alternate Facility (or Generator)				Month Day Year		
18 Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a						
Printed/Typed Name Mike Hinds				Signature Mike Hinds		Month Day Year 1 28 14



Richland County LF  
 1047 Highway Church Road  
 Elgin, SC, 29045  
 Ph: (803) 788-3054

Original  
 Ticket# 1286794

Customer Name EZPAYCREDITCARD EZPAY CREDIT Carrier CERT  
 Ticket Date 01/14/2014 Vehicle# D2  
 Payment Type Credit Card Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check# \*  
 Route Billing # 0000156  
 State Waste Code Gen EPA ID NR  
 Manifest 0  
 Destination  
 PO  
 Profile VA1052 (SOIL CONT W/PETROLEUM HYDROCARBONS)  
 Generator 126-KATAWBAENVIRONMENTAL KATAWBA ENVIRONMENTAL

Volume

	Time	Scale	ScaleMaster	Gross	54100 lb
In	01/14/2014 09:57:31	Scale2	Dwayne	Tare	24660 lb
Out	01/14/2014 12:01:27	Scale2	Dwayne	Net	29440 lb
				Tons	14.72

Comments

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Pet-Tons 100		14.72	Tons				12-CHESTER
2 FUEL-Fuel Surcharg 100			%				12-CHESTER
3 EVF-P-Standard Env 100			%				12-CHESTER
4 RCR-P-Regulatory C 100			%				12-CHESTER

Total Fees  
 Total Ticket

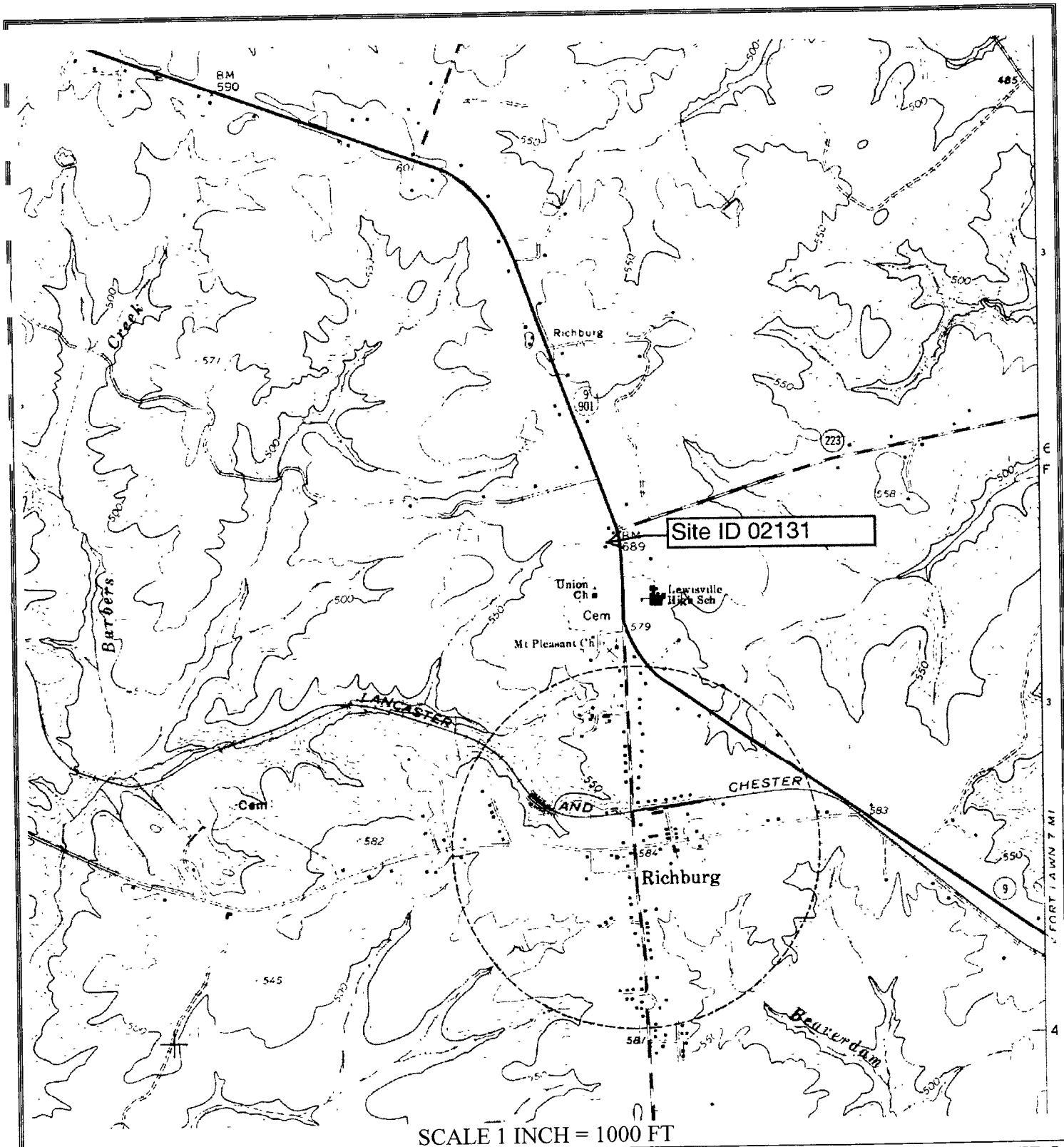
SIGNATURE

*Kenneth A. [Signature]*



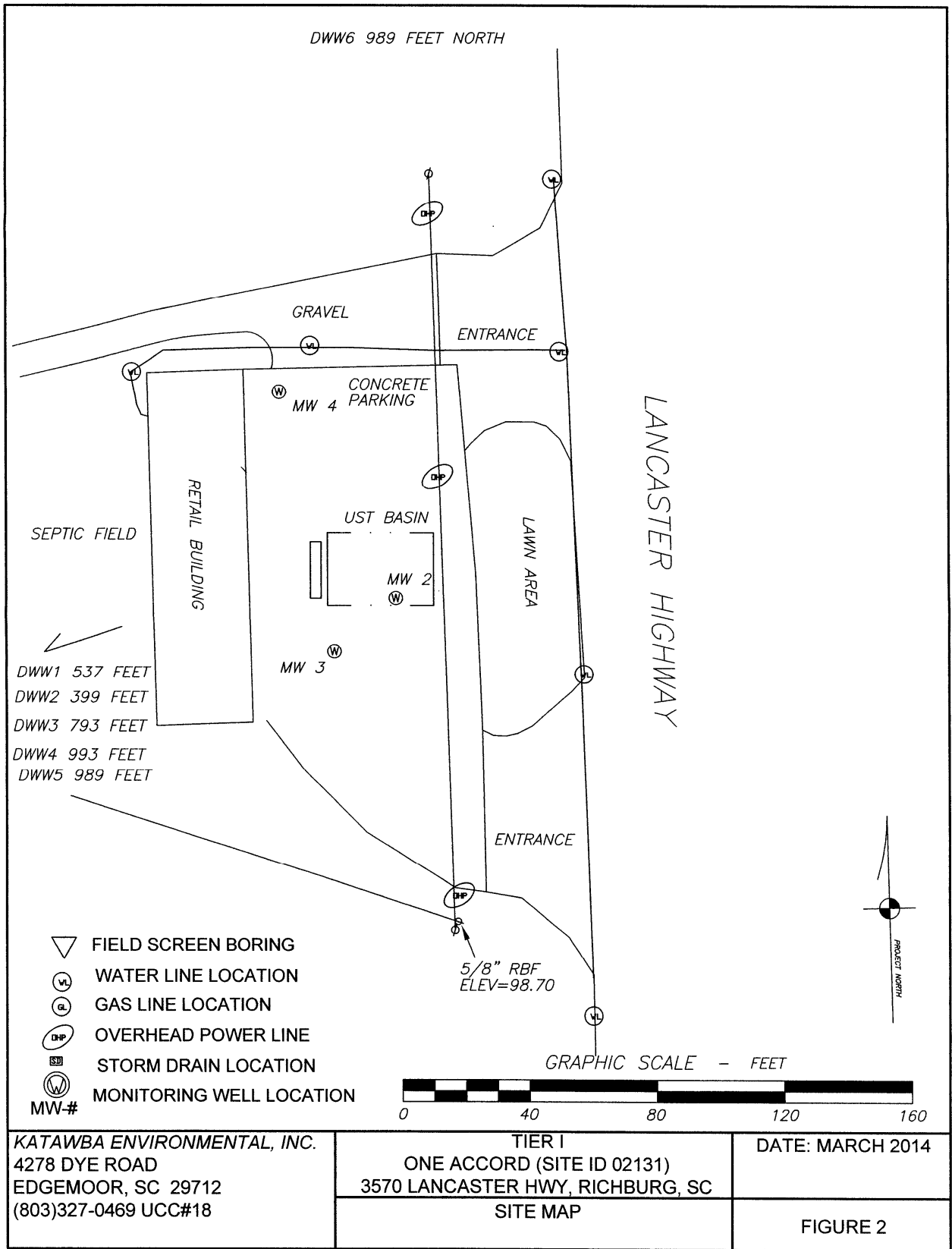
## **APPENDIX F**

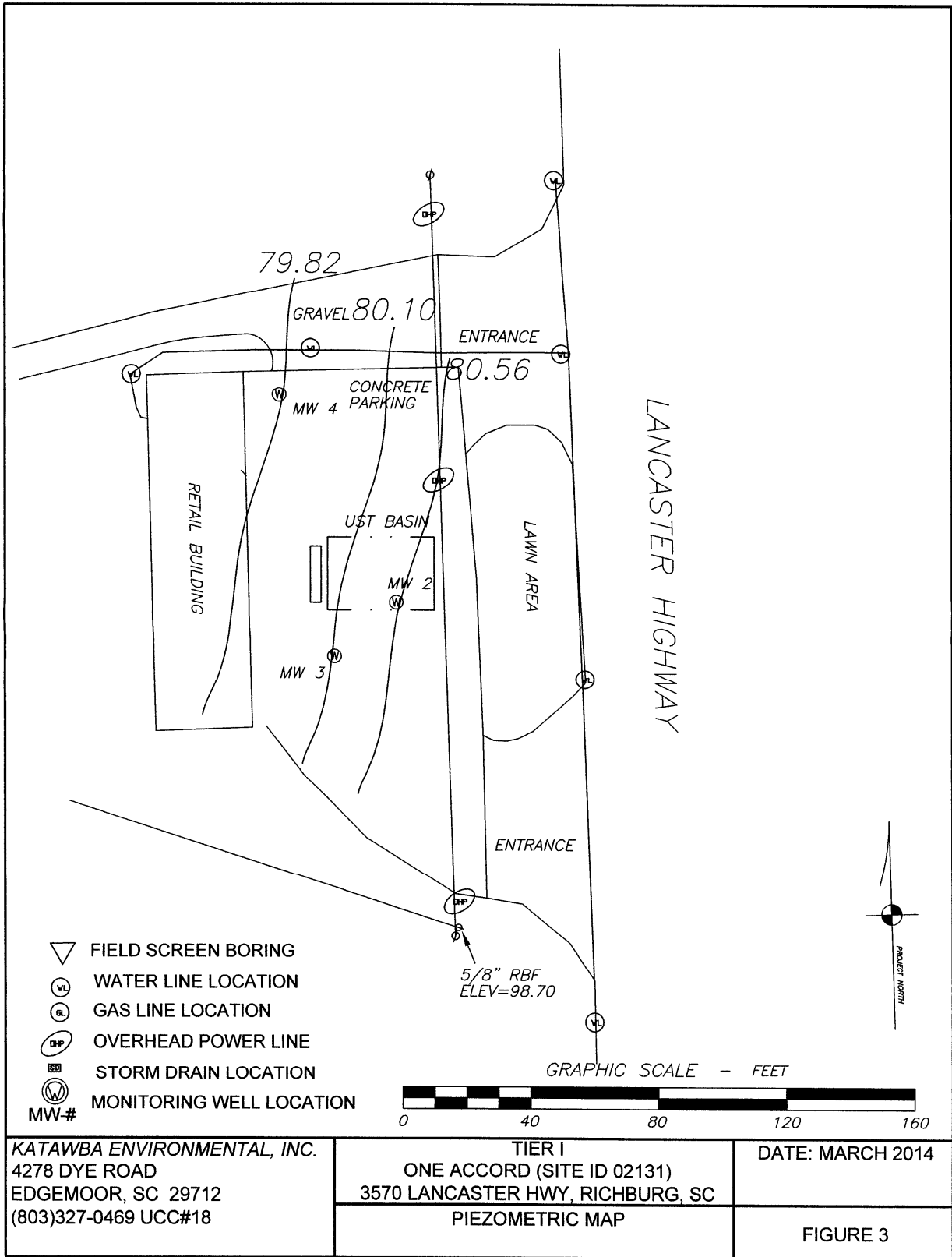
### **Figures**



**KATAWBA ENVIRONMENTAL, INC.**  
 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803) 327-0469 UCC#18

**TIER I**  
**ONE ACCORD SITE ID 02131**  
 3570 LANCASTER HIGHWAY  
 RICHBURG, SOUTH CAROLINA  
 FIGURE 1- SITE MAP



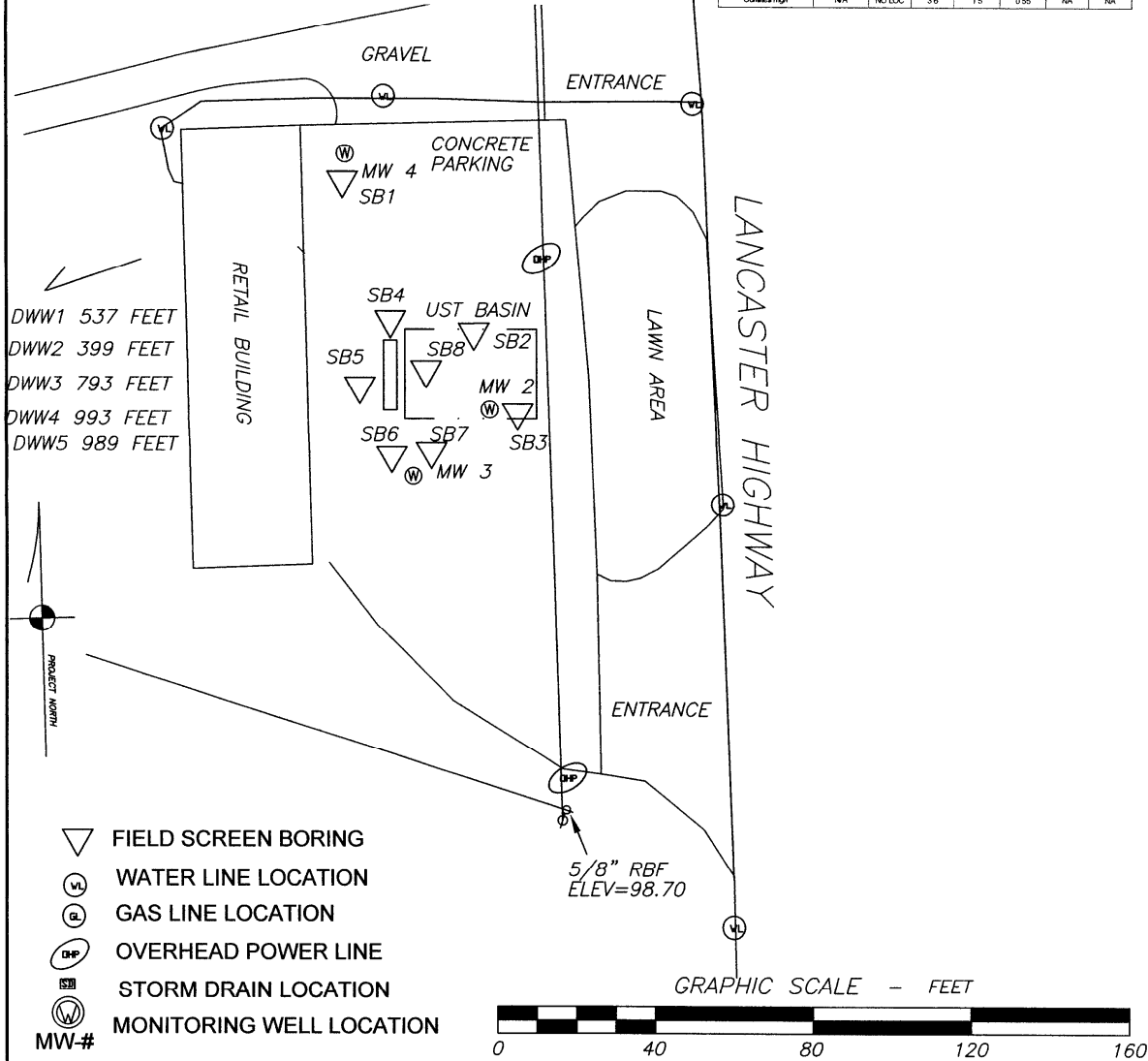




CoC	RBSL	SB-1	DUP	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8
Benzene	7	<6.8	<300	<6.2	<5.7	<5.8	<5.7	17	6.5	<6.3
Toluene	1460	<6.8	<300	<6.2	<5.7	<5.8	3.9	180	12	<6.3
Ethylbenzene	1190	<6.8	<300	<6.2	<5.7	<5.8	<5.7	95	<5.8	<6.3
Xylenes	14500	<6.8	<300	<6.2	<5.7	<5.8	8.5	780	32	<6.3
Naphthalene	36	<6.8	<300	<6.2	<5.7	<5.8	4.1	230/180	30	5.2
Benzo(a)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluorene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Phenanthrene	NA	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(k)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Chrysene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Dibenzo(a,h)anthracene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(a)pyrene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
Benzo(b)fluoranthene	66	<410	<400	<400	<410	<380	<400	<420	<410	<390
GRO(EPA 8015M)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOC (background boring)	mg/kg	NA	450	540	NA	NA	NA	NA	NA	NA
Lead mg/kg	NA	12	13	2.0	19	17	19	6.2	14	31

DWW6 989 FEET NORTH

CoC	RBSL (ug/L)	MW-1	MW-2	MW-3	MW-4	DWW-1	DWW-2
Free Product Thickness	None	NO LOC	None	None	None	None	None
Benzene	5	NO LOC	13000	15000	<1	<1	<1
Toluene	1,000	NO LOC	44000	44000	1	<1	<1
Ethylbenzene	700	NO LOC	4200	4000	<1	<1	<1
Xylenes	10,000	NO LOC	22000	20000	18	<1	<1
MTBE	40	NO LOC	3100	31000	0.56	<1	71
Naphthalene	25	NO LOC	<500/790	1400/980	0.90	<1	<1
1,2-DCP	15	NO LOC	<50	<1000	1	<1	<1
Benzo(a)anthracene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzo(b)fluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Benzo(k)fluoranthene	10	NO LOC	<50	<50	<5.1	<5	<5
Chrysene	10	NO LOC	<50	<50	<5.1	<5	<5
Dibenzo(a,h)anthracene	10	NO LOC	<50	<50	<5.1	<5	<5
Ferrous iron mg/l	NA	NO LOC	NA	NA	NA	NA	NA
Lead ug/l	15	NO LOC	16	7.2	9.7	NA	NA
ECB ug/l	0.05	NO LOC	<0.020	0.074	<0.020	NA	NA
Nitrates mg/l	NA	NO LOC	0.0089	0.014	0.40	NA	NA
Sulfates mg/l	NA	NO LOC	3.6	1.5	0.55	NA	NA



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

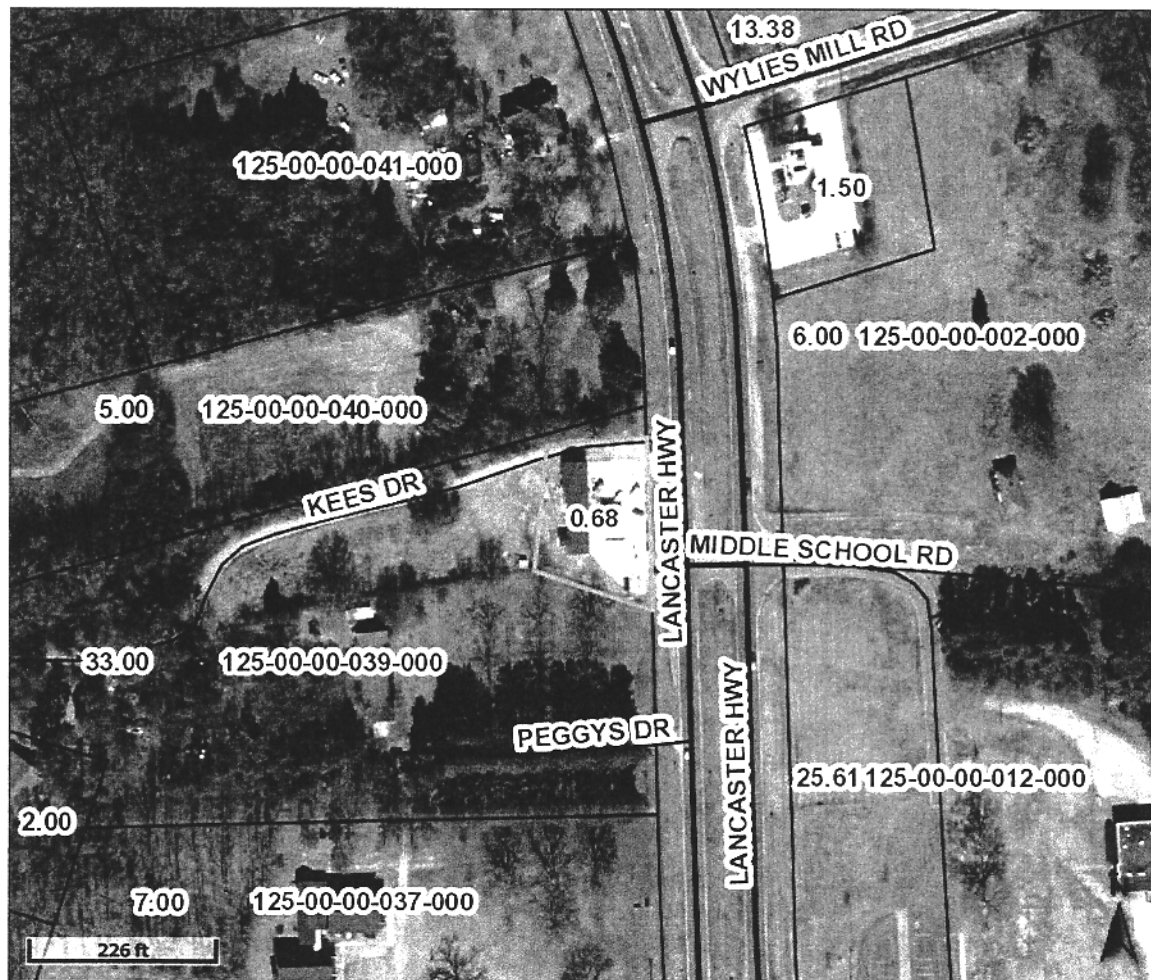
TIER I  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY, RICHBURG, SC  
 CONTAMINATION MAP

DATE: MARCH 2014

FIGURE 4

## **APPENDIX G**

### **Tax Map Information**



Overview

Legend

- Roads**
  - Secondary Road
  - SC Highway
- Municipals
- Parcels
- County Boundary

<b>Parcel ID</b>	125-00-00-059-000	<b>Alternate ID</b>	n/a	<b>Owner Address</b>	HOUGH ANGELA D-SURVIVORSHIP HUGHES MELVIN E SR-SURVIVORSHI PO BOX 220 RICHBURG SC 29729
<b>Sec/Twp/Rng</b>	n/a	<b>Class</b>	EX		
<b>Property Address</b>		<b>Acreage</b>	n/a		
<b>District</b>	04				
<b>Brief Tax Description</b>	KEES SERVICE STATION (Note: Not to be used on legal documents)				

Last Data Upload: 3/13/2014 2:14:20 AM

ONE ACCORD TAX MAP

TM NUMBER	ADDRESS	OWNER	
125-00-00-059-000	3570 Lancaster Hwy	Angela and Melvin Hough	PO Box 220, Richburg, SC 29729
125-00-00-039-000	518 Peggys Drive	Marion Kee	518 Peggy's Drive, Richburg, SC 29729
125-00-00-020-000	3571 Lancaster Hwy	John Darnell Faust	3571 Lancaster Highway, Richburg, SC 29729
125-00-00-012-000	Lancaster Hwy	Chester County School Board	1 Hinton Street, Chester, SC 29706
125-00-00-040-000	Lancaster Hwy	James Gill Knox Life Estate	1719 Old Richburg Road, Chester, SC 29706

# **APPENDIX H**

## **Land Use**

## ZONING REGULATIONS

One Accord Site ID 021317 further identified by Chester County Tax ID 1250000059000 is zoned LC (Limited Commercial). A copy of the current zoning regulations were too lengthy for inclusion within this report. This designation does not prohibit the use of onsite drinking water wells or irrigation wells according to Chester County. The subject site is located in an area serviced by public water and sewer lines. No future development plans for the site include the installation of a drinking water or irrigation well.

**APPENDIX I**  
**QAPP CHECKLIST**

QUAPP Contractor Checklist

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number provided?	X		
3	Is name, address, & phone number of current property owner provided?	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number provided?	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells provided?	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses provided?	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been detailed?	X		
16	Has the monitoring well installation and development dates been provided?	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the monitoring wells?	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?	X		
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?			X
27	Does the report include a brief discussion of the fate & transport models used?			X



Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)	X		
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)	X		
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)	X		
37	Has the topographic map been provided with all required elements? (Figure 1)	X		
38	Has the site base map been provided with all required elements? (Figure 2)	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)			X
41	Have the geologic cross-sections been provided? (Figure 6)			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements? (Appendix C)	X		
47	Have the soil boring/field screening logs been provided? (Appendix D)	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			X
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided? (Appendix H)	X		
52	Has all fate and transport modeling been provided? (Appendix I)			X
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



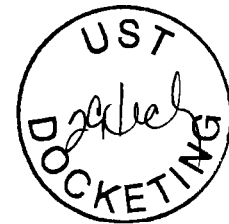
Catherine B. Templeton, Director

*Promoting and protecting the health of the people and the environment*

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

JUN 30 2014

Re: Site-Specific Work Plan Directive for a Tier II Assessment  
One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131  
Release Reported March 23, 2009  
Tier I Assessment Report received March 26, 2014  
Report of Analysis received April 1, 2014  
Chester County



Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) reviewed the referenced report submitted by Katawba Environmental, Inc, and confirmed an impacted water supply well on the adjacent property. The Tier I Assessment Report indicated that concentrations of petroleum chemicals of concern were found in the groundwater above Risk-Based Screening Levels (RBSLs) and water supply wells are located within 1000 feet of the facility.

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of a Tier II Assessment as outlined in the UST Quality Assurance Program Plan (QAPP) Revision 2.0 is necessary. The Tier II Assessment must be conducted in accordance with the UST QAPP and in compliance with all applicable regulations once the Site-Specific Work Plan is approved. The Site-Specific Work Plan must be prepared using the format as outlined in the QAPP Revision 2.0, available on-line at <http://www.scdhec.gov/environment/lwm/usthome/Qapp.htm>. **Your contractor must complete and submit the Site-Specific Work Plan within thirty (30) days of the date of this letter.** A cost agreement is required that includes sampling all water supply wells, and surface water bodies within 1,000 feet of the facility or 500 feet down gradient of the edge of the plume. **Please note that approval from the Agency must be issued before work begins.**

According to Division records, the release at the facility was reported to the Agency on March 23, 2009. In accordance with Section 44-2-40(D) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act, you are responsible for the first \$25,000 of site rehabilitation costs. To ensure that costs made toward the Tier II apply to the \$25,000 deductible, costs need to be preapproved and a cost agreement provided once the Site-Specific Work Plan is approved.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

On all correspondence regarding this site, please reference UST permit number 02131. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 898-7542 or hornsosms@dhec.sc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Minda Hornosky". The signature is fluid and cursive, with the first name "Minda" being more prominent and the last name "Hornosky" following in a similar style.

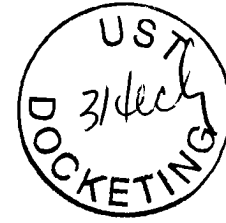
Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



Catherine B. Templeton Director

*Promoting and protecting the health of the public and the environment*



ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
PO BOX 220  
RICHBURG SC 29729-0220

AUG 21 2014

Re: Tier II Assessment Directive  
One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131; CA #48356; MWA #UMW-25624  
Release reported March 23, 2009  
Tier I Assessment Report received March 26, 2014  
Site- Specific Work Plan received July 30, 2014  
Revised Proposed Cost Agreement received August 7, 2014  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the referenced report and the Site-Specific Work Plan submitted by Katawba Environmental, Inc. The Tier I Assessment Report indicated that petroleum Chemicals of Concern (CoCs) are present in the soil and groundwater at concentrations that exceed Risk-Based Screening Levels (RBSLs) and water supply wells are in use within 1,000 feet of the facility.

In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, assessment activities must be conducted when CoCs are above RBSLs in soil and groundwater. Therefore, implementation of the scope of work as outlined in the Tier II Assessment will be necessary to characterize risk to human health and the environment. The Tier II Assessment must be conducted in accordance with the UST QAPP Revision 2.0 (UST QAPP), all applicable regulations, and the submitted Site- Specific Work Plan. A copy of the UST QAPP is available at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentClean-up/QualityAssurance/>.

The Tier II Assessment report, contractor checklist, and invoice are due 90 days from the date of this letter. A water sample should be collected from all water supply wells and surface water bodies within 1,000 feet of the facility or 500 feet down gradient of the edge of the plume and analyzed for BTEX, naphthalene, 8 oxygenates, 1,2-DCA, ethanol, and EDB. Existing groundwater monitoring wells with a screen that brackets the water table do not need to be purged prior to collection of a groundwater sample. Groundwater samples the monitoring well network should be collected and analyzed for BTEX, naphthalene, 8 oxygenates, 1,2-DCA, ethanol, lead, and EDB. Analyses should be in accordance with Appendix E of the UST QAPP including

duplicate samples, field blanks, and trip blanks. Please note that you and/or your contractor are responsible for obtaining all off-site access agreements and/or encroachment permits necessary for this scope of work.

Assessment activities at the site should begin immediately upon receipt of this letter. Cost agreement number (CA #) 48356 has been approved for the amount shown on the enclosed cost agreement form for installation of up to 22 temporary, 12 shallow and 3 deep pit-cased monitoring wells and sampling the extant monitoring well network to define the horizontal and vertical extent of dissolved CoC. Please be aware that the July 1, 2011 State Underground Petroleum Environmental Response Bank (SUPERB) Allowable Costs sheet states that "If the vertical and horizontal extent of chemicals of concern is not fully defined by the tier report, the Agency may not approve additional future mobilizations for additional screening or well installation." Any screening point that is converted to a permanent monitoring well will be reimbursed at the approved well installation rate. Please contact the Agency prior to well installation for concurrence regarding the final well locations. All shallow wells are to be installed with 10-foot screen intervals that bracket the water table. The SUPERB Account cannot reimburse costs for any shallow well with a screen that does not properly bracket the water table.

The Tier II Assessment report (a signed .pdf copy on CD is preferred) submitted at the completion of these activities should include information outlined in the UST QAPP and the following:

- Geological cross sections that include the shallow and deep monitoring wells. The percentage of sand, silt, and clay should be shown for the screen intervals of the newly installed shallow and deep well pair.
- Boring logs and well logs (DHEC 1903 form) signed by a well driller licensed in the state of South Carolina for each new temporary or permanent monitoring well in accordance with the South Carolina Well Standards, R.61-71. DHEC 1903 forms are required for field screening borings (whether direct push or drilled) where a sample is extracted for analysis.
- A CoC map based on current groundwater laboratory analytical data. The groundwater data should be adjacent to the relevant monitoring well location.
- The percentage of sand, silt, and clay from the screen interval of the down gradient shallow and deep well pair.
- Groundwater elevations, top of casing elevation, depth to groundwater, measurable free product thickness (where applicable), total well depth and screened interval for all monitoring wells associated with the site, unless otherwise directed by the Division, shall be presented in tabular format. Historical groundwater laboratory analytical data and depth to groundwater, and product if applicable, for this and all previous monitoring events for all monitoring wells shall be presented in tabular format.
- A groundwater elevation contour map of the site based on current groundwater potentiometric data. A second contour map will be necessary if three or more deep wells are installed.
- Manifests for contaminated soil and/or groundwater removed from the site for treatment and/or disposal.

- Signature and seal by a professional geologist or engineer registered in the State of South Carolina.
- According to R.61-98 Section IV.C.1 all plans, reports, invoices, and other documents relating to site rehabilitation activities which have been prepared or approved by a certified contractor shall be signed by the certified contractor and bear his certification number.

According to Division records, the release at the facility was reported to the Agency on March 23, 2009. In accordance with Section 44-2-40(D) of the State Underground Petroleum Environmental Response Bank (SUPERB) Account, you are responsible for the first \$25,000 of site rehabilitation costs. Please be sure to provide proof of costs that will be applied to the deductible with the invoice. Acceptable proof of payment of deductible costs include a copy of the cancelled check (front and back) that made payment to your contractor or a signed notarized statement by your site rehabilitation contractor for the amount that was paid directly to your contractor. Katawba Environmental, Incorporated can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for preapproved costs that exceed the \$25,000 deductible. An interim well drilling invoice may not be submitted for this scope of work as the deductible has not been met. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

The Division, because of unnecessary dilution, cannot make decisions if the reporting limit of individual petroleum CoCs exceeds RBSLs. The Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release. Note that the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL.

The Agency grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Ms. Hough  
Page 4

On all correspondence regarding this site, please reference UST Permit number 02131. Should you have any questions regarding this correspondence, you may contact me at (803) 898-7542, fax me at (803) 898-0673, or e-mail me at [hornosms@dhec.sc.gov](mailto:hornosms@dhec.sc.gov).

Sincerely,



Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)  
Monitoring Well Approval (MWA)

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712 (with enc.)  
Technical File (with enc.)



Catherine B. Templeton, Director

*Promoting and protecting the health of the public and the environment*

### Monitoring Well Approval Form

Approval is hereby granted to: Katawba Environmental, Inc  
On behalf of: Angela Hough  
UST Permit #: 02131  
Facility: One Accord Ministries  
3570 Lancaster Hwy  
Richburg, SC  
County: Chester

This approval is for the installation of up to 22 temporary and 15 (12 shallow and 3 deep telescoping) permanent groundwater monitoring wells. The monitoring wells are to be installed in the approved locations. The monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents.

**Please note that R.61-71 requires the following:**

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Agency shall be completed and submitted to the Agency within 30 days after well completion or abandonment unless another schedule has been approved by the Agency. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Agency within 30 days of receipt of laboratory results unless another schedule has been approved by the Agency as required by R.61-71.H.1.d.
5. If any of the information provided to the Agency changes, notification to Minda Hornosky (tel: 803 898-7542 or e-mail: hornosms@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Agency approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

**Date of Issuance: August 8, 2014**

**Approval #: UMW-25624**

  
Minda Hornosky, Hydrogeologist

Assessment Section  
UST Management Division,  
Bureau of Land and Waste Management



# Approved Cost Agreement 48356

Facility 02131 ONE ACCORD MINISTRIES

HORNOSMS

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
01 PLAN		A1 SITE SPECIFIC WORK PLAN	1 0000	150.00	150.00
03 COMPREHENSIVE SURVEY		A1 COMPREHENSIVE SURVEY	1 0000	1,040.00	1,040.00
04 MOB/DEMOB		A1 EQUIPMENT	2 0000	1,020.00	2,040.00
		B1 PERSONNEL	5 0000	423.00	2,115.00
06 SOIL BORINGS (DRILLED)		AA SOIL BORING/FLD SCR STANDARD	650 0000	15.00	9,750.00
08 ABANDONMENT		A1 ABANDONMENT 2" DIA OR LESS	650 0000	3.10	2,015.00
09 WELL INSTALLATION		B1 WATER TABLE (DRILL RIG)	348 0000	38.00	13,224.00
		CC TELESCOPING	225 0000	50.00	11,250.00
10 SAMPLE COLLECTION		A1 GROUNDWATER (PURGE)	19 0000	60.00	1,140.00
		C1 WATER SUPPLY	6 0000	22.00	132.00
		D1 GROUNDWATER NO PURGE/DUPLICATE	5 0000	28.00	140.00
		H1 FIELD BLANK	2 0000	24.60	49.20
11 ANALYSES					
	GW GROUNDWATER	A2 BTEXNM+OXYGS+1,2-DCA+ETH-8260B	32 0000	122.00	3,904.00
		E1 LEAD	30 0000	16.00	480.00
		F1 EDB BY 8011	31 0000	45.20	1,401.20
	SOIL SOIL	Q1 BTEX+NAPTH	6 0000	64.00	384.00
		R1 SOIL PAH'S	6 0000	64.04	384.24
		W1 GRAIN SIZE / HYDROMETER	3 0000	104.00	312.00
12 AQUIFER CHARACTERIZATION		B1 SLUG TEST	3 0000	191.00	573.00
17 DISPOSAL		AA WASTEWATER	250 0000	0.56	140.00
		C1 SOIL TREATMENT DISPOSAL	8 0000	60.00	480.00
		D1 DRILLING FLUIDS	250 0000	0.42	105.00
19 RPT/PROJECT MNGT & COORDINATIO		PRT REPORT PREPARATION	0.1200	51,208.64	6,145.04
<b>Total Amount</b>					<b>57,353.68</b>



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

APR 24 2009

MR LARRY TERRY  
FIREBALL SERVICE STATION  
3570 LANCASTER HIGHWAY  
RICHBURG SC 29729

Re: Option for Work  
Fireball Service Station, 3570 Lancaster Highway, Richburg, SC  
UST Permit # 02131; Cost Agreement # 35857; MWA # UMW-22703  
Release reported March 23, 2009  
Chester County

Dear Mr. Terry:


The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the file for the referenced facility and has determined that additional environmental assessment work will be necessary to determine what risk the release may pose to human health and the environment. The release may be qualified to receive funds from the State Underground Petroleum Environmental Response Bank (SUPERB) Account under the conditions of the SUPERB Act.

Our records do not indicate that you have selected a contractor to perform assessment activities at this site. If you wish to select your own contractor, please complete the enclosed Owner/Operator Information Sheet and return it to my attention within 15 days of the date of this letter. All site rehabilitation activities must be performed and submitted by a South Carolina Certified Underground Storage Tank Site Rehabilitation Contractor. For your convenience, a list of SCDHEC certified environmental companies is enclosed.

If you wish, the SCDHEC can directly procure the services of a site rehabilitation contractor on your behalf. If you would like more information on this method of implementing the necessary environmental assessment work, please call me within ten days of the date of this letter. Or if you prefer this option, please complete the enclosed Permission and Right of Entry forms (as appropriate) and return them to my attention within 15 days of the date of this letter.

On all correspondence or inquiries regarding this project, please reference UST Permit # 02131. If you have any questions, please contact me at (803) 896-6395. I can also be reached by email at [johnoms@dhec.sc.gov](mailto:johnoms@dhec.sc.gov) by fax at (803) 896-6245.

Sincerely,

  
Minda Johnson, Hydrogeologist  
Assessment Section  
UST Management Division  
Bureau of Land and Waste Management



cc: Technical File (without enc.)



Katawba Environmental, Inc.

---

7/28/2014

Ms. Minda Hornosky  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

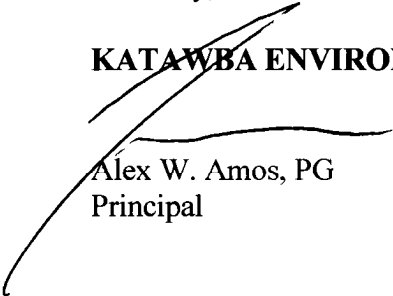
**RE: SITE SPECIFIC WORK PLAN  
ONE ACCORD  
UST PERMIT #02131  
RICHBURG, SOUTH CAROLINA**

Dear Ms. Hornosky:

Katawba Environmental, Inc. (Katawba) has prepared this Site Specific Work Plan for the above-referenced facility for your review. This plan was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated June 30, 2014. Should you have any questions do not hesitate to contact me at (803) 327-0469.

Sincerely,

**KATAWBA ENVIRONMENTAL, INC.**

  
Alex W. Amos, PG  
Principal





Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Minda Hornosky (SCDHEC Project Manager)
From: Alex Amos (Contractor Project Manager)
Contractor: Katawba Environmental, Inc. UST Contractor Certification Number: 18

Facility Name: One Accord Ministries UST Permit #: 02131
Facility Address: 3570 Lancaster Highway, Richburg, SC
Responsible Party: Angela Hough Phone: 803 804 0253
RP Address: PO Box 220, Richburg SC 29729
Property Owner (if different):
Property Owner Address:
Current Use of Property: Church fellowship

Scope of Work (Please check all that apply)

- IGWA, Tier I, Tier II, Monitoring Well Installation, Groundwater Sampling, Other, GAC

Analyses (Please check all that apply)

- Groundwater/Surface Water: BTEXNMDCA, Oxygenates, EDB, PAH, Lead, 8 RCRA Metals, TPH, pH, BOD, Nitrate, Sulfate, Other, Methane, Ethanol, Dissolved Iron
Soil: BTEXN, PAH, 8 RCRA Metals, Oil & Grease, TPH-DRO, TPH-GRO, Grain Size, TOC
Air: BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

6 Soil, 6 Water Supply Wells, Air, 2 Field Blank, 19 Monitoring Wells, Surface Water, 3 Duplicate, 2 Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.
# of shallow points proposed: 20 Estimated Footage: 25 feet per point
# of deep points proposed: 2 Estimated Footage: 75 feet per point
Field Screening Methodology: Geoprobe to set temporary 1 inch casing. Screen groundwater with OVA.

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.
# of shallow wells: 12 Estimated Footage: 29 feet per point
# of deep wells: 3 Estimated Footage: 75 feet per point
# of recovery wells: Estimated Footage: feet per point
Monitoring Well development method (consistent with SOP): QAPP
Comments, if warranted.

UST Permit #: 02131 Facility Name: One Accord

**Implementation Schedule** (Number of calendar days from approval)

Field Work Start-Up: 30 Field Work Completion: 60  
Report Submittal: 90 # of Copies Provided to Property Owners: 1

**Aquifer Characterization**

Pump Test:  Slug Test:  (Check one and provide explanation below for choice)

Slug test generate less waste  
\_\_\_\_\_  
\_\_\_\_\_

**Investigation Derived Waste Disposal**

Soil: 8 Tons Purge Water: 250 Gallons  
Drilling Fluids: 250 Gallons Free-Phase Product: \_\_\_\_\_ Gallons

**Additional Details For This Scope of Work**

For example, list wells to be sampled, wells to be abandoned/repaired, well pads/bolts/caps to replace, details of AFVR event, etc.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**

yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.

Name of Laboratory: \_\_\_\_\_  
SCDHEC Certification Number: \_\_\_\_\_  
Name of Laboratory Director: \_\_\_\_\_

yes Well Driller as indicated in ACQAO? (Yes/No) If no, indicate driller information below.

Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_

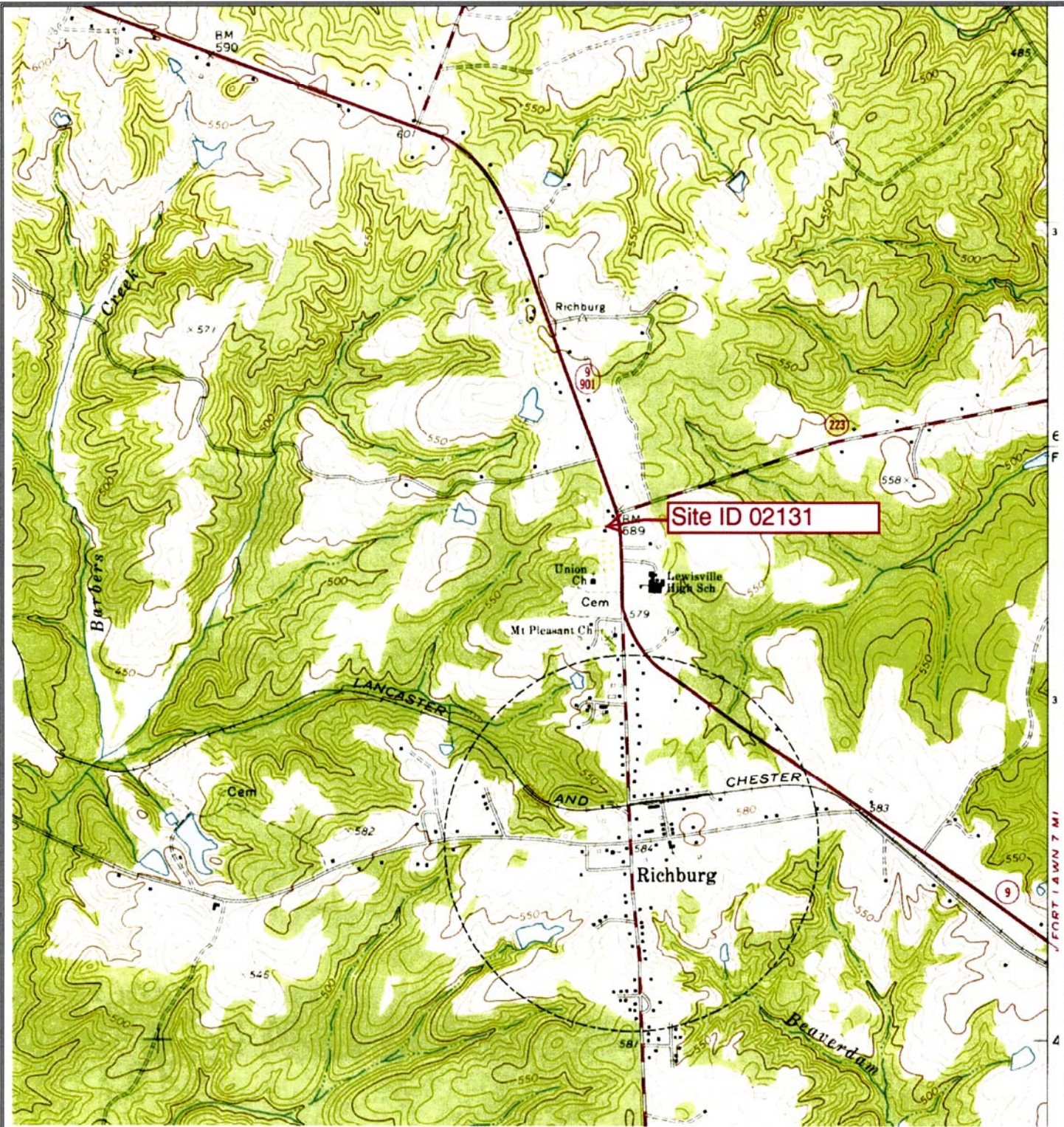
no Other variations from ACQAP. Please describe below.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Attachments**

1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:  
North Arrow Proposed monitoring well locations  
Location of property lines Legend with facility name and address, UST permit number, and bar scale  
Location of buildings Streets or highways (indicate names and numbers)  
Previous soil sampling locations Location of all present and former ASTs and USTs  
Previous monitoring well locations Location of all potential receptors  
Proposed soil boring locations
3. Assessment Component Cost Agreement, SCDHEC Form D-3664





SCALE 1 INCH=1000 FT

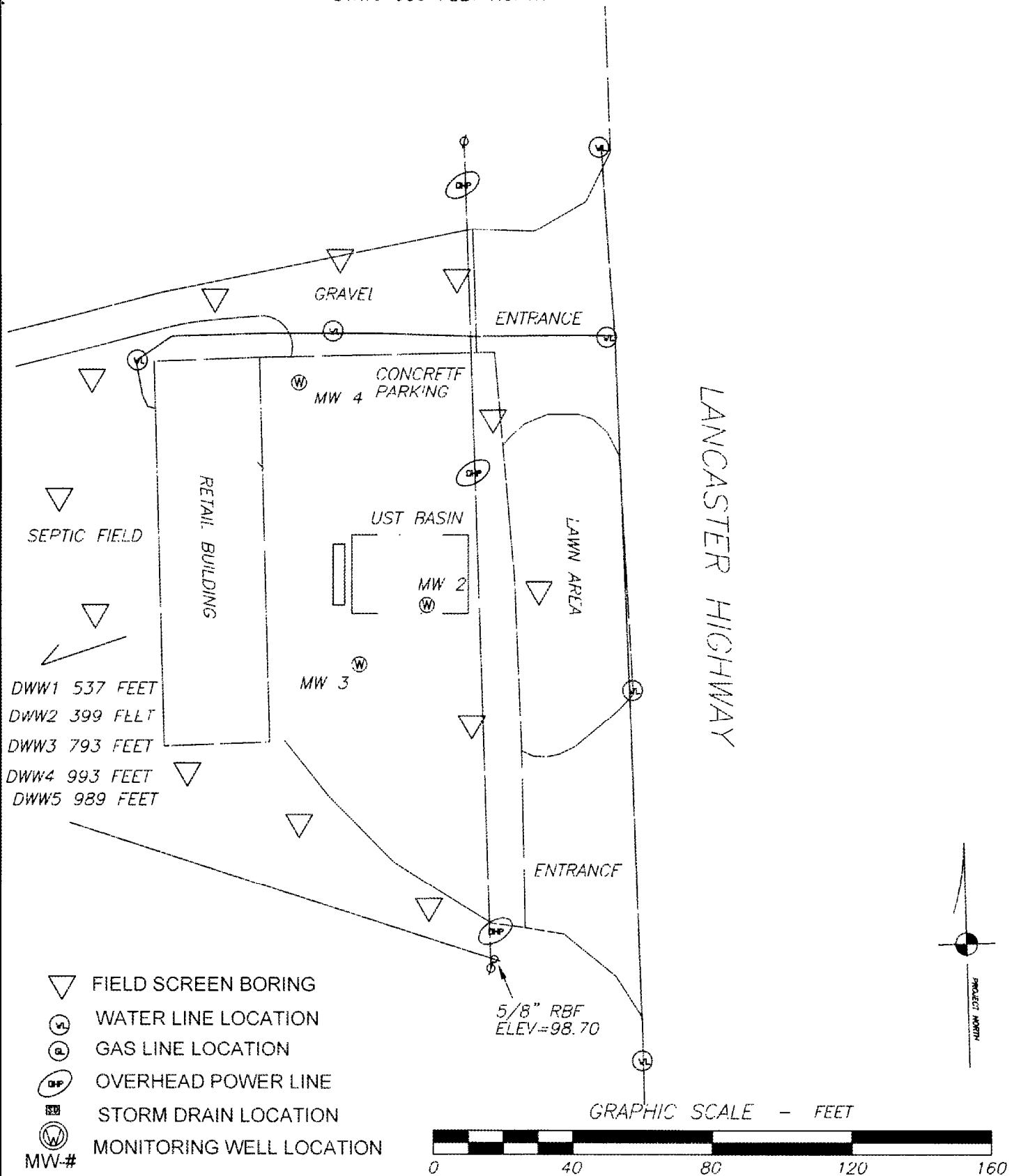
KATAWBA ENVIRONMENTAL, INC.

4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

TIER II  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HIGHWAY  
 RICHBURG, SOUTH CAROLINA  
 FIGURE 1 – SITE LOCATION



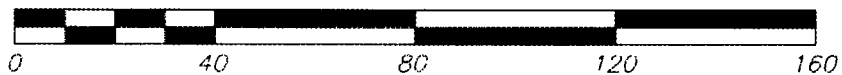
DWW6 989 FEET NORTH



DWW1 537 FEET  
 DWW2 399 FLLT  
 DWW3 793 FEET  
 DWW4 993 FEET  
 DWW5 989 FEET

- ▽ FIELD SCREEN BORING
  - Ⓥ WATER LINE LOCATION
  - ⓐ GAS LINE LOCATION
  - Ⓞ OVERHEAD POWER LINE
  - Ⓢ STORM DRAIN LOCATION
  - Ⓜ MONITORING WELL LOCATION
- MW-#

GRAPHIC SCALE - FEET



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

TIER II  
 ONE ACCORD (SITE ID 02131)  
 3570 LANCASTER HWY RICHBURG, SC  
 SITE MAP

DATE: JULY 2014  
 FIGURE 2



South Carolina Department of Health and Environmental Control

**ASSESSMENT COMPONENT COST AGREEMENT  
SOUTH CAROLINA**

Department of Health and Environmental Control  
Underground Storage Tank Management Division  
State Underground Petroleum Environmental Response Bank Account  
May 15, 2014

**Facility Name:** One Accord

**UST Permit #:** \_\_\_\_\_

**Cost Agreement #:** \_\_\_\_\_

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>1. Plan Preparation</b>				
A1. Site-specific Work Plan		each	\$150.00	\$0.00
B1. Tax Map		each	\$70.00	\$0.00
C1. Tier II or Comp. Plan /QAPP Appen	1	each	\$250.00	\$250.00
<b>2. A1. Receptor Survey *</b>		each	\$551.00	\$0.00
<b>3. Survey (500 ft x 500 ft)</b>				
A1. Comprehensive Survey		each	\$1,040.00	\$0.00
B. Subsurface Geophysical Survey				
1B. < 10 meters below grade		each	\$1,300.00	\$0.00
2B. > 10 meters below grade		each	\$2,310.00	\$0.00
C1. Geophysical UST or Drum Survey		each	\$910.00	\$0.00
<b>4. Mob/Demob</b>				
A1. Equipment	2	each	\$1,020.00	\$2,040.00
B1. Personnel	5	each	\$423.00	\$2,115.00
C1. Adverse Terrain Vehicle		each	\$500.00	\$0.00
<b>5. A1. Soil Borings (hand auger)*</b>		foot	\$5.00	\$0.00
<b>6. Soil Borings (requiring equipment, push technology, etc)* or Field Screening (including water sample, soil sample, soil gas sample, etc.)*</b>				
AA. Standard	650	per foot	\$15.00	\$9,750.00
C1. Fractured Rock		per foot	\$20.20	\$0.00
<b>7. A1. Soil Leachability Model</b>		each	\$60.00	\$0.00
<b>8. Abandonment (per foot)*</b>				
A1. 2" diameter or less	650	per foot	\$3.10	\$2,015.00
B1. Greater than 2" to 6" diameter		per foot	\$4.50	\$0.00
C1. Dug/Bored well (up to 6 feet diameter)		per foot	\$15.00	\$0.00
<b>9. Well Installation (per foot)*</b>				
A1. Water Table (hand augered)		per foot	\$10.60	\$0.00
B1. Water Table (drill rig)	348	per foot	\$38.00	\$13,224.00
CC. Telescoping	225	per foot	\$50.00	\$11,250.00
DD. Rock Drilling		per foot	\$58.00	\$0.00
E1. 2" Rock Coring		per foot	\$30.90	\$0.00
G1. Rock Multi-sampling ports/screens		per foot	\$33.40	\$0.00
HH. Recovery Well (4" diameter)		per foot	\$45.00	\$0.00
II. Pushed Pre-packed screen (1.25" dia)		per foot	\$15.00	\$0.00
J1. Rotasonic (2" diameter)		per foot	\$44.00	\$0.00
K. Re-develop Existing Well		per foot	\$11.00	\$0.00



<b>10. Groundwater Sample Collection / Gauge Depth to Water or Product *</b>				
A1. Groundwater Purge	19	per well/recept	\$60.00	\$1,140.00
B1. Air or Vapors		per recepto	\$12.00	\$0.00
C1. Water Supply	6	per well/recept	\$22.00	\$132.00
D1. Groundwater No Purge or Duplicate	5	per well/recept	\$28.00	\$140.00
E1. Gauge Well only		per well	\$7.00	\$0.00
F1. Sample Below Product		per well	\$12.00	\$0.00
G1. Passive Diffusion Bag		each	\$26.00	\$0.00
H1. Field Blank	2	each	\$24.60	\$49.20
<b>11. Laboratory Analyses-Groundwater</b>				
A2. BTEXNM+Oxyg's+1,2 DCA+Eth(82	32	per sample	\$122.00	\$3,904.00
AA1. Lead, Filtered		per sample	\$13.80	\$0.00
B2. Rush EPA Method 8260B (All of item A.)		per sample	\$153.60	\$0.00
C2. Trimethal, Butyl, and Isopropyl Benzenes		per sample	\$36.40	\$0.00
D1. PAH's	32	per sample	\$60.60	\$1,939.20
E1. Lead	32	per sample	\$16.00	\$512.00
F1. EDB by EPA 8011	32	per sample	\$45.20	\$1,446.40
FF1. EDB by EPA Method 8011 Rush		per sample	\$68.20	\$0.00
G1. 8 RCRA Metals		per sample	\$63.40	\$0.00
H1. TPH (9070)		per sample	\$41.00	\$0.00
II. pH		per sample	\$5.20	\$0.00
J1. BOD		per sample	\$20.00	\$0.00
PP. Ethanol		per sample	\$14.80	\$0.00
<b>11. Analyses-Soil</b>				
Q1. BTEX + Naphth.	6	per sample	\$64.00	\$384.00
R1. PAH's	6	per sample	\$64.04	\$384.24
S1. 8 RCRA Metals		per sample	\$56.40	\$0.00
U1. TPH-DRO (3550C/8015C)		per sample	\$40.00	\$0.00
V1. TPH- GRO (5030B/8015C)		per sample	\$35.96	\$0.00
W1. Grain size/hydrometer	3	per sample	\$104.00	\$312.00
X1. Total Organic Carbon		per sample	\$30.60	\$0.00
<b>11. Analyses-Air</b>				
Y1. BTEX + Naphthalene		per sample	\$216.00	\$0.00
<b>11. Analyses-Free Phase Product</b>				
Z1. Hydrocarbon Fuel Identification		per sample	\$357.00	\$0.00
<b>12. Aquifer Characterization</b>				
A1. Pumping Test*		per hour	\$23.00	\$0.00
B1. Slug Test*	3	per test	\$191.00	\$573.00
C1. Fractured Rock		per test	\$100.00	\$0.00
<b>13. A1. Free Product Recovery Rate Test*</b>				
		each	\$38.00	\$0.00
<b>14. Fate/Transport Modeling</b>				
A1. Mathematical Model		each	\$100.00	\$0.00
B1. Computer Model		each	\$100.00	\$0.00
<b>15. Risk Evaluation</b>				
A. Tier I Risk Evaluation		each	\$300.00	\$0.00
B1. Tier II Risk Evaluation		each	\$100.00	\$0.00
<b>16. A1. Subsequent Survey*</b>				
	1	each	\$260.00	\$260.00

<b>17. Disposal (gallons or tons)*</b>					
AA. Wastewater	250	gallon	\$0.56		\$140.00
BB. Free Product		gallon	\$0.50		\$0.00
C1. Soil Treatment/Disposal	8	ton	\$60.00		\$480.00
D1. Drilling fluids	250	gallon	\$0.42		\$105.00
<b>18. Miscellaneous (attach receipts)</b>					
		each	\$0.00		\$0.00
		each	\$0.00		\$0.00
		each	\$0.00		\$0.00
<b>20. Tier I Assessment (Use DHEC 3665 form)</b>		standard			\$0.00
<b>21. IGWA (Use DHEC 3666 form)</b>		standard			\$0.00
<b>22. Corrective Action (Use DHEC 3667 form)</b>		PFP Bid			\$0.00
<b>23. Aggressive Fluid &amp; Vapor Recovery (AFVR)</b>					
A1. 8-hour Event*		each	\$1,375.00		\$0.00
AA. 24-hour Event*		each	\$3,825.00		\$0.00
A3. 48-hour Event*		each	\$6,265.00		\$0.00
A4. 96-hour Event*		each	\$12,567.50		\$0.00
C1. Off-gas Treatment 8 hour		per event	\$122.50		\$0.00
C2. Off-gas Treatment 24 hour		per event	\$241.50		\$0.00
C3. Off-gas Treatment 48 hour		per event	\$327.00		\$0.00
C4. Off-gas Treatment 96 hour		per event	\$780.00		\$0.00
D. Site Reconnaissance		each	\$203.25		\$0.00
E1. Additional Hook-ups		each	\$25.75		\$0.00
F1. Effluent Disposal		gallon	\$0.44		\$0.00
G. AFVR Mobilization/Demobilization		each	\$391.50		\$0.00
<b>24. Granulated Activated Carbon (GAC) filter system installation &amp; service:</b>					
A1. New GAC System Installation*		each	\$1,900.00		\$0.00
BB. Refurbished GAC Sys. Install*		each	\$900.00		\$0.00
C1. Filter replacement/removal*		each	\$350.00		\$0.00
DD. GAC System removal, cleaning, & refurbishment*		each	\$275.00		\$0.00
E1. GAC System housing*		each	\$250.00		\$0.00
F. In-line particulate filter		each	\$150.00		\$0.00
G1. Additional piping & fittings		foot	\$1.50		\$0.00
<b>25. Well Repair</b>					
A1. Additional Copies of the Report Delivered		each	\$50.00		\$0.00
B1. Repair 2x2 MW pad*		each	\$50.00		\$0.00
C1. Repair 4x4 MW pad*		each	\$88.00		\$0.00
D1. Repair well vault*		each	\$118.00		\$0.00
F1. Replace well cover bolts		each	\$2.60		\$0.00
G. Replace locking well cap & lock		each	\$15.00		\$0.00
H1. Replace/Repair stick-up*		each	\$134.00		\$0.00
II. Convert Flush-mount to Stick-up*		each	\$150.00		\$0.00
J1. Convert Stick-up to Flush-mount*		each	\$130.00		\$0.00
K1. Replace missing/illegible well ID plate		each	\$12.00		\$0.00
<b>Report Prep &amp; Project Management</b>		12%	percent	\$52,545.04	\$6,305.40
<b>TOTAL</b>					<b>\$58,850.44</b>

\*The appropriate mobilization cost can be added to complete these tasks, as necessary



Catherine E. Heigel, Director

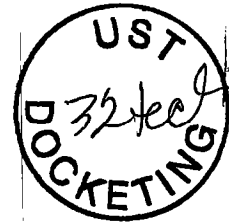
*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

9214 8969 0099 9790 1507 2219 57

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
P O BOX 220  
RICHBURG SC 29729-0220

JUN 19 2015



Re: **Notice of Alleged Violation**  
One Accord Ministries, 3570 Lancaster Highway, Richburg, SC  
UST Permit #02131  
Release Reported Release reported March 23, 2009  
Tier II Directive dated August 21, 2014  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) directed you in August 2014 to complete a Tier II Assessment with the report due on November 21, 2014. At your request the deadline was extended to April 15, 2015. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the Risk-Based Screening Levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report on or before July 19, 2015. Should you not submit the report on or before this date, this office will initiate further enforcement action.**

On all correspondence regarding this site, please reference UST Permit #02131. If you have any questions concerning this correspondence, please call me at (803) 898-7542, e-mail me at hornosms@dhec.sc.gov, or fax me at (803)898-0673.

Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



Catherine E. Heigel, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

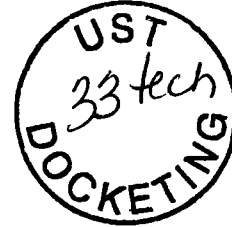
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JAN 08 2016

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ATTN ANGELA HOUGH  
PO BOX 220  
RICHBURG SC 29729-0220

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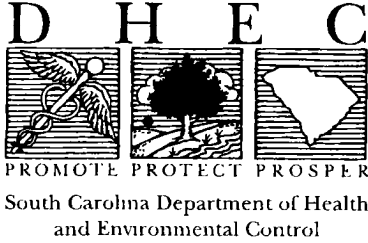
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Sincerely,

Ed Mendenhall, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



UNDERGROUND STORAGE TANK MANAGEMENT DIVISION
BUREAU OF LAND AND WASTE MANAGEMENT

2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-2544
Fax (803) 898-0673

MEMORANDUM

To: Rob McDaniel, Manager
Enforcement Section

Date: May 9, 2016

Re: Enforcement Referral

Type: Technical (Tier II Assessment Report)

UST Permit #: 02131

Facility Name: One Accord Ministries

Owner/Operator: Name One Accord Ministries, Attn: Angela Hough
Address PO Box 220, Richburg, SC 29729-0220
Phone # 803-804-0253

Regulatory Citation: Subpart F, Section 280.65 Investigation for soil and ground-water cleanup
of the South Carolina Underground Storage Tank Regulations, R. 61-92

Requested Action/Information: Requested a Tier II Assessment Report due on April 15, 2015.
Assessment Report to be conducted with O/O's money.

Additional Comments: Directed to complete a Tier II Assessment Report due on April 15, 2015.
Certified letters sent on June 19, 2015 and January 8, 2016. Have not
received report to date.

Are there any Tank Ownership Issues? : \_\_\_ Yes \_\_\_ No If yes please explain.

Are there any other persons being dealt with other than the tank owner? \_\_\_ Yes \_\_\_ No

If yes please list name and relationship

Referred By: Jeffery E. Mendonca Date: 5/9/16

Section Manager's Approval: [Signature] Date: 05-16-16

Division Director's Approval: [Signature] Date: 5/18/2016

Enc: Certified Letters dated June 19, 2015 and January 8, 2016





Catherine E. Heigel, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

9214 8969 0099 9790 1507 2219 57

ONE ACCORD MINISTRIES  
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JUN 19 2015



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Sincerely,

Minda Hornosky, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



Catherine E. Heigel, Director

*Promoting and protecting the health of the public and the environment*

**CERTIFIED MAIL**

9214 8969 0099 9790 1403 3587 19

**JAN 08 2016**

ONE ACCORD MINISTRIES  
ATTN ANGELA HOUGH  
PO BOX 220  
RICHBURG SC 29729-0220

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Sincerely,

Ed Mendenhall, Hydrogeologist  
Assessment Section  
Underground Storage Tank Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

January 30, 2012

**CERTIFIED MAIL**

One Accord Ministries/Angela Hough  
3570 Lancaster Hwy  
Richburg, SC 29729

RE: Product Delivery Prohibition –Operator Training  
One Accord Ministries, Site ID #02131

Dear Sir or Madam:

The South Carolina Division of Underground Storage Tank (UST) Management is notifying you that on December 5, 2011, a notice of violation was issued that affected all tanks at this facility. If the out of compliance condition is not corrected by February 14, 2012, the Department will implement delivery prohibition against all tanks at this facility. The authority for this action is the South Carolina Underground Storage Tank Control Regulation, R.61-92, Section 280.22 (i). After delivery prohibition is established, product in the tanks where delivery is prohibited may be dispensed; however, new product cannot be delivered into the tank(s).

You may complete online training program found at [www.scdhec.gov/ust](http://www.scdhec.gov/ust) (click on Operator Training) or send in proof of a trained operator to Jessica Price at [priceje@dhec.sc.gov](mailto:priceje@dhec.sc.gov) or fax (803) 896-6245. If mailing, please mail to:

**SCDHEC-UST  
2600 Bull Street  
Columbia, SC 29201**

If you have questions about operator training, contact Jessica Price at (803) 896-6650. If you have any questions about delivery prohibition actions, call (803) 896-7957.

Respectfully,

Eric F. Cathcart, Manager  
Regulatory Compliance Section  
Division of UST Management  
Bureau of Land and Waste Management

UST PROGRAM  
DOCKETING # 35r





# Katawba Environmental, Inc.

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March 15, 2017

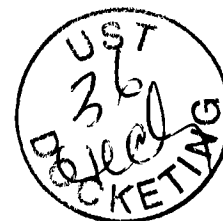
Ms. Beverly McLeod  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

RE: Tier II Report  
One Accord Ministries  
UST Permit #02131 CA #48356  
3570 Lancaster Highway  
Richburg, South Carolina

**RECEIVED**

MAR 20 2017

SCDHEC - Bureau of  
Land & Waste Management



Dear Ms. McLeod:

Katawba Environmental, Inc. (Katawba) has prepared this Tier II Report for the above-referenced facility for your review. This Tier II Assessment was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated August 21, 2014.

The vertical and horizontal extent of the plume has been defined. It is recommended that free product removal be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.


Sincerely,

**KATAWBA ENVIRONMENTAL, INC. #18**

  
Alex W. Amos, CEO, PG  
Senior Consultant



***Tier II Report***  
**One Accord**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit #02131**



Alex W. Amos, CEO, PG  
Senior Consultant

March 15, 2017

Mr. Ed Mendenhall, Hydrogeologist  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE: Tier II Report  
One Accord Ministries  
UST Permit #02131 CA #48356  
3570 Lancaster Highway  
Richburg, South Carolina**

Dear Mr. Mendenhall:

Katawba Environmental, Inc. (Katawba) has prepared this Tier II Report for the above-referenced facility for your review. This Tier II Assessment was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated August 21, 2014.

The vertical and horizontal extent of the plume has been defined. It is recommended that free product removal be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

Sincerely,

**KATAWBA ENVIRONMENTAL, INC. #18**

Alex W. Amos, CEO, PG  
Senior Consultant

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## **1.0 INTRODUCTION**

Katawba Environmental, Inc. has been contracted by Ms. Angel Hough to complete a Tier II Assessment for One Accord Ministries. The Subject Site (Site ID 02131) is located at 3570 Lancaster Highway in Richburg, South Carolina (Appendix A, Figure 1). The subject site currently operates as youth ministry for Union ARP Church. The facility no longer retails petroleum products.

The surrounding area is mixed residential and commercial development. The subject site is abutted by residential structures to the north, south, east and west. First Citizens Bank is located approximately 421 feet northeast, the entrance for Lewisville Middle school is located approximately 260 feet east and Union ARP Church is located approximately 560 feet southwest. The nearest permitted UST site appears to be in excess of 2500 feet from the subject site.

The release at the subject site was reported March 23, 2009. An Initial Groundwater Assessment was conducted in November 2012. A Tier I was conducted in March 2014. The findings of the Tier II indicated further assessment was warranted to delineate the vertical and horizontal extent of the petroleum hydrocarbon release. The approval for this Tier II scope of work was approved in August 2014. Findings of the Tier II Assessment indicated that the plume extends approximately 420 feet from the source in a west southwestern direction. 0.06 feet of free product at the site is present in monitoring well MW3.

- This project included the installation of field screening boring installation to determine the extent of the petroleum hydrocarbon plume. Installation of monitoring wells MW1R and monitoring wells numbered MW5 through MW15 were completed during this scope of work. Deep wells DW1 through DW4 were installed during this scope of work. As directed by SCDHEC the installation of deep wells within the known free product zone was not conducted. Deep well installation was also avoided near drinking water wells.
- Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, two septic tanks and eight drinking water wells were noted to be within the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility.

Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

- Monitoring wells MW1, MW2, DW1, DW3 and DWW1 were above the established RBSL for petroleum based constituents.
- Monitoring well MW3 contained 0.06 feet of free product at the time the assessment was conducted.

## **1.1 Site Information**

The responsible party for the subject site is One Accord Ministries, PO Box 220, Richburg, South Carolina 29729. Angel Hough is the contact for One Accord Ministries and can be communicated with via mail or phone at (803) 804-0253. According to Chester County Tax Assessor records the parcel is currently owned by owned by Angela D. Hough and Melvin E. Hugh Sr. Survivorship, PO Box 220, Richburg, South Carolina 29729. The subject site is a square shaped parcel that is occupied by one primary structure and a storage unit in the rear of the facility. The subject site is listed with the Chester County Assessor's Office as TM 125-00-00-059-000.

## **2.0 ASSESSMENT INFORMATION**

One Accord Ministries is located at an elevation of 585 feet above mean sea level. Topographically overland flow is to the south. Groundwater levels varied over the investigation site from 19.20 feet BLS to 36.72 feet BLS. Groundwater flow at the site was calculated to be to the west southwest.

Soils encountered during the assessment were classified as silty sand in content. Boulders that were granitic in formation were encountered at depths of 24 to 25 feet BLS and ranged in size from 2 to 4 feet in diameter. Bedrock was encountered at a depth of 75 feet BLS.

### **2.1 Piezometric Data**

Figure 2 in Appendix A serves as the comprehensive site map showing the locations of the 21 monitoring wells located at the subject site. Monitoring wells MW2 through MW4 were installed during previous scopes of work. Monitoring wells MW1R through MW15, MW9R, MW10R, DW1 through DW4 were installed during this Tier II Assessment by Environmental Probing and Drilling Service (EDPS) of Charlotte, NC (SC Driller # 1846B). Mr. Tommy Bolyard of EDPS can be contacted at 17538 Greenhill Road, Charlotte, NC 28278 or via phone at (704) 607-7529. These wells were installed on various dates from March 23, 2016 to March 2, 2017.



The well logs for this well installation event can be found in Appendix E. The monitoring wells were constructed at varying depths utilizing 2 inch diameter riser with 2 inch diameter screen slotted 0.010. Coarse grain filter pack was placed into the annulus to an approximate elevation of 1 foot above the screen followed by a bentonite seal and grouted to the surface with neat cement. All monitoring wells are outfitted with an 8 inch steel traffic rated manhole cover encapsulated within an exterior concrete pad. Well tags for each well were cemented in place upon completion of the well vault. Newly installed wells were developed utilizing a purge pump to remove all drilling fluids from the well annulus. Removal of fluids was conducted until the process was completed. Development of all onsite wells occurred on various dates from 4/5/16 to 3/2/17. All well development fluids were disposed of at Haz Mat, Inc. in Charlotte, North Carolina.

Piezometric data for all monitoring wells associated with the release at the One Accord Ministries site can be found in Table 1. Two gauging events were conducted for this scope of work. Water levels were measured on January 31, 2017 and again on March 13, 2017. A piezometric map was created utilizing groundwater elevations measured during a sampling event on March 13, 2017. The piezometric map is included as Figure 3 in Appendix A.

Depths to fluid measurements were collected relative to the top of casing for each well with the accuracy of measurements being within 0.01 foot or 1/8 inch. A hydrocarbon interface probe capable of detecting and measuring a hydrocarbon product thickness of 0.01 foot or 1/8 inch was used for depth to fluid measurements.

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 1R	3/13/17	99.20	24-14	--	21.93	77.27
MW 2	3/13/17	99.04	28-18	--	21.74	77.30
MW 3	3/13/17	98.95	28-18	21.67	21.73	77.19
MW 4	3/13/17	99.30	28-18	--	21.32	77.98
MW 5	3/13/17	100.13	25-15	--	22.09	78.04
MW 6	3/13/17	98.09	24-14	--	20.44	77.65
MW 7	3/13/17	96.98	23-13	--	19.66	77.32
MW 8	3/13/17	95.83	23-13	--	19.20	76.63
MW 9R	3/13/17	103.90	37-27	--	29.23	74.67
MW 9	3/13/17	103.75	30-20	--	DRY	DRY
MW 10 R	3/13/17	104.51	40-30	--	31.73	72.78
MW 10	3/13/17	104.68	30-20	--	DRY	DRY
MW 11	3/13/17	99.24	29-19	--	25.63	73.61
MW 12	3/13/17	98.96	29-19	--	20.59	78.37
MW 13	3/13/17	98.51	26-16	--	21.20	77.31
MW 14	3/13/17	99.77	36-26	--	27.24	72.53
MW 15	3/13/17	105.72	40-30	--	36.72	69.00
DW 1	3/13/17	98.42	75-70	--	21.36	77.06
DW 2	3/13/17	99.59	75-70	--	21.70	77.89
DW 3	3/13/17	104.30	75-70	--	32.47	71.83
DW 4	3/13/17	99.81	120-115	--	27.63	72.18

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	1/31/17	99.20	24-14	--	21.83	77.37
	3/13/17			--	21.93	77.27
MW 1	10/26/12	UNK	29-19	--	23.51	UNK
	12/18/13			--	NL	NL
MW 2	12/18/13	99.04	28-18	--	18.48	80.56
	1/31/17			--	21.69	77.35
	3/13/17			--	21.74	77.30
MW 3	12/18/13	98.95	28-18	--	18.85	80.10
	1/31/17			21.70	21.76	77.19
	3/13/17			21.67	21.73	77.19
MW 4	12/18/13	99.30	28-18	--	19.48	79.82
	1/31/17			--	21.94	77.36
	3/13/17			--	21.32	77.98
MW 5	1/31/17	100.13	25-15	--	22.71	77.42
	3/13/17			--	22.09	78.04
MW 6	1/31/17	98.09	24-14	--	20.79	77.30
	3/13/17			--	20.44	77.65
MW 7	1/31/17	96.98	23-13	--	19.86	77.12
	3/13/17			--	19.66	77.32
MW 8	1/31/17	95.83	23-13	--	19.16	76.67
	3/13/17			--	19.20	76.63
MW 9R	3/3/17	103.90	37-27	--	29.37	74.53
	3/13/17			--	29.23	74.67
MW 9	1/31/17	103.75	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 10 R	3/3/17	104.51	40-30	--	31.58	72.93
	3/13/17			--	31.73	72.78
MW 10	1/31/17	104.68	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 11	1/31/17	99.24	29-19	--	26.31	72.93
	3/13/17			--	25.63	73.61
MW 12	1/31/17	98.96	29-19	--	21.62	77.34
	3/13/17			--	20.59	78.37
MW 13	1/31/17	98.51	26-16	--	20.52	77.99
	3/13/17			--	21.20	77.31
MW 14	3/3/17	99.77	36-26	--	28.02	71.75
	3/13/17			--	27.24	72.53
MW 15	3/3/17	105.72	40-30	--	37.12	68.60
	3/13/17			--	36.72	69.00
DW 1	1/31/17	98.42	75-70	--	21.53	76.89
	3/13/17			--	21.36	77.06
DW 2	1/31/17	99.59	75-70	--	22.29	77.30
	3/13/17			--	21.70	77.89
DW 3	1/31/17	104.30	75-70	--	31.29	73.01
	3/13/17			--	32.47	71.83
DW 4	1/31/17	99.81	120-115	--	28.05	71.76
	3/13/17			--	27.63	72.18

## 2.2 Hydraulic Conductivity & Transmissivity

The hydraulic conductivity ( $K$ ) for wells DW1, DW3 and DW4 were measured as part of the Tier II. The hydraulic conductivity and transmissivity were calculated by the Bouwer-Rice method. The calculated hydraulic conductivity was 0.20 feet per day (FPD) for DW1, 0.04 FPD for DW3, 0.12 FPD for DW4. The average hydraulic conductivity for the wells DW1 and DW3 tested for this scope of work is 0.12 FPD. The transmissivity was calculated for this scope of work was 10.16 f<sup>2</sup>/day for DW1, 2.047 f<sup>2</sup>/day for DW3, 0.642 f<sup>2</sup>/day for DW4.

## 2.3 Average Linear Flow Velocity and Hydraulic Gradient

The hydraulic gradient calculation for the shallow aquifer was performed utilizing data from monitoring wells DW1 and DW3. The resulting hydraulic gradient is calculated to be 0.023 ft/ft. The linear flow velocity is calculated using a modified form of Darcy's Law:

$$V = K/n (\Delta h/\Delta L)$$

where:

- $V$  = the average linear flow velocity (L/t)
- $K$  = the hydraulic conductivity (L/t)
- $n$  = the estimated effective porosity (%) = 25%
- $\Delta h/\Delta L$  = the hydraulic gradient (L/L)

The linear flow velocity is calculated to be 4.0 feet/year. This is used to represent the migration of COC in the shallow aquifer. The vertical gradient was also calculated between the shallow well and the deep well using data from DW-1 and the nearest shallow well, MW-13. The vertical gradient was calculated to be -0.005 ft/ft and is flowing in a downward direction, or recharging the deeper aquifer. Calculations are provided in Appendix F.

## **2.4 Horizontal Plume Delineation**

Delineation of the petroleum hydrocarbon contaminant plume was conducted on various dates between February 18 to February 20, 2016. Plume delineation for the shallow borings was accomplished using a GeoProbe with auger capabilities and a calibrated mobile field Organic Vapor Analyzer (OVA). Probe borings were conducted by augering into the subsurface and insertion of a temporary 1 inch diameter temporary well screen and riser into the well annulus. Groundwater was extracted from each field screen location utilizing a disposable 0.5 inch diameter plastic bailer. Once the groundwater field screen sample was obtained it was introduced into a new non-preserved laboratory supplied VOA container. Groundwater samples were then analyzed by OVA to determine volatile organic concentrations present at each location.

Once data was collected, each boring was abandoned with forced injected grout to the surface. Field screening data is depicted in Table 2 Field Screening results. Field screen locations are depicted on Figure 4 Field Screen Map. Signed well logs for each boring conducted can be located in Appendix D.

**TABLE 2**  
**Delineation OVA Field Data One Accord Ministries Site ID 02131**  
**Richburg, SC**

Sample ID	Depth	OVA PPM
SB1	27	287
SB2	27	44.5
SB3	27	29.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	27 6	0
SB9	25	Dry hit rock at 25
SB10	18	Dry hit rock at 18
SB10A	20	Dry hit rock at 20
SB11	27	6
SB12	27	4
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27 11	0
SB22	25	Dry at 25
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27 4	0

48

709'

## **2.5 Soil and Groundwater Sampling**

Soil samples collected for grain size analysis were obtained during well installation for this scope of work. A grain size sample was collected from MW10, DW2 and DW3 at the termination point of each borehole. Soil samples were retrieved from the borehole with a split spoon. Soil samples collected from the spoon were inserted into laboratory supplied containers for grain size analysis by PSI, 534 St. Andrews Road, Suite C, Columbia, SC 29210.

Samples were collected from monitoring wells installed during this and prior rounds of assessment. Prior to sampling each well, depths to groundwater were measured utilizing an oil/water interface probe. These measurements were used to construct a piezometric map which is located in Appendix A, as Figure 3. Groundwater was evacuated from each well utilizing a battery operated Monsoon purge pump. As directed by SCDHEC all wells were purged three volumes prior to sampling. Sampling of wells located at the site was completed by utilizing a disposable bailer attached to a new non colored nylon line. Groundwater samples collected were placed into laboratory supplied containers and stored on ice for same day transport for analysis. Katawba personnel submitted all groundwater samples to Shealy Environmental, 106 Vantage Point Drive, Cayce, SC 29033 to the attention of laboratory director Dan Wright who can be contacted at 803-791-9700. The results for the groundwater sampling analysis are as follows.



**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	1/31/17	<b>11000</b>	<b>42000</b>	<b>2800</b>	<b>20000</b>	<b>750</b>	<b>5700</b>	0.010 J	NA	NA	<500
MW 2	1/31/17	<b>13000</b>	<b>41000</b>	<b>3200</b>	<b>20000</b>	<b>760</b>	<b>1800</b>	<0.020	NA	NA	<500
MW 3	1/31/17	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>0.06 FT</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW 4	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
<del>MW 9</del>	<del>1/31/17</del>	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
x MW 9R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
<del>MW 10</del>	<del>1/31/17</del>	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
x MW 10R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
x MW 14	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
x DUP	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	<b>16</b>	NA	<1
x MW15	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
x DW 1	1/31/17	<b>990</b>	200	100	1600	<b>37</b>	<b>1000</b>	<0.020	NA	NA	<10
DW 2	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/31/17	<5	4.2 J	<5	<5	<5	<b>190</b>	<0.020	NA	NA	<5
DW 4	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DUP	1/31/17	<1	<1	<1	<1	<1	8.0	<0.020	NA	NA	<1
DWW1	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50

23

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DWW2	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
DWW3	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
DWW4	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DWW5	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
DWW6	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DUP	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
FB	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB2	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
TB	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
X FB	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
X TB	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

11

26 to 8260B  
 24 to 801  
 ? low  
 6 DW  
 1 Dup  
 1 FS  
 8 to 8260B but 2.0 not 3.1

23

21

34 → 8260B

26 → 8260B

25 → 801

0 → 600

**TABLE 3 Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
MW 3	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
MW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 13	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 14	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 1	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 3	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5

**TABLE 3A Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	1/31/17	11000	42000	2800	20000	750	5700	0.010 J	NA	NA	<500
MW 2	12/18/13	13000	44000	4200	22000	<500	3100	<0.020	16	780	<500
	1/31/17	13000	41000	3200	20000	760	1800	<0.020	NA	NA	<500
MW 3	12/18/13	15000	44000	4600	23000	1400	31000	0.074	7.2	860	<1000
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP	FP	FP
MW 4	12/18/13	<1	1	4600	23000	1400	31000	<0.020	9.7	<5	1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10	1/31/17	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
MW15	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
DW 1	1/31/17	990	200	100	1600	37	1000	<0.020	NA	NA	<10
DW 2	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/31/17	<5	4.2 J	<5	<5	<5	190	<0.020	NA	NA	<5

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 4	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DWW1	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
DWW2	12/18/13	<1	<1	<1	<1	<1	71	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
DWW3	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
DWW4	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DWW5	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
DWW6	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50

**TABLE 3A Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
<b>RBSL</b>		NA	NA	NA	NA	NA	NA	NA	NA
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
MW 3	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
MW 4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 13	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 14	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 1	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 3	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5



## 2.6 RECEPTOR SURVEY

A receptor survey and drinking water well survey was conducted for this scope of work. Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, drainage ditch and two septic tanks were noted to be the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

**Table 4 Receptor Data One Accord Ministries Site ID 02131**

Receptor	Depth	Location	Assessed
Water Line	36 inches	Site E Row	Yes
Sewer Line	36 inches	Site E ROW	Yes
Phone Line	36 inches	Site E ROW	Yes
Gas Line	36 inches	Site E ROW	Yes
Septic Tank	36 inches	Site W Property Line	Yes
Septic Tank	36 inches	518 Peggy's Drive	No
DWW1	120 feet	533 Peggy's Drive	Yes
DWW2	110 feet	510 Peggy's Drive	Yes
DWW3	Unknown	568 Kee's Drive	Yes
DWW4	Unknown	603 Kee's Drive	No
DWW5	80 feet	583 Kee's Drive	Yes
DWW6	Unknown	843 Elliot Road	No
DWW7	Unknown	1719 Old Richburg	No
DWW8	Unknown	3571 Lancaster Hwy	No

**Table 4A Drinking Water Well Survey One Accord Ministries Site ID 02131**

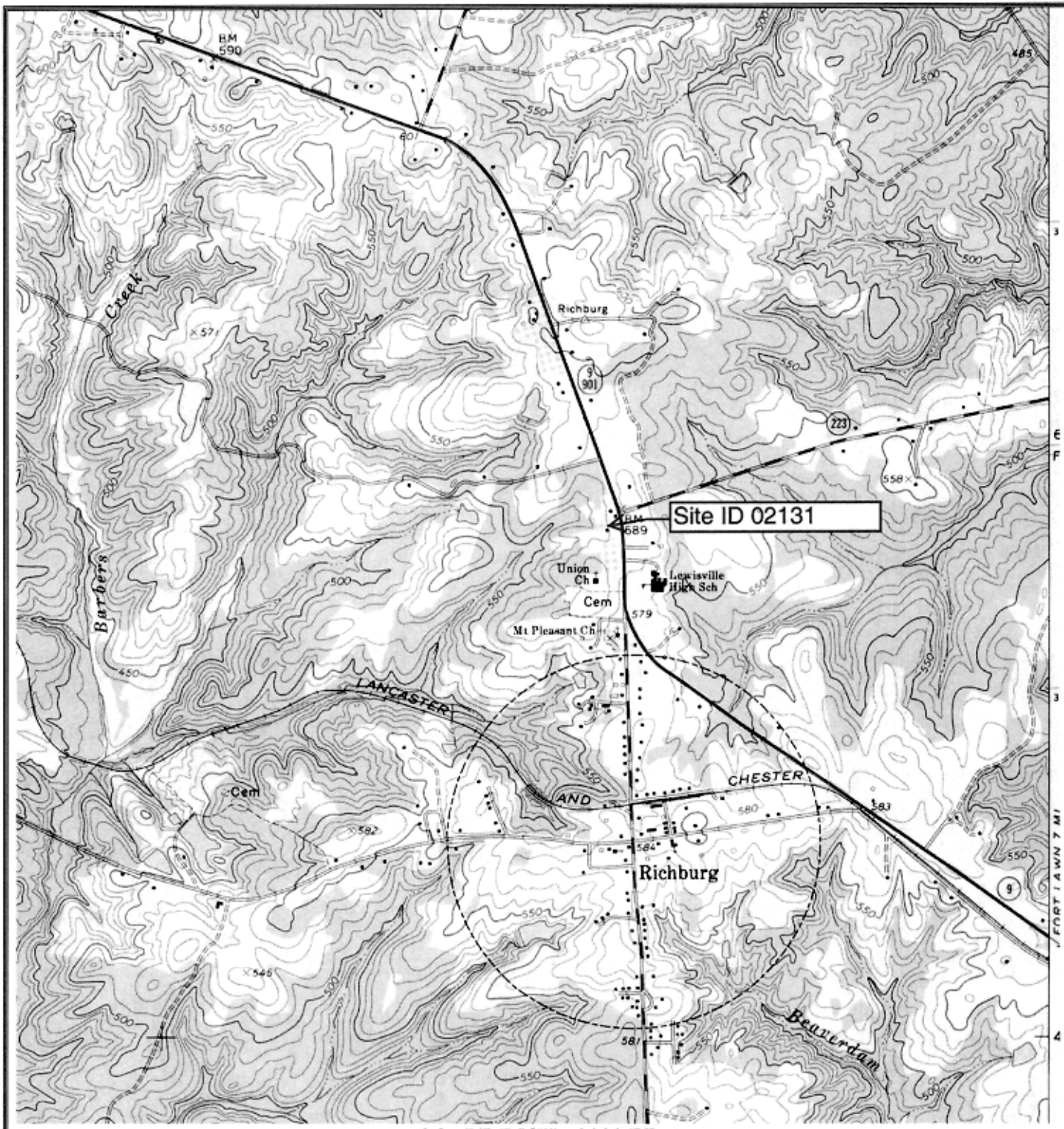
1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
7	1719 OLD RICHBURG ROAD	JAMES KNOX	UNKNOWN	HOUSE	NO POWER NO CONTACT
8	3571 LANCASTER HWY	JOHN FAUST	UNKNOWN	HOUSE	NOT IN USE

### **3.0 CONCLUSIONS**

Findings of the Tier II Assessment indicated that free product plume at the site measures approximately 420 feet on a east northeast / west southwest axis. Additional data obtained during this scope of work are as follows:

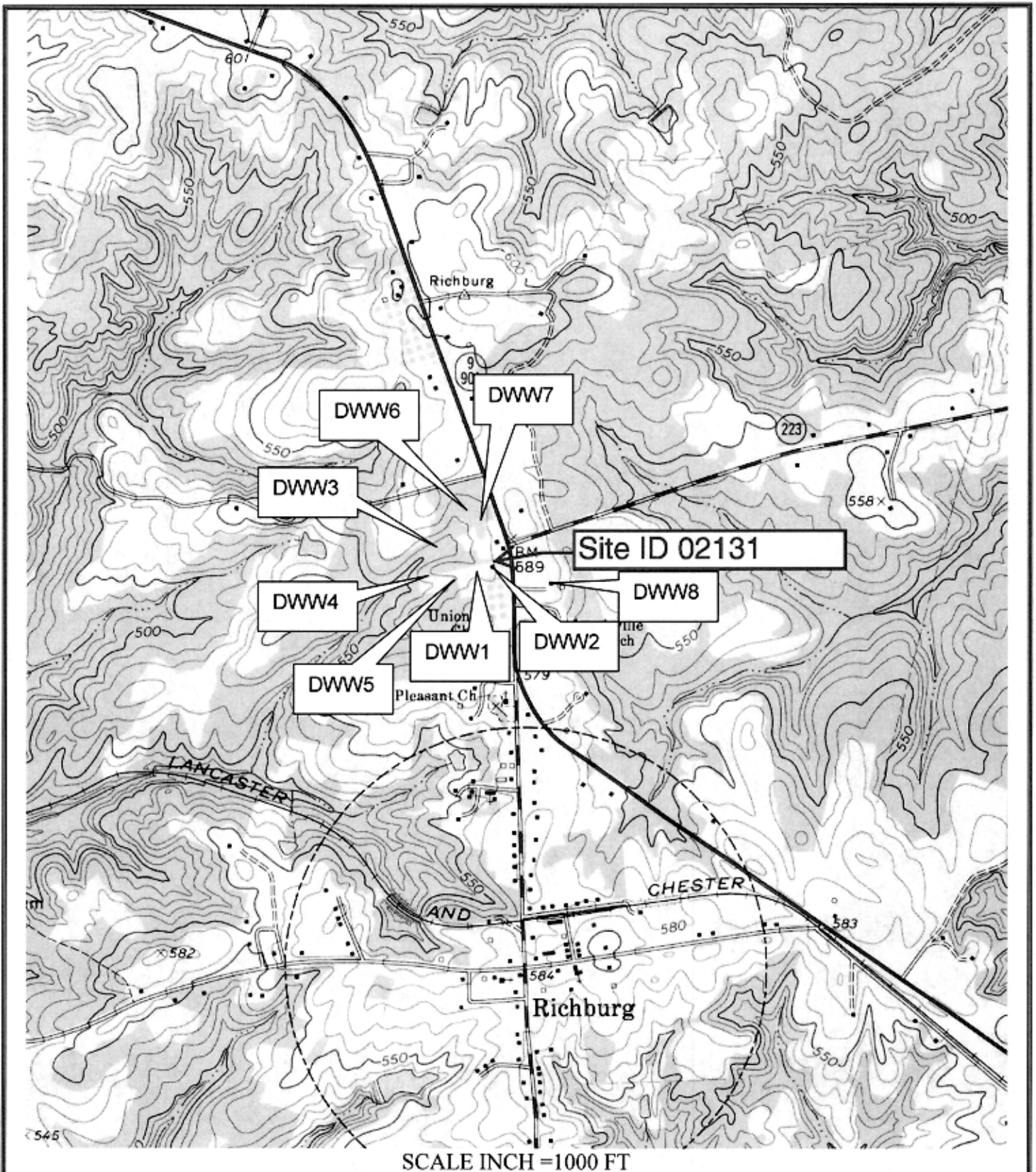
- This project included the installation of field screening boring installation to determine the extent of the petroleum hydrocarbon plume. Installation of monitoring wells MW1R and monitoring wells numbered MW5 through MW15 were completed during this scope of work. Deep wells DW1 through DW4 were installed during this scope of work. As directed by SCDHEC the installation of deep wells within the known free product zone was not conducted. Deep well installation was also avoided near drinking water wells.
- Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, two septic tanks and eight drinking water wells were noted to be within the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.
- Monitoring wells MW1, MW2, DW1, DW3 and DWW1 were above the established RBSL for petroleum based constituents.
- Monitoring well MW3 contained 0.06 feet of free product at the time the assessment was conducted.
- Based on the findings it is recommended that free product removal be conducted as the next scope of work.

**APPENDIX A**  
**FIGURES**



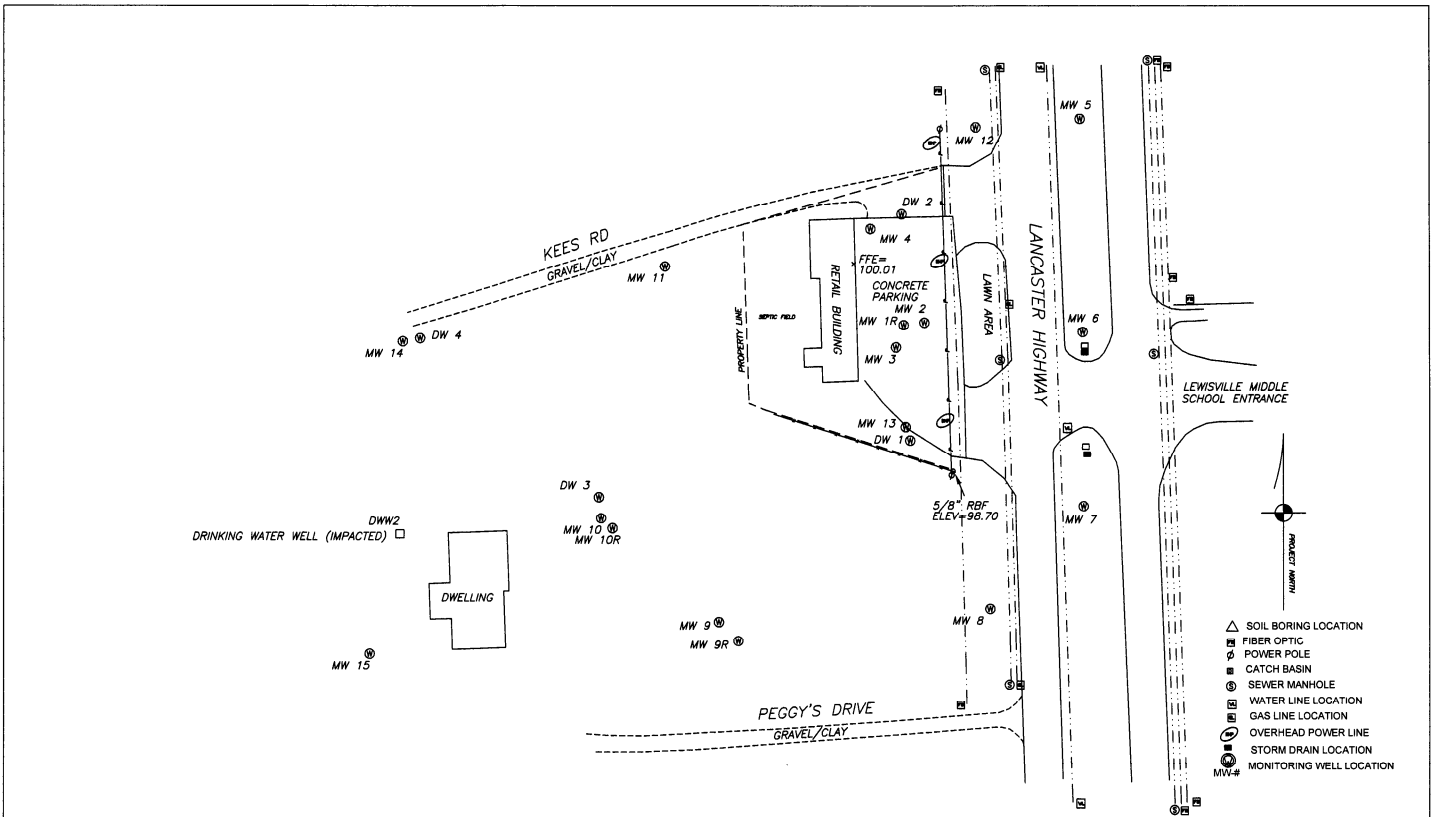
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 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803) 327-0469 UCC#18

TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION

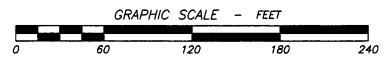


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 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1A-DRINKING WATER WELL MAP

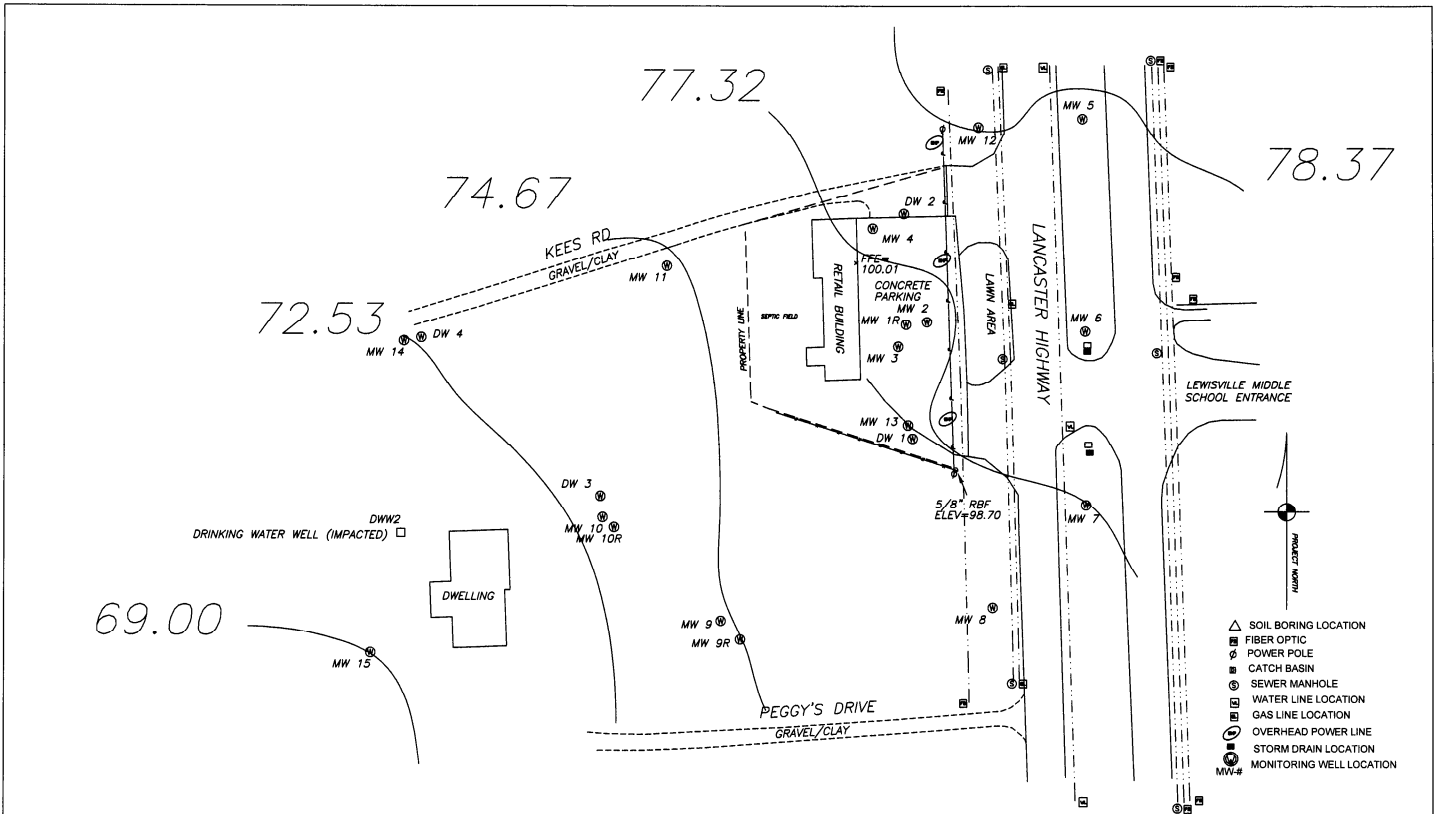


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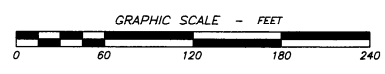


TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 2 - SITE MAP





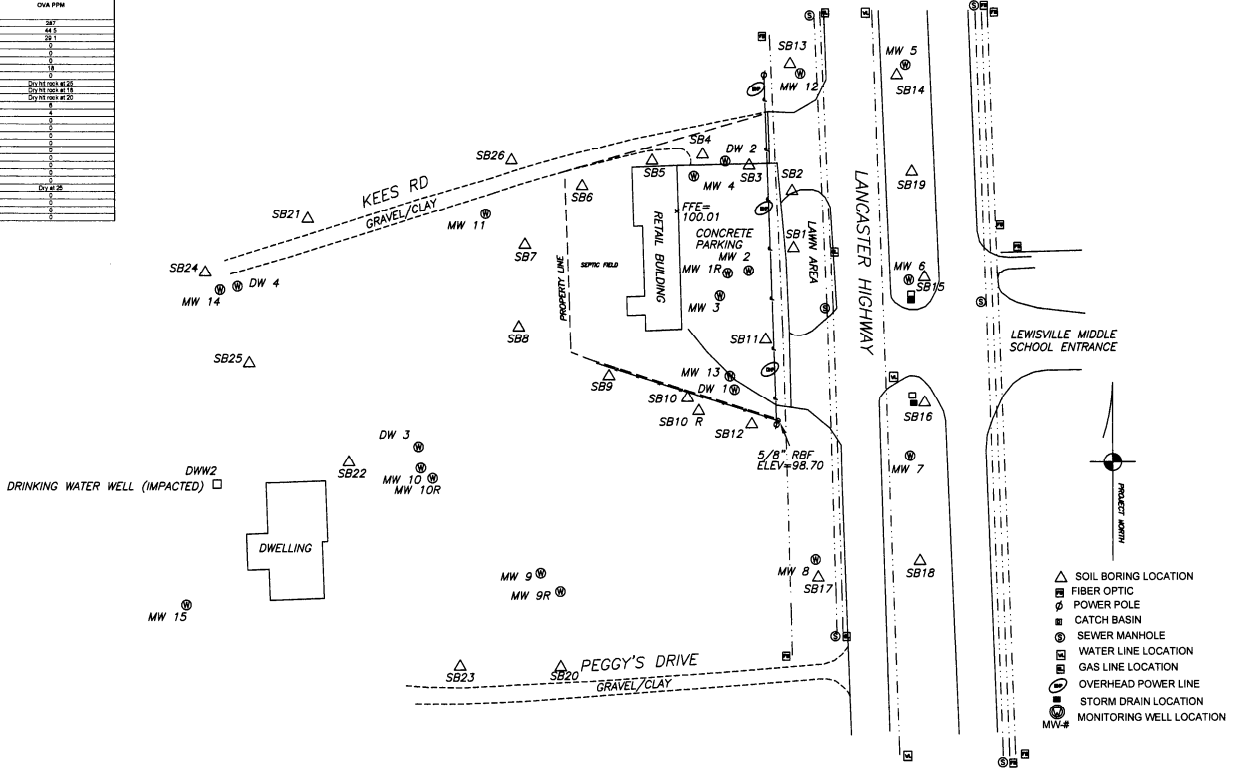
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TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 3 - PIEZOMETRIC MAP

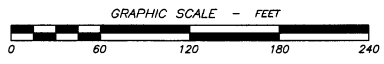


TABLE 2 Delineation OVA Field Data One Accord Miniarea Site ID 02131 Richburg, SC		
Sample ID	Depth	OVA PPM
SB1	27	SB7
SB2	27	46.5
SB3	27	25.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	11	0
SB9	28	SOLUBLE SOLIDS
SB10	18	SOLUBLE SOLIDS
SB10A	20	SOLUBLE SOLIDS
SB11	27	4
SB12	27	0
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27	0
SB22	27	0
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27	0



- △ SOIL BORING LOCATION
- FIBER OPTIC
- ⊕ POWER POLE
- ⊕ CATCH BASIN
- ⊕ SEWER MANHOLE
- ⊕ WATER LINE LOCATION
- ⊕ GAS LINE LOCATION
- ⊕ OVERHEAD POWER LINE
- ⊕ STORM DRAIN LOCATION
- ⊕ MW-# MONITORING WELL LOCATION

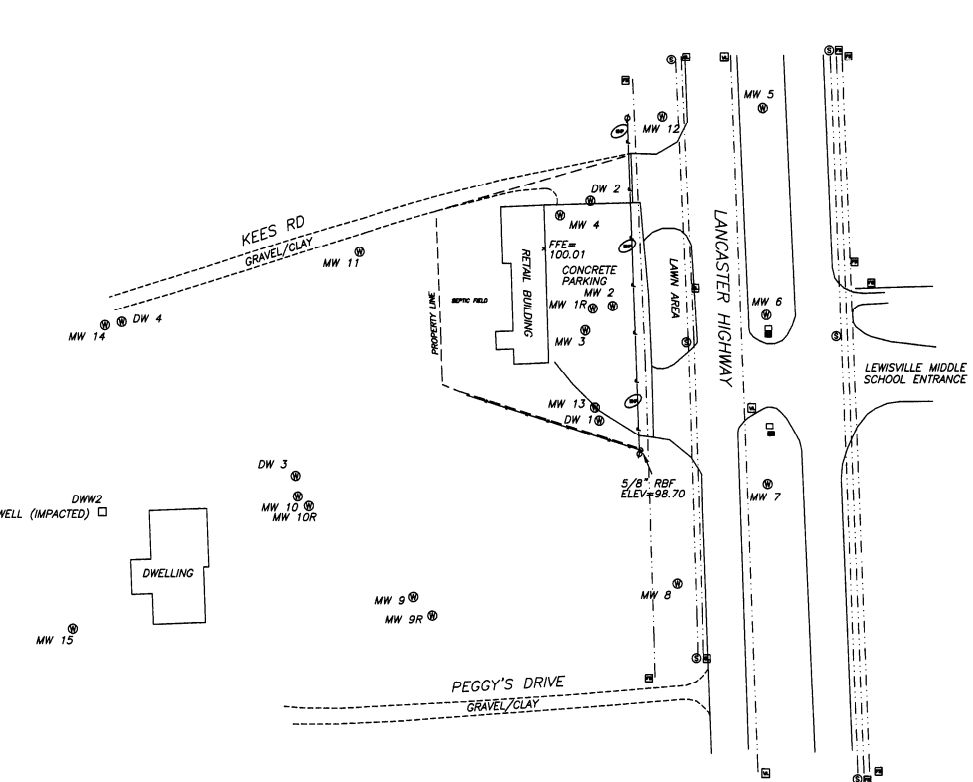
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TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - GEOPROBE MAP

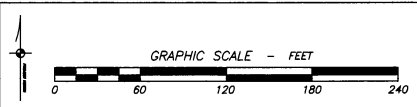
**TABLE 3 Groundwater Analytical Data One Accord Minutes Site ID 02131**

MW ID	DATE	Parameter	Value	Unit	30 Day Avg	1-yr Avg	10-yr Avg	100-yr Avg	100-yr Flood	100-yr Storm
MW 1R	10/13/17	BAD	<0000		<0000	<0000	<0000	<0000	<0000	<0000
MW 2	10/17/17	MS	<0000		<0000	<0000	<0000	<0000	<0000	<0000
MW 3	10/13/17	PP	PP	PP	PP	PP	PP	PP	PP	PP
MW 4	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 5	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 6	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 7	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 8	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 9	10/13/17	DRY	DRY		DRY	DRY	DRY	DRY	DRY	DRY
MW 10	10/13/17	DRY	DRY		DRY	DRY	DRY	DRY	DRY	DRY
MW 11	10/13/17	DRY	DRY		DRY	DRY	DRY	DRY	DRY	DRY
MW 12	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 13	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 14	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 15	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 16	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 17	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 18	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 19	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 20	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 21	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 22	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 23	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 24	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 25	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 26	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 27	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 28	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 29	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 30	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 31	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 32	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 33	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 34	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 35	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 36	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 37	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 38	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 39	10/13/17	+	<50		<50	<50	<50	<50	<50	<50
MW 40	10/13/17	+	<50		<50	<50	<50	<50	<50	<50



- △ SOIL BORING LOCATION
- ▣ FIBER OPTIC
- ⊕ POWER POLE
- CATCH BASIN
- ⊙ SEWER MANHOLE
- ⊞ WATER LINE LOCATION
- ⊚ GAS LINE LOCATION
- ⊕ OVERHEAD POWER LINE
- ⊙ STORM DRAIN LOCATION
- ⊙ MONITORING WELL LOCATION

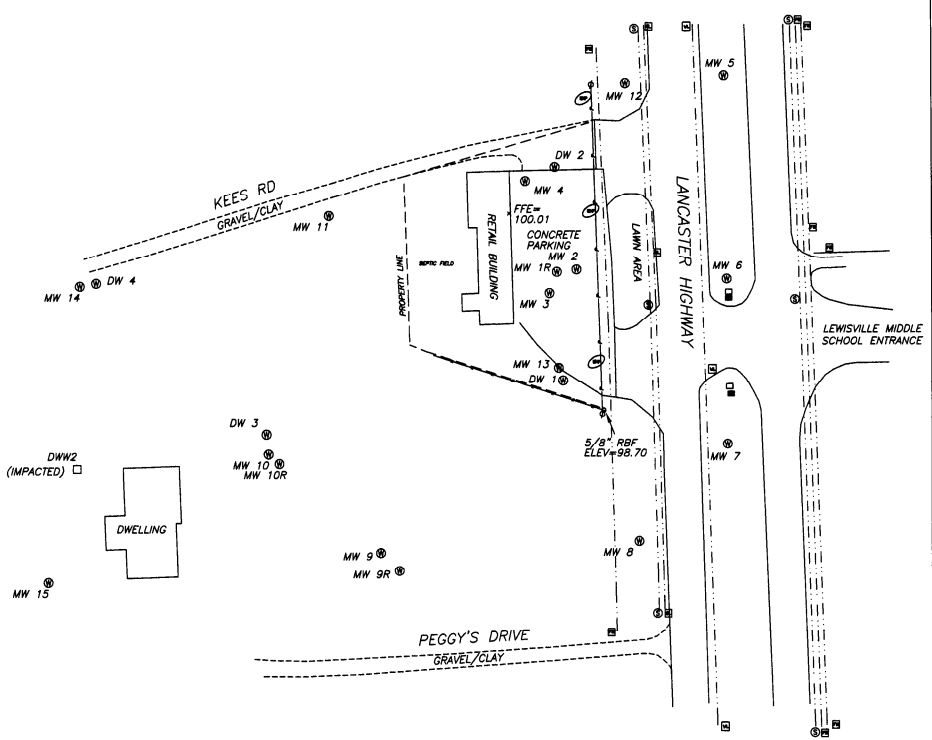
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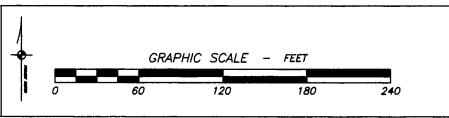
**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Hydrocarbons	MTBE	EDB	Lead	PAH (Sum)	1,2-DCA
		5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	10/1/17	1190	4200	3200	3000	70	570	0.01	NA	<0.02
MW 2	10/1/17	1300	4100	3200	3000	70	180	<0.02	NA	<0.02
MW 3	10/1/17	PP	PP	PP	6.0M FT	PP	PP	PP	PP	PP
MW 4	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 5	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 6	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 7	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 8	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 9	10/1/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 10R	3/2/17	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 11	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 12	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
DW 1	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 13	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
MW 14	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	10	NA
DUP	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	18	NA
MW 15	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	0.5	NA
DW 1	10/1/17	80	200	100	1800	37	1000	<0.02	NA	<10
DW 2	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
DW 3	10/1/17	<5	4.2	<5	<5	<5	180	<0.02	NA	<5
DW 4	10/1/17	<1	<1	<1	<1	<1	8.3	<0.02	NA	<1
DUP	10/1/17	<1	<1	<1	<1	<1	8.9	<0.02	NA	<1
DW 1	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.02	NA	<0.50
DW 2	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.02	NA	<0.50
DW 3	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.38	<0.02	NA	<0.50
DW 4	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.02	NA	<0.50
DW 5	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	<0.02	NA	<0.50
DW 6	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.02	NA	<0.50
DUP	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.02	NA	<0.50
FB	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
FB 2	10/1/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.02	NA	<0.50
FB	10/1/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
FB	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1
FB	3/2/17	<1	<1	<1	<1	<1	<1	<0.02	NA	<1



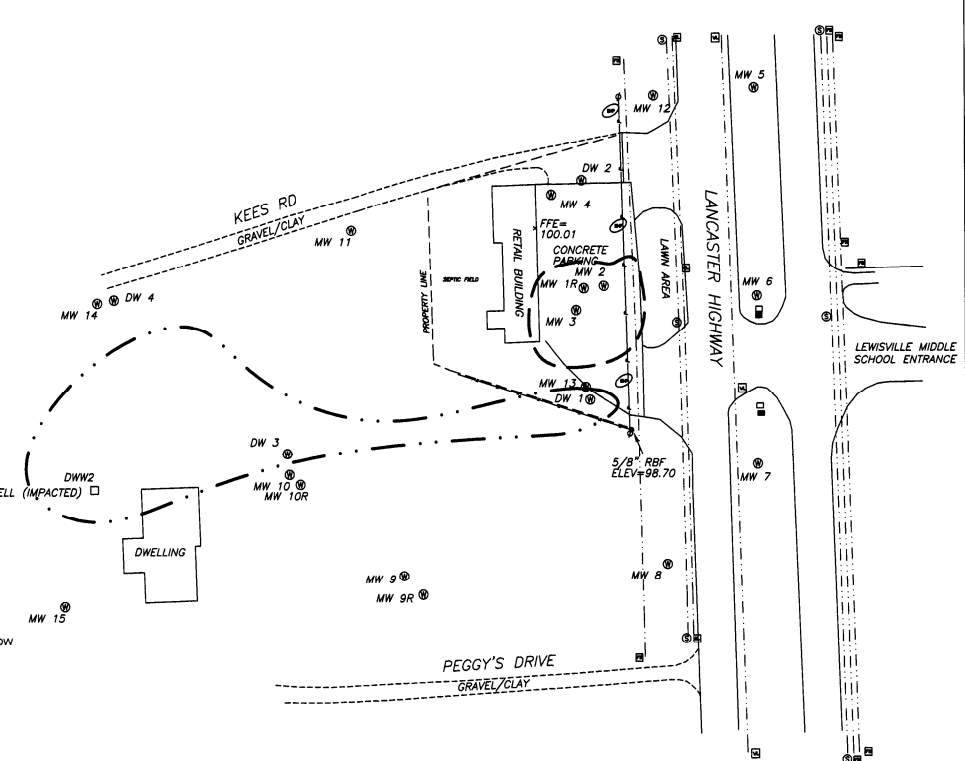
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**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

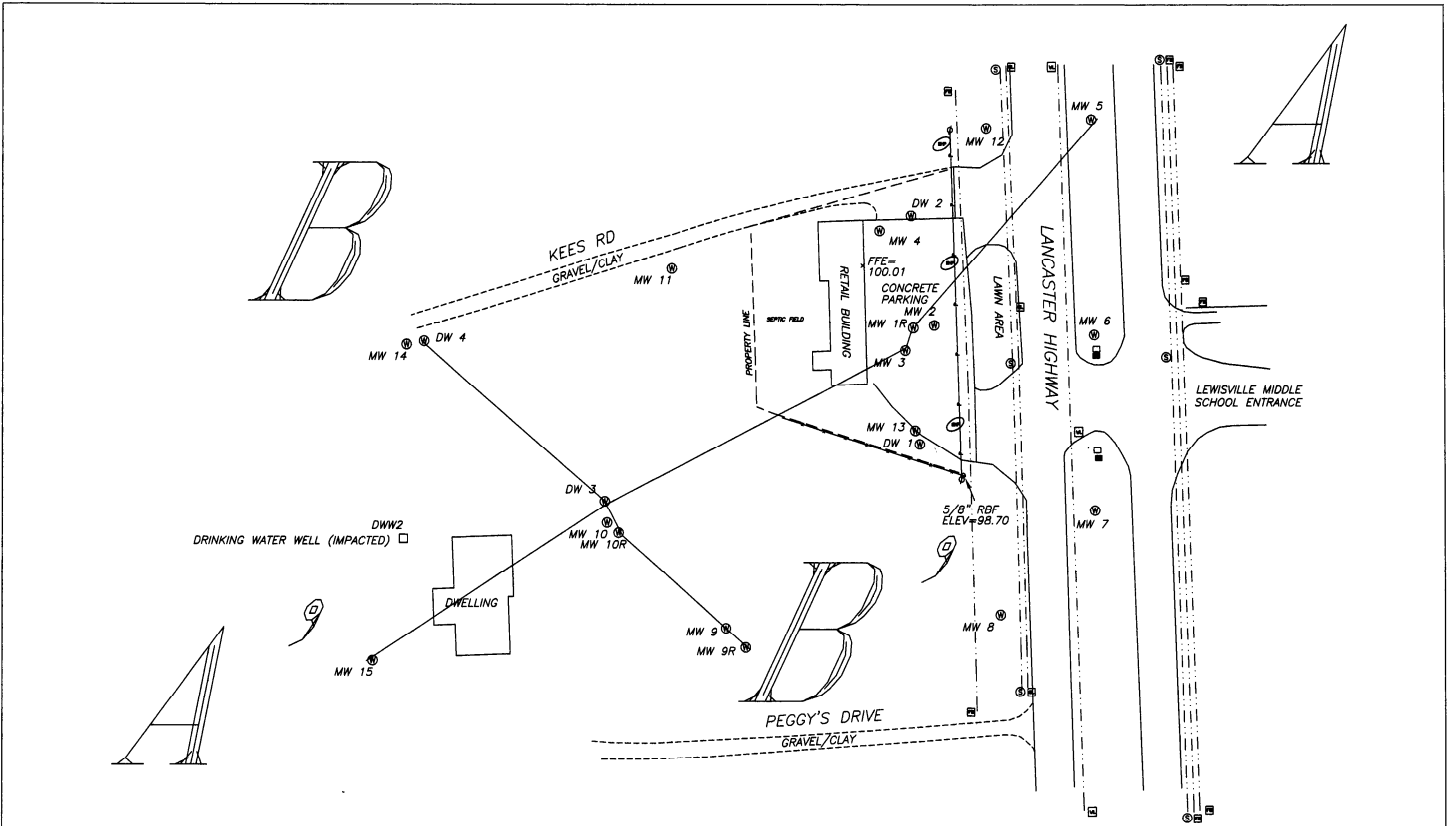
**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Analyzed	Benzene	Toluene	Ethylbenzene	Total Xylenes	Nonhlsolvent	MTBE	EDB	Lead	PAH (Total)	1-2 DCA
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
RBSL	-	5	1,000	700	10,000	25	40	0.58	15	NA	<500
MW 1R	1/21/17	11000	42000	3900	20000	790	8700	0.2102	NA	NA	<500
MW 2	1/21/17	15000	41000	3200	20000	790	1800	<0.020	NA	NA	<500
MW 2	1/21/17	FP	FP	FP	6.88 FP	FP	FP	FP	FP	FP	FP
MW 4	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 7	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/21/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10	1/21/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
CLP	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/21/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
CLP	3/21/17	<1	<1	<1	<1	<1	<1	<0.020	18	NA	<1
MW 15	3/21/17	<1	<1	<1	<1	<1	<1	<0.019	2.8	NA	<1
DW 1	1/21/17	990	200	100	1800	37	1800	<0.020	NA	NA	<10
DW 2	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/21/17	<1	4.2, 2	<1	<1	<1	1.9	<0.020	NA	NA	<1
DW 4	1/21/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
CLP	1/21/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DW 1R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
DW 2R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	4.4	<0.020	NA	NA	<0.50
DW 3R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	9.62	<0.020	NA	NA	<0.50
DW 4R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	<0.020	NA	NA	<0.50
DW 5R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.62	<0.020	NA	NA	<0.50
DW 6R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DW 7R	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
CLP	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
FB	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB	1/21/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
FB	1/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB	3/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB	3/21/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1

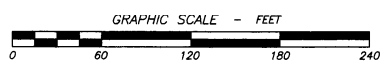


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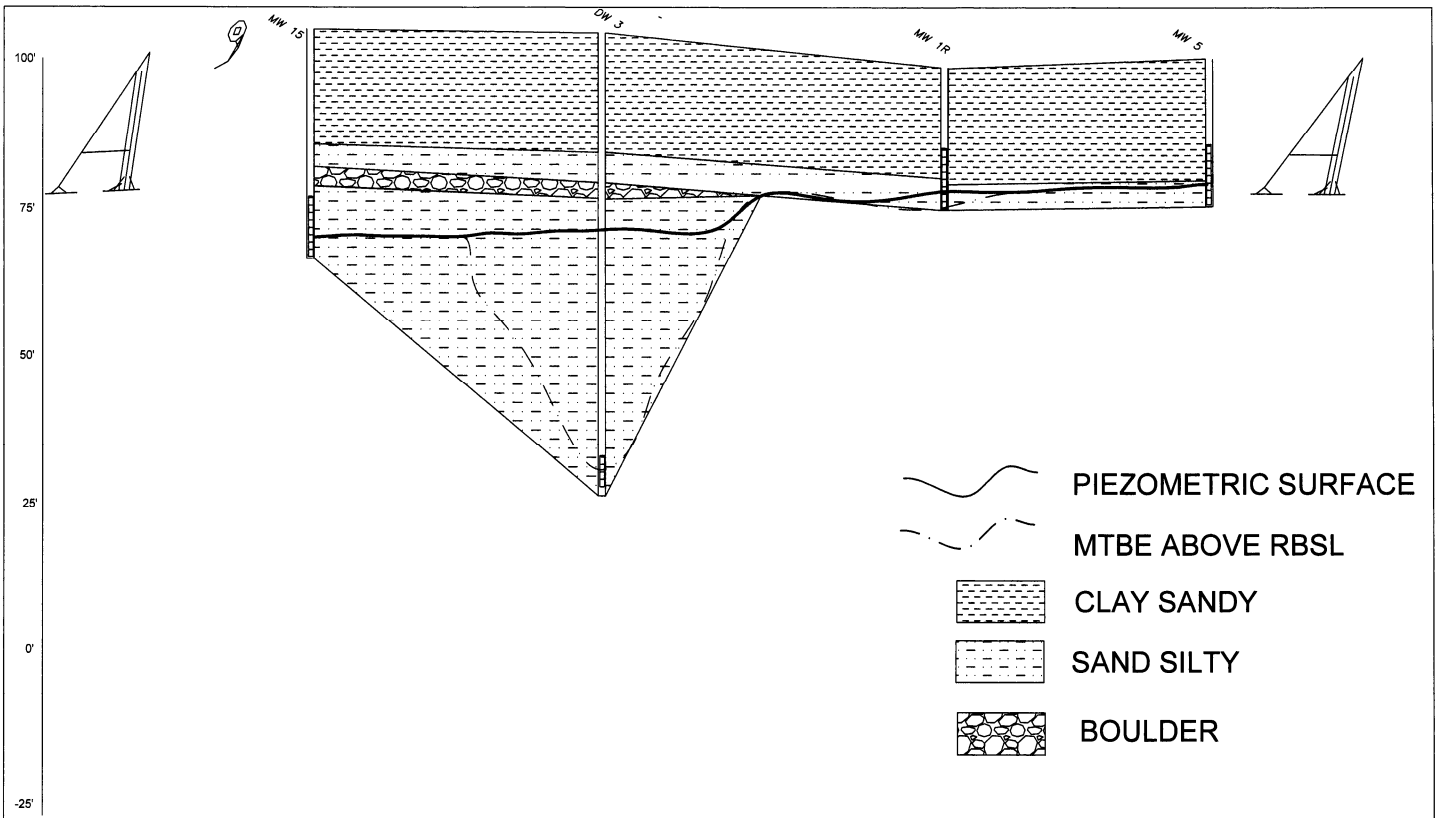
**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 6 - WELL DELINEATION MAP








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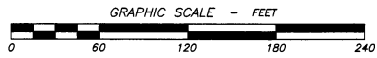


TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 7 - A B TRANSECT MAP

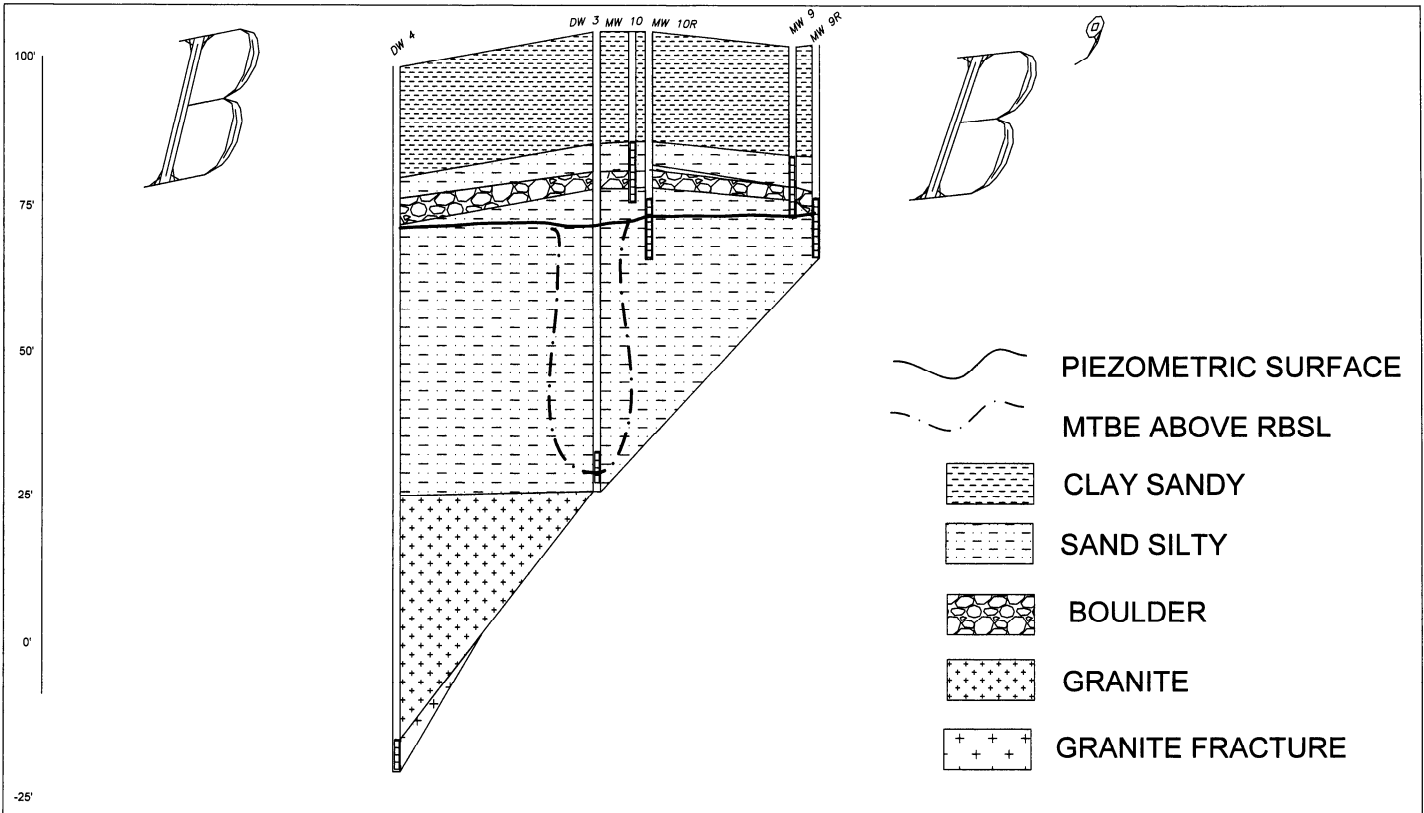


-  PIEZOMETRIC SURFACE
-  MTBE ABOVE RBSL
-  CLAY SANDY
-  SAND SILTY
-  BOULDER

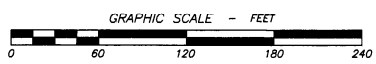
KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGE Moor, SC 29712  
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TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 8 - A A' TRANSECT MAP



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
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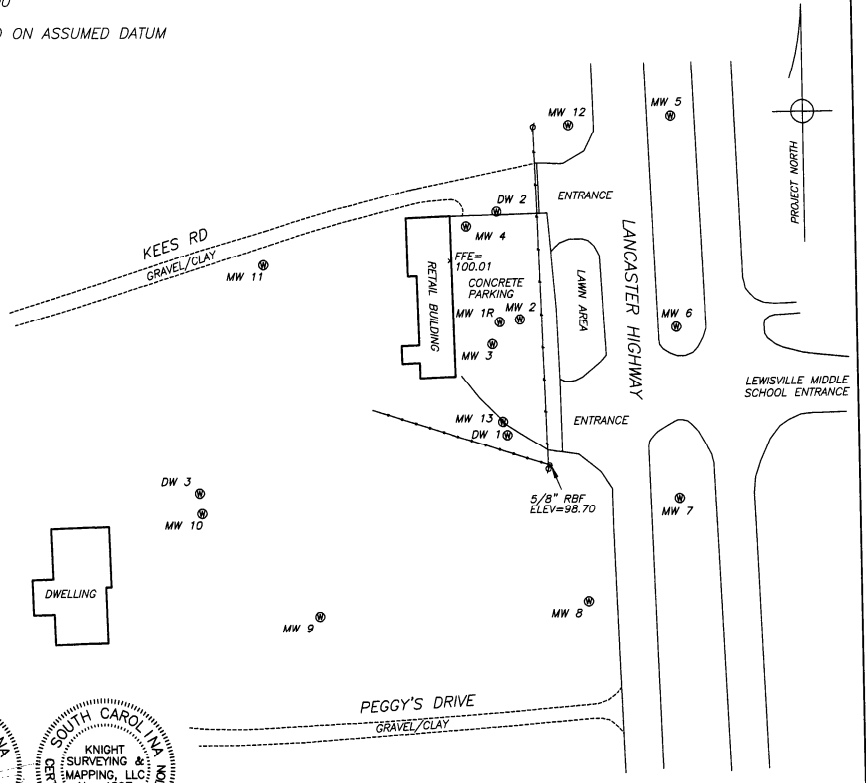
TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 9 - B B' TRANSECT MAP



**KNIGHT SURVEYING & MAPPING, LLC**  
 Professional Land Surveying Services  
 843.789.0850  
 803.385.8698  
 www.knightsurveying.com

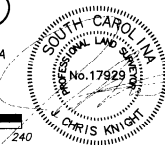
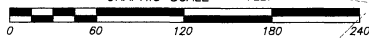
PROJECT: 16169.00  
 ELEVATIONS BASED ON ASSUMED DATUM

WELL	TOP PIPE	GROUND ELEV
MW 2	99.04	99.55
MW 3	98.95	99.30
MW 4	99.30	99.72
MW 5	100.13	100.44
MW 6	98.09	98.51
MW 7	96.98	97.42
MW 8	95.83	96.12
MW 9	103.75	104.10
MW 10	104.68	105.06
MW 11	99.24	99.62
MW 12	98.96	99.37
MW 13	98.51	98.93
MW 1R	99.20	99.50
DW 1	98.42	98.82
DW 2	99.59	99.91
DW 3	104.30	104.59



MAP OF WELL SURVEY  
**KATAWBA ENVIRONMENTAL, INC.**  
**ONE ACCORD (SITE 02131)**

3570 LANCASTER HIGHWAY  
 RICHBURG, CHESTER COUNTY, SOUTH CAROLINA  
 JUNE 1, 2016  
 SCALE: 1"=60'  
 GRAPHIC SCALE - FEET





**APPENDIX B**  
**ANALYTICAL DATA**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **SB01113**  
Date Completed: **02/13/2017**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

# SHEALY ENVIRONMENTAL SERVICES, INC.

---

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

---

## Case Narrative Katawba Environmental, Inc. Lot Number: SB01113

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This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

EDB by Microextraction

Sample -001 has been qualified with a "P" as the relative percent difference between the two GC columns exceeded method criteria. Per SCDHEC, the lesser of the two values has been reported.

VOCs by GC/MS

Due to matrix interferences, sample -021 recovered one surrogate outside of method criteria. Repeat analysis yielded similar surrogate recoveries and confirming matrix interferences.

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: SB01113

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131 MW1	Aqueous	01/31/2017 1638	02/01/2017
002	02131 MW2	Aqueous	01/31/2017 1613	02/01/2017
003	02131 MW4	Aqueous	01/31/2017 1517	02/01/2017
004	02131 MW5	Aqueous	01/31/2017 1235	02/01/2017
005	02131 MW6	Aqueous	01/31/2017 1307	02/01/2017
006	02131 MW7	Aqueous	01/31/2017 1329	02/01/2017
007	02131 MW8	Aqueous	01/31/2017 1353	02/01/2017
008	02131 MW11	Aqueous	01/31/2017 1452	02/01/2017
009	02131 MW12	Aqueous	01/31/2017 1424	02/01/2017
010	02131 MW12DUP	Aqueous	01/31/2017 1426	02/01/2017
011	02131 MW13	Aqueous	01/31/2017 1547	02/01/2017
012	02131 DW1	Aqueous	01/31/2017 1056	02/01/2017
013	02131 DW2	Aqueous	01/31/2017 0937	02/01/2017
014	02131 DW3	Aqueous	01/31/2017 1213	02/01/2017
015	02131 DW4	Aqueous	01/31/2017 0817	02/01/2017
016	02131 DW4DUP	Aqueous	01/31/2017 0819	02/01/2017
017	02131 DWW1	Aqueous	01/31/2017 1559	02/01/2017
018	02131 DWW2	Aqueous	01/31/2017 1510	02/01/2017
019	02131 DWW3	Aqueous	01/31/2017 1613	02/01/2017
020	02131 DWW4	Aqueous	01/31/2017 1523	02/01/2017
021	02131 DWW5	Aqueous	01/31/2017 1546	02/01/2017
022	02131 DWW6	Aqueous	01/31/2017 1629	02/01/2017
023	02131 DWW6DUP	Aqueous	01/31/2017 1631	02/01/2017
024	02131 FB	Aqueous	01/31/2017 1647	02/01/2017
025	02131 FB2	Aqueous	01/31/2017 1658	02/01/2017
026	02131 TB	Aqueous	01/31/2017 1717	02/01/2017

(26 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

## Executive Summary Katawba Environmental, Inc. Lot Number: SB01113

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131 MW1	Aqueous	tert-Amyl alcohol (TAA)	8260B	12000		ug/L	5
001	02131 MW1	Aqueous	tert-Amyl methyl ether	8260B	2000	J	ug/L	5
001	02131 MW1	Aqueous	Benzene	8260B	11000		ug/L	5
001	02131 MW1	Aqueous	Diisopropyl ether (IPE)	8260B	840		ug/L	5
001	02131 MW1	Aqueous	Ethylbenzene	8260B	2800		ug/L	5
001	02131 MW1	Aqueous	Methyl tertiary butyl ether	8260B	5700		ug/L	5
001	02131 MW1	Aqueous	Naphthalene	8260B	750		ug/L	5
001	02131 MW1	Aqueous	Toluene	8260B	42000		ug/L	5
001	02131 MW1	Aqueous	Xylenes (total)	8260B	20000		ug/L	5
001	02131 MW1	Aqueous	1,2-Dibromoethane (EDB)	8011	0.010	JP	ug/L	5
002	02131 MW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	29000		ug/L	6
002	02131 MW2	Aqueous	tert-Amyl methyl ether	8260B	550	J	ug/L	6
002	02131 MW2	Aqueous	Benzene	8260B	13000		ug/L	6
002	02131 MW2	Aqueous	Diisopropyl ether (IPE)	8260B	950		ug/L	6
002	02131 MW2	Aqueous	Ethylbenzene	8260B	3200		ug/L	6
002	02131 MW2	Aqueous	Methyl tertiary butyl ether	8260B	1800		ug/L	6
002	02131 MW2	Aqueous	Naphthalene	8260B	760		ug/L	6
002	02131 MW2	Aqueous	Toluene	8260B	41000		ug/L	6
002	02131 MW2	Aqueous	Xylenes (total)	8260B	20000		ug/L	6
012	02131 DW1	Aqueous	tert-Amyl alcohol (TAA)	8260B	2200		ug/L	16
012	02131 DW1	Aqueous	tert-Amyl methyl ether	8260B	140		ug/L	16
012	02131 DW1	Aqueous	Benzene	8260B	990		ug/L	16
012	02131 DW1	Aqueous	Diisopropyl ether (IPE)	8260B	83		ug/L	16
012	02131 DW1	Aqueous	Ethylbenzene	8260B	100		ug/L	16
012	02131 DW1	Aqueous	Methyl tertiary butyl ether	8260B	1000		ug/L	16
012	02131 DW1	Aqueous	Naphthalene	8260B	37		ug/L	16
012	02131 DW1	Aqueous	tert-butyl alcohol (TBA)	8260B	520		ug/L	16
012	02131 DW1	Aqueous	Toluene	8260B	200		ug/L	16
012	02131 DW1	Aqueous	Xylenes (total)	8260B	1600		ug/L	16
014	02131 DW3	Aqueous	tert-Amyl methyl ether	8260B	4.7	J	ug/L	18
014	02131 DW3	Aqueous	Methyl tertiary butyl ether	8260B	190		ug/L	18
014	02131 DW3	Aqueous	Toluene	8260B	4.2	J	ug/L	18
015	02131 DW4	Aqueous	Methyl tertiary butyl ether	8260B	8.3		ug/L	19
016	02131 DW4DUP	Aqueous	Methyl tertiary butyl ether	8260B	8.0		ug/L	20
017	02131 DWW1	Aqueous	Methyl tertiary butyl ether	524.2	1.9		ug/L	21
018	02131 DWW2	Aqueous	Methyl tertiary butyl ether	524.2	44		ug/L	23
019	02131 DWW3	Aqueous	Methyl tertiary butyl ether	524.2	0.52		ug/L	25
021	02131 DWW5	Aqueous	Methyl tertiary butyl ether	524.2	0.92		ug/L	29

(38 detections)

Description: **02131 MW1**Matrix: **Aqueous**Date Sampled: **01/31/2017 1638**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	500	02/02/2017 1501	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	12000		10000	4000	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	2000	J	5000	200	ug/L	1	
Benzene	71-43-2	8260B	11000		500	200	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	840		500	200	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1	
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1	
Ethylbenzene	100-41-4	8260B	2800		500	200	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	5700		500	200	ug/L	1	
Naphthalene	91-20-3	8260B	750		500	200	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1	
Toluene	108-88-3	8260B	42000		500	200	ug/L	1	
Xylenes (total)	1330-20-7	8260B	20000		500	200	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		101	70-130						
Bromofluorobenzene		111	70-130						
Toluene-d8		106	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/03/2017 1916	MEM	02/02/2017 1314	33352		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	0.010	JP	0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		123	57-137						

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW2**Matrix: **Aqueous**Date Sampled: **01/31/2017 1613**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	500	02/02/2017 1524	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	29000		10000	4000	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	550	J	5000	200	ug/L	1	
Benzene	71-43-2	8260B	13000		500	200	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	950		500	200	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1	
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1	
Ethylbenzene	100-41-4	8260B	3200		500	200	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1800		500	200	ug/L	1	
Naphthalene	91-20-3	8260B	760		500	200	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1	
Toluene	108-88-3	8260B	41000		500	200	ug/L	1	
Xylenes (total)	1330-20-7	8260B	20000		500	200	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		115	70-130
Toluene-d8		108	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/07/2017 2359	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		127	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW4**Matrix: **Aqueous**Date Sampled: **01/31/2017 1517**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1546	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0010	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		103	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131 MW5**Matrix: **Aqueous**Date Sampled: **01/31/2017 1235**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1608	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		107	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0020	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		112	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW6**Matrix: **Aqueous**Date Sampled: **01/31/2017 1307**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1630	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		111	70-130						
Bromofluorobenzene		109	70-130						
Toluene-d8		109	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0031	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.021	0.0053	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		108	57-137						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW7**Matrix: **Aqueous**Date Sampled: **01/31/2017 1329**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1652	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		106	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0042	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		112	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW8**Matrix: **Aqueous**Date Sampled: **01/31/2017 1353**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1714	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		108	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0052	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		112	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW11**Matrix: **Aqueous**Date Sampled: **01/31/2017 1452**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	02/02/2017 1825	JM1		33338

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		93	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	02/08/2017 0103	MEM	02/07/2017 1227	33817

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		114	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW12**Matrix: **Aqueous**Date Sampled: **01/31/2017 1424**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1850	JM1		33338		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		97	70-130
Bromofluorobenzene		92	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0114	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		106	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW12DUP**Matrix: **Aqueous**Date Sampled: **01/31/2017 1426**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1915	JM1		33338		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		96	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0124	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		113	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 MW13**Matrix: **Aqueous**Date Sampled: **01/31/2017 1547**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 2239	JJG		33414		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		115	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		109	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0135	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		104	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: **02131 DW1**Matrix: **Aqueous**Date Sampled: **01/31/2017 1056**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	10	02/02/2017 2301	JJG		33414		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	2200		200	80	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	140		100	4.0	ug/L	1	
Benzene	71-43-2	8260B	990		10	4.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	83		10	4.0	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1	
Ethanol	64-17-5	8260B	ND		1000	400	ug/L	1	
Ethylbenzene	100-41-4	8260B	100		10	4.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1000		10	4.0	ug/L	1	
Naphthalene	91-20-3	8260B	37		10	4.0	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	520		200	80	ug/L	1	
Toluene	108-88-3	8260B	200		10	4.0	ug/L	1	
Xylenes (total)	1330-20-7	8260B	1600		10	4.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		102	70-130						
Bromofluorobenzene		111	70-130						
Toluene-d8		108	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/08/2017 0146	MEM	02/07/2017 1227	33817		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		123	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DW2**Matrix: **Aqueous**Date Sampled: **01/31/2017 0937**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 2323	JJG		33414		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		111	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/13/2017 1040	MEM	02/10/2017 1532	34229		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		96	57-137						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DW3**Matrix: **Aqueous**Date Sampled: **01/31/2017 1213**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	5	02/02/2017 2345	JJG		33414		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	40	ug/L	1	
<b>tert-Amyl methyl ether (TAME)</b>	<b>994-05-8</b>	<b>8260B</b>	<b>4.7</b>	<b>J</b>	<b>50</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>	
Benzene	71-43-2	8260B	ND		5.0	2.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	2.0	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	1	
Ethanol	64-17-5	8260B	ND		500	200	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		5.0	2.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>190</b>		<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		5.0	2.0	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	40	ug/L	1	
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>4.2</b>	<b>J</b>	<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>	
Xylenes (total)	1330-20-7	8260B	ND		5.0	2.0	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		108	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/13/2017 1112	MEM	02/10/2017 1532	34229		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		99	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DW4**Matrix: **Aqueous**Date Sampled: **01/31/2017 0817**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1758	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>8.3</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		109	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/13/2017 1123	MEM	02/10/2017 1532	34229		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		98	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DW4DUP**Matrix: **Aqueous**Date Sampled: **01/31/2017 0819**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1736	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>8.0</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		107	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/13/2017 1134	MEM	02/10/2017 1532	34229		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		95	57-137						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DWW1**Matrix: **Aqueous**Date Sampled: **01/31/2017 1559**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1205	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		110	70-130						
Bromofluorobenzene		107	70-130						
Toluene-d8		109	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/05/2017 2349	ECP		33630		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>1.9</b>		<b>0.50</b>	<b>0.10</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		77	70-130						
1,2-Dichlorobenzene-d4		80	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1715	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0084	ug/L	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-017**

Description: **02131 DWW1**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1559**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Description: **02131 DWW2**Matrix: **Aqueous**Date Sampled: **01/31/2017 1510**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1227	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		111	70-130						
Bromofluorobenzene		105	70-130						
Toluene-d8		106	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/05/2017 2204	ECP		33630		
2	524.2	524.2	10	02/08/2017 2111	TML		34030		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>44</b>		<b>5.0</b>	<b>1.0</b>	<b>ug/L</b>	<b>2</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits			
Bromofluorobenzene		79	70-130		78	70-130			
1,2-Dichlorobenzene-d4		88	80-120		85	80-120			

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1751	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.019	0.0082	ug/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-018**

Description: **02131 DWW2**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1510**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Description: **02131 DWW3**Matrix: **Aqueous**Date Sampled: **01/31/2017 1613**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1249	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		111	70-130						
Bromofluorobenzene		105	70-130						
Toluene-d8		108	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/06/2017 0024	ECP		33630		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>0.52</b>		<b>0.50</b>	<b>0.10</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		75	70-130						
1,2-Dichlorobenzene-d4		85	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1803	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0084	ug/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-019**

Description: **02131 DWW3**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1613**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 DWW4**Matrix: **Aqueous**Date Sampled: **01/31/2017 1523**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1311	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		10	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		111	70-130						
Bromofluorobenzene		105	70-130						
Toluene-d8		109	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/06/2017 0058	ECP		33630		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.10	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		70	70-130						
1,2-Dichlorobenzene-d4		82	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1815	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0085	ug/L	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-020**

Description: **02131 DWW4**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1523**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		104	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Description: **02131 DWW5**Matrix: **Aqueous**Date Sampled: **01/31/2017 1546**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1333	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		113	70-130						
Bromofluorobenzene		115	70-130						
Toluene-d8		104	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/08/2017 2146	TML		34030		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>524.2</b>	<b>0.92</b>		<b>0.50</b>	<b>0.10</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		105	70-130						
1,2-Dichlorobenzene-d4	N	149	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1828	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0085	ug/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-021**

Description: **02131 DWW5**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1546**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		103	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Description: **02131 DWW6**Matrix: **Aqueous**Date Sampled: **01/31/2017 1629**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1355	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		108	70-130						
Bromofluorobenzene		109	70-130						
Toluene-d8		111	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/06/2017 0133	ECP		33630		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.10	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		74	70-130						
1,2-Dichlorobenzene-d4		81	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1840	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0083	ug/L	1	

PQL = Practical quantitation limit    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    H = Out of holding time  
 ND = Not detected at or above the MDL    J = Estimated result < PQL and ≥ MDL    P = The RPD between two GC columns exceeds 40%    N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-022**

Description: **02131 DWW6**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1629**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		102	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	1	02/02/2017 1417	JM1		33340			
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run		
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1		
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1		
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1		
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		108	70-130							
Bromofluorobenzene		102	70-130							
Toluene-d8		108	70-130							

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	524.2	524.2	1	02/06/2017 0208	ECP		33630			
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run		
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1		
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1		
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1		
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.10	ug/L	1		
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1		
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1		
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
Bromofluorobenzene		77	70-130							
1,2-Dichlorobenzene-d4		84	80-120							

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	504.1	504.1	1	02/10/2017 1852	MEM	02/10/2017 1004	34178			
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0085	ug/L	1		

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-023**

Description: **02131 DWW6DUP**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1631**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		106	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Description: **02131 FB**Matrix: **Aqueous**Date Sampled: **01/31/2017 1647**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1058	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		110	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		108	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	02/13/2017 1144	MEM	02/10/2017 1532	34229		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		98	57-137						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 FB2**Matrix: **Aqueous**Date Sampled: **01/31/2017 1658**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1120	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		109	70-130						
Bromofluorobenzene		108	70-130						
Toluene-d8		109	70-130						

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	524.2	524.2	1	02/05/2017 2054	ECP		33630		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Benzene	71-43-2	524.2	ND		0.50	0.080	ug/L	1	
1,2-Dichloroethane	107-06-2	524.2	ND		0.50	0.12	ug/L	1	
Ethylbenzene	100-41-4	524.2	ND		0.50	0.060	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	524.2	ND		0.50	0.10	ug/L	1	
Naphthalene	91-20-3	524.2	ND		0.50	0.050	ug/L	1	
Toluene	108-88-3	524.2	ND		0.50	0.070	ug/L	1	
Xylenes (total)	1330-20-7	524.2	ND		0.50	0.32	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
Bromofluorobenzene		87	70-130						
1,2-Dichlorobenzene-d4		89	80-120						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	504.1	504.1	1	02/10/2017 1904	MEM	02/10/2017 1004	34178		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	504.1	ND		0.020	0.0085	ug/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Client: **Katawba Environmental, Inc.**

Laboratory ID: **SB01113-025**

Description: **02131 FB2**

Matrix: **Aqueous**

Date Sampled: **01/31/2017 1658**

Date Received: **02/01/2017**

<b>Surrogate</b>	<b>Q</b>	<b>Run 1 % Recovery</b>	<b>Acceptance Limits</b>
1,1,1,2-Tetrachloroethane		101	57-137

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SB01113-026**Description: **02131 TB**Matrix: **Aqueous**Date Sampled: **01/31/2017 1717**Date Received: **02/01/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	02/02/2017 1143	JM1		33340		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		109	70-130						
Bromofluorobenzene		104	70-130						
Toluene-d8		108	70-130						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Chain of Custody  
and  
Miscellaneous Documents**



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**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive - West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

Number 67678

Client: <b>Katawba Env</b>		Report to Contract: <b>Alex Ams</b>		Telephone No. / E-mail		Quote No.	
Address: <b>4278 Dyc Rd</b>		Sampler's Signature: <i>[Signature]</i>		Analysis (Attach list if more space is needed)		Page <u>1</u> of <u>2</u>	
City: <b>Edgemoor</b>	State: <b>SC</b>	Zip Code: <b>29712</b>	Printed Name: <b>Billy Morris</b>		 <b>SB01113</b>  Remarks / Cooler I.D.		
Project Name: <b>One Accord</b>		Project No.: <b>One Accord</b>		R.D. No.: <b>One Accord</b>			
Sample ID / Description		Date	Time	Matrix		No. of Containers by Preservative Type	
<small>(Containers for each sample may be combined on one line.)</small>				<small>Matrix</small>		<small>No. of Containers by Preservative Type</small>	
<b>02131 MW1</b>		<b>1-31-17</b>	<b>1638</b>	<b>X</b>		<b>X X</b>	
<b>02131 MW2</b>			<b>1613</b>				
<b>02131 MW4</b>			<b>1517</b>				
<b>02131 MW5</b>			<b>1235</b>				
<b>02131 MW6</b>			<b>1307</b>				
<b>02131 MW7</b>			<b>1329</b>				
<b>02131 MW8</b>			<b>1353</b>				
<b>02131 MW9</b>			<b>1452</b>				
<b>02131 MW12</b>			<b>1424</b>				
<b>02131 MW19 Dup</b>		<b>1-31-17</b>	<b>1426</b>	<b>X</b>		<b>X X</b>	

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### Chain of Custody Record

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www.shealylab.com

Number 67675

SHEALY ENVIRONMENTAL SERVICES, INC.

Client <b>Katawba Env</b>		Report to Contact <b>Alex Amos</b>		Telephone No / E-mail		Quote No.	
Address <b>4278 Dye Rd</b>		Sample's Signature <i>Billy Morris</i>		Containers (Attach list if more than is needed) <b>BIOHAZARD WASTE 12004 BOKS SCHOOL</b>		Page <b>2</b> of <b>3</b>	
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>				
Project Name <b>DM Accord</b>		Project No. <b>DM Accord</b>		Barcode <b>SB01113</b>		Barcode / Cooler I.D.	
P.O. Address <b>DM Accord</b>		Matrix					
Sample ID / Description (Containers for each sample may be combined on one line.)		Date	Time	No. of Containers by Preservative Type			
				UNCON	ACID	ALK	OTHER
<b>02131 MW13</b>		<b>1-31-17</b>	<b>1547</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>02131 DW1</b>			<b>1056</b>				
<b>02131 DW2</b>			<b>937</b>				
<b>02131 DW3</b>			<b>1213</b>				
<b>02131 DW4</b>			<b>817</b>				
<b>02131 DW4DND</b>			<b>819</b>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>02131 DWW1</b>			<b>1559</b>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>02131 DWW2</b>			<b>1510</b>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>02131 DWW3</b>			<b>1613</b>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>02131 DWW4</b>		<b>1-31-17</b>	<b>1523</b>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Turn Around Time Required (Prior lab approval required for expedited TAT.)				Possible Hazard Identification			
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown		QC Requirements (Specify)	
<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab							
1. Relinquished by	Date	Time	1. Received by		Date	Time	
<i>Billy Morris</i>	<b>2-1-17</b>	<b>8:33</b>	<i>Michon</i>		<b>2-1-17</b>	<b>8:33</b>	
2. Relinquished by	Date	Time	2. Received by		Date	Time	
<i>Michon</i>	<b>2-1-17</b>	<b>15:15</b>	<i>Roy Coy</i>		<b>2-1-17</b>	<b>15:15</b>	
3. Relinquished by	Date	Time	3. Received by		Date	Time	
4. Relinquished by	Date	Time	4. Laboratory received by		Date	Time	
<i>Roy Coy</i>	<b>2-1-17</b>	<b>16:40</b>	<i>S. Elliott</i>		<b>2-1-17</b>	<b>16:40</b>	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY			
				Received on Ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack Receipt Temp <b>18</b> °C			

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 06-01-2014

Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive • West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

Number 67676

Client <b>Katawba Gnu</b>		Report to Contact <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.	
Address <b>4278 Dyc Rd</b>		Sampler's Signature <i>[Signature]</i>		Applicable (Attach list of areas to be sampled)		Page <b>3</b> of <b>3</b>	
City <b>Edgemoor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>		 <b>SB01113</b>		
Project Name <b>One Accord</b>		Project No. <b>One Accord</b>		P.O. No.			
Sample ID / Description		Date	Time	No. of Containers by Preservative Type			
(Containers for each sample may be scribbled on one line.)				None	Formaldehyde	Formaldehyde	Formaldehyde
<b>02131 DWWS</b>	<b>1-31-17</b>	<b>15:46</b>	<b>X</b>				
<b>02131 DWWP</b>		<b>16:29</b>					
<b>02131 DWWP Dup</b>		<b>16:31</b>					
<b>02131 FB</b>		<b>16:47</b>					
<b>02131 FB2</b>		<b>16:58</b>					
<b>02131 TB</b>	<b>1-31-17</b>	<b>17:17</b>	<b>X</b>				

Turn Around Time Required (Prior lab approval required for expedited TAT)		Sample Disposal		Possible Hazard Identification				QC Requirements (Specify)	
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) <b>7 DAY TAT</b>		<input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown					
1. Relinquished by <b>Billy Morris</b>		Date	Time	1. Received by <b>[Signature]</b>		Date	Time		
		<b>2-1-17</b>	<b>8:33</b>			<b>2-1-17</b>	<b>8:33</b>		
2. Relinquished by <b>[Signature]</b>		Date	Time	2. Received by <b>Roy Coy</b>		Date	Time		
		<b>2-1-17</b>	<b>15:15</b>			<b>2-1-17</b>	<b>15:15</b>		
3. Relinquished by		Date	Time	3. Received by		Date	Time		
4. Relinquished by <b>Roy Coy</b>		Date	Time	4. Laboratory received by <b>[Signature]</b>		Date	Time		
		<b>2-1-17</b>	<b>16:40</b>			<b>2-1-17</b>	<b>16:40</b>		
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY					
				Received on ice (Circle) <b>Yes</b> No Ice Pack Receipt Temp. <b>1.8 °C</b>					

**SHEALY ENVIRONMENTAL SERVICES, INC.**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **SC03074**  
Date Completed: **03/09/2017**

  
Lucas Odom  
Project Manager



This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

# SHEALY ENVIRONMENTAL SERVICES, INC.

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SC DHEC No. 32010

NELAC No: E87653

NC DENR No. 329

NC Field Parameters No. 5639

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## Case Narrative Katawba Environmental, Inc. Lot Number: SC03074

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This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Sample Summary Katawba Environmental, Inc. Lot Number: SC03074

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131MW9R	Aqueous	03/03/2017 1107	03/03/2017
002	02131MW10R	Aqueous	03/03/2017 1134	03/03/2017
003	02131MW14	Aqueous	03/03/2017 1021	03/03/2017
004	02131DUPMW14	Aqueous	03/03/2017 1023	03/03/2017
005	02131MW15	Aqueous	03/03/2017 1219	03/03/2017
006	02131 FB	Aqueous	03/03/2017 1233	03/03/2017
007	02131 TB	Aqueous	03/03/2017 1249	03/03/2017

(7 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Executive Summary Katawba Environmental, Inc. Lot Number: SC03074

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	02131MW14	Aqueous	Lead	6010D	0.017		mg/L	7
004	02131DUPMW14	Aqueous	Lead	6010D	0.016		mg/L	8
005	02131MW15	Aqueous	Lead	6010D	0.0050	J	mg/L	9

(3 detections)

Description: **02131MW9R**Matrix: **Aqueous**Date Sampled: **03/03/2017 1107**Date Received: **03/03/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/07/2017 1332	PMV		36404		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	03/07/2017 1636	MEM	03/06/2017 1044	36298		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		85	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	03/07/2017 1758	CJZ	03/07/2017 0822	36366		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"



Description: 02131MW10R

Matrix: Aqueous

Date Sampled: 03/03/2017 1134

Date Received: 03/03/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/07/2017 1357	PMV		36404

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		95	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/07/2017 1647	MEM	03/06/2017 1044	36298

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		77	57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	03/07/2017 1803	CJZ	03/07/2017 0822	36366

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131MW14**Matrix: **Aqueous**Date Sampled: **03/03/2017 1021**Date Received: **03/03/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/07/2017 1422	PMV		36404		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	91	70-130	
Bromofluorobenzene	106	70-130	
Toluene-d8	98	70-130	

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	03/07/2017 1658	MEM	03/06/2017 1044	36298		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Run 1 Q	Acceptance % Recovery	Limits						
1,1,1,2-Tetrachloroethane	89	57-137							

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	03/07/2017 1808	CJZ	03/07/2017 0822	36366		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Lead	7439-92-1	6010D	0.017		0.010	0.0047	mg/L	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131DUPMW14**Matrix: **Aqueous**Date Sampled: **03/03/2017 1023**Date Received: **03/03/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/07/2017 1447	PMV		36404		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	88	70-130	
Bromofluorobenzene	105	70-130	
Toluene-d8	95	70-130	

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	03/07/2017 1708	MEM	03/06/2017 1044	36298		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1	
Surrogate	Run 1 Q	Acceptance % Recovery	Limits						
1,1,1,2-Tetrachloroethane	89	57-137							

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	03/07/2017 1813	CJZ	03/07/2017 0822	36366		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Lead	7439-92-1	6010D	0.016		0.010	0.0047	mg/L	1	

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result &lt; PQL and ≥ MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131MW15**Matrix: **Aqueous**Date Sampled: **03/03/2017 1219**Date Received: **03/03/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/07/2017 1512	PMV		36404		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	89	70-130	
Bromofluorobenzene	104	70-130	
Toluene-d8	97	70-130	

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	03/07/2017 1719	MEM	03/06/2017 1044	36298		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	
Surrogate	Run 1 Q	Acceptance % Recovery	Limits						
1,1,1,2-Tetrachloroethane	75	57-137							

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	03/07/2017 1818	CJZ	03/07/2017 0822	36366		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
Lead	7439-92-1	6010D	0.0050	J	0.010	0.0047	mg/L	1	

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: 02131 FB

Matrix: Aqueous

Date Sampled: 03/03/2017 1233

Date Received: 03/03/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	03/07/2017 1038	PMV		36404

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		95	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	03/07/2017 1730	MEM	03/06/2017 1044	36298

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		92	57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	03/07/2017 1823	CJZ	03/07/2017 0822	36366

Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Description: **02131 TB**Matrix: **Aqueous**Date Sampled: **03/03/2017 1249**Date Received: **03/03/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	03/07/2017 1103	PMV		36404		
Parameter	CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.40	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		87	70-130						
Bromofluorobenzene		105	70-130						
Toluene-d8		97	70-130						

PQL = Practical quantitation limit

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

ND = Not detected at or above the MDL

J = Estimated result < PQL and  $\geq$  MDL

P = The RPD between two GC columns exceeds 40%

N = Recovery is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

**Chain of Custody  
and  
Miscellaneous Documents**


Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive • West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

**Number 68124**

Client: <b>Katawba Eno</b>		Report to Contact: <b>Alex Amos</b>		Telephone No. / E-mail		Quote No.												
Address: <b>4278 Dyer Rd</b>		Sampler's Signature: <i>Billy Morris</i>		Analysis (Attach list if more space is needed)		Page <b>1</b> of <b>1</b>												
City: <b>Edge Moor</b>	State: <b>SC</b>	Zip Code: <b>29712</b>	Printed Name: <b>Billy Morris</b>		 <b>SC03074</b>  Remarks / Cooler I.D.													
Project Name: <b>On Accord</b>		Project No.: <b>On Accord</b>		PO No.: <b>On Accord</b>														
Sample ID / Description		Date	Time	Matrix				No. of Containers or Preservative Type										
<small>(Containers for each sample may be combined on one line.)</small>				Aspirate	Filter	Mobile	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	
<b>02131 mwgR</b>		<b>3-3-17</b>	<b>1107</b>	<b>X</b>														
<b>02131 mwiDR</b>		<b>↑</b>	<b>1134</b>															
<b>02131 mwi4</b>		<b>↑</b>	<b>1021</b>															
<b>02131 pupmwi4</b>		<b>↑</b>	<b>1023</b>															
<b>02131 mwi5</b>		<b>↑</b>	<b>1219</b>															
<b>02131 FB</b>		<b>↓</b>	<b>1233</b>															
<b>02131 TB</b>		<b>3-3-17</b>	<b>1249</b>	<b>X</b>														
Turn Around Time Required (Prior lab approval required for expedited TAT): <input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal: <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		Possible Hazard Identification: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown				QC Requirements (Specify):										
1. Relinquished by: <i>Billy Morris</i>	Date: <b>3-3-17</b>	Time: <b>15:00</b>	1. Received by: <i>[Signature]</i>		Date: <b>3/3/17</b>	Time: <b>15:00</b>												
2. Relinquished by: <i>[Signature]</i>	Date: <b>3/3/17</b>	Time: <b>15:25</b>	2. Received by: <i>[Signature]</i>		Date: <b>3-3-17</b>	Time: <b>15:25</b>												
3. Relinquished by:	Date:	Time:	3. Received by:		Date:	Time:												
4. Relinquished by: <i>[Signature]</i>	Date: <b>3-3-17</b>	Time: <b>16:35</b>	4. Laboratory received by: <i>[Signature]</i>		Date: <b>3/3/17</b>	Time: <b>16:35</b>												
<small>Note: All samples are retained for four weeks from receipt unless other arrangements are made.</small>				LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No Ice Pack Receipt Temp. <b>2.1</b> °C														

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: F-AD-133 Effective Date: 08-01-2014

**SHEALY ENVIRONMENTAL SERVICES, INC.**



# SHEALY ENVIRONMENTAL SERVICES, INC.

---

## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: **One Accord**

Lot Number: **RF13049**  
Date Completed: **06/16/2016**

  
Lucas Odom  
Project Manager



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The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

# **SHEALY ENVIRONMENTAL SERVICES, INC.**

---

SC DHEC No: 32010

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

---

## **Case Narrative Katawba Environmental, Inc. Lot Number: RF13049**

---

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

# SHEALY ENVIRONMENTAL SERVICES, INC.

---

## Sample Summary Katawba Environmental, Inc. Lot Number: RF13049

---

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	GW-1 DEEP	Aqueous	06/13/2016 0902	06/13/2016

---

(1 sample)

---

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106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 [www.shealylab.com](http://www.shealylab.com)

Page: 3 of 5

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Executive Summary Katawba Environmental, Inc. Lot Number: RF13049

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	GW-1 DEEP	Aqueous	Methyl tertiary butyl ether	8260B	370		ug/L	5
001	GW-1 DEEP	Aqueous	Naphthalene	8260B	2.1	BJ	ug/L	5

(2 detections)

Client: **Katawba Environmental, Inc.**Laboratory ID: **RF13049-001**Description: **GW-1 DEEP**Matrix: **Aqueous**Date Sampled: **06/13/2016 0902**Date Received: **06/13/2016****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	5	06/14/2016 1826	SES		15491		
Parameter		CAS Number	Analytical Method	Result	Q	PQL	MDL	Units	Run
Benzene		71-43-2	8260B	ND		5.0	1.1	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		5.0	1.1	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>		<b>1634-04-4</b>	<b>8260B</b>	<b>370</b>		<b>5.0</b>	<b>1.2</b>	<b>ug/L</b>	<b>1</b>
<b>Naphthalene</b>		<b>91-20-3</b>	<b>8260B</b>	<b>2.1</b>	<b>BJ</b>	<b>5.0</b>	<b>0.70</b>	<b>ug/L</b>	<b>1</b>
Toluene		108-88-3	8260B	ND		5.0	1.2	ug/L	1
Xylenes (total)		1330-20-7	8260B	ND		5.0	1.6	ug/L	1
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		101	70-130						
Bromofluorobenzene		95	70-130						
Toluene-d8		106	70-130						

PQL = Practical quantitation limit      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      H = Out of holding time  
 ND = Not detected at or above the MDL      J = Estimated result < PQL and ≥ MDL      P = The RPD between two GC columns exceeds 40%      N = Recovery is out of criteria  
 Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

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Page: 5 of 5


**Chain of Custody  
and  
Miscellaneous Documents**


**SHEALY Chain of Custody Record**

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 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number 56972

SHEALY ENVIRONMENTAL SERVICES, INC.

Client <b>Katauba Env</b>			Report to Contact <b>Alex Amos</b>				Telephone No. / E-mail				Quets No.																																																						
Address <b>2649 Starnes R.d</b>			Sampler's Signature <b>Cal Funderburk</b>				Analysis (Attach list if more space is needed)				Page <u>1</u> of <u>1</u>																																																						
City <b>Edgemoor</b>		State <b>SC</b>	Zip Code <b>29112</b>		Printed Name <b>Cal Funderburk</b>				 <b>RF13049</b>  Remarks / Cooler I.D.																																																								
Project Name <b>One Accord</b>			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">Project No.</th> <th rowspan="2">Sample ID / Description</th> <th rowspan="2">Date</th> <th rowspan="2">Time</th> <th rowspan="2">Matrix</th> <th colspan="11">No of Containers by Preservative Type</th> </tr> <tr> <th>None</th> <th>HAZ</th> <th>NAD</th> <th>AC</th> <th>ROH</th> <th>TS</th> <th>TS-1</th> <th>TS-2</th> <th>TS-3</th> <th>TS-4</th> <th>TS-5</th> </tr> <tr> <td><b>One Accord</b></td> <td><b>One Accord</b></td> <td><b>6/13/16</b></td> <td><b>9:02</b></td> <td><b>X</b></td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										Project No.	Sample ID / Description	Date	Time	Matrix	No of Containers by Preservative Type											None	HAZ	NAD	AC	ROH	TS	TS-1	TS-2	TS-3	TS-4	TS-5	<b>One Accord</b>	<b>One Accord</b>	<b>6/13/16</b>	<b>9:02</b>	<b>X</b>																					
Project No.	Sample ID / Description	Date	Time	Matrix	No of Containers by Preservative Type																																																												
					None	HAZ	NAD	AC	ROH	TS	TS-1	TS-2	TS-3	TS-4	TS-5																																																		
<b>One Accord</b>	<b>One Accord</b>	<b>6/13/16</b>	<b>9:02</b>	<b>X</b>																																																													
Turn Around Time Required (Prior lab approval required for expedited TAT.) <input type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)													Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown				OC Requirements (Specify)																																														
1. Relinquished by <b>Cal Funderburk</b>			Date <b>6/13/16</b>		Time <b>9:36</b>		1. Received by <b>Alex Amos</b>				Date <b>6/13/16</b>		Time <b>9:02</b>																																																				
2. Relinquished by <b>Alex Amos</b>			Date <b>6/13/16</b>		Time <b>11:02</b>		2. Received by <b>M. Chapman</b>				Date <b>6/13/16</b>		Time <b>11:02</b>																																																				
3. Relinquished by <b>M. Chapman</b>			Date <b>6-13-16</b>		Time <b>15:35</b>		3. Received by <b>M. Chapman</b>				Date <b>6/13/16</b>		Time <b>15:35</b>																																																				
4. Relinquished by <b>M. Chapman</b>			Date <b>6/13/16</b>		Time <b>16:30</b>		4. Laboratory received by <b>Tracy</b>				Date <b>6/13/16</b>		Time <b>16:30</b>																																																				
Note: All samples are retained for four weeks from receipt unless other arrangements are made.							LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No Ice Pack				Receipt Temp. <b>1.9</b> °C																																																						



Professional Service Industries, Inc.  
534 St. Andrews Road, Suite C  
Columbia, SC 29210

Phone: (803) 776-6050  
Fax: (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-35-S1**  
**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**CC:** ALEX AMOS

**Project:** GRAIN SIZE ANALYSIS

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Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S1  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)  
**Supplier:**  
**Source:**  
**Material:** Light Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Light Brown Silty SAND (SM)  
**General Location:** One Accord MW 10

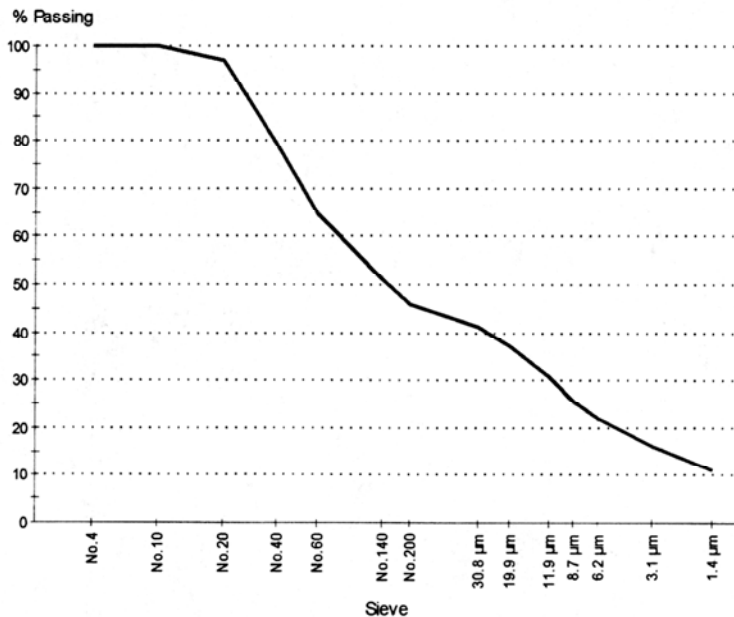
## Sample Description:

Light Brown Silty SAND (SM)

**Grading:** ASTM D 422

**Date Tested:** 10/21/2016  
**Tested By:** John Kepner

## Particle Size Distribution



Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	97	
No.40 (425µm)	79	
No.60 (250µm)	65	
No.140 (106µm)	51	
No.200 (75µm)	46	
30.8 µm	41.1	
19.9 µm	37.2	
11.9 µm	30.8	
8.7 µm	25.8	
6.2 µm	22.0	
3.1 µm	16.3	
1.4 µm	11.3	

COBBLES (0.0%)	GRAVEL		SAND			FINES	
	Coarse (0.0%)	Fine (0.0%)	Coarse (0.0%)	Medium (21.0%)	Fine (33.0%)	Silt (26.2%)	Clay (19.8%)

**D85:** 0.5355    **D60:** 0.1840    **D50:** 0.0989  
**D30:** 0.0113    **D15:** 0.0025    **D10:** 0.0011  
**Cu:** 161.62    **Cc:** 0.61





Professional Service Industries, Inc.  
534 St. Andrews Road, Suite C  
Columbia, SC 29210

Phone: (803) 776-6050  
Fax: (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-35-S1**

**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**CC:** ALEX AMOS

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**Project:** GRAIN SIZE ANALYSIS

Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S1  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)

**Supplier:**  
**Source:**  
**Material:** Light Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Light Brown Silty SAND (SM)  
**General Location:** One Accord MW 10

## Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422		
Dispersion time (min)			
Shape			
Hardness			

## Comments

N/A



Professional Service Industries, Inc.  
534 St. Andrews Road, Suite C  
Columbia, SC 29210

Phone: (803) 776-6050  
Fax: (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-35-S2**

**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**CC:** ALEX AMOS

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**Project:** GRAIN SIZE ANALYSIS

Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S2  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)  
**Supplier:**  
**Source:**  
**Material:** Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Brown Silty SAND (SM)  
**General Location:** One Accord DW 2

## Sample Description:

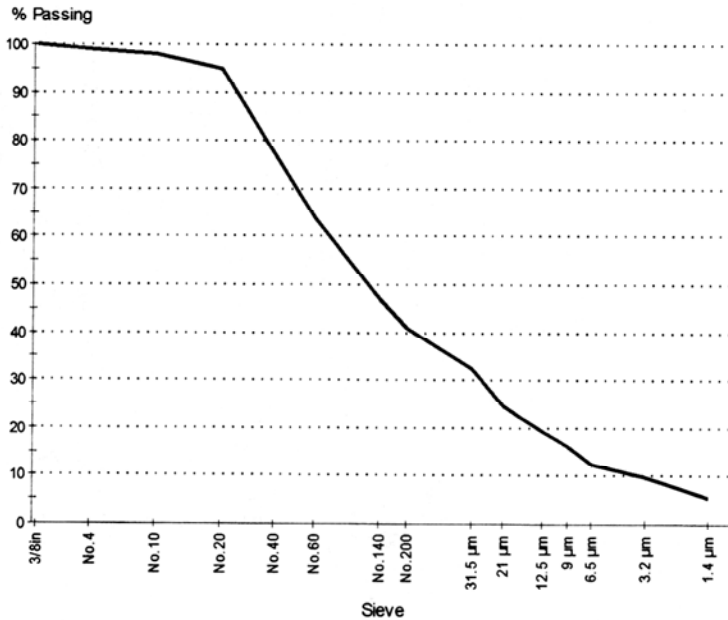
Brown Silty SAND (SM)

**Grading:** ASTM D 422

**Date Tested:** 10/21/2016  
**Tested By:** John Kepner

Sieve Size	% Passing	Limits
3/8in (9.5mm)	100	
No.4 (4.75mm)	99	
No.10 (2.0mm)	98	
No.20 (850µm)	95	
No.40 (425µm)	77	
No.60 (250µm)	64	
No.140 (106µm)	47	
No.200 (75µm)	41	
31.5 µm	32.4	
21.0 µm	24.8	
12.5 µm	19.4	
9.0 µm	16.2	
6.5 µm	12.4	
3.2 µm	9.7	
1.4 µm	5.4	

## Particle Size Distribution



COBBLES (0.0%)	GRAVEL		SAND			FINES	
	Coarse (0.0%)	Fine (1.0%)	Coarse (1.0%)	Medium (21.0%)	Fine (36.0%)	Silt (29.8%)	Clay (11.2%)

**D85:** 0.5783    **D60:** 0.2043    **D50:** 0.1233  
**D30:** 0.0277    **D15:** 0.0081    **D10:** 0.0035  
**Cu:** 59.01    **Cc:** 1.09



Professional Service Industries, Inc.  
534 St. Andrews Road, Suite C  
Columbia, SC 29210

Phone: (803) 776-6050  
Fax: (803) 772-2803

# Material Test Report

**Report No: MAT:0451102-35-S2**

**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL      **CC:** ALEX AMOS  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**Project:** GRAIN SIZE ANALYSIS

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Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S2  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)

**Supplier:**  
**Source:**  
**Material:** Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Brown Silty SAND (SM)  
**General Location:** One Accord DW 2

## Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422		
Dispersion time (min)			
Shape			
Hardness			

## Comments

N/A



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# Material Test Report

**Report No: MAT:0451102-35-S3**

**Issue No: 1**

**Client:** KATAWBA ENVIRONMENTAL  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**CC:** ALEX AMOS

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**Project:** GRAIN SIZE ANALYSIS

Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S3  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)  
**Supplier:**  
**Source:**  
**Material:** Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Brown Silty SAND (SM)  
**General Location:** One Accord DW 3

## Sample Description:

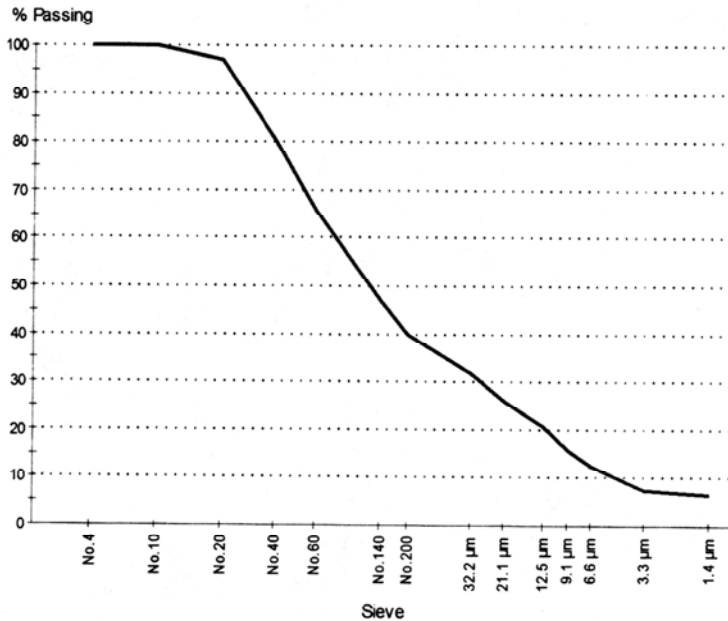
Brown Silty SAND (SM)

**Grading:** ASTM D 422

**Date Tested:** 10/21/2016  
**Tested By:** John Kepner

Sieve Size	% Passing	Limits
No.4 (4.75mm)	100	
No.10 (2.0mm)	100	
No.20 (850µm)	97	
No.40 (425µm)	80	
No.60 (250µm)	66	
No.140 (106µm)	47	
No.200 (75µm)	40	
32.2 µm	31.6	
21.1 µm	26.1	
12.5 µm	20.7	
9.1 µm	15.8	
6.6 µm	12.5	
3.3 µm	7.6	
1.4 µm	6.5	

## Particle Size Distribution



COBBLES (0.0%)	GRAVEL (0.0%)		SAND (20.0%)			FINES (29.9%)	
	Coarse (0.0%)	Fine (0.0%)	Coarse (0.0%)	Medium (20.0%)	Fine (40.0%)	Silt (29.9%)	Clay (10.1%)

**D85:** 0.5211   **D60:** 0.1907   **D50:** 0.1214  
**D30:** 0.0285   **D15:** 0.0084   **D10:** 0.0046  
**Cu:** 41.14   **Cc:** 0.92



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**Report No: MAT:0451102-35-S3**

**Issue No: 1**

# Material Test Report

**Client:** KATAWBA ENVIRONMENTAL      **CC:** ALEX AMOS  
POST OFFICE BOX 11228  
ROCK HILL, SC 29731

**Project:** GRAIN SIZE ANALYSIS

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Approved Signatory: Tom Cannarella, P.E. (Branch Manager)  
Date of Issue: 10/25/2016

## Sample Details

**Sample ID:** 0451102-35-S3  
**Client Sample ID:**  
**Date Sampled:** 10/07/16  
**Sampled By:** Client  
**Specification:** D422/T88 Part. Size Analysis (Set #1)

**Supplier:**  
**Source:**  
**Material:** Brown Silty SAND (SM)  
**Sampling Method:** Grab Sample  
**Soil Description:** Brown Silty SAND (SM)  
**General Location:** One Accord DW 3

## Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422		
Dispersion time (min)			
Shape			
Hardness			

## Comments

N/A

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <p>Relinquished by _____ Date/Time _____          Received by _____ Date/Time _____</p>	<p><b>Well # <u>MW-1R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>24</u> ft.          Depth to GW (DGW) <u>21.83</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.17 FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>2.17 \times 0.163 = 0.35</math> gals.          3 Csg. Volumes = <math>3 \times 0.35 = 1.06</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>1.25 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
--	--

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35	0.75	1.25				
<b>Time (military)</b>	1624	1629	1633	1638				
<b>pH (s.u.)</b>	5.66	5.63	5.60	5.53				
<b>Specific Cond. (umhos/cm)</b>	188	188	187	187				
<b>Water Temp (°C)</b>	22.0	22.1	22.3	22.4				
<b>Turbidity (*)</b>	129	147	159	160				
<b>Dissolved Oxygen</b>	2.20	2.13	2.10	2.06				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.69</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>6.31 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>6.31 X 0.163</u> = <u>1.02</u> gals.          3 Csg. Volumes = 3 X <u>1.02</u> = <u>3.08</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.25 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.25				
<b>Time (military)</b>	1559	1604	1609	1613				
<b>pH (s.u.)</b>	5.64	5.60	5.53	5.50				
<b>Specific Cond. (umhos/cm)</b>	178	178	177	176				
<b>Water Temp (°C)</b>	5.64	5.60	5.53	5.50				
<b>Turbidity (*)</b>	137	149	158	165				
<b>Dissolved Oxygen</b>	2.76	2.70	2.63	2.57				





**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.94</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>6.06 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>6.06 X 0.163 = 0.98</u> gals.          3 Csg. Volumes = <u>3 X 0.98 = 2.96</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.0</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3				
<b>Time (military)</b>	1504	1508	1512	1517				
<b>pH (s.u.)</b>	5.63	5.48	5.45	5.38				
<b>Specific Cond. (umhos/cm)</b>	70.5	63.2	62.6	62.1				
<b>Water Temp (°C)</b>	20.3	19.8	19.5	19.3				
<b>Turbidity (*)</b>	141	169	185	189				
<b>Dissolved Oxygen</b>	2.10	2.07	2.02	1.97				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-5</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>25</u> ft.          Depth to GW (DGW) <u>22.71</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.29 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>2.29 X 0.163</u> = <u>0.37</u> gals.          3 Csg. Volumes = 3 X <u>0.37</u> = <u>1.11</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>0.35 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35						
<b>Time (military)</b>	1223	1226	1235					
<b>pH (s.u.)</b>	6.72	6.75	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	64.5	64.5						
<b>Water Temp (°C)</b>	18.5	18.2						
<b>Turbidity (*)</b>	189	190						
<b>Dissolved Oxygen</b>	4.31	4.38						

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-6</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>24</u> ft.          Depth to GW (DGW) <u>20.79</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.21 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>3.21 X 0.163</u> = <u>0.52</u> gals.          3 Csg. Volumes = 3 X <u>0.52</u> = <u>1.56</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>0.50 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.50						
<b>Time (military)</b>	1256	1302	1307					
<b>pH (s.u.)</b>	6.37	6.41	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	126	128						
<b>Water Temp (°C)</b>	18.8	18.9						
<b>Turbidity (*)</b>	180	186						
<b>Dissolved Oxygen</b>	1.62	1.75						

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-7</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>19.86</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.14</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>3.14 X 0.163</u> = <u>0.51</u> gals.          3 Csg. Volumes = 3 X <u>0.51</u> = <u>1.53</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>0.50</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.50						
<b>Time (military)</b>	1316	1320	1329					
<b>pH (s.u.)</b>	6.12	6.15	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	83.0	89.5						
<b>Water Temp (°C)</b>	18.1	18.2						
<b>Turbidity (*)</b>	207	209						
<b>Dissolved Oxygen</b>	7.06	7.04						

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>19.16</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.84 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>3.84 X 0.163 = 0.62</u> gals.          3 Csg. Volumes = 3 X <u>0.62</u> = <u>1.87</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.75						
<b>Time (military)</b>	1353	1344	1353					
<b>pH (s.u.)</b>	6.93	6.99	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	61.3	62.5						
<b>Water Temp (°C)</b>	19.0	19.4						
<b>Turbidity (*)</b>	212	190						
<b>Dissolved Oxygen</b>	1.62	1.65						





**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-11</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>26.31</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.69 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>2.69 X 0.163</u> = <u>0.43</u> gals.          3 Csg. Volumes = 3 X <u>0.43</u> = <u>1.31</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>0.35 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35	Purge Dry					
<b>Time (military)</b>	1440	1443	1452					
<b>pH (s.u.)</b>	6.38	6.42						
<b>Specific Cond. (umhos/cm)</b>	60.6	62.5						
<b>Water Temp (°C)</b>	18.9	19.1						
<b>Turbidity (*)</b>	19.9	20.1						
<b>Dissolved Oxygen</b>	2.07	2.09						



**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-12</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.62</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.38 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>7.38 X 0.163 = 1.20</u> gals.          3 Csg. Volumes = 3 X <u>1.20</u> = <u>3.60</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.75 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	2.50	3.75				
<b>Time (military)</b>	1408	1413	1418	1424				
<b>pH (s.u.)</b>	6.28	6.29	6.27	6.25				
<b>Specific Cond. (umhos/cm)</b>	92.8	89.1	87.3	86.7				
<b>Water Temp (°C)</b>	18.8	19.2	19.3	19.4				
<b>Turbidity (*)</b>	201	227	239	246				
<b>Dissolved Oxygen</b>	1.97	1.26	1.20	1.13				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-13</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>26</u> ft.          Depth to GW (DGW) <u>20.52</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>5.48 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>5.48</u> X <u>0.163</u> = <u>0.89</u> gals.          3 Csg. Volumes = 3 X <u>0.89</u> = <u>2.67</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2.75 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	2.75				
<b>Time (military)</b>	1534	1538	1542	1547				
<b>pH (s.u.)</b>	5.60	5.48	5.45	5.41				
<b>Specific Cond. (umhos/cm)</b>	119	125	126	126				
<b>Water Temp (°C)</b>	19.5	19.7	19.8	19.9				
<b>Turbidity (*)</b>	183	207	212	217				
<b>Dissolved Oxygen</b>	2.88	2.65	2.60	2.56				

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<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-1</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>21.53</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>53.47</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>53.47 X 0.163</u> = <u>8.71</u> gals.          3 Csg. Volumes = 3X <u>8.71</u> = <u>26.13</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>26.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26.5				
<b>Time (military)</b>	1034	1040	1048	1056				
<b>pH (s.u.)</b>	5.60	5.62	5.64	5.67				
<b>Specific Cond. (umhos/cm)</b>	111	127	128	128				
<b>Water Temp (°C)</b>	20.1	20.0	19.8	19.6				
<b>Turbidity (*)</b>	12.9	10.8	10.5	10.2				
<b>Dissolved Oxygen</b>	2.03	1.95	1.91	1.86				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>22.29</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>52.71</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>52.71 X 0.163</u> = <u>8.59</u> gals.          3 Csg. Volumes = 3X <u>8.59</u> = <u>25.77</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>26</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26				
<b>Time (military)</b>	917	922	929	937				
<b>pH (s.u.)</b>	5.50	5.38	5.33	5.27				
<b>Specific Cond. (umhos/cm)</b>	187	200	201	201				
<b>Water Temp (°C)</b>	20.3	20.3	20.2	20.1				
<b>Turbidity (*)</b>	74.3	107	113	118				
<b>Dissolved Oxygen</b>	2.51	2.24	2.16	2.10				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>38</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.                  Depth to GW (DGW) <u>31.29</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>43.71</u> FT</p> <p>1 Csg. Volume (LWC*C) = <math>43.71 \times 0.163 = 7.12</math> gals.                  3 Csg. Volumes = <math>3 \times 7.12 = 21.37</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>21.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	7	14	21.5				
<b>Time (military)</b>	1150	1157	1205	1213				
<b>pH (s.u.)</b>	5.97	5.84	5.81	5.95				
<b>Specific Cond. (umhos/cm)</b>	43.0	37.3	36.8	36.2				
<b>Water Temp (°C)</b>	18.0	17.8	17.7	17.5				
<b>Turbidity (*)</b>	13.9	11.6	10.4	9.8				
<b>Dissolved Oxygen</b>	8.51	7.09	7.02	6.93				

**South Carolina Department of Health and Environmental Control  
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**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/3/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Cloudy</u>                  Ambient Air Temperature <u>73</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u>                  pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-9R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>37</u> ft.                  Depth to GW (DGW) <u>29.37</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.63 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>7.63 X 0.163 = 1.24</u> gals.                  3 Csg. Volumes = <u>3 X 1.24 = 3.73</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1050	1054	1101	1107				
<b>pH (s.u.)</b>	5.69	5.48	5.43	5.35				
<b>Specific Cond. (umhos/cm)</b>	47.7	46.6	43.3	44.8				
<b>Water Temp (°C)</b>	17.9	17.8	17.7	17.6				
<b>Turbidity (*)</b>	127	149	168	173				
<b>Dissolved Oxygen</b>	4.38	3.95	3.86	3.81				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/3/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Cloudy  
 Ambient Air Temperature 73  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-10R**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 40 ft.  
 Depth to GW (DGW) 31.58 ft.

Length of Water Column (LWC=TWD-DGW) 8.42 FT

1 Csg. Volume (LWC\*C) = 8.42 X 0.163 = 1.37 gals.  
 3 Csg. Volumes = 3 X 1.37 = 4.11 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.25				
<b>Time (military)</b>	1117	1121	1128	1134				
<b>pH (s.u.)</b>	5.74	5.71	5.67	5.65				
<b>Specific Cond. (umhos/cm)</b>	52.5	45.6	48.2	47.7				
<b>Water Temp (°C)</b>	17.9	18.1	18.2	18.3				
<b>Turbidity (*)</b>	139	157	165	168				
<b>Dissolved Oxygen</b>	5.67	4.74	4.68	4.61				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/3/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Cloudy</u>          Ambient Air Temperature <u>73</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-14</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>36</u> ft.          Depth to GW (DGW) <u>28.02</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.98</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.98</u> X <u>0.163</u> = <u>1.30</u> gals.          3 Csg. Volumes = 3 X <u>1.30</u> = <u>3.90</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1005	1011	1017	1021				
<b>pH (s.u.)</b>	5.31	5.54	5.55	5.57				
<b>Specific Cond. (umhos/cm)</b>	69.9	59.5	58.7	59.1				
<b>Water Temp (°C)</b>	17.0	16.8	16.6	16.5				
<b>Turbidity (*)</b>	115	153	169	171				
<b>Dissolved Oxygen</b>	9.89	7.29	7.21	7.13				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management**

**Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/3/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Cloudy</u>                  Ambient Air Temperature <u>73</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-15</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>40</u> ft.                  Depth to GW (DGW) <u>37.12</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.88</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>2.88</u> X <u>0.163</u> = <u>0.46</u> gals.                  3 Csg. Volumes = 3 X <u>0.46</u> = <u>1.40</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.5	1	2				
<b>Time (military)</b>	1203	1208	1214	1219				
<b>pH (s.u.)</b>	5.71	5.75	5.78	5.81				
<b>Specific Cond. (umhos/cm)</b>	113	73.9	73.1	72.6				
<b>Water Temp (°C)</b>	17.5	17.2	17.1	17.0				
<b>Turbidity (*)</b>	127	149	158	163				
<b>Dissolved Oxygen</b>	4.07	4.22	4.13	4.07				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

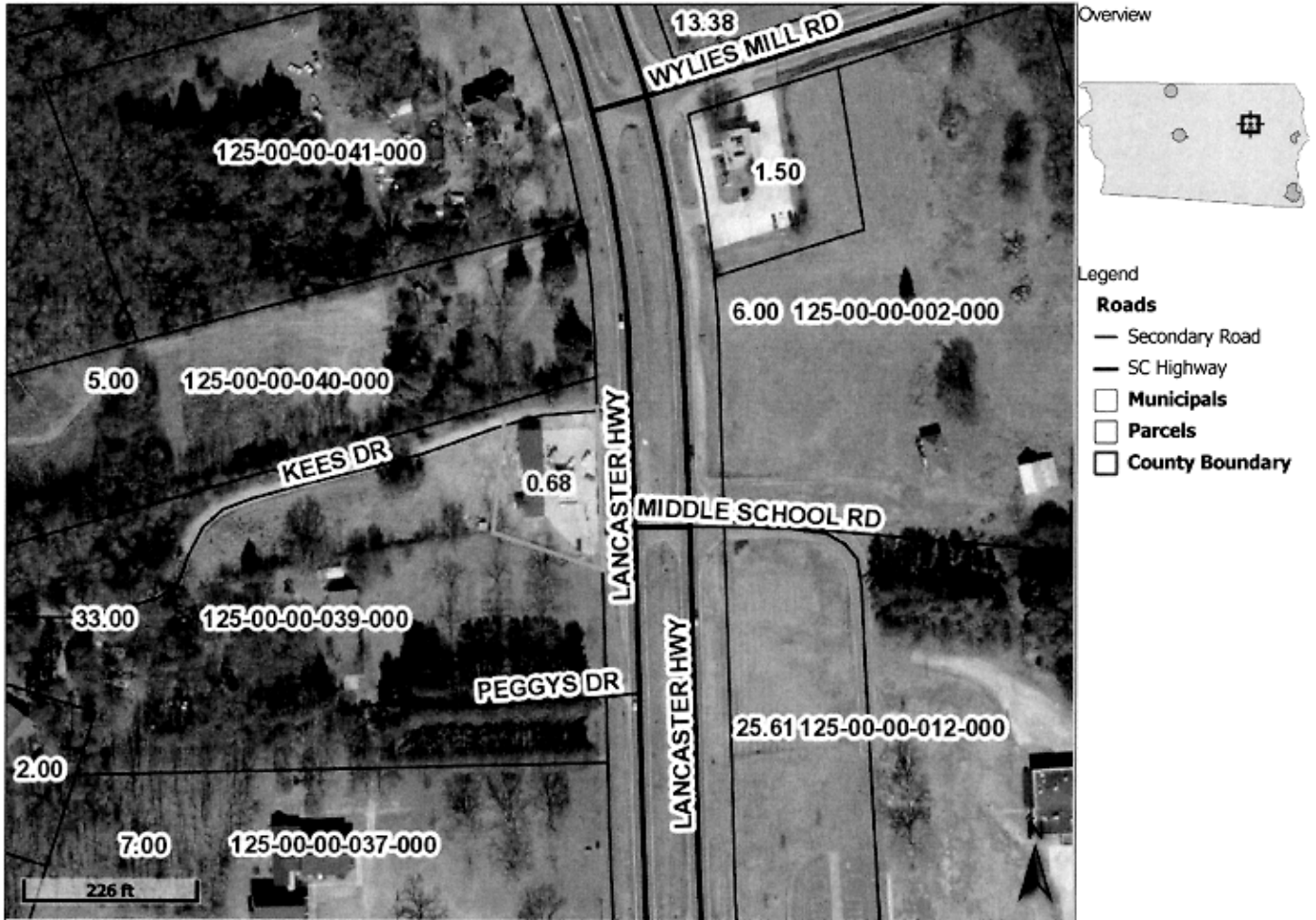
<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>120</u> ft.          Depth to GW (DGW) <u>28.05</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>91.95</u>FT</p> <p>1 Csg. Volume (LWC*C) = <math>91.95 \times 0.163 = 14.98</math> gals.          3 Csg. Volumes = <math>3 \times 14.98 = 44.96</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>45.0</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	15	30	45				
<b>Time (military)</b>	749	758	807	817				
<b>pH (s.u.)</b>	6.39	6.40	6.43	6.45				
<b>Specific Cond. (umhos/cm)</b>	97.0	103	104	104				
<b>Water Temp (°C)</b>	15.4	16.0	16.3	16.5				
<b>Turbidity (*)</b>	13.9	12.6	12.1	11.7				
<b>Dissolved Oxygen</b>	3.34	2.77	2.70	2.63				

**APPENDIX C**  
**TAX MAP**

**ONE ACCORD TAX MAP**

<b>TM NUMBER</b>	<b>ADDRESS</b>	<b>OWNER</b>	
125-00-00-059-000	3570 Lancaster Hwy	Angela and Melvin Hough	PO Box 220, Richburg, SC 29729
125-00-00-039-000	518 Peggys Drive	Marion Kee	518 Peggy's Drive, Richburg, SC 29729
125-00-00-002-000	3571 Lancaster Hwy	John Darnell Faust	PO Box 202, Richburg, SC 29729
125-00-00-012-000	Lancaster Hwy	Chester County School Board	1 Hinton Street, Chester, SC 29706
125-00-00-040-000	Lancaster Hwy	James Gill Knox Life Estate	1719 Old Richburg Road, Chester, SC 29706
125-00-00-037-000	Lancaster Hwy	Union Church	Highway 9, Richburg, SC 29729



<b>Parcel ID</b>	125-00-00-059-000	<b>Alternate ID</b>	n/a	<b>Owner Address</b>	HOUGH ANGELA D-SURVIVORSHIP HUGHES MELVIN E SR-SURVIVORSHI PO BOX 220 RICHBURG SC 29729
<b>Sec/Twp/Rng</b>	n/a	<b>Class</b>	EX		
<b>Property Address</b>		<b>Acreage</b>	n/a		
<b>District</b>	04				
<b>Brief Tax Description</b>	KEES SERVICE STATION (Note: Not to be used on legal documents)				

Last Data Upload: 3/13/2014 2:14:20 AM

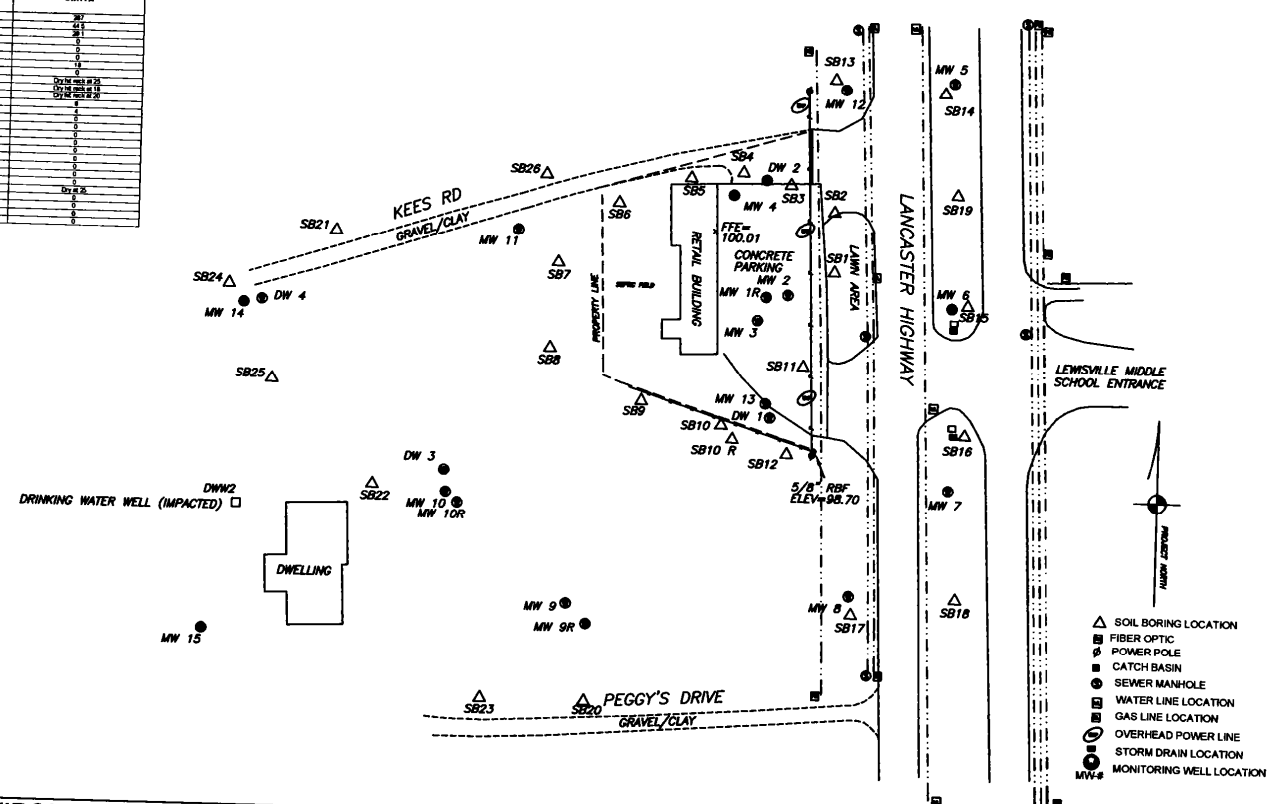
**APPENDIX D**  
**FIELD SCREEN RESULTS**

**TABLE 2**  
**Delineation OVA Field Data One Accord Ministries Site ID 02131**  
**Richburg, SC**

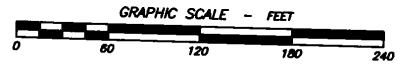
Sample ID	Depth	OVA PPM
SB1	27	287
SB2	27	44.5
SB3	27	29.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	27	0
SB9	25	Dry hit rock at 25
SB10	18	Dry hit rock at 18
SB10A	20	Dry hit rock at 20
SB11	27	6
SB12	27	4
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27	0
SB22	25	Dry at 25
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27	0

**TABLE B**  
 Deformation CVA Field Data One Accord Meritrees Site ID 02131  
 Richburg, SC

Sample ID	Depth	CVA PPM
SB1	2'	207
SB2	2'	211
SB3	2'	2
SB4	2'	2
SB5	2'	2
SB6	2'	2
SB7	2'	2
SB8	2'	2
SB9	2'	2
SB10	2'	2
SB11	2'	2
SB12	2'	2
SB13	2'	2
SB14	2'	2
SB15	2'	2
SB16	2'	2
SB17	2'	2
SB18	2'	2
SB19	2'	2
SB20	2'	2
SB21	2'	2
SB22	2'	2
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SB88	2'	2
SB89	2'	2
SB90	2'	2
SB91	2'	2
SB92	2'	2
SB93	2'	2
SB94	2'	2
SB95	2'	2
SB96	2'	2
SB97	2'	2
SB98	2'	2
SB99	2'	2
SB100	2'	2



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - GEOPROBE MAP





## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** PUBLIC SYSTEM NUMBER:  
SB1

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 2/18/16  
27 ft. Date Completed: 2/18/16

**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_  
 Type:  PVC  Galvanized  Steel  Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER** (filter pack)  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

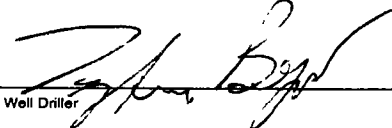
**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 4/10/16  
 Well Driller  
 If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
                 (last)    (first)  
 Address: PO Box 220  
 City: Richburg                  State: SC                  Zip: 29729-0000  
 Telephone: Work:                                  Home:

**2. LOCATION OF WELL:                  COUNTY: Chester**  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg                                  Zip: 29729-0000  
 Latitude:                                  Longitude:

**3. PUBLIC SYSTEM NAME:                  PUBLIC SYSTEM NUMBER:**  
SB2

**4. ABANDONMENT:**     Yes     No  
 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**    Mud Rotary           Jettied                   Bored  
                  Dug                                   Air Rotary               Driven  
                  Cable tool                   Other

**7. PERMIT NUMBER:**                  02131

**8. USE:**  
 Residential                           Public Supply                           Process  
 Irrigation                               Air Conditioning                       Emergency  
 Test Well                                   Monitor Well                                   Replacement

**9. WELL DEPTH (completed)**                  Date Started: 2/18/16  
27 ft.    Date Completed: 2/18/16

**10. CASING:**    Threaded     Welded  
 Diam.: \_\_\_\_\_  
 Type:    PVC       Galvanized  
              Steel       Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
             \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?    Yes     No

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
   \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis    Yes (please enclose)    No  
**NOTE: MULTIPLE SCREENS  
 USE SECOND SHEET**

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:    Yes (please enclose)    No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis    Yes    No    Bacterial Analysis    Yes    No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**    Yes    No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**    Yes    No  
 Neat Cement    Bentonite    Bentonite/Cement    Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected    Yes    No    Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:**   Date installed: \_\_\_\_\_                  Not installed     
 Mfr. Name: \_\_\_\_\_                  Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:    Submersible       Jet (shallow)       Turbine  
                  Jet (deep)                   Reciprocating       Centrifugal

**19. WELL DRILLER: Tommy Bolyard                  CERT. NO.: 1846**  
 Address: (Print)    Level:   A   B   C   D   (circle one)  
          
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233                          Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: \_\_\_\_\_                  Date: 4/10/16  
                     Well Driller

If D Level Driller, provide supervising driller's name:



# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** SB3

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 2/18/16  
27 ft. Date Completed: 2/18/16

**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_ Height: Above  Below   
 Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.  
 Steel  Other Weight \_\_\_\_\_ lb./ft.  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2235 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 4/10/16  
 Well Driller

If D Level Driller, provide supervising driller's name:



# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

### 1. WELL OWNER INFORMATION:

Name: **One Accord**  
(last) (first)  
Address: **PO Box 220**  
City: **Richburg** State: **SC** Zip: **29729-0000**  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

### 2. LOCATION OF WELL:

COUNTY: **Chester**

Name: **One Accord**  
Street Address: **3570 Lancaster Highway**  
City: **Richburg** Zip: **29729-0000**  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

### 3. PUBLIC SYSTEM NAME:

PUBLIC SYSTEM NUMBER: \_\_\_\_\_

**SB4**

### 4. ABANDONMENT:

Yes  No

Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<b>CLAY Orange Sandy</b>	<b>20</b>	<b>20</b>
<b>SAND Brown Silty</b>	<b>7</b>	<b>27</b>

\*Indicate Water Bearing Zones

(Use a 2nd sheet if needed)

### 5. REMARKS:

Grouted to surface on completion

### 6. TYPE:

Mud Rotary     Jetted     Bored  
 Dug     Air Rotary     Driven  
 Cable tool     Other

7. PERMIT NUMBER: **02131**

### 8. USE:

Residential     Public Supply     Process  
 Irrigation     Air Conditioning     Emergency  
 Test Well     Monitor Well     Replacement

### 9. WELL DEPTH (completed)

Date Started: **2/18/16**

27 ft.

Date Completed: **2/18/16**

### 10. CASING: Threaded Welded

Diam.: \_\_\_\_\_

Height: Above  Below

Type:  PVC  Galvanized

Surface \_\_\_\_\_ ft.

Steel  Other

Weight \_\_\_\_\_ lb./ft.

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Drive Shoe?  Yes  No

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

### 11. SCREEN:

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_

Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_

Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

NOTE: MULTIPLE SCREENS  
USE SECOND SHEET

\_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Sieve Analysis  Yes (please enclose)  No

### 12. STATIC WATER LEVEL

\_\_\_\_\_ ft. below land surface after 24 hours

### 13. PUMPING LEVEL Below Land Surface.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: \_\_\_\_\_

### 14. WATER QUALITY

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

### 15. ARTIFICIAL FILTER (filter pack) Yes No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

### 16. WELL GROUTED? Yes No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 27 ft. to 0 ft.

### 17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: \_\_\_\_\_ ft. \_\_\_\_\_ direction

Type **Petroleum**

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

### 18. PUMP: Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

### 19. WELL DRILLER: **Tommy Bolyard**

CERT. NO.: **1846**

Address: (Print)

Level: A B C D (circle one)

**17538 Greenhill Road**

**Charlotte, NC 28278**

Telephone No.: **803 548 2233**

Fax No.:

Signed: \_\_\_\_\_

Well Driller

Date: **4/10/16**

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**9. WELL DEPTH (completed)** Date Started: 2/18/16  
 27 ft. Date Completed: 2/18/16  
**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_ Height: Above  Below   
 Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.  
 Steel  Other Weight \_\_\_\_\_ lb./ft.  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

**3. PUBLIC SYSTEM NAME:** SB5 **PUBLIC SYSTEM NUMBER:**

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) Level: A  B  C  D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.:

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**  
 Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: Date: 4/10/16  
 Well Driller

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**2. LOCATION OF WELL: COUNTY: Chester**  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
 SB6

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
 Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 2/18/16  
 27 ft. Date Completed: 2/18/16

**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_  
 Type:  PVC  Galvanized  Steel  Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No  
**NOTE: MULTIPLE SCREENS USE SECOND SHEET**

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846**  
 Address: (Print) 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2255  
 Level: A  B  C  D (circle one)  
 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:   
 Well Driller Date: 4/10/16

If D Level Driller, provide supervising driller's name:









### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

#### 1. WELL OWNER INFORMATION:

Name: **One Accord**  
(last) (first)  
Address: **PO Box 220**  
City: **Richburg** State: **SC** Zip: **29729-0000**  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

#### 2. LOCATION OF WELL:

COUNTY: **Chester**

Name: **One Accord**  
Street Address: **3570 Lancaster Highway**  
City: **Richburg** Zip: **29729-0000**  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

3. PUBLIC SYSTEM NAME: \_\_\_\_\_ PUBLIC SYSTEM NUMBER: **SB9**

4. ABANDONMENT:  Yes  No

Grouted Depth: from **25** ft. to **0** ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	5	25
Refusal		

5. REMARKS:  
Grouted to surface on completion

6. TYPE:  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

7. PERMIT NUMBER: **02131**

#### 8. USE:

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

#### 9. WELL DEPTH (completed)

Date Started: **2/18/16**

**25** ft.

Date Completed: **2/18/16**

#### 10. CASING: Threaded Welded

Diam.: \_\_\_\_\_

Type:  PVC  Galvanized  
 Steel  Other

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below

Surface \_\_\_\_\_ ft.

Weight \_\_\_\_\_ lb./ft.

Drive Shoe?  Yes  No

#### 11. SCREEN:

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_

Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_

Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
USE SECOND SHEET

Sieve Analysis  Yes (please enclose)  No

12. STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface after 24 hours

#### 13. PUMPING LEVEL Below Land Surface.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: \_\_\_\_\_

#### 14. WATER QUALITY

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

#### 15. ARTIFICIAL FILTER (filter pack) Yes No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

#### 16. WELL GROUTED? Yes No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From **25** ft. to **0** ft.

#### 17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: \_\_\_\_\_ ft. \_\_\_\_\_ direction

Type **Petroleum**

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

#### 18. PUMP: Date installed: \_\_\_\_\_ Not installed

Mr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

#### 19. WELL DRILLER: **Tommy Bolyard**

CERT. NO.: **1846**

Address: (Print)

Level: A  B  C  D  (circle one)

**17538 Greenhill Road**

**Charlotte, NC 28278**

Telephone No.: **803 548 2255**

Fax No.: \_\_\_\_\_

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: *Tommy Bolyard* Date: **4/10/16**  
Well Driller

If D Level Driller, provide supervising driller's name: \_\_\_\_\_







**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 2/18/16  
27 ft. Date Completed: 2/18/16

**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_  
 Type:  PVC  Galvanized  Steel  Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** SB11 **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**5. REMARKS:**  
 Grouted to surface on completion

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 4/10/16  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: SB12**
**PUBLIC SYSTEM NUMBER:**
**4. ABANDONMENT:**
 Yes  No

 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

**5. REMARKS:**

Grouted to surface on completion

**7. PERMIT NUMBER:** 02131

**8. USE:**

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)**
27 ft. Date Started: 2/18/16

 Date Completed: 2/18/16
**10. CASING:**  Threaded  Welded

Diam.: \_\_\_\_\_ Height: Above  Below   
 Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.  
 Steel  Other Weight \_\_\_\_\_ lb./ft.  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

**11. SCREEN:**

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. direction

Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard**

Address: (Print) 17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Level: A  B  C  D  (circle one)  
 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

 Signed: *Tommy Bolyard* Date: 4/10/16  
 Well Driller

If D Level Driller, provide supervising driller's name:

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

COUNTY: Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:**

**PUBLIC SYSTEM NUMBER:**

SB13

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

Grouted to surface on completion

**6. TYPE:**

- Mud Rotary     Jetted     Bored  
 Dug     Air Rotary     Driven  
 Cable tool     Other

**7. PERMIT NUMBER:**

02131

**8. USE:**

- Residential     Public Supply     Process  
 Irrigation     Air Conditioning     Emergency  
 Test Well     Monitor Well     Replacement

**9. WELL DEPTH (completed)**

Date Started: 2/18/16

27 ft.

Date Completed: 2/18/16

**10. CASING:**  Threaded  Welded

Diam.: \_\_\_\_\_  
 Type:  PVC  Galvanized  
 Steel  Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**

Chemical Analysis  Yes  No    Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction

Type Petroleum  
 Well Disinfected  Yes  No    Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard**

CERT. NO.: 1846

Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under

my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard  
 Well Driller

Date: 4/10/16

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** SB14

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	22	22
SAND Brown Silty	5	27

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 27 ft. Date Started: 2/19/16  
 Date Completed: 2/19/16

**10. CASING:**  Threaded  Welded  
 Diam.: \_\_\_\_\_ Height: Above  Below   
 Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.  
 Steel  Other Weight \_\_\_\_\_ lb./ft.  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

**11. SCREEN:**  
 Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
 \_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 4/10/16  
 Well Driller

If D Level Driller, provide supervising driller's name:







Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

9. WELL DEPTH (completed) Date Started: 2/19/16
27 ft. Date Completed: 2/19/16

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
SB16

10. CASING: Threaded Welded
Diam.:
Type: PVC Galvanized Steel Other
in. to ft. depth
in. to ft. depth
Height: Above Below
Surface lb./ft.
Weight lb./ft.
Drive Shoe? Yes No

4. ABANDONMENT: Yes No
Grouted Depth: from 27 ft. to 0 ft.

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft. ft. and ft.
Sieve Analysis Yes (please enclose) No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

Table with 3 columns: Formation Description, \*Thickness of Stratum, Depth to Bottom of Stratum

CLAY Orange Sandy 22 22

SAND Brown Silty 5 27

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: Yes (please enclose) No
Yield:

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 27 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2233 Fax No.:

\*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

5. REMARKS:
Grouted to surface on completion

Signed: [Signature] Date: 4/10/16
Well Driller

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool Other

If D Level Driller, provide supervising driller's name:



Water Well Record  
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:  
Name: One Accord  
(last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

7. PERMIT NUMBER: 02131

2. LOCATION OF WELL: COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

8. USE:  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

9. WELL DEPTH (completed) Date Started: 2/19/16  
27 ft. Date Completed: 2/19/16

3. PUBLIC SYSTEM NAME: \_\_\_\_\_ PUBLIC SYSTEM NUMBER:  
SB17

4. ABANDONMENT:  Yes  No  
Grouted Depth: from 27 ft. to 0 ft.

10. CASING:  Threaded  Welded  
Diam.: \_\_\_\_\_  
Type:  PVC  Galvanized  
 Steel  Other  
\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
Height: Above  Below   
Surface \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

11. SCREEN:  
Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Sieve Analysis  Yes (please enclose)  No  
NOTE: MULTIPLE SCREENS  
USE SECOND SHEET

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	22	22
SAND Brown Silty	5	27

12. STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface after 24 hours  
13. PUMPING LEVEL Below Land Surface.  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: \_\_\_\_\_

14. WATER QUALITY  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack)  Yes  No  
Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

16. WELL GROUTED?  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 27 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: \_\_\_\_\_ ft. \_\_\_\_\_ direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

18. PUMP: Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846  
Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 348 2255 Fax No.: \_\_\_\_\_

5. REMARKS:  
Grouted to surface on completion

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under  
my direction and this report is true to the best of my knowledge and belief.

6. TYPE:  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: \_\_\_\_\_ Date: 4/10/16  
Well Driller

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: Home:

**2. LOCATION OF WELL:** COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: Longitude:

**3. PUBLIC SYSTEM NAME:** SB18 **PUBLIC SYSTEM NUMBER:**

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	22	22
SAND Brown Silty	5	27

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 2/19/16  
27 ft. Date Completed: 2/19/16

**10. CASING:**  Threaded  Welded  
Diam.: \_\_\_\_\_  
Type:  PVC  Galvanized  
 Steel  Other  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
Height: Above  Below   
Surface \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**  
Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**  
Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: \_\_\_\_\_

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
Telephone No.: 803 548 2255 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: *Tommy Bolyard* Date: 4/10/16  
Well Driller

If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: Home:

**2. LOCATION OF WELL: COUNTY: Chester**  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: Longitude:

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
SB19

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	22	22
SAND Brown Silty	5	27

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**  
Grouted to surface on completion

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 2/19/16  
27 ft. Date Completed: 2/19/16

**10. CASING:**  Threaded  Welded  
Diam.: \_\_\_\_\_  
Type:  PVC  Galvanized  
 Steel  Other  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
Height: Above  Below   
Surface \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**  
Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**  
Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: \_\_\_\_\_

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_


**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** **CERT. NO.: 1846**  
Address: (Print) Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 548 2233 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 4/10/16  
Well Driller

If D Level Driller, provide supervising driller's name:



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

2. LOCATION OF WELL:

COUNTY: Chester

Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

3. PUBLIC SYSTEM NAME:

PUBLIC SYSTEM NUMBER:

SB20

4. ABANDONMENT:

[X] Yes [ ] No

Grouted Depth: from 27 ft. to 0 ft.

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy and SAND Brown Silty.

5. REMARKS:

Grouted to surface on completion

6. TYPE: [X] Mud Rotary [ ] Dug [ ] Cable tool

[ ] Jetted [ ] Air Rotary [ ] Other [X] Bored [ ] Driven

7. PERMIT NUMBER:

02131

8. USE:

[ ] Residential [ ] Public Supply [ ] Process
[ ] Irrigation [ ] Air Conditioning [ ] Emergency
[ ] Test Well [X] Monitor Well [ ] Replacement

9. WELL DEPTH (completed)

Date Started: 2/19/16

27 ft.

Date Completed: 2/19/16

10. CASING: [ ] Threaded [X] Welded

Diam.:
Type: [ ] PVC [ ] Galvanized [ ] Steel [ ] Other
in. to ft. depth

Height: Above [ ] Below [ ]
Surface ft.
Weight lb./ft.
Drive Shoe? [ ] Yes [X] No

11. SCREEN:

Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
Sieve Analysis [ ] Yes (please enclose) [X] No

NOTE: MULTIPLE SCREENS
USE SECOND SHEET

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.

ft. after hrs. Pumping G.P.M.
Pumping Test: [ ] Yes (please enclose) [ ] No
Yield:

14. WATER QUALITY

Chemical Analysis [ ] Yes [X] No Bacterial Analysis [ ] Yes [ ] No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) [ ] Yes [X] No

Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? [X] Yes [ ] No

[X] Neat Cement [ ] Bentonite [ ] Bentonite/Cement [ ] Other
Depth: From 27 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction

Type Petroleum
Well Disinfected [ ] Yes [X] No Type: Amount:

18. PUMP: Date installed: Not installed [ ]

Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (shallow) [ ] Turbine
[ ] Jet (deep) [ ] Reciprocating [ ] Centrifugal

19. WELL DRILLER: Tommy Bolyard

CERT. NO.: 1846

Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 348 2233 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 4/10/16
Well Driller

If D Level Driller, provide supervising driller's name:



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

COUNTY: Chester

Name: One Accord

Street Address: 3570 Lancaster Highway

City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:**

**PUBLIC SYSTEM NUMBER:** SB21

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones

(Use a 2nd sheet if needed)

**5. REMARKS:**

Grouted to surface on completion

- 6. TYPE:**  Mud Rotary  Jetted  Bored
- Dug  Air Rotary  Driven
- Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**

- Residential  Public Supply  Process
- Irrigation  Air Conditioning  Emergency
- Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)**

27 ft. Date Started: 2/19/16

Date Completed: 2/19/16

**10. CASING:**  Threaded  Welded

Diam.: \_\_\_\_\_ Height: Above  Below

Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.

Steel  Other Weight \_\_\_\_\_ lb./ft.

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

**11. SCREEN:**

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_

Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_

Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS**

\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**

Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: \_\_\_\_\_

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)  Yes  No**

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?  Yes  No**

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** \_\_\_\_\_ ft. \_\_\_\_\_ direction

Type Petroleum

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard**

Address: (Print) 17538 Greenhill Road Level: A  B  C  D (circle one)

Charlotte, NC 28278

Telephone No.: 803 548 2253 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 4/10/16

Well Driller

If D Level Driller, provide supervising driller's name:



# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

### 1. WELL OWNER INFORMATION:

Name: One Accord  
(last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

7. PERMIT NUMBER: 02131

### 8. USE:

- Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

### 2. LOCATION OF WELL: COUNTY: Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

9. WELL DEPTH (completed) 25 ft. Date Started: 2/19/16  
Date Completed: 2/19/16

10. CASING:  Threaded  Welded  
Diam.: \_\_\_\_\_ Height: Above  Below   
Type:  PVC  Galvanized Surface \_\_\_\_\_ ft.  
 Steel  Other Weight \_\_\_\_\_ lb./ft.  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe?  Yes  No  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

3. PUBLIC SYSTEM NAME: \_\_\_\_\_ PUBLIC SYSTEM NUMBER: SB22

4. ABANDONMENT:  Yes  No  
Grouted Depth: from 25 ft. to 0 ft.

11. SCREEN:  
Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
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CLAY Orange Sandy	20	20
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SAND Brown Silty	5	25
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Refusal		
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12. STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.  
\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: \_\_\_\_\_

14. WATER QUALITY  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack)  Yes  No  
Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

16. WELL GROUTED?  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 25 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: \_\_\_\_\_ ft. \_\_\_\_\_ direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

18. PUMP: Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846  
Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

5. REMARKS:  
Grouted to surface on completion

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 4/10/16  
Well Driller

If D Level Driller, provide supervising driller's name:

6. TYPE:  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**2. LOCATION OF WELL:**

COUNTY: Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**3. PUBLIC SYSTEM NAME:**

**PUBLIC SYSTEM NUMBER:**

SB23

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

Grouted to surface on completion

**6. TYPE:**

- Mud Rotary
- Dug
- Cable tool
- Jetted
- Air Rotary
- Other
- Bored
- Driven

**7. PERMIT NUMBER:**

02131

**8. USE:**

- Residential
- Irrigation
- Test Well
- Public Supply
- Air Conditioning
- Monitor Well
- Process
- Emergency
- Replacement

**9. WELL DEPTH (completed)**

Date Started: 2/19/16

27 ft.

Date Completed: 2/19/16

**10. CASING:**

Threaded  Welded  
 Diam.: \_\_\_\_\_  
 Type:  PVC  Galvanized  
 Steel  Other  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
 Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
 Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**

**12. STATIC WATER LEVEL** \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: \_\_\_\_\_

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**

Yes  No  
 Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**

Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:**

\_\_\_\_\_ ft. \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:**

Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard

CERT. NO.: 1846

Address: (Print)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2255

Level: A B C D (circle one)  
     
 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:**

This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:

Date: 4/10/16

Well Driller

If D Level Driller, provide supervising driller's name:





# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: Home:

**2. LOCATION OF WELL:**

COUNTY: Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: Longitude:

**3. PUBLIC SYSTEM NAME:**

PUBLIC SYSTEM NUMBER:

SB24

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from 27 ft. to 0 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	7	27

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

Grouted to surface on completion

**6. TYPE:**

- Mud Rotary
- Dug
- Cable tool
- Jetted
- Air Rotary
- Other
- Bored
- Driven

**7. PERMIT NUMBER:**

02131

**8. USE:**

- Residential
- Irrigation
- Test Well
- Public Supply
- Air Conditioning
- Monitor Well
- Process
- Emergency
- Replacement

**9. WELL DEPTH (completed)**

Date Started: 2/19/16

27 ft.

Date Completed: 2/19/16

**10. CASING:**

Threaded  Welded  
Diam.: \_\_\_\_\_  
Type:  PVC  Galvanized  Steel  Other  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_  
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_  
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Sieve Analysis  Yes (please enclose)  No

**NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**

**12. STATIC WATER LEVEL**

\_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: \_\_\_\_\_

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**

Yes  No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

**16. WELL GROUTED?**

Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 27 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:**

\_\_\_\_\_ ft. \_\_\_\_\_ direction

Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:**

Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

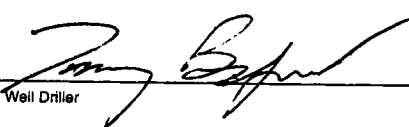
**19. WELL DRILLER: Tommy Bolyard**

CERT. NO.: 1846

Address: (Print) 17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 348 2253  
Level: A  B  C  D (circle one)  
Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:**

This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 4/10/16  
Well Driller

If D Level Driller, provide supervising driller's name:



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

2. LOCATION OF WELL:

COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
SB25

4. ABANDONMENT: [X] Yes [X] No

Grouted Depth: from 27 ft. to 0 ft.

Table with 3 columns: Formation Description, \*Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy and SAND Brown Silty.

\*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

5. REMARKS:

Grouted to surface on completion

6. TYPE: [ ] Mud Rotary [ ] Jetted [X] Bored
[ ] Dug [ ] Air Rotary [ ] Driven
[ ] Cable tool [ ] Other

7. PERMIT NUMBER: 02131

8. USE:

[ ] Residential [ ] Public Supply [ ] Process
[ ] Irrigation [ ] Air Conditioning [ ] Emergency
[ ] Test Well [X] Monitor Well [ ] Replacement

9. WELL DEPTH (completed)

27 ft. Date Started: 2/19/16 Date Completed: 2/19/16

10. CASING: [ ] Threaded [ ] Welded

Diam.: Height: Above [ ] Below [ ]
Type: [ ] PVC [ ] Galvanized Surface \_\_\_\_\_ ft.
[ ] Steel [ ] Other Weight \_\_\_\_\_ lb./ft.
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth Drive Shoe? [X] Yes [ ] No
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

11. SCREEN:

Type: \_\_\_\_\_ Diam.: \_\_\_\_\_
Slot/Gauge: \_\_\_\_\_ Length: \_\_\_\_\_
Set Between: \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

12. STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.

\_\_\_\_\_ ft. after \_\_\_\_\_ hrs. Pumping \_\_\_\_\_ G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield: \_\_\_\_\_

14. WATER QUALITY

Chemical Analysis [ ] Yes [X] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) [ ] Yes [X] No

Installed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.
Effective size \_\_\_\_\_ Uniformity Coefficient \_\_\_\_\_

16. WELL GROUTED? [X] Yes [ ] No

[X] Neat Cement [ ] Bentonite [ ] Bentonite/Cement [ ] Other \_\_\_\_\_
Depth: From 27 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: \_\_\_\_\_ ft. \_\_\_\_\_ direction

Type Petroleum
Well Disinfected [ ] Yes [X] No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

18. PUMP: Date installed: \_\_\_\_\_ Not installed [ ]

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm
TYPE: [ ] Submersible [ ] Jet (shallow) [ ] Turbine
[ ] Jet (deep) [ ] Reciprocating [ ] Centrifugal

19. WELL DRILLER: Tommy Bolyard

Address: (Print) CERT. NO.: 1846
Level: A B C D (circle one)
17538 Greenhill Road [X] [ ] [ ] [ ]
Charlotte, NC 28278
Telephone No.: 803 348 2233 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 4/10/16
Well Driller

If D Level Driller, provide supervising driller's name:



**APPENDIX E**  
**WELL LOGS**



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 3/23/16  
24 ft. Date Completed: 3/23/16

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 14 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above \_\_\_\_\_ Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-1R

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 24 ft. and 14 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24

**12. STATIC WATER LEVEL** 21.83 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 24 ft. to 13 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other  
 Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 2/1/17  
 Well Driller  
 If D Level Driller, provide supervising driller's name:

**5. REMARKS:**  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 3/23/16
25 ft. Date Completed: 3/23/16

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized Steel Other
2 in. to 15 ft. depth
Height: Above Below Surface 2 inches
Weight lb./ft.
Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
MW-5

11. SCREEN:
Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 25 ft. and 15 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 22.71 ft. below land surface after 24 hours

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy and SAND Brown Silty.

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 25 ft. to 14 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 13 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 348 2255 Fax No.:

\*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

5. REMARKS:

Signed: [Signature] Date: 2/1/17
Well Driller

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool Other

If D Level Driller, provide supervising driller's name:



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**COUNTY: Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:**

PUBLIC SYSTEM NUMBER:

MW-6

**4. ABANDONMENT:** Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131**8. USE:**

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)**Date Started: 3/23/1624 ft.Date Completed: 3/23/16**10. CASING:**  Threaded  Welded

Diam.: 2  
Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 14 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below   
Surface 2 inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**

Type: PVC Diam.: 2 inch  
Slot/Gauge: .01 Length: 10 feet  
Set Between: 24 ft. and 14 ft. NOTE: MULTIPLE SCREENS  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 20.79 ft. below land surface after 24 hours**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 24 ft. to 13 ft.  
Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction

Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard

CERT. NO.: 1846

Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)

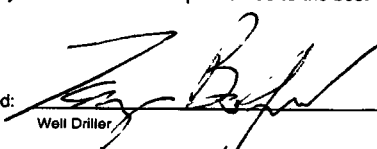
17538 Greenhill Road    

Charlotte, NC 28278

Telephone No.: 803 548 2233

Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 2/1/17  
Well Driller

If D Level Driller, provide supervising driller's name:



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 3/23/16  
23 ft. Date Completed: 3/23/16

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 13 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 2 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-7

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 23 ft. and 13 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 19.86 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	3	23

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 23 ft. to 12 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 11 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D  (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: [Signature] Date: 2/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:





## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL: COUNTY: Chester**  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
MW-8

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>
<u>SAND Brown Silty</u>	<u>3</u>	<u>23</u>
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 3/23/16  
23 ft. Date Completed: 3/23/16

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 13 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 23 ft. and 13 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL 19.16** ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 23 ft. to 12 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 11 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) 17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Level:  A  B  C  D (circle one)  
 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under  
 my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 2/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-9

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
BOULDER Granite	2	26
SAND Tan Silty	4	30

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 30 ft. Date Started: 3/23/16  
 Date Completed: 3/23/16

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 20 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 4 INCHES ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 30 ft. and 20 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** dry ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 30 ft. to 20 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 19 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) 17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_  
 Level:  A  B  C  D (circle one)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 2/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:

- Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester

Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 2/21/17
37 ft. Date Completed: 2/21/17

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized
Steel Other
2 in. to 27 ft. depth
Height: Above Below Surface in. Weight lb./ft. Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: MW-9R

4. ABANDONMENT: Yes No

Grouted Depth: from ft. to ft.

11. SCREEN: Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 37 ft. and 27 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

12. STATIC WATER LEVEL 29.23 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 37 ft. to 26 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 25 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2233 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 3/14/17
Well Driller

If D Level Driller, provide supervising driller's name:

- 6. TYPE: Mud Rotary Jettied Bored
Dug Air Rotary Driven
Cable tool Other

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy, SAND Brown Silty, BOULDER Granite, SAND Tan Silty.

\*Indicate Water Bearing Zones (Use a 2nd sheet if needed)

5. REMARKS:



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

2. LOCATION OF WELL:
COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
MW-10

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

Table with 3 columns: Formation Description, \*Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy, SAND Brown Silty, BOULDER Granite, SAND Tan Silty.

\*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

5. REMARKS:

6. TYPE: Mud Rotary Jettied Bored
Dug Air Rotary Driven
Cable tool Other

7. PERMIT NUMBER: 02131

8. USE: Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

9. WELL DEPTH (completed) Date Started: 3/23/16
30 ft. Date Completed: 3/23/16

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized
Steel Other
2 in. to 20 ft. depth
in. to ft. depth
Height: Above Below Surface inCPES ft.
Weight lb./ft.
Drive Shoe? Yes No

11. SCREEN:
Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 30 ft. and 20 ft.
ft. and ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

12. STATIC WATER LEVEL dry ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 30 ft. to 20 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 19 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 348 2233 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 2/1/17
Well Driller
If D Level Driller, provide supervising driller's name:



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:****COUNTY:** Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: MW-10R PUBLIC SYSTEM NUMBER:****4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
BOULDER Granite	4	28
SAND Tan Silty	12	40

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

- 6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131**8. USE:**

- |                                      |  |                                      |
|--------------------------------------|--|--------------------------------------|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Public Supply           | <input type="checkbox"/> Process     |
| <input type="checkbox"/> Irrigation  | <input type="checkbox"/> Air Conditioning        | <input type="checkbox"/> Emergency   |
| <input type="checkbox"/> Test Well   | <input checked="" type="checkbox"/> Monitor Well | <input type="checkbox"/> Replacement |

**9. WELL DEPTH (completed)**Date Started: 2/21/1740 ft.Date Completed: 2/21/17**10. CASING:**  Threaded  WeldedDiam.: 2Type:  PVC  Galvanized Steel  Other2 in. to 30 ft. depth

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 2 inches \_\_\_\_\_ ft.

Weight \_\_\_\_\_ lb./ft.

Drive Shoe?  Yes  No**11. SCREEN:**Type: DVC Diam.: 2 inchSlot/Gauge: .01 Length: 10 feetSet Between: 40 ft. and 30 ft.

\_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Sieve Analysis  Yes (please enclose)  No**NOTE: MULTIPLE SCREENS  
USE SECOND SHEET****12. STATIC WATER LEVEL** 31.73 ft. below land surface after 24 hours**13. PUMPING LEVEL Below Land Surface.**na ft. after na hrs. Pumping na G.P.M.Pumping Test:  Yes (please enclose)  NoYield: na**14. WATER QUALITY**Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  NoInstalled from 40 ft. to 29 ft.Effective size 2 Uniformity Coefficient Coarse**16. WELL GROUTED?**  Yes  No Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_Depth: From 28 ft. to 0 ft.**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W directionType PetroleumWell Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_**18. PUMP:** Date installed: \_\_\_\_\_Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine Jet (deep)  Reciprocating  Centrifugal**19. WELL DRILLER:** Tommy Bolyard

Address: (Print)

17538 Greenhill RoadCharlotte, NC 28278Telephone No.: 803 548 2255CERT. NO.: 1846Level: A  B  C  D  (circle one)

Fax No.: \_\_\_\_\_

Signed: [Signature]  
Well DrillerDate: 3/14/17

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** MW-11

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>
<u>SAND Brown Silty</u>	<u>9</u>	<u>29</u>

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 29 ft. Date Started: 3/23/16  
 Date Completed: 3/23/16

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 19 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above \_\_\_\_\_ Below  Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 29 ft. and 19 ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 26.31 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 29 ft. to 18 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 17 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Date: 2/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:









**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-14

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
BOULDER Granite	4	28
SAND Tan Silty	8	36

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  Dug  Air Rotary  Driven  Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ Date Started: 2/21/17  
36 \_\_\_\_\_ ft. Date Completed: 2/21/17

**10. CASING:**  Threaded  Welded  
Diam.: 2 \_\_\_\_\_  
Type:  PVC  Galvanized  Steel  Other  
2 \_\_\_\_\_ in. to 26 \_\_\_\_\_ ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 4 \_\_\_\_\_ inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**  
Type: PVC \_\_\_\_\_ Diam.: 2 inch  
Slot/Gauge: .01 \_\_\_\_\_ Length: 10 feet  
Set Between: 36 \_\_\_\_\_ ft. and 26 \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 27.24 \_\_\_\_\_ ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na \_\_\_\_\_ ft. after na \_\_\_\_\_ hrs. Pumping na \_\_\_\_\_ G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na \_\_\_\_\_

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from 36 \_\_\_\_\_ ft. to 26 \_\_\_\_\_ ft.  
Effective size 2 \_\_\_\_\_ Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 25 \_\_\_\_\_ ft. to 0 \_\_\_\_\_ ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 \_\_\_\_\_ ft. w \_\_\_\_\_ direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  A  B  C  D  
Charlotte, NC 28278  
Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: \_\_\_\_\_ Date: 3/14/17  
Well Driller

If D Level Driller, provide supervising driller's name: \_\_\_\_\_



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**COUNTY: Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:**

PUBLIC SYSTEM NUMBER:

MW-15

**4. ABANDONMENT:** Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
BOULDER Granite	4	28
SAND Tan Silty	12	40

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131**8. USE:**

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)**Date Started: 2/21/1740 ft.Date Completed: 2/21/17**10. CASING:**  Threaded  WeldedDiam.: 2Height: Above  Below   
Surface 2 inches ft.Type:  PVC  Galvanized  
 Steel  Other2 in. to 30 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depthWeight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No**11. SCREEN:**Type: pvc Diam.: 2 inchSlot/Gauge: .01 Length: 10 feetSet Between: 40 ft. and 30 ft. **NOTE: MULTIPLE SCREENS**  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**Sieve Analysis  Yes (please enclose)  No**12. STATIC WATER LEVEL** 36.72 ft. below land surface after 24 hours**13. PUMPING LEVEL Below Land Surface.**na ft. after na hrs. Pumping na G.P.M.Pumping Test:  Yes (please enclose)  NoYield: na**14. WATER QUALITY**Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.**15. ARTIFICIAL FILTER (filter pack)**  Yes  NoInstalled from 40 ft. to 29 ft.Effective size 2 Uniformity Coefficient Coarse**16. WELL GROUTED?**  Yes  No Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_Depth: From 28 ft. to 0 ft.**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w directionType PetroleumWell Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_**18. PUMP:** Date installed: \_\_\_\_\_ Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal**19. WELL DRILLER: Tommy Bolyard**

CERT. NO.: 1846

Address: (Print)

Level: A  B  C  D (circle one)

17538 Greenhill Road

Charlotte, NC 28278

Telephone No.: 803 548 2233

Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.Signed: Tommy Bolyard  
Well DrillerDate: 3/14/17

If D Level Driller, provide supervising driller's name:





Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL:
COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 3/25/16
75 ft. Date Completed: 3/26/16

10. CASING: [X] Threaded [ ] Welded
Diam.: 2
Type: [X] PVC [ ] Galvanized [ ] Steel [ ] Other
2 in. to 70 ft. depth
6 in. to 65 ft. depth
Height: Above [ ] Below [X] Surface 2 INCHES
Weight lb./ft.
Drive Shoe? [ ] Yes [X] No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
DW-2

11. SCREEN:
Type: DVC Diam.: 2 inch
Slot/Gauge: .01 Length: 5 feet
Set Between: 75 ft. and 70 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

4. ABANDONMENT: [ ] Yes [X] No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 22.29 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: [ ] Yes (please enclose) [X] No
Yield: na

Table with 3 columns: Formation Description, \*Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy, SAND Brown Silty, Boulder, SAND Brown Silty, Rock at 75.

14. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) [X] Yes [ ] No
Installed from 75 ft. to 70 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? [X] Yes [ ] No
[X] Neat Cement [ ] Bentonite [ ] Bentonite/Cement [ ] Other
Depth: From 69 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w direction
Type Petroleum
Well Disinfected [ ] Yes [X] No Type: Amount:

18. PUMP: Date installed: Not installed [X]
Mr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (shallow) [ ] Turbine
[ ] Jet (deep) [ ] Reciprocating [ ] Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2253 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 4/15/16
Well Driller
If D Level Driller, provide supervising driller's name:

6. TYPE: [ ] Mud Rotary [ ] Jetted [X] Bored
[ ] Dug [ ] Air Rotary [ ] Driven
[ ] Cable tool [ ] Other



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

**COUNTY:** Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:**

**PUBLIC SYSTEM NUMBER:**

DW-3

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	5	25
Boulder	3	28
SAND Brown Silty	47	75
Rock at 75		
*Indicate Water Bearing Zones		
(Use a 2nd sheet if needed)		

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)**

Date Started: 3/26/16

75 ft.

Date Completed: 3/27/16

**10. CASING:**  Threaded  Welded

Diam.: 2

Type:  PVC  Galvanized

Steel  Other

2 in. to 70 ft. depth

6 in. to 65 ft. depth

Height: Above  Below   
Surface 2 inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**11. SCREEN:**

Type: DVC Diam.: 2 inch

Slot/Gauge: .01 Length: 5 feet

Set Between: 75 ft. and 70 ft.

**NOTE: MULTIPLE SCREENS  
USE SECOND SHEET**

\_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 31.29 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.

na ft. after na hrs. Pumping na G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER** (filter pack)  Yes  No

Installed from 75 ft. to 70 ft.

Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 69 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction

Type Petroleum

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard**

**CERT. NO.:** 1846

Address: (Print)

Level: A B C D (circle one)


17538 Greenhill Road

Charlotte, NC 28278

Telephone No.: 803 348 2253

Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:   
Well Driller

Date: 4/15/16

If D Level Driller, provide supervising driller's name:



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

**COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:**  
DW-4

**4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	47	75
Rock Granite	40	115
Rock Granite Fracture	5	120

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**

Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ **Date Started:** 10/16/16

120 ft. **Date Completed:** 10/17/16

**10. CASING:**  Threaded  Welded

Diam.: 2

Type:  PVC  Galvanized

Steel  Other

2 in. to 115 ft. depth

6 in. to 85 ft. depth

Height: Above  Below

Surface 2 INCHES \_\_\_\_\_ ft.

Weight \_\_\_\_\_ lb./ft.

Drive Shoe?  Yes  No

**11. SCREEN:**

Type: PVC Diam.: 2 inch

Slot/Gauge: .01 Length: 5 feet

Set Between: 120 ft. and 115 ft.

\_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Sieve Analysis  Yes (please enclose)  No

**NOTE: MULTIPLE SCREENS  
 USE SECOND SHEET**

**12. STATIC WATER LEVEL** 28.05 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 120 ft. to 115 ft.

Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 114 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction

Type Petroleum

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard

**CERT. NO.:** 1846

Address: (Print)

17538 Greenhill Road

Charlotte, NC 28278

Telephone No.: 803 548 2255

Level: A B C D (circle one)

Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 10/31/16  
Well Driller

If D Level Driller, provide supervising driller's name:



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Billy Morris  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 12 Well Casing Diameter 2 inches Borehole Diameter 4.25 inches  
 Depth to Ground Water (DGW) 16.91 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 24 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	9:05	9:12	9:20	9:29			
pH (s.u.)*	7.57	7.03	6.58	6.59			
Specific Conductivity (mmhos/cm)*	281	195	191	194			
Water Temperature (C)*	21.4	20.6	20.6	20.7			
Turbidity (NTU) *	843	406	129	131			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	3 gals	9 gals	12 gals	16 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: 4/8/16



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 4/5/16 Field Personnel: Cal Funderburk  
 Drilling Company: EDPS Driller's Name: Tommy Bolvard  
 Driller's Certification Number: 1846 Weather Conditions: Clear

Well Development Method

Surge Block  Submersible Pump  Air Lifting

\* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. <u>008369830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>116100871</u> standard _____	Temperature meter serial no. <u>116100871</u>	Turbidity meter serial no. <u>00490900</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW5 Well Casing Diameter 2 inches Borehole Diameter 4.25 inches  
 Depth to Ground Water (DGW) 17.81 ft. Screen Length/Slot Size 10 ft. 010 in.  
 Total Well Depth (TWD) 25 ft. Screen Interval 25 ft. to 15 ft.  
 Length of water column (LWC=TWD-DGW) 7.19 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 11 gals. Drilling Fluids recovered NA gals.

Time (military)	14:30	14:40	14:52				
pH (s.u.)*	7.21	7.42	7.46				
Specific Conductivity (mmhos/cm)*	.3210	.2891	.2796				
Water Temperature ( C)*	21.5	21.9	21.9				
Turbidity (NTU) *	950	115	19				
Physical Characteristics (color/odor)	Dark	Mild clear	Clear				
Water Level Measurement (ft) from TOC	18.52	19.91	20.73				
Total Well Depth (ft) from TOC	25	25	25				
Cumulative Gallons Removed	5 gals	8 gals	11 gals				

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge block utilized in conjunction with submersible pump

Driller Signature: Tommy Bolvard Date: 4/8/16





**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 4/5/16 Field Personnel: Cal Funderburk  
 Drilling Company: EDPS Driller's Name: Tommy Bolvard  
 Driller's Certification Number: 1846 Weather Conditions: Clear

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

pH meter serial no. <u>008369830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>116100871</u> standard _____	Temperature meter serial no. <u>116100871</u>	Turbidity meter serial no. <u>00490800</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW6 Well Casing Diameter 2 inches Borehole Diameter 4.25 inches  
 Depth to Ground Water (DGW) 15.64 ft. Screen Length/Slot Size 10 ft. / .010 in.  
 Total Well Depth (TWD) 25 ft. Screen Interval 25 ft. to 15 ft.  
 Length of water column (LWC=TWD-DGW) 9.36 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 21 gals. Drilling Fluids recovered NA gals.

Time (military)	15:38	15:56	16:30	16:55			
pH (s.u.)*	7.73	7.46	7.49	7.24			
Specific Conductivity (mmhos/cm)*	.2848	.2718	.2133	.1996			
Water Temperature (C)*	23.2	22.1	20.5	19.9			
Turbidity (NTU) *	166	135	52	18			
Physical Characteristics (color/odor)	Dark/nick	Cloudy	Cloudy	clear			
Water Level Measurement (ft) from TOC	15.93	16.31	16.95	18.88			
Total Well Depth (ft) from TOC	25	25	25	25			
Cumulative Gallons Removed	2 gals	9 gals	12 gals	21 gals			

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge block utilized in conjunction with submersible pump

Driller Signature: [Signature] Date: 4/8/16



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord  
 Date: 4/5/16  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Cal Funderburk  
 Driller's Name: Tommy Bolvard  
 Weather Conditions: Clear

Well Development Method

Surge Block       Submersible Pump       Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. <u>908389830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>116100871</u> standard _____	Temperature meter serial no. <u>116100871</u>	Turbidity meter serial no. <u>00490900</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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Drilling Method

Hollow Stem Augers       Solid Flight Augers       Direct Push   
 Air Rotary       Mud Rotary       Sonic

Monitoring Well ID# MW7      Well Casing Diameter 2 inches      Borehole Diameter 4.25 inches  
 Depth to Ground Water (DGW) 15.35 ft.      Screen Length/Slot Size 10 ft./.010 in.  
 Total Well Depth (TWD) 25 ft.      Screen Interval 25 ft. to 15 ft.  
 Length of water column (LWC=TWD-DGW) 9.65 ft.      Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 24 gals.      Drilling Fluids recovered NA gals.

Time (military)	17:20	17:45	18:15	18:41			
pH (s.u.)*	7.37	7.42	7.25	7.65			
Specific Conductivity (mmhos/cm)*	.1026	.1095	.1108	.1292			
Water Temperature ( C)*	19.6	19.5	19.5	19.5			
Turbidity (NTU) *	1227	475	216	32			
Physical Characteristics (color/odor)	Dark	Mild clear	Mild clear	Clear			
Water Level Measurement (ft) from TOC	15.75	17.87	19.03	19.51			
Total Well Depth (ft) from TOC	25	25	25	25			
Cumulative Gallons Removed	1 gals	8 gals	15 gals	24 gals			

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge block utilized in conjunction with submersible pump

Driller Signature: [Signature]      Date: 4/6/16



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Bray Mann  
 Drilling Company: EDPS Driller's Name: Tommy Boyd  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# NWG Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 20.15 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 23 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>626</u>	<u>631</u>	<u>639</u>	<u>645</u>			
pH (s.u.)*	<u>7.21</u>	<u>7.03</u>	<u>7.06</u>	<u>7.05</u>			
Specific Conductivity (mmhos/cm)*	<u>839</u>	<u>896</u>	<u>65.4</u>	<u>64.1</u>			
Water Temperature (C)*	<u>20.3</u>	<u>20.1</u>	<u>20.1</u>	<u>20.1</u>			
Turbidity (NTU) *	<u>483</u>	<u>216</u>	<u>205</u>	<u>204</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>1</u> gals	<u>2</u> gals	<u>3</u> gals	<u>4</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: puce Day

Driller Signature: Tommy Boyd Date: \_\_\_\_\_



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 00-131  
 Date: 2/22/17 Field Personnel: Tony Boyd / Billy Mann  
 Drilling Company: EDPS Driller's Name: Tony Boyd  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>8369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>890824</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 9R Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 30.11 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 37 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>715</u>	<u>721</u>	<u>729</u>	<u>734</u>			
pH (s.u.)*	<u>6.12</u>	<u>5.91</u>	<u>5.93</u>	<u>5.91</u>			
Specific Conductivity (mmhos/cm)*	<u>42.8</u>	<u>43.9</u>	<u>44.2</u>	<u>44.1</u>			
Water Temperature (C)*	<u>17.9</u>	<u>18.1</u>	<u>18.3</u>	<u>18.1</u>			
Turbidity (NTU) *	<u>185</u>	<u>217</u>	<u>191</u>	<u>190</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>3</u> gals	<u>6</u> gals	<u>9</u> gals	<u>12</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: 3/8/17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Account Site ID#: 02131  
 Date: 2/22/17 Field Personnel: \_\_\_\_\_  
 Drilling Company: EDPS Driller's Name: Tony Boyd  
 Driller's Certification Number: 1846 Weather Conditions: Billy morns

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>8369830</u>	serial no. <u>116100571</u>	serial no. <u>16100571</u>	serial no. <u>890521</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 10R Well Casing Diameter \_\_\_\_\_ inches Borehole Diameter \_\_\_\_\_ inches  
 Depth to Ground Water (DGW) 31.67 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 40 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>7:50</u>	<u>7:59</u>	<u>8:10</u>	<u>8:19</u>			
pH (s.u.)*	<u>6.21</u>	<u>6.10</u>	<u>5.99</u>	<u>5.93</u>			
Specific Conductivity (mmhos/cm)*	<u>75.2</u>	<u>76.1</u>	<u>63.4</u>	<u>63.8</u>			
Water Temperature (C)*	<u>19.1</u>	<u>18.6</u>	<u>18.5</u>	<u>18.5</u>			
Turbidity (NTU) *	<u>246</u>	<u>309</u>	<u>194</u>	<u>190</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>3</u> gals	<u>6</u> gals	<u>9</u> gals	<u>12</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: 3/8/17





**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Bray Means  
 Drilling Company: EDPS Driller's Name: Tammy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW11 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 27.45 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 29 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	6:58	7:09	7:16	7:24			
pH (s.u.)*	6.61	6.75	6.40	6.42			
Specific Conductivity (mmhos/cm)*	75.0	79.8	63.8	64.5			
Water Temperature ( C)*	19.9	20.6	20.1	20.0			
Turbidity (NTU) *	389	109	85	83			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	1 gals	3 gals	5 gals	7 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Purge Dry

Driller Signature: Tammy Boyard Date: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Bray Morris  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW12 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 22.38 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ in.  
 Total Well Depth (TWD) 29 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	7:36	744	750	759			
pH (s.u.)*	648	640	633	631			
Specific Conductivity (mmhos/cm)*	103	99	91	92			
Water Temperature (C)*	20.4	19.9	19.8	19.8			
Turbidity (NTU) *	448	361	240	238			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	2 gals	4 gals	6 gals	8 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: Tommy Boyard Date: \_\_\_\_\_



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Bray Morris  
 Drilling Company: EDPS Driller's Name: Tommy Boyford  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW13 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) \_\_\_\_\_ ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) \_\_\_\_\_ ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>809</u>	<u>818</u>	<u>827</u>	<u>834</u>			
pH (s.u.)*	<u>5.99</u>	<u>6.2</u>	<u>5.50</u>	<u>5.56</u>			
Specific Conductivity (mmhos/cm)*	<u>148</u>	<u>130</u>	<u>136</u>	<u>134</u>			
Water Temperature (C)*	<u>20.1</u>	<u>20.1</u>	<u>19.9</u>	<u>19.9</u>			
Turbidity (NTU) *	<u>246</u>	<u>193</u>	<u>185</u>	<u>180</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>3</u> gals	<u>6</u> gals	<u>9</u> gals	<u>12</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: Tommy Boyford Date: \_\_\_\_\_





**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Account Site ID#: 02131  
 Date: 2/22/17 Field Personnel: \_\_\_\_\_  
 Drilling Company: EDPS Driller's Name: Tommy Boyl  
 Driller's Certification Number: 1846 Weather Conditions: Blue morns

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>8364830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>850821</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 16R Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 29.07 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 36 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>8:41</u>	<u>8:52</u>	<u>9:06</u>	<u>9:12</u>			
pH (s.u.)*	<u>6.11</u>	<u>5.85</u>	<u>5.71</u>	<u>5.73</u>			
Specific Conductivity (mmhos/cm)*	<u>103</u>	<u>74</u>	<u>65</u>	<u>65</u>			
Water Temperature (C)*	<u>19.1</u>	<u>18.3</u>	<u>18.1</u>	<u>18.0</u>			
Turbidity (NTU) *	<u>148</u>	<u>131</u>	<u>126</u>	<u>128</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>2</u> gals	<u>4</u> gals	<u>6</u> gals	<u>9</u> gals	_____ gals	_____ gals	_____ gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .  
 Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: Tommy Boyl Date: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Account  
 Date: 2/22/17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: \_\_\_\_\_  
 Driller's Name: Tommy Boyd  
 Weather Conditions: Blue, morns

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. <u>8369830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>46100871</u> standard _____	Temperature meter serial no. <u>16100871</u>	Turbidity meter serial no. <u>930821</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# 15 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 36.45 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 40 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	9:46	9:58	10:18	10:26			
pH (s.u.)*	5.99	5.83	5.91	5.90			
Specific Conductivity (mmhos/cm)*	148	123	110	109			
Water Temperature (C)*	17.6	16.5	16.2	16.5			
Turbidity (NTU) *	308	221	194	193			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	2 gals	4 gals	6 gals	10 gals			

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 4/5/16 Field Personnel: Cal Funderburk  
 Drilling Company: EDPS Driller's Name: Tommy Bolvard  
 Driller's Certification Number: 1846 Weather Conditions: Clear

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. <u>008369830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>116100871</u> standard _____	Temperature meter serial no. <u>116100871</u>	Turbidity meter serial no. <u>00490800</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW1 Well Casing Diameter 6 inches Borehole Diameter 10.25 inches  
 Depth to Ground Water (DGW) 16.59 ft. Screen Length/Slot Size 5 ft. 1.010 in.  
 Total Well Depth (TWD) 75 ft. Screen Interval 75 ft. to 70 ft.  
 Length of water column (LWC=TWD-DGW) 58.41 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 46 gals. Drilling Fluids recovered NA gals.

Time (military)	11:00	11:16	11:40	12:08	12:34		
pH (s.u.)*	8.45	8.51	7.91	7.27	7.22		
Specific Conductivity (mmhos/cm)*	.1611	.1545	.1573	.1531	.1521		
Water Temperature (C)*	22.5	22.5	22.6	21.9	21.8		
Turbidity (NTU)*	185	204	1141	92	08		
Physical Characteristics (color/odor)	cloudy from	cloudy	Dark cloudy	cloudy	clear		
Water Level Measurement (ft) from TOC	17.12	20.32	26.51	28.76	29.95		
Total Well Depth (ft) from TOC	75	75	75	75	75		
Cumulative Gallons Removed	2 gals	10 gals	22 gals	34 gals	46 gals		

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge block utilized in conjunction with submersible pump

Driller Signature: [Signature]

Date: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 4/5/16 Field Personnel: Cal Funderburk  
 Drilling Company: EDPS Driller's Name: Tommy Bolvard  
 Driller's Certification Number: 1846 Weather Conditions: clear

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter serial no. <u>008369830</u> pH=4.0 _____ pH=7.0 _____ pH=10.0 _____	Conductivity meter serial no. <u>116100871</u> standard _____	Temperature meter serial no. <u>116100871</u>	Turbidity meter serial no. <u>00490900</u> NTU=0.0 _____ NTU=1.0 _____ NTU=10.0 _____
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Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW 2 Well Casing Diameter 6 inches Borehole Diameter 10.25 inches  
 Depth to Ground Water (DGW) 16.89 ft. Screen Length/Slot Size 5 ft./.010 in.  
 Total Well Depth (TWD) 75 ft. Screen Interval 75 ft. to 70 ft.  
 Length of water column (LWC=TWD-DGW) 58.11 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: 48 gals. Drilling Fluids recovered NA gals.

Time (military)	12:50	13:18	13:39	13:41	14:15		
pH (s.u.)*	7.87	7.70	7.93	7.84	7.79		
Specific Conductivity (mmhos/cm)*	1268	1295	1022	10927	10923		
Water Temperature (C)*	23.9	22.1	21.5	19.6	19.1		
Turbidity (NTU) *	821	78	1264	128	22		
Physical Characteristics (color/odor)	Dark	Mild clear	Cloudy	Mild clear	Clear		
Water Level Measurement (ft) from TOC	16.85	18.28	22.60	28.65	35.12		
Total Well Depth (ft) from TOC	75	75	75	75	75		
Cumulative Gallons Removed	1 gals	11 gals	25 gals	32 gals	48 gals		

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block utilized in conjunction with submersible pump

Driller Signature: [Signature]

Date: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 4/4/16 Field Personnel: Billy Morris  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting

\* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>008369830</u>	serial no. <u>116100871</u>	serial no. <u>16100871</u>	serial no. <u>0089082</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DWS Well Casing Diameter 6 inches Borehole Diameter 10.25 inches  
 Depth to Ground Water (DGW) 31.45 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 75 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 33 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>10:18</u>	<u>10:26</u>	<u>10:38</u>	<u>10:49</u>			
pH (s.u.)*	<u>6.78</u>	<u>6.08</u>	<u>5.99</u>	<u>6.01</u>			
Specific Conductivity (mmhos/cm)*	<u>108</u>	<u>56</u>	<u>41</u>	<u>45</u>			
Water Temperature (C)*	<u>19.8</u>	<u>17.9</u>	<u>18.1</u>	<u>18.1</u>			
Turbidity (NTU) *	<u>19</u>	<u>20</u>	<u>10</u>	<u>11</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>8</u> gals	<u>16</u> gals	<u>24</u> gals	<u>33</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: Tommy Boyard Date: \_\_\_\_\_





**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: ONE Account Site ID#: 02131  
 Date: 10/28/16 Field Personnel: Buy Meas  
 Drilling Company: EDPS Driller's Name: Tony Baul  
 Driller's Certification Number: 1846 Weather Conditions: \_\_\_\_\_

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. <u>8369830</u>	serial no. <u>116100671</u>	serial no. <u>16100671</u>	serial no. <u>890822</u>
pH=4.0 _____	standard _____		NTU=0.0 _____
pH=7.0 _____			NTU=1.0 _____
pH=10.0 _____			NTU=10.0 _____

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW4 Well Casing Diameter 6 inches Borehole Diameter 10.5 inches  
 Depth to Ground Water (DGW) 28.46 ft. Screen Length/Slot Size \_\_\_\_\_ ft./ \_\_\_\_\_ in.  
 Total Well Depth (TWD) 120 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) \_\_\_\_\_ ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	<u>8:15</u>	<u>8:26</u>	<u>8:39</u>	<u>8:46</u>			
pH (s.u.)*	<u>7.01</u>	<u>6.59</u>	<u>6.46</u>	<u>6.41</u>			
Specific Conductivity (mmhos/cm)*	<u>203</u>	<u>95</u>	<u>103</u>	<u>101</u>			
Water Temperature (C)*	<u>19.1</u>	<u>16.1</u>	<u>16.0</u>	<u>16.0</u>			
Turbidity (NTU) *	<u>56</u>	<u>71</u>	<u>16</u>	<u>17</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	<u>15</u> gals	<u>30</u> gals	<u>55</u> gals	<u>75</u> gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Driller Signature: Tony Baul Date: \_\_\_\_\_

**Katawba Environmental, Inc.**  
**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 1R
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	1 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	24	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					45
15					69
20					83
25					102
30					
35					
40					
45					
50					
55				SAND Brown Silty SAND Brown Silty	
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

**Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 5
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	2 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	25	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW6
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	3 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	24	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20					0
25					0
30				SAND Brown Silty	0
35					0
40				SAND Brown Silty	0
45					0
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 7
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	4 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	23	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20					0
25					0
30				SAND Brown Silty	0
35					0
40				SAND Brown Silty	0
45					0
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW8
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	5 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	23	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 9
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	6 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	_____ <b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	1
30				SAND Tan Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 10
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	7 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	_____ <b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	1
30				SAND Tan Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW11
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	8 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	29	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

**Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW12
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	9 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	29	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW13
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	10 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	70	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	26	<b>Date</b>	3/23/16
<b>Wt Hammer</b>	<b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30					
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 1
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	11 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	65	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	_____	<b>Hole Depth</b>	75	<b>Date</b>	3/24/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	10.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				Boulder	1
35				SAND Brown Silty	18
40					109
45					117
50					125
55					143
60					198
65					165
70				SAND Brown Silty	153
75				Rock at 75	168
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 2
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	12 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	65	<b>Surface Elev.</b>	
<b>Drill Rig</b>		<b>Hole Depth</b>	75	<b>Date</b>	3/25/16
<b>Wt Hammer</b>		<b>Hole Diam.</b>	10.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				Boulder	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60					0
65					0
70				SAND Brown Silty	1
75				Rock at 75	1
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 3
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	13 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	65	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	_____	<b>Hole Depth</b>	75	<b>Date</b>	3/26/16
<b>Wt Hammer</b>	_____ <b>Drop</b> _____	<b>Hole Diam.</b>	10.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				Boulder	0
35				SAND Brown Silty	3
40					5
45					6
50					0
55					9
60					4
65					9
70				SAND Brown Silty	15
75				Rock at 75	
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 9R
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	14 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	56	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	37	<b>Date</b>	2/22/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	0
30				SAND Tan Silty	0
35					0
40				SAND Tan Silty	0
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 10R
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	15 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	56	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	40	<b>Date</b>	2/22/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	0
30				SAND Tan Silty	0
35					0
40				SAND Tan Silty	0
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

**Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis**

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 14
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	16 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	56	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	36	<b>Date</b>	2/22/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	0
30				SAND Tan Silty	0
35					0
40				SAND Tan Silty	0
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 15
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	17 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	56	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	40	<b>Date</b>	2/22/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder Granite	0
30					0
35				SAND Tan Silty	0
40				SAND Tan Silty	0
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 4
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	18 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	73	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	_____	<b>Hole Depth</b>	120	<b>Date</b>	10/16/16
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	10.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				Boulder	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60					0
65					0
70				SAND Brown Silty	0
75				Granite	0
80					0
85					0
90					0
95					0
100					0
105					0
110					0
115				Granite Fracture Water	0
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**APPENDIX F**  
**AQUIFER CALCULATIONS**

**Vertical Potential Hydraulic Gradient  
Between Shallow MW13 and Deep DW1**

$$\frac{Dh}{DI} = \frac{[(GW \text{ Elevation DW-1})-(GW \text{ Elevation MW-13})]}{[(\text{Base of Screen MW-13})-(\text{Base of Screen DW-1})]}$$

$$\frac{Dh}{DI} = \frac{77.06-77.31}{72.51-23.42} = \frac{-0.25 \text{ ft/ft}}{49.09} = -0.005$$

Head Elevation of DW-1 is lower than MW-13 so Vertical Flow is downward (recharging)



**SOUTH CAROLINA**  
**Department of Health and Environmental Control**  
**Summary of Slug Test Form**

**Site Data**

UST Permit # 02131 County: CHESTER  
 Facility Name ONE ACCORD

**Slug Data**

See Appendix F Table \_\_\_\_\_ Figure F-1 for a list of all data measurements.  
 (water level logs, etc.) (Complete as appropriate).

Water Level Recovery Data was measured by WATER LEVEL INDICATOR.  
 (Hermit Data Logger, Manually with Water Level Indicator, etc.) (List Method).

Complete the following table for each well tested.

**COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED**

Slug Test Conducted in well(s) number	DW1	DW3	DW4	
Initial Rise/Drawdown in well (feet)	1.21	1.51	1.43	
Radius of Well Casing (feet)	8.33 <sup>-2</sup>	8.33 <sup>-2</sup>	8.33 <sup>-2</sup>	
Effective Radius of Well (feet)	.95	.95	.95	
Static Saturated Aquifer Thickness (feet)	50	50	5	
Length of Well Screen (feet)	5	5	5	
Static Height of Water Column in Well (ft)	21.20	30.69	27.41	

**Calculations**

See Appendix F Table \_\_\_\_\_ Figure F-1 for calculations. (Complete as appropriate).

The method for aquifer calculations was BOWEN & RICE

Calculated values by well were as follows:

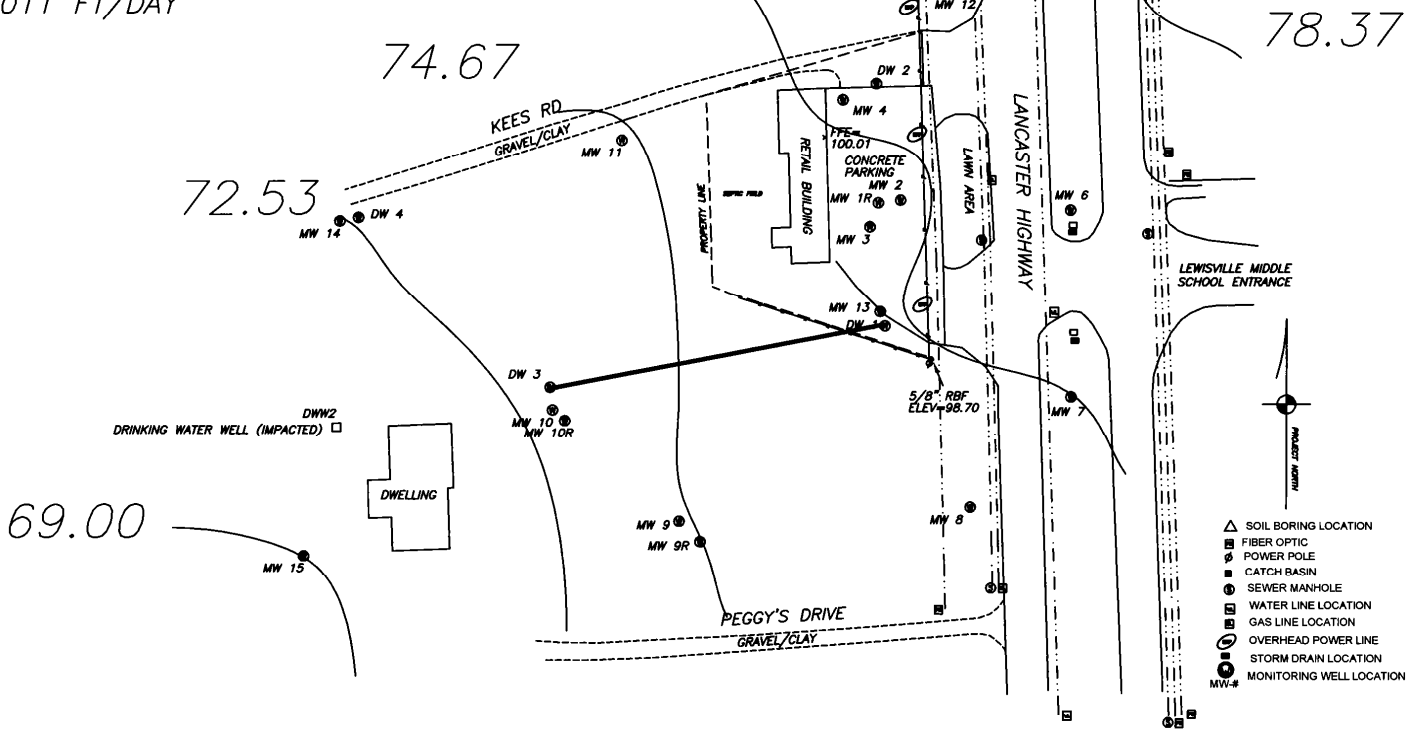
Slug Test Conducted in well(s) number	DW1	DW3	DW4	
Hydraulic Conductivity	0.20	0.04	0.12	

Thickness of the aquifer used to calculate hydraulic conductivity was 50 feet.

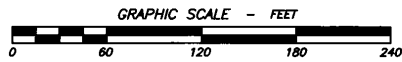
The aquifer is \_\_\_\_\_ confined \_\_\_\_\_ semi-confined X water table (Check as appropriate).

The estimated seepage velocity is 4 feet per year based on  
 a hydraulic conductivity of 0.12, a hydraulic gradient of 0.023, and  
 a porosity of 25 per cent for SAND soil (list type i.e., silty sand, clay, etc).

GRADIENT  $77.06-71.83/218\text{FT} = 0.023 \text{ FT/FT}$   
 $V = (0.12 \text{ FT/DAY}) (1/0.25) (2.3/100 \text{ FT}) 77.32$   
 $= 0.011 \text{ FT/DAY}$



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE F-1 - AQUIFER CALC

## Slug Test

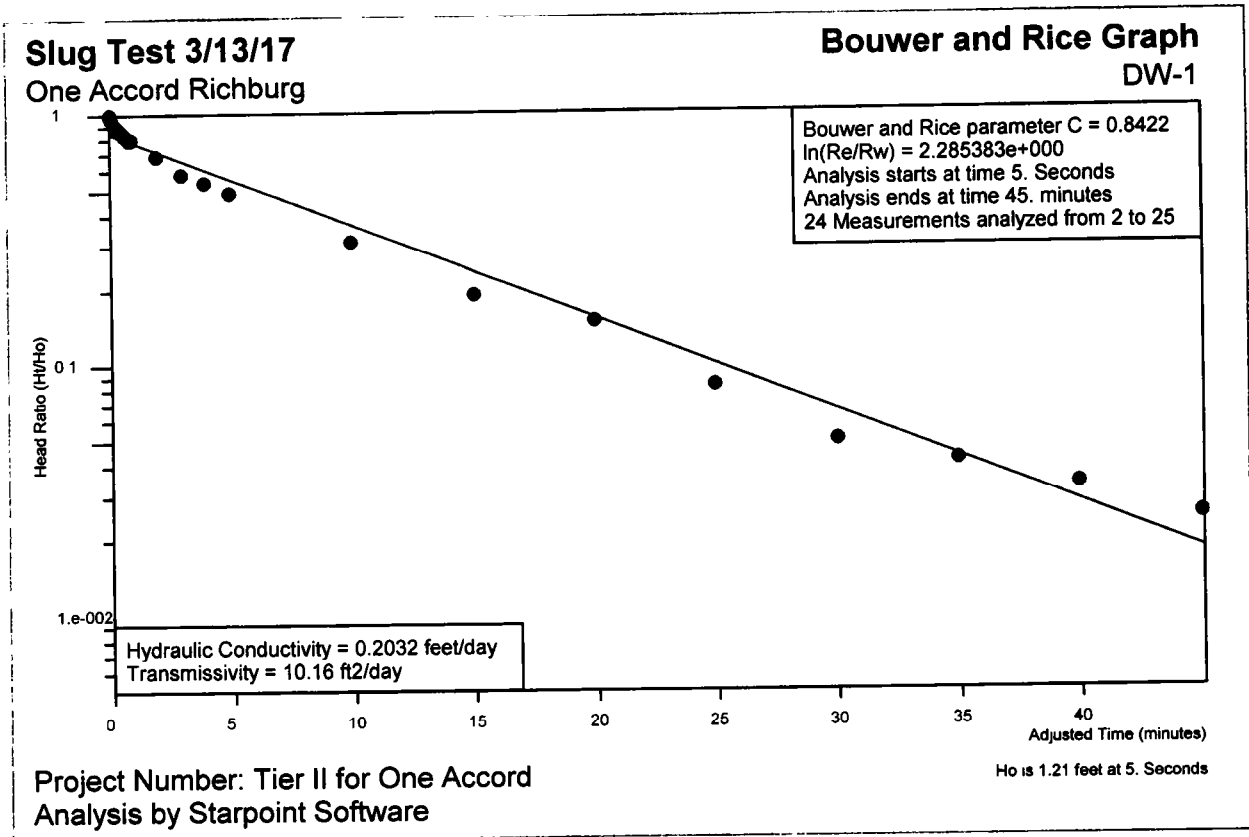
Site Name: One Accord  
 Location: Richburg  
 Test Date: 3/13/17  
 Client: One Accord  
 Project Number: Tier II

---

Well Label: DW-1  
 Aquifer Thickness: 50. feet  
 Screen Length: 5. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.95 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 53.8 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5. Seconds

Test starts with trial 1  
 There are 25 time and drawdown measurements  
 Maximum head is 1.21 feet  
 Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.21	1.21	1.
3	10.	5.	1.19	1.19	0.9835
4	15.	10.	1.15	1.15	0.9504
5	20.	15.	1.12	1.12	0.9256
6	25.	20.	1.09	1.09	0.9008
7	30.	25.	1.06	1.06	0.876
8	35.	30.	1.05	1.05	0.8678
9	40.	35.	1.03	1.03	0.8512
10	45.	40.	1.02	1.02	0.843
11	50.	45.	1.	1.	0.8264
12	55.	50.	0.98	0.98	0.8099
13	60.	55.	0.97	0.97	0.8017
14	120.	115.	0.83	0.83	0.686
15	180.	175.	0.71	0.71	0.5868
16	240.	235.	0.66	0.66	0.5455
17	300.	295.	0.6	0.6	0.4959
18	600.	595.	0.38	0.38	0.314
19	900.	895.	0.23	0.23	0.1901
20	1200	1195	0.18	0.18	0.1488
21	1500	1495	0.1	0.1	8.264e-002
22	1800	1795	6.e-002	6.e-002	4.959e-002
23	2100	2095	5.e-002	5.e-002	4.132e-002
24	2400	2395	4.e-002	4.e-002	3.306e-002
25	2700	2695	3.e-002	3.e-002	2.479e-002



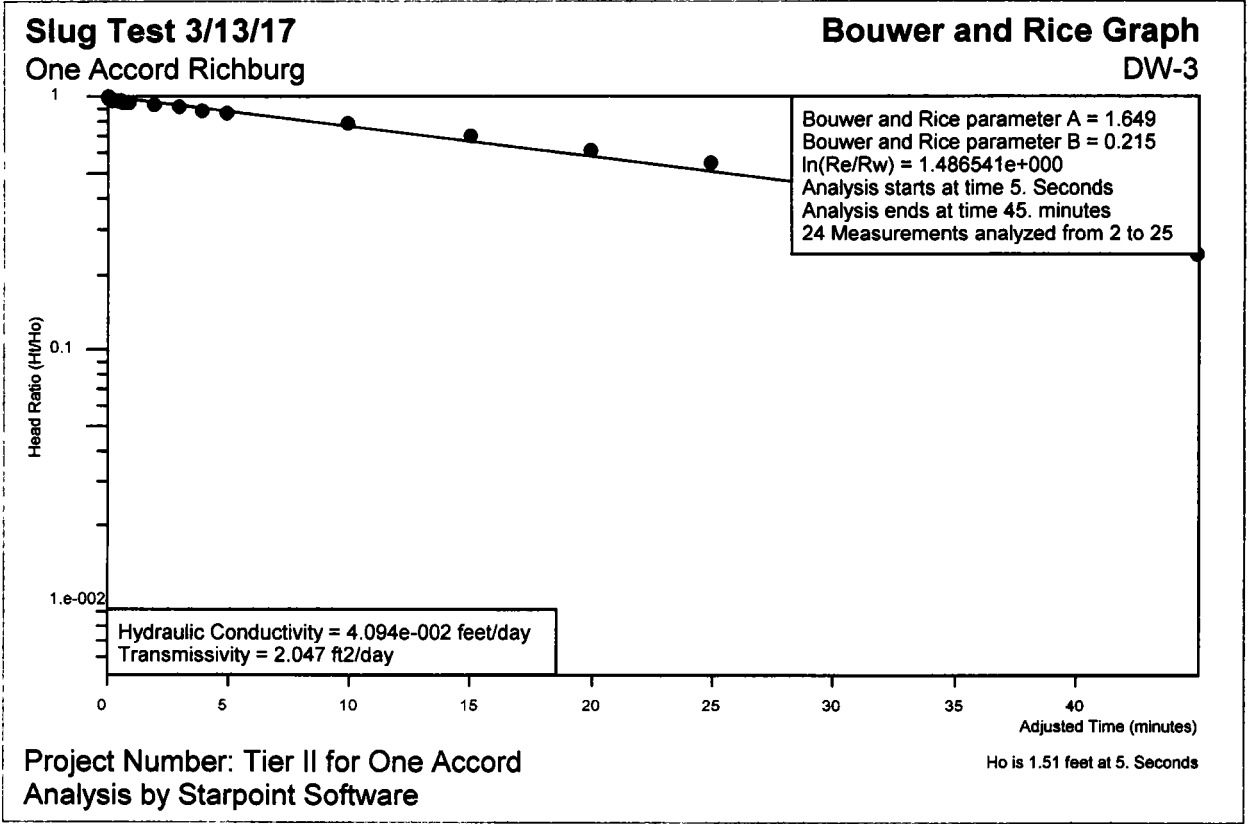
## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 3/13/17  
 Client: One Accord  
 Project Number: Tier II

---

Well Label: DW-3  
 Aquifer Thickness: 50. feet  
 Screen Length: 5. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.95 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 44.31 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5. Seconds  
 Test starts with trial 1  
 There are 25 time and drawdown measurements  
 Maximum head is 1.51 feet  
 Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.51	1.51	1.
3	10.	5.	1.5	1.5	0.9934
4	15.	10.	1.49	1.49	0.9868
5	20.	15.	1.48	1.48	0.9801
6	25.	20.	1.48	1.48	0.9801
7	30.	25.	1.47	1.47	0.9735
8	35.	30.	1.47	1.47	0.9735
9	40.	35.	1.46	1.46	0.9669
10	45.	40.	1.45	1.45	0.9603
11	50.	45.	1.45	1.45	0.9603
12	55.	50.	1.45	1.45	0.9603
13	60.	55.	1.45	1.45	0.9603
14	120.	115.	1.42	1.42	0.9404
15	180.	175.	1.39	1.39	0.9205
16	240.	235.	1.34	1.34	0.8874
17	300.	295.	1.31	1.31	0.8675
18	600.	595.	1.19	1.19	0.7881
19	900.	895.	1.06	1.06	0.702
20	1200	1195	0.94	0.94	0.6225
21	1500	1495	0.83	0.83	0.5497
22	1800	1795	0.72	0.72	0.4768
23	2100	2095	0.61	0.61	0.404
24	2400	2395	0.5	0.5	0.3311
25	2700	2695	0.36	0.36	0.2384





## Slug Test

Site Name: One Accord  
 Location: Richburg  
 Test Date: 3/13/17  
 Client: One Accord  
 Project Number: Tier II

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Well Label: DW-4  
 Aquifer Thickness: 5. feet  
 Screen Length: 5. feet  
 Casing Radius: 8.333e-002 feet  
 Effective Radius: 0.95 feet  
 Static Water Level: 0. feet  
 Water Table to Screen Bottom: 92.59 feet  
 Anisotropy Ratio: 1.  
 Time Adjustment: 5. Seconds

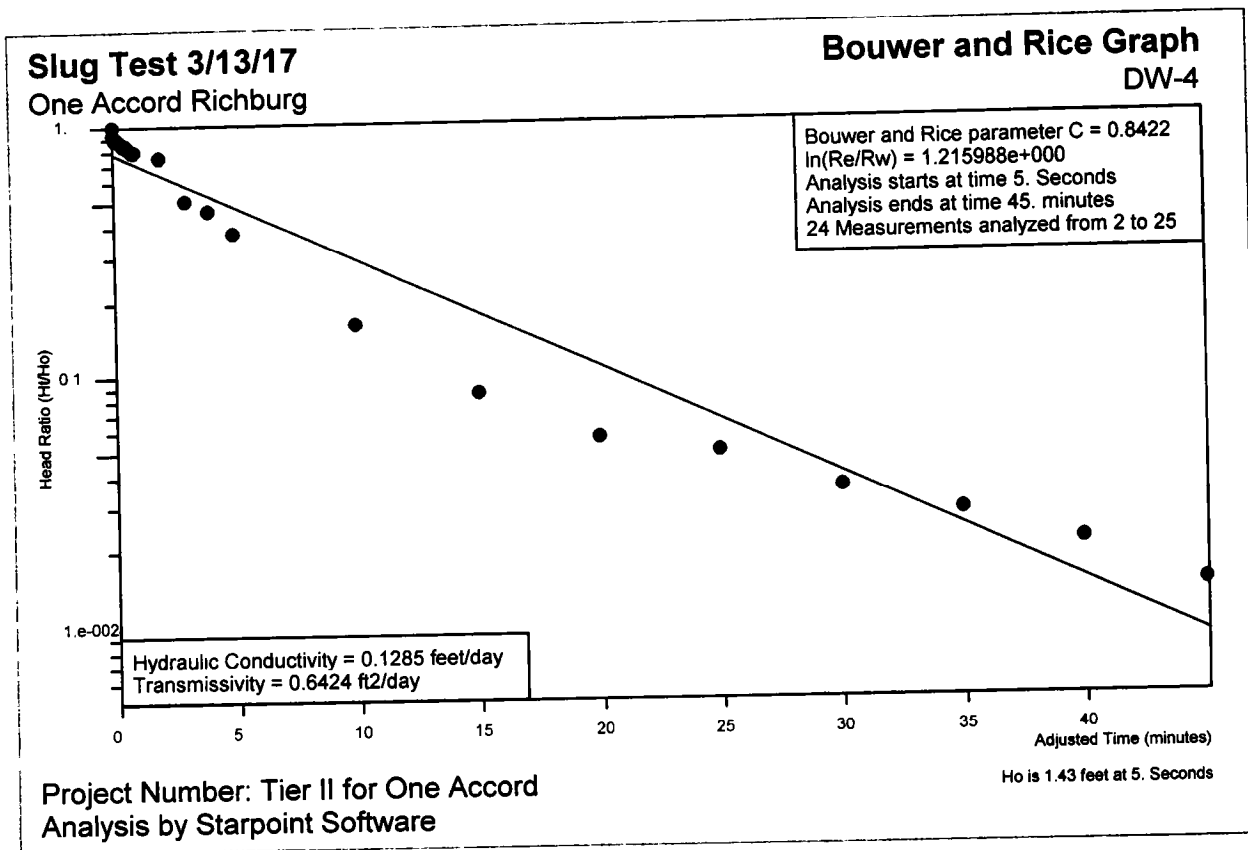
Test starts with trial 1

There are 25 time and drawdown measurements

Maximum head is 1.43 feet


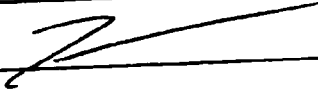

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.43	1.43	1.
3	10.	5.	1.33	1.33	0.9301
4	15.	10.	1.3	1.3	0.9091
5	20.	15.	1.29	1.29	0.9021
6	25.	20.	1.27	1.27	0.8881
7	30.	25.	1.24	1.24	0.8671
8	35.	30.	1.22	1.22	0.8531
9	40.	35.	1.21	1.21	0.8462
10	45.	40.	1.19	1.19	0.8322
11	50.	45.	1.17	1.17	0.8182
12	55.	50.	1.16	1.16	0.8112
13	60.	55.	1.14	1.14	0.7972
14	120.	115.	1.09	1.09	0.7622
15	180.	175.	0.73	0.73	0.5105
16	240.	235.	0.66	0.66	0.4615
17	300.	295.	0.54	0.54	0.3776
18	600.	595.	0.23	0.23	0.1608
19	900.	895.	0.12	0.12	8.392e-002
20	1200	1195	8.e-002	8.e-002	5.594e-002
21	1500	1495	7.e-002	7.e-002	4.895e-002
22	1800	1795	5.e-002	5.e-002	3.497e-002
23	2100	2095	4.e-002	4.e-002	2.797e-002
24	2400	2395	3.e-002	3.e-002	2.098e-002
25	2700	2695	2.e-002	2.e-002	1.399e-002



**APPENDIX G**  
**DISPOSAL MANIFESTS**

# SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA1052	<b>Richland Landfill</b> 1047 Highway Church Road Elgin, SC 29045 
EXPIRATION DATE August 20, 2016	
SPECIAL WASTE PHONE: 803-744-3373 or 803-744-3345 FAX: 803-736-0995	
Prepared by: ALLEAN LARKIN	
GENERATOR OF WASTE: KATAWBA ENVIRONMENTAL	ACCOUNT NUMBER: 820-537
CUSTOMER: KATAWBA ENVIRONMENTAL	
LOCATION OF WASTE:	
CITY: EDGEMOOR COUNTY: CHESTER	
PHONE NUMBER: 803-417-4568	CONTACT: ALEX AMOS
FAX NUMBER:	
GENERATOR'S SIGNATURE 	DATE: 8-3-16
DESCRIPTION OF WASTE: SOIL WITH VIRGIN PETROLEUM	WASTE CLASS:
TRANSPORTER OF WASTE: <i>Furnell's Hauling</i>	
DATE: 8-3-16	TRUCK NUMBER: WFI
DRIVER'S SIGNATURE <i>William D. Furnell</i>	
**** TO BE COMPLETED BY RICHLAND LANDFILL*****	
DISPOSAL SITE: ( RICHLAND LANDFILL ELGIN, SC	
TICKET NUMBER: 1473256	1279
RECEIVED BY: 	DATE: 8-3-16

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE GENERATOR	<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of			
	3. Generator's Name and Mailing Address <i>KATAWHA ENVIRONMENTAL</i> <i>4278 DYE RD</i> <i>PACONIA SC 29712</i>								
	4. Generator's Phone <i>803 417-4566</i>		5. Transporter 1 Company Name <i>KATAWHA ENVIRONMENTAL</i>			6. US EPA ID Number			
	7. Transporter 2 Company Name		8. US EPA ID Number			A. State Transporter's ID			
	9. Designated Facility Name and Site Address <i>HRZ MTS</i> <i>221 DALTON DR</i> <i>CHARLOTTE, NC</i>		10. US EPA ID Number			B. Transporter 1 Phone			
						C. State Transporter's ID			
NON-HAZARDOUS WASTE TRANSPORTER	11. WASTE DESCRIPTION <i>PURGE WATER USE SITE</i>					12. Containers		13. Total Quantity	14. Unit Wt./Vol.
	a. <i>CS111, ANDERSON RD, ROCK HILL SC</i>					No.	Type		
	b. <i>FORNE MARYS, FINE TOWN RD, ROCK HILL SC</i>					1	Dr	52	Gm
	c. <i>ONE ACCORD, HIGHWAY 9, ROCK HILL SC</i>					1	Dr	7	GAL
	d. <i>WENB II AND E2 STEP 33 COLONY RD ERODIN</i>					3	Dr	148	GAL
	d. <i>WENB II AND E2 STEP 33 COLONY RD ERODIN</i>					1	Dr	15	Gm
G. Additional Descriptions for Materials Listed Above					H. Handling Codes for Wastes Listed Above				
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.									
Printed/Typed Name <i>Doby Means</i>				Signature <i>Doby Means</i>		Date Month Day Year <i>2 13 17</i>			
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Date Month Day Year			
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Date Month Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.									
Printed/Typed Name <i>Mike Herd</i>				Signature <i>Mike Herd</i>		Date Month Day Year <i>2 13 17</i>			



# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address		KATAWHA ENVIRONMENTAL 4278 DYE ROAD EDGEWOOD, SC 29712			
4. Generator's Phone ( )					
5. Transporter 1 Company Name		6. US EPA ID Number		A. State Transporter's ID	
KATAWHA ENVIRONMENTAL				B. Transporter 1 Phone	
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
9. Designated Facility Name and Site Address		10. US EPA ID Number		E. State Facility's ID	
HAZ MAT 221 DALTON DR CHARLOTTE, NC				F. Facility's Phone	
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity	14. Unit Wt./Vol.
PURE WATER UST SIPS		No.	Type		
a. ONE ACCORD, Hwy 9 RICHBURG, SC		1	Tote	187	Gm
b. Jims Varnier, Hwy 1 - McGowan St PAGEL, SC		2	Drum	76	Gm
c. SPORTSMANS CORNER #6, MORRISTON RD CHARL HILL, SC		1	Drum	38	GAL
d. METHEORS OATS, METHEORS OATS DR, ORANBURG SC		1	Drum	23	Gm
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name		Signature		Date	
Cae Funderburk		Cae Funderburk		6   1   16	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name		Signature		Date	
Mike Hinds		Mike Hinds		6   1   16	

NON-HAZARDOUS WASTE



**APPENDIX H**  
**ZONING REGULATIONS**

## ZONING REGULATIONS

One Accord Ministries Site ID 02131 further identified by Chester County Tax ID 1250000059000 is zoned LC (Limited Commercial). A copy of the current zoning regulations were too lengthy for inclusion within this report. This designation does not prohibit the use of onsite drinking water wells or irrigation wells according to Chester County Zoning. The subject site is located in an area serviced by public water and sewer lines. No future development plans include the installation of a drinking water or irrigation well.



**APPENDIX I**  
**FATE TRANSPORT MODELING**

## FATE AND TRANSPORT MODELING

Fate and transport modeling was not required for this scope of work.

**APPENDIX J**  
**ACCESS AGREEMENTS**



# Katawba Environmental, Inc.

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November 16, 2015

Mr. John Darnell Faust  
PO Box 202  
Richburg, SC 29729

Dear Mr. Faust:

On behalf of One Accord Ministries and the South Carolina Department of Health and Environmental Control (SCDHEC) we are requesting access to your property on Lancaster Highway, Richburg, South Carolina.

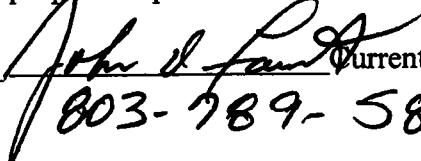
Analytical testing of groundwater sampled from Kee's Service Station / Fireballs Service Station / One Accord Ministries, near your parcel indicated the presence of petroleum hydrocarbons from an underground storage tank (UST) release at the facility. In order to determine the horizontal extent of the release, groundwater sampling and well installation will be required on your property at the locations identified on the attached map. Please be advised remedial efforts will not begin until a full assessment of the release has been completed so your cooperation is greatly appreciated.

Please sign the bottom of this correspondence and remit to my office at 4278 Dye Road, Edgemoor, SC 29712 or scan and send the approval via email to [katawba@comporium.net](mailto:katawba@comporium.net). Please provide us with you phone number so that we contact you regarding this case. Should you need to discuss this matter further please do not hesitate to contact me at (803) 327-0469 office or (803) 417-4568 cell.

Sincerely,  
KATAWBA ENVIRONMENTAL, INC.

Alex "Chip" Amos, PG CEO

As owner/representative of the parcel of property described above, I hereby grant Katawba Environmental, Inc. and all subcontractors access to my property for the purpose of permanent well installation and groundwater sampling.

  
John D. Faust Current Owner/Representative  
803-789-5856



# Application for Encroachment Permit

S.C. Department of Transportation

Form 637 (Rev 10/2015)

## Contact Information

**Applicant:** Katawba Environmental, Inc.  
**Street:** 4278 Dye Rd  
**City:** Edgemoor  
**State:** SC                    ▾    **Zip Code:** 29712  
**Phone:** (803)417-4568    **Fax:** (843)225-1360  
**Email:** katawba@comporium.net  
**Contact:** Alex Amos

## Project Location

**Primary County:** Chester                    ▾

<b>Chester</b>	<b>Lancaster Hwy</b>

**1. Type of Encroachment:** ENVIRONMENTAL

Installation of monitoring wells in SCDOT ROW.

**2. Description of Location:**

3570 Lancaster Highway, Richburg, SC. Installation of monitoring wells as indicated by the attached site drawing.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)

3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. DISCHARGES OF STORM WATER AND NON-STORM WATER: Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein, and the applicant agrees to indemnify and hold SCDOT harmless from and against any and all claims for personal injury and/or property damage which may be sustained by reason of the construction, maintenance or existence of said encroachment on the SCDOT's right of way.

Applicant's Name: Alex Amos

Date: 11/16/2015

(Please print or type)

Applicant's Sig: \_\_\_\_\_

Title: *CEO*

### **For Office Use Only**

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

**See Attached Special Provision and/or Permit Requirements**

NPDES Permit

Nbr:

(Date received by res. Maint. Engr.)

(SCDOT Approval)

(Date)

## Application for Encroachment Permit

### General Provisions

1. **DEFINITIONS:** The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.
2. **NOTICE PRIOR TO STARTING WORK:** Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.
3. **PERMIT SUBJECT TO INSPECTION:** This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.
4. **PROTECTION OF HIGHWAY TRAFFIC:** The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.
5. **STANDARDS OF CONSTRUCTION:** All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.
6. **FUTURE MOVING OF PHYSICAL APPURTENANCES:** If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee.
7. **RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES:** If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee.
8. **COSTS:** All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the Permittee.
9. **ADDITIONAL PERMISSIONS:**
  - (a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.
  - (b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.

- (c) There shall be no excavation of soil nearer than two feet to any public utility line or appurtenant facility except with the consent of the owner thereof, or except upon special permission of this Department after an opportunity to be heard is given the owner of such line or appurtenant facility.
10. **ADDITIONAL WORK PERFORMANCE:**
- (a) All crossings over the highway shall be constructed in accordance with "Specifications for Overhead Crossings of Light and Power Transmission Lines and Telegraph Lines over each other and over Highway Rights of Way in South Carolina," as approved by the Public Service Commission of South Carolina and effective as of date of this permit.
- (b) All tunneling, boring, or jacking shall be done in such a way as not to disturb the highway surfacing.
- (c) No pavement shall be cut unless specifically authorized herein.
- (d) No excavation shall be nearer than three feet to the edge of pavement unless specifically authorized herein.
- (e) Underground facilities will be located at minimum depths as defined in the "Utility Accommodations Manual" for the transmittant, generally as follows: 4 feet minimum for hazardous or dangerous transmittant, 3 feet minimum for other lines. The Department may approve shallower depths if adequate protection is provided. Such approval must be obtained in writing.
- (f) Service and other small diameter pipes shall be jacked, driven, or otherwise forced underneath the pavements on any surfaced road without disturbing the pavement. The section under the highway pavement and within a distance of three (3) feet on either side shall be continuous without joints.
11. **ACCESS:**
- (a) Permittee is responsible for maintaining reasonable access to private driveways during construction.
- (b) It is expressly provided that, with respect to any limited access highway, the Permittee shall not have or gain access from the main traveled way of the highway, or the on or off ramps to such facility, except upon approval by the Department.
12. **DRIVEWAYS:**
- (a) The existing crown of the highway shall be continued to the outside shoulder line of the highway.
- (b) If the driveway or approach is concrete pavement, the pavement shall be constructed at least 6 inches thick and with a minimum of class 2500 concrete. There shall be a bituminous expansion joint, not less than 3/4 inches in thickness, placed between the highway paving and the paving of the approach for the full width of the approach.
13. **BEAUTIFICATION:**
- (a) All trees, plants, flowers, etc. shall be placed in accordance with the provisions specifically stipulated herein.
- (b) All trees, plants, flowers, etc. shall be maintained by, and at the expense of, the Permittee and the provisions of this permit shall become null and void, if and when said Permittee ceases to maintain aid trees, plants, flowers, etc.
14. **AS-BUILT PLANS:**
- (a) The applicant shall provide the Department with survey-quality as-built plans in accordance with the requirements set forth in the Department's "A Policy for Accommodating Utilities on Highway Rights of Way".



**APPENDIX K**  
**QAPP CHECKLIST**

QAPP Contractor Checklist One Accord Ministries Site ID 02131

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number	X		
3	Is name, address, & phone number of current property owner	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been	X		
16	Has the monitoring well installation and development dates been	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2			X
31	Have recommendations for further action been provided and	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk			X
37	Has the topographic map been provided with all required elements? (Figure	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements?	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?	X		
47	Have the soil boring/field screening logs been provided?	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided?	X		
52	Has all fate and transport modeling been provided? (Appendix I)	X		
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** 30 ft. Date Started: 7/15/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded       Welded  
 Diam.: 2  
 Type:  PVC       Galvanized  
 Steel       Other  
2 in. to 20 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes       No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** MW-16

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 30 ft. and 20 ft.      NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.      USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)       No

**4. ABANDONMENT:**       Yes       No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>
<u>SAND Brown Silty</u>	<u>10</u>	<u>30</u>

**13. PUMPING LEVEL Below Land Surface.**  
NA ft. after NA hrs. Pumping NA G.P.M.  
 Pumping Test:  Yes (please enclose)       No  
 Yield: NA

**14. WATER QUALITY**  
 Chemical Analysis  Yes       No      Bacterial Analysis  Yes       No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**       Yes       No  
 Installed from 30 ft. to 19 ft.  
 Effective size 2      Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes       No  
 Neat Cement       Bentonite       Bentonite/Cement       Other \_\_\_\_\_  
 Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes       No      Type: \_\_\_\_\_ Amount: \_\_\_\_\_

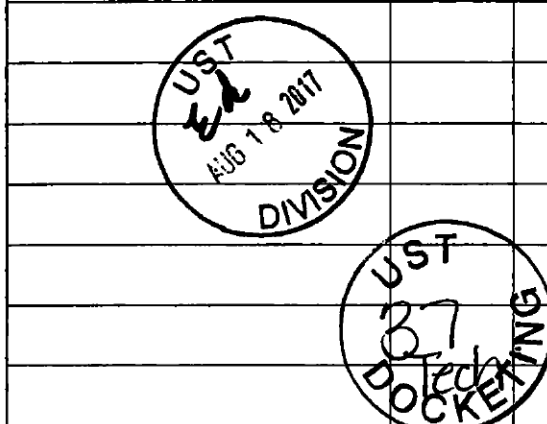
**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:       Submersible       Jet (shallow)       Turbine  
 Jet (deep)       Reciprocating       Centrifugal

**19. WELL DRILLER:** Tommy Bolyard      CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level:  A       B       C       D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2255      Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: \_\_\_\_\_ Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**       Mud Rotary       Jetted       Bored  
 Dug       Air Rotary       Driven  
 Cable tool       Other



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord  
(last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 30 ft. Date Started: 7/15/17  
Date Completed: 7/18/17

**3. PUBLIC SYSTEM NAME:** MW-17 **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_

**10. CASING:**  Threaded  Welded  
Diam.: 2  
Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 20 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
Height: Above  Below   
Surface 2 inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
Type: PVC Diam.: 2 inch  
Slot/Gauge: .01 Length: 10 feet  
Set Between: 30 ft. and 20 ft.  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30

**12. STATIC WATER LEVEL** 27.50 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from 30 ft. to 19 ft.  
Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under  
my direction and this report is true to the best of my knowledge and belief.

Signed: \_\_\_\_\_ Date: 8/1/17  
Well Driller

If D Level Driller, provide supervising driller's name:

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

<input type="checkbox"/> Residential	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Process
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Air Conditioning	<input type="checkbox"/> Emergency
<input type="checkbox"/> Test Well	<input checked="" type="checkbox"/> Monitor Well	<input type="checkbox"/> Replacement

**2. LOCATION OF WELL: COUNTY: Chester**

Name: One Accord

Street Address: 3570 Lancaster Highway

City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** 32 ft. Date Started: 7/15/17

Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded

Diam.: 2

Type:  PVC  Galvanized  
 Steel  Other

2 in. to 22 ft. depth

Height: Above  Below  Surface 2 INCHES ft.

Weight \_\_\_\_\_ lb./ft.

Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME: MW-18 PUBLIC SYSTEM NUMBER:**

**11. SCREEN:**

Type: PVC Diam.: 2 inch

Slot/Gauge: .01 Length: 10 feet

Set Between: 32 ft. and 22 ft.

NOTE: MULTIPLE SCREENS USE SECOND SHEET

Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 28.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	12	32

**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 32 ft. to 21 ft.

Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 20 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction

Type Petroleum

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846**

Address: (Print) \_\_\_\_\_ Level: A  B  C  D  (circle one)

17538 Greenhill Road  
Charlotte, NC 28278

Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17

Well Driller

If D Level Driller, provide supervising driller's name: \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** MW-19

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	12	32

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/15/17  
32 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 22 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above \_\_\_\_\_ Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 32 ft. and 22 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 28.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 32 ft. to 21 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 20 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
 \_\_\_\_\_  
 Well Driller  
 If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** 28 ft. Date Started: 7/15/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 18 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 2 inches  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-20

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: 01 Length: 10 feet  
 Set Between: 28 ft. and 18 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS  
 USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 28 ft. to 18 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 17 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D  (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: Tommy Bolyard Date: 8/1/17  
 \_\_\_\_\_  
 Well Driller  
 If D Level Driller, provide supervising driller's name:







## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft.      Date Started: 7/15/17  
 \_\_\_\_\_ ft.      Date Completed: 7/18/17

**3. PUBLIC SYSTEM NAME:** MW-23      **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_

**10. CASING:**  Threaded       Welded  
 Diam.: 2  
 Type:  PVC       Galvanized  
           Steel       Other  
2 in. to 25 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ ft.      Below  \_\_\_\_\_ ft.  
 Surface 2 INCHES  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?       Yes       No

**4. ABANDONMENT:**       Yes       No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
 Type: PVC      Diam.: 2 inch  
 Slot/Gauge: .01      Length: 10 feet  
 Set Between: 35 ft. and 25 ft.      NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.      USE SECOND SHEET  
 Sieve Analysis       Yes (please enclose)       No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	3	27
SAND Brown Silty	8	35

**12. STATIC WATER LEVEL** 34.00 ft. below land surface after 24 hours

**5. REMARKS:**

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)       No  
 Yield: na

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**14. WATER QUALITY**  
 Chemical Analysis  Yes       No      Bacterial Analysis       Yes       No  
 Please enclose lab results.

**6. TYPE:**       Mud Rotary       Jetted       Bored  
           Dug       Air Rotary       Driven  
           Cable tool       Other

**15. ARTIFICIAL FILTER** (filter pack)       Yes       No  
 Installed from 35 ft. to 24 ft.  
 Effective size 2      Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes       No  
 Neat Cement       Bentonite       Bentonite/Cement       Other \_\_\_\_\_  
 Depth: From 23 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected       Yes       No      Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_      Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:       Submersible       Jet (shallow)       Turbine  
           Jet (deep)       Reciprocating       Centrifugal

**19. WELL DRILLER:** Tommy Bolyard      CERT. NO.: 1846  
 Address: (Print) 17538 Greenhill Road      Level: A  B  C  D  (circle one)  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233      Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard      Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
 (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-24

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>
<u>SAND Brown Silty</u>	<u>4</u>	<u>24</u>
<u>Boulder</u>	<u>4</u>	<u>28</u>
<u>SAND Brown Silty</u>	<u>7</u>	<u>35</u>

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/15/17  
35 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 25 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below  \_\_\_\_\_  
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb/ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 35 ft. and 25 ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 34.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 35 ft. to 24 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 23 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17  
 \_\_\_\_\_  
 Well Driller  
 If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
                     (last)  (first)  
 Address: PO Box 220  
 City: Richburg             State: SC             Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

<input type="checkbox"/> Residential	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Process
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Air Conditioning	<input type="checkbox"/> Emergency
<input type="checkbox"/> Test Well	<input checked="" type="checkbox"/> Monitor Well	<input type="checkbox"/> Replacement

**2. LOCATION OF WELL:**             **COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg             Zip: 29729-0000  
 Latitude: \_\_\_\_\_             Longitude: \_\_\_\_\_

**9. WELL DEPTH** (completed)             Date Started: 7/17/17  
30 ft.             Date Completed: 7/18/17

**10. CASING:**  Threaded    Welded  
 Diam.: 2 \_\_\_\_\_  
 Type:  PVC    Galvanized  
           Steel    Other  
2 in. to 20 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 4 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes    No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_   **PUBLIC SYSTEM NUMBER:**  
MW-25

**11. SCREEN:**  
 Type: PVC             Diam.: 2 inch  
 Slot/Gauge: .01             Length: 10 feet  
 Set Between: 30 ft. and 20 ft.   **NOTE: MULTIPLE SCREENS**  
                     \_\_\_\_\_ ft. and \_\_\_\_\_ ft.   **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes    No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 28.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30

**14. WATER QUALITY**  
 Chemical Analysis  Yes    No    Bacterial Analysis  Yes    No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER** (filter pack)  Yes    No  
 Installed from 30 ft. to 19 ft.  
 Effective size 2             Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes    No  
 Neat Cement    Bentonite    Bentonite/Cement    Other \_\_\_\_\_  
 Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w \_\_\_\_\_ direction  
 Type Petroleum  
 Well Disinfected  Yes    No    Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible    Jet (shallow)    Turbine  
           Jet (deep)            Reciprocating    Centrifugal

**19. WELL DRILLER: Tommy Bolyard**             **CERT. NO.:** 1846  
 Address: (Print)             Level:  A    B    C    D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2255             Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: \_\_\_\_\_ Date: 8/1/17  
 Well Driller: \_\_\_\_\_

**6. TYPE:**  Mud Rotary    Jetted    Bored  
 Dug            Air Rotary    Driven  
 Cable tool    Other

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY: Chester**  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**9. WELL DEPTH (completed)** 28 ft. Date Started: 7/15/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2 Type:  PVC  Galvanized  
 Steel  Other  
 2 in. to 18 ft. depth  
 Height: Above  Below  Surface 4 INCHES ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
 MW-26

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 28 ft. and 18 ft. NOTE: MULTIPLE SCREENS  
 USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
 na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 28 ft. to 18 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 17 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) Level: A B C D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 348 2255 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**  
 (Use a 2nd sheet if needed)

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller  
 If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

<b>1. WELL OWNER INFORMATION:</b> Name: <u>One Accord</u> (last) (first) Address: <u>PO Box 220</u> City: <u>Richburg</u> State: <u>SC</u> Zip: <u>29729-0000</u> Telephone: Work: _____ Home: _____	<b>7. PERMIT NUMBER:</b> <u>02131</u> <b>8. USE:</b> <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement																																							
<b>2. LOCATION OF WELL: COUNTY: Chester</b> Name: <u>One Accord</u> Street Address: <u>3570 Lancaster Highway</u> City: <u>Richburg</u> Zip: <u>29729-0000</u> Latitude: _____ Longitude: _____	<b>9. WELL DEPTH (completed)</b> Date Started: <u>7/15/17</u> <u>28</u> ft.    Date Completed: <u>7/18/17</u>																																							
<b>3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:</b> <u>MW-27</u>	<b>10. CASING:</b> <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: <u>2</u> Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other <u>2</u> in. to <u>18</u> ft. depth _____ in. to _____ ft. depth																																							
<b>4. ABANDONMENT:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Grouted Depth: from _____ ft. to _____ ft.	<b>11. SCREEN:</b> Type: <u>DVC</u> Diam.: <u>2</u> inch Slot/Gauge: <u>.01</u> Length: <u>10</u> feet Set Between: <u>28</u> ft. and <u>18</u> ft.    NOTE: MULTIPLE SCREENS _____ ft. and _____ ft.    USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Formation Description</th> <th style="width: 15%;">*Thickness of Stratum</th> <th style="width: 15%;">Depth to Bottom of Stratum</th> </tr> </thead> <tbody> <tr> <td><u>CLAY Orange Sandy</u></td> <td style="text-align: center;"><u>20</u></td> <td style="text-align: center;"><u>20</u></td> </tr> <tr> <td><u>SAND Brown Silty</u></td> <td style="text-align: center;"><u>8</u></td> <td style="text-align: center;"><u>28</u></td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum	<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>	<u>SAND Brown Silty</u>	<u>8</u>	<u>28</u>																															<b>12. STATIC WATER LEVEL</b> <u>26.00</u> ft. below land surface after 24 hours <b>13. PUMPING LEVEL</b> Below Land Surface. <u>na</u> ft. after <u>na</u> hrs. Pumping <u>na</u> G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: <u>na</u>
Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum																																						
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<b>5. REMARKS:</b>   *Indicate Water Bearing Zones (Use a 2nd sheet if needed)	<b>14. WATER QUALITY</b> Chemical Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.																																							
<b>6. TYPE:</b> <input checked="" type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other	<b>15. ARTIFICIAL FILTER (filter pack)</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No installed from <u>28</u> ft. to <u>18</u> ft. Effective size <u>2</u> Uniformity Coefficient <u>Coarse</u>																																							
<b>6. TYPE:</b> <input checked="" type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other	<b>16. WELL GROUTED?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From <u>17</u> ft. to <u>0</u> ft.																																							
<b>6. TYPE:</b> <input checked="" type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other	<b>17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:</b> <u>0</u> ft. w direction Type <u>Petroleum</u> Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Type: _____ Amount: _____																																							
<b>6. TYPE:</b> <input checked="" type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other	<b>18. PUMP:</b> Date installed: _____    Not installed <input checked="" type="checkbox"/> Mfr. Name: _____    Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input checked="" type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal																																							
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<b>6. TYPE:</b> <input checked="" type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other	<b>20. WATER WELL DRILLER'S CERTIFICATION:</b> This well was drilled under my direction and this report is true to the best of my knowledge and belief.  Signed: <u>[Signature]</u> Date: <u>8/1/17</u> Well Driller If D Level Driller, provide supervising driller's name:																																							



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord  
(last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH** (completed) Date Started: 7/16/17  
59 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
Diam.: 2  
Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 49 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 2 inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:**  
MW-28

**11. SCREEN:**  
Type: PVC Diam.: 2 inch  
Slot/Gauge: .01 Length: 10 feet  
Set Between: 59 ft. and 49 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 53.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	18	38
Boulder	2	40
SAND Brown Silty	19	59

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER** (filter pack)  Yes  No  
Installed from 59 ft. to 48 ft.  
Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 47 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 8/1/17  
Well Driller

If D Level Driller, provide supervising driller's name:

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 59 ft. Date Started: 7/16/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 49 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** MW-30 PUBLIC SYSTEM NUMBER: \_\_\_\_\_

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 59 ft. and 49 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 51.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	3	27
SAND Brown Silty	32	59

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 59 ft. to 49 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 48 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2253 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:





## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 57 ft. Date Started: 7/16/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 47 ft. depth  
 Height: Above \_\_\_\_\_ Below   
 Surface 2 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:**  
MW-31

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 57 ft. and 47 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 54.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	29	57

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 57 ft. to 46 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 45 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w/ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

Signed: Date: 8/1/17  
 Well Driller  
 If D Level Driller, provide supervising driller's name: \_\_\_\_\_



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester
Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 7/17/17
56 ft. Date Completed: 7/18/17

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized Steel Other
2 in. to 46 ft. depth
Height: Above Below Surface inc/inches lb./ft. Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: MW-32

11. SCREEN:
Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 10 feet
Set Between: 56 ft. and 46 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

4. ABANDONMENT: Yes No
Grouted Depth: from ft. to ft.

12. STATIC WATER LEVEL 52.00 ft. below land surface after 24 hours

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy, SAND Brown Silty, Boulder, SAND Brown Silty.

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: Yes (please enclose) No
Yield: na

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 56 ft. to 45 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUDED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 44 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2253 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17
Well Driller

If D Level Driller, provide supervising driller's name:

5. REMARKS:

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool Other





# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
MW-34

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28
Boulder	3	31
SAND Brown Silty	25	56

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 56 ft. Date Started: 7/17/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 46 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 56 ft. and 46 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 52.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 56 ft. to 45 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 44 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846**  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

<b>1. WELL OWNER INFORMATION:</b> Name: <u>One Accord</u> (last)   (first) Address: <u>PO Box 220</u> City: <u>Richburg</u> State: <u>SC</u> Zip: <u>29729-0000</u>  Telephone: Work: _____ Home: _____			<b>7. PERMIT NUMBER:</b> 02131																																																																																								
<b>2. LOCATION OF WELL:</b> <b>COUNTY:</b> Chester Name: <u>One Accord</u> Street Address: <u>3570 Lancaster Highway</u> City: <u>Richburg</u> Zip: <u>29729-0000</u>  Latitude: _____ Longitude: _____			<b>8. USE:</b> <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement																																																																																								
<b>3. PUBLIC SYSTEM NAME:</b> <b>PUBLIC SYSTEM NUMBER:</b> <u>DW-5</u>			<b>9. WELL DEPTH (completed)</b> Date Started: <u>7/19/17</u> <u>150</u> ft.   Date Completed: <u>7/22/17</u>																																																																																								
<b>4. ABANDONMENT:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Grouted Depth: from _____ ft. to _____ ft.			<b>10. CASING:</b> <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: <u>2</u> Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other <u>2</u> in. to <u>145</u> ft. depth <u>6</u> in. to <u>75</u> ft. depth  Height: Above <input type="checkbox"/> Below <input checked="" type="checkbox"/> Surface <u>2</u> INCHES ft. Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																																																																								
<b>11. SCREEN:</b> Type: <u>PVC</u> Diam.: <u>2 inch</u> Slot/Gauge: <u>.01</u> Length: <u>5 feet</u> Set Between: <u>150</u> ft. and <u>145</u> ft. ft. and _____ ft. Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			<b>12. STATIC WATER LEVEL</b> <u>35.00</u> ft. below land surface after 24 hours  <b>13. PUMPING LEVEL</b> Below Land Surface. <u>na</u> ft. after <u>na</u> hrs. Pumping <u>na</u> G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: <u>na</u>																																																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:75%;">Formation Description</th> <th style="width:12.5%;">*Thickness of Stratum</th> <th style="width:12.5%;">Depth to Bottom of Stratum</th> </tr> </thead> <tbody> <tr> <td>CLAY Orange Sandy</td> <td style="text-align:center">20</td> <td style="text-align:center">20</td> </tr> <tr> <td>SAND Brown Silty</td> <td style="text-align:center">10</td> <td style="text-align:center">30</td> </tr> <tr> <td>Boulder</td> <td style="text-align:center">2</td> <td style="text-align:center">32</td> </tr> <tr> <td>SAND Brown Silty</td> <td style="text-align:center">43</td> <td style="text-align:center">75</td> </tr> <tr> <td>Rock Granite</td> <td style="text-align:center">75</td> <td style="text-align:center">150</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum	CLAY Orange Sandy	20	20	SAND Brown Silty	10	30	Boulder	2	32	SAND Brown Silty	43	75	Rock Granite	75	150																																																																						<b>14. WATER QUALITY</b> Chemical Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No     Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.	
Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum																																																																																									
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<b>15. ARTIFICIAL FILTER (filter pack)</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from <u>150</u> ft. to <u>142</u> ft. Effective size <u>2</u> Uniformity Coefficient <u>Coarse</u>			<b>16. WELL GROUTED?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From <u>140</u> ft. to <u>0</u> ft.																																																																																								
<b>17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:</b> <u>0</u> ft. w. direction Type <u>Petroleum</u> Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No     Type: _____ Amount: _____			<b>18. PUMP:</b> Date installed: _____ Not installed <input checked="" type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal																																																																																								
*Indicate Water Bearing Zones  (Use a 2nd sheet if needed)			<b>19. WELL DRILLER: Tommy Bolyard</b> <b>CERT. NO.:</b> 1846 Address: (Print)                                     Level: A B C D (circle one) <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 17538 Greenhill Road Charlotte, NC 28278 Telephone No.: <u>803 348 2235</u> Fax No.: _____																																																																																								
<b>5. REMARKS:</b>			<b>20. WATER WELL DRILLER'S CERTIFICATION:</b> This well was drilled under my direction and this report is true to the best of my knowledge and belief.  Signed: <u>Tommy Bolyard</u> Date: <u>8/1/17</u> Well Driller																																																																																								
<b>6. TYPE:</b> <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other			If D Level Driller, provide supervising driller's name:																																																																																								



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester

Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 7/19/17
150 ft. Date Completed: 7/22/17

10. CASING: Threaded Welded
Diam.: 2
Type: PVC Galvanized
Steel Other
2 in. to 145 ft. depth
6 in. to 75 ft. depth
Height: Above Below Surface 2 inches ft.
Weight lb./ft.
Drive Shoe? Yes No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:
DW-6

4. ABANDONMENT: Yes No

Grouted Depth: from ft. to ft.

11. SCREEN:
Type: PVC Diam.: 2 inch
Slot/Gauge: .01 Length: 5 feet
Set Between: 150 ft. and 145 ft. NOTE: MULTIPLE SCREENS
USE SECOND SHEET
Sieve Analysis Yes (please enclose) No

12. STATIC WATER LEVEL 35.00 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: Yes (please enclose) No
Yield: ft.

14. WATER QUALITY
Chemical Analysis Yes No Bacterial Analysis Yes No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) Yes No
Installed from 150 ft. to 142 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? Yes No
Neat Cement Bentonite Bentonite/Cement Other
Depth: From 140 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction
Type Petroleum
Well Disinfected Yes No Type: Amount:

18. PUMP: Date installed: Not installed
Mr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 548 2255 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under
my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17
Well Driller

If D Level Driller, provide supervising driller's name:

Table with 3 columns: Formation Description, Thickness of Stratum, Depth to Bottom of Stratum. Rows include CLAY Orange Sandy, SAND Brown Silty, Boulder, SAND Brown Silty, Rock Granite.

5. REMARKS:

6. TYPE: Mud Rotary Jettied Bored
Dug Air Rotary Driven
Cable tool Other



**Water Well Record**  
**Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/19/17  
 \_\_\_\_\_ ft. Date Completed: 7/22/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
DW-7

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28
Boulder	3	31
SAND Brown Silty	44	75
Rock Granite	75	150

**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 345 2255 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name: \_\_\_\_\_

**5. REMARKS:**  
 \_\_\_\_\_  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)







**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** 150 ft. Date Started: 7/19/17  
 Date Completed: 7/22/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** DW-9

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	47	75
Rock Granite	75	150

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) 17538 Greenhill Road Level: A B C D (circle one)  
Charlotte, NC 28278      
 Telephone No.: 803 548 2255 Fax No.:

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: [Signature] Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 7/19/17  
29 ft. Date Completed: 7/20/17

**10. CASING:**  Threaded  Welded  
Diam.: 4  
Type:  PVC  Galvanized  
 Steel  Other  
4 in. to 14 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 2 inches \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
RW-1

**11. SCREEN:**  
Type: PVC Diam.: 4 inch  
Slot/Gauge: .01 Length: 15 feet  
Set Between: 29 ft. and 14 ft. **NOTE: MULTIPLE SCREENS**  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	9	29

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

**14. WATER QUALITY**  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from 29 ft. to 13 ft.  
Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
Address: (Print) \_\_\_\_\_ Level: A  B  C  D  (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: Tommy Bolyard Date: 8/1/17  
Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



Water Well Record
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)
Address: PO Box 220
City: Richburg State: SC Zip: 29729-0000
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well Monitor Well Replacement

2. LOCATION OF WELL: COUNTY: Chester

Name: One Accord
Street Address: 3570 Lancaster Highway
City: Richburg Zip: 29729-0000
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 7/19/17
29 ft. Date Completed: 7/20/17

10. CASING: [X] Threaded [ ] Welded
Diam.: 4
Type: [X] PVC [ ] Galvanized
[ ] Steel [ ] Other
4 in. to 14 ft. depth
Height: Above [ ] Below [X]
Surface 2 inches ft.
Weight lb./ft.
Drive Shoe? [ ] Yes [X] No

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: RW-2

4. ABANDONMENT: [ ] Yes [X] No
Grouted Depth: from ft. to ft.

11. SCREEN:
Type: PVC Diam.: 4 inch
Slot/Gauge: .01 Length: 15 feet
Set Between: 29 ft. and 14 ft. NOTE: MULTIPLE SCREENS
USE SECOND SHEET
Sieve Analysis [ ] Yes (please enclose) [X] No

12. STATIC WATER LEVEL 26.00 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
na ft. after na hrs. Pumping na G.P.M.
Pumping Test: [ ] Yes (please enclose) [ ] No
Yield: na

Table with 3 columns: Formation Description, \*Thickness of Stratum, Depth to Bottom of Stratum

CLAY Orange Sandy 20 20

SAND Brown Silty 9 29

14. WATER QUALITY
Chemical Analysis [X] Yes [ ] No Bacterial Analysis [ ] Yes [X] No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) [X] Yes [ ] No
Installed from 29 ft. to 13 ft.
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED? [X] Yes [ ] No
[X] Neat Cement [ ] Bentonite [ ] Bentonite/Cement [ ] Other
Depth: From 12 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w direction
Type Petroleum
Well Disinfected [ ] Yes [X] No Type: Amount:

18. PUMP: Date installed: Not installed [X]
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: [ ] Submersible [ ] Jet (shallow) [ ] Turbine
[ ] Jet (deep) [ ] Reciprocating [ ] Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846
Address: (Print) Level: A B C D (circle one)
17538 Greenhill Road
Charlotte, NC 28278
Telephone No.: 803 348 2255 Fax No.:

\*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

5. REMARKS:
6. TYPE: [X] Mud Rotary [ ] Jetted [X] Bored
[ ] Dug [ ] Air Rotary [ ] Driven
[ ] Cable tool [ ] Other

Signed: Tommy Bolyard Date: 8/1/17
Well Driller

If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

<b>1. WELL OWNER INFORMATION:</b> Name: <u>One Accord</u> (last) (first) (first) Address: <u>PO Box 220</u> City: <u>Richburg</u> State: <u>SC</u> Zip: <u>29729-0000</u> Telephone: Work: _____ Home: _____		<b>7. PERMIT NUMBER:</b> <u>02131</u>																																
<b>2. LOCATION OF WELL:</b> COUNTY: <u>Chester</u> Name: <u>One Accord</u> Street Address: <u>3570 Lancaster Highway</u> City: <u>Richburg</u> Zip: <u>29729-0000</u> Latitude: _____ Longitude: _____		<b>8. USE:</b> <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="checked" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement																																
<b>3. PUBLIC SYSTEM NAME:</b> _____ <b>PUBLIC SYSTEM NUMBER:</b> _____ <u>RW-3</u>		<b>9. WELL DEPTH (completed)</b> Date Started: <u>7/19/17</u> <u>29</u> ft.      Date Completed: <u>7/20/17</u>																																
<b>4. ABANDONMENT:</b> <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.		<b>10. CASING:</b> <input checked="checked" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: <u>4</u> Type: <input checked="checked" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other <u>4</u> in. to <u>14</u> ft. depth in. to _____ ft. depth																																
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">Formation Description</th> <th style="width:20%;">*Thickness of Stratum</th> <th style="width:20%;">Depth to Bottom of Stratum</th> </tr> </thead> <tbody> <tr> <td>CLAY Orange Sandy</td> <td style="text-align: center;">20</td> <td style="text-align: center;">20</td> </tr> <tr> <td>SAND Brown Silty</td> <td style="text-align: center;">9</td> <td style="text-align: center;">29</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum	CLAY Orange Sandy	20	20	SAND Brown Silty	9	29																						Height: Above _____ Below <input checked="checked" type="checkbox"/> Surface $\Delta$ INCHES _____ ft. Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No		
Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum																																
CLAY Orange Sandy	20	20																																
SAND Brown Silty	9	29																																
<b>5. REMARKS:</b> _____ _____ _____ _____		<b>11. SCREEN:</b> Type: <u>PVC</u> Diam.: <u>4 inch</u> Slot/Gauge: <u>.01</u> Length: <u>15 feet</u> Set Between: <u>29</u> ft. and <u>14</u> ft. _____ ft. and _____ ft. <b>NOTE: MULTIPLE SCREENS USE SECOND SHEET</b> Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="checked" type="checkbox"/> No																																
<b>*Indicate Water Bearing Zones</b> (Use a 2nd sheet if needed)		<b>12. STATIC WATER LEVEL</b> <u>26.00</u> ft. below land surface after 24 hours																																
<b>6. TYPE:</b> <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jettied <input checked="checked" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		<b>13. PUMPING LEVEL Below Land Surface.</b> <u>na</u> ft. after <u>na</u> hrs. Pumping <u>na</u> G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: <u>na</u>																																
<b>19. WELL DRILLER: Tommy Bolyard</b> <b>CERT. NO.: 1846</b> Address: (Print)      Level: <input type="checkbox"/> A <input checked="checked" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D (circle one) <u>17538 Greenhill Road</u> <u>Charlotte, NC 28278</u> Telephone No.: <u>803 348 2255</u> Fax No.: _____		<b>14. WATER QUALITY</b> Chemical Analysis <input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No    Bacterial Analysis <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No Please enclose lab results.																																
<b>20. WATER WELL DRILLER'S CERTIFICATION:</b> This well was drilled under my direction and this report is true to the best of my knowledge and belief.		<b>15. ARTIFICIAL FILTER (filter pack)</b> <input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No Installed from <u>29</u> ft. to <u>13</u> ft. Effective size <u>2</u> Uniformity Coefficient <u>Coarse</u>																																
<b>Signed:</b> <u>Tommy Bolyard</u> Date: <u>8/1/17</u> Well Driller		<b>16. WELL GROUTED?</b> <input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="checked" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From <u>12</u> ft. to <u>0</u> ft.																																
<b>If D Level Driller, provide supervising driller's name:</b> _____		<b>17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:</b> <u>0</u> ft. <u>w</u> direction Type <u>Petroleum</u> Well Disinfected <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No    Type: _____ Amount: _____																																



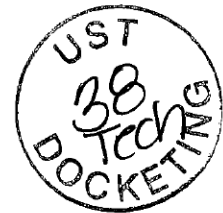
# Katawba Environmental, Inc.

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September 26, 2017

Mr. Ed Mendenhall  
SCDHEC  
Assessment and Corrective Action Division  
Underground Storage Tank Program  
Bureau of Land and Waste Management  
2600 Bull Street  
Columbia, South Carolina 29201-1708

**RE: Tier II Report Addendum  
One Accord Ministries  
UST Permit #02131 CA #48356  
3570 Lancaster Highway  
Richburg, South Carolina**



Dear Mr. Mendenhall:

Katawba Environmental, Inc. (Katawba) has prepared this Tier II Report Addendum for the above-referenced facility for your review. This Tier II Assessment Addendum was conducted in response to South Carolina Department of Health and Environmental Control (SCDHEC) correspondence dated August 21, 2014.

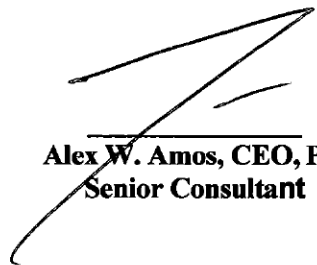
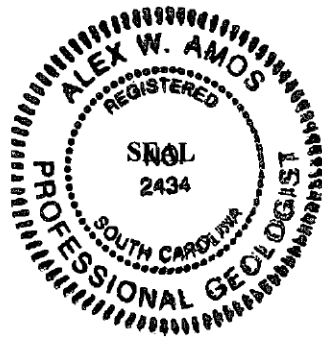
The vertical and horizontal extent of the plume has been defined. It is recommended that multiple AFVR Events be conducted as the next appropriate scope of work. Should you have any questions do not hesitate to contact us at (803) 327-0469.

Sincerely,  
**KATAWBA ENVIRONMENTAL, INC. #18**

  
Alex W. Amos, CEO, PG  
Senior Consultant



***Tier II Report***  
**One Accord**  
**3570 Lancaster Highway**  
**Richburg, SC**  
**UST Permit #02131**



Alex W. Amos, CEO, PG  
Senior Consultant

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## **1.0 INTRODUCTION**

Katawba Environmental, Inc. has been contracted by Ms. Angel Hough to complete a Tier II Assessment for One Accord Ministries. The Subject Site (Site ID 02131) is located at 3570 Lancaster Highway in Richburg, South Carolina (Appendix A, Figure 1). The subject site currently operates as youth ministry for Union ARP Church. The facility no longer retails petroleum products.

The surrounding area is mixed residential and commercial development. The subject site is abutted by residential structures to the north, south, east and west. First Citizens Bank is located approximately 421 feet northeast, the entrance for Lewisville Middle school is located approximately 260 feet east and Union ARP Church is located approximately 560 feet southwest. The nearest permitted UST site appears to be in excess of 2500 feet from the subject site.

The release at the subject site was reported March 23, 2009. An Initial Groundwater Assessment was conducted in November 2012. A Tier I was conducted in March 2014. The findings of the Tier I indicated further assessment was warranted to delineate the vertical and horizontal extent of the petroleum hydrocarbon release. The approval for this Tier II scope of work was approved in August 2014. Findings of the Tier II Assessment indicated that the plume extends approximately 420 feet from the source in a west southwestern direction. 0.06 feet of free product was present in monitoring well MW3 at the initial time of the assessment.

- This project included the installation of field screening boring installation to determine the extent of the petroleum hydrocarbon plume. Installation of monitoring wells MW1R, MW9R, MW10R and monitoring wells numbered MW5 through MW37 were completed during this scope of work. Deep wells DW1 through DW9 and recovery wells RW1, RW2 and RW3 were installed during this scope of work. As directed by SCDHEC the installation of deep wells within the known free product zone was not conducted. Deep well installation was also avoided near drinking water wells.
- Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, two septic tanks and eight drinking water wells were noted to be within the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern

ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

- Monitoring wells MW1, MW2, MW16, MW19, MW20, MW22, MW24, MW26, MW29, MW31, MW33, DW1, DW3, DW5, DW6, DW7, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Monitoring well MW3 contained 0.06 feet of free product at the time the assessment was conducted.

## **1.1 Site Information**

The responsible party for the subject site is One Accord Ministries, PO Box 220, Richburg, South Carolina 29729. Angel Hough is the contact for One Accord Ministries and can be communicated with via mail or phone at (803) 804-0253. According to Chester County Tax Assessor records the parcel is currently owned by owned by Angela D. Hough and Melvin E. Hugh Sr. Survivorship, PO Box 220, Richburg, South Carolina 29729. The subject site is a square shaped parcel that is occupied by one primary structure and a storage unit in the rear of the facility. The subject site is listed with the Chester County Assessor's Office as TM 125-00-00-059-000.

## **2.0 ASSESSMENT INFORMATION**

One Accord Ministries is located at an elevation of 585 feet above mean sea level. Topographically overland flow is to the south. Groundwater levels varied over the investigation site from 16.07 feet BLS to 37.22 feet BLS. Groundwater flow at the site was calculated to be to the west southwest.

Soils encountered during the assessment were classified as silty sand in content. Boulders that were granitic in formation were encountered at depths of 24 to 25 feet BLS and ranged in size from 2 to 4 feet in diameter. Bedrock was encountered at a depth of 75 feet BLS.

### **2.1 Piezometric Data**

Figure 2 in Appendix A serves as the comprehensive site map showing the locations of the 49 monitoring wells located at the subject site. Monitoring wells MW2 through MW4 were installed during previous scopes of work. Monitoring wells MW1R, MW9R, MW10R, MW5 to MW37, DW1 to DW9 and recovery wells RW1, RW2 and RW3 were installed during this Tier II Assessment by Environmental Probing and Drilling Service (EDPS) of Charlotte, NC (SC Driller # 1846B). Mr. Tommy Bolyard of EDPS can be contacted at 17538 Greenhill Road, Charlotte, NC 28278 or via phone at (704) 607-7529. These wells were installed on various dates from March 23, 2016 to August 28, 2017.

The well logs for this well installation event can be found in Appendix E. The monitoring wells were constructed at varying depths utilizing 2 inch diameter riser with 2 inch diameter screen slotted 0.010. Coarse grain filter pack was placed into the annulus to an approximate elevation of 1 foot above the screen followed by a bentonite seal and grouted to the surface with neat cement. All monitoring wells are outfitted with an 8 inch steel traffic rated manhole cover encapsulated within an exterior concrete pad. Well tags for each well were cemented in place upon completion of the well vault. Newly installed wells were developed utilizing a purge pump to remove all drilling fluids from the well annulus. Removal of fluids was conducted until the process was completed. Development of all onsite wells occurred on various dates from 4/5/16 to 8/25/17. All well development fluids were disposed of at Haz Mat, Inc. in Charlotte, North Carolina.

Piezometric data for all monitoring wells associated with the release at the One Accord Ministries site can be found in Table 1. Two gauging events were conducted for this scope of work. Water levels were measured on January 31, 2017, March 13, 2017 and September 1, 2017. A piezometric map was created utilizing groundwater elevations measured during a sampling event on March 13, 2017 and again on September 1, 2017. The piezometric map from September 1, 2017 is included as Figure 3 in Appendix A.

Depths to fluid measurements were collected relative to the top of casing for each well with the accuracy of measurements being within 0.01 foot or 1/8 inch. A hydrocarbon interface probe capable of detecting and measuring a hydrocarbon product thickness of 0.01 foot or 1/8 inch was used for depth to fluid measurements.

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

<b>Monitoring Well</b>	<b>Date</b>	<b>TOC Elevation</b>	<b>Screened Interval (below land surface)</b>	<b>TOC to FP</b>	<b>TOC to GW</b>	<b>GW Elevation</b>
MW 1R	9/1/17	99.20	24-14	--	16.59	82.61
MW 2	9/1/17	99.04	28-18	--	21.39	77.65
MW 3	9/1/17	98.95	28-18	--	22.17	76.78
MW 4	9/1/17	99.30	28-18	--	21.42	77.88
MW 5	9/1/17	100.13	25-15	--	18.10	82.03
MW 6	9/1/17	98.09	24-14	--	16.29	81.80
MW 7	9/1/17	96.98	23-13	--	16.07	80.90
MW 8	9/1/17	95.83	23-13	--	20.07	75.76
MW 9R	9/1/17	103.90	37-27	--	30.32	73.58
MW 9	9/1/17	103.75	30-20	--	DRY	DRY
MW 10 R	9/1/17	104.51	40-30	--	30.89	73.62
MW 10	9/1/17	104.68	30-20	--	DRY	DRY
MW 11	9/1/17	99.24	29-19	--	26.39	72.85
MW 12	9/1/17	98.96	29-19	--	17.57	81.39
MW 13	9/1/17	98.51	26-16	--	24.71	73.80
MW 14	9/1/17	99.77	36-26	--	28.16	71.61
MW 15	9/1/17	105.72	40-30	--	37.19	68.53
MW 16	9/1/17	94.17	30-20	--	21.42	77.72
MW 17	9/1/17	98.62	30-20	--	21.57	77.05
MW 18	9/1/17	100.03	32-22	--	25.61	74.42
MW 19	9/1/17	99.24	32-22	--	23.25	75.99
MW 20	9/1/17	98.22	28-18	--	21.59	76.63
MW 21	9/1/17	98.84	35-25	--	27.03	71.81
MW 22	9/1/17	101.55	30-20	--	28.15	73.40
MW 23	9/1/17	99.18	35-25	--	27.00	72.18
MW 24	9/1/17	101.20	35-25	--	28.43	72.77
MW 25	9/1/17	99.37	30-20	--	21.59	77.78
MW 26	9/1/17	99.24	28-18	-	26.93	72.31

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 27	9/1/17	99.35	28-18	--	18.21	81.14
MW 28	9/1/17	99.25	59-49	--	27.18	72.07
MW 29	9/1/17	101.64	64-54	--	28.49	73.15
MW 30	9/1/17	99.41	59-49	--	26.85	72.56
MW 31	9/1/17	101.24	57-47	--	28.40	72.84
MW 32	9/1/17	99.18	56-46	--	21.60	77.58
MW 33	9/1/17	98.90	58-48	--	27.13	71.77
MW 34	9/1/17	99.28	56-46	--	21.84	77.44
MW 35	9/1/17	104.25	50-40	--	31.25	73.00
MW 36	9/1/17	103.59	59-49	--	29.90	73.69
MW 37	9/1/17	105.69	64-54	--	37.22	68.47
DW 1	9/1/17	98.42	75-70	--	17.32	81.10
DW 2	9/1/17	99.59	75-70	--	17.59	82.00
DW 3	9/1/17	104.30	75-70	--	26.10	78.20
DW 4	9/1/17	99.81	120-115	--	28.30	71.51
DW 5	9/1/17	99.52	150-145	--	21.61	77.91
DW 6	9/1/17	98.54	150-145	--	27.17	71.37
DW 7	9/1/17	99.32	150-145	--	21.40	77.92
DW 8	9/1/17	103.97	150-145	--	30.51	73.46
DW 9	9/1/17	105.79	150-145	--	37.12	68.67
RW 1	9/1/17	98.90	29-19	--	21.12	77.78
RW 2	9/1/17	98.87	29-19	--	21.10	77.77
RW 3	9/1/17	99.01	29-19	--	21.14	77.87

**TABLE 1 Groundwater Data (feet) One Accord Site ID 02131**

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 1R	1/31/17	99.20	24-14	--	21.83	77.37
	3/13/17			--	21.93	77.27
	9/1/17			--	16.59	82.61
MW 1	10/26/12	UNK	29-19	--	23.51	UNK
	12/18/13			--	NL	NL
MW 2	12/18/13	99.04	28-18	--	18.48	80.56
	1/31/17			--	21.69	77.35
	3/13/17			--	21.74	77.30
	9/1/17			--	21.39	77.65
MW 3	12/18/13	98.95	28-18	--	18.85	80.10
	1/31/17			21.70	21.76	77.19
	3/13/17			21.67	21.73	77.19
	9/1/17			--	22.17	76.78
MW 4	12/18/13	99.30	28-18	--	19.48	79.82
	1/31/17			--	21.94	77.36
	3/13/17			--	21.32	77.98
	9/1/17			--	21.42	77.88
MW 5	1/31/17	100.13	25-15	--	22.71	77.42
	3/13/17			--	22.09	78.04
	9/1/17			--	18.10	82.03
MW 6	1/31/17	98.09	24-14	--	20.79	77.30
	3/13/17			--	20.44	77.65
	9/1/17			--	16.29	81.80
MW 7	1/31/17	96.98	23-13	--	19.86	77.12
	3/13/17			--	19.66	77.32
	9/1/17			--	16.07	80.91
MW 8	1/31/17	95.83	23-13	--	19.16	76.67
	3/13/17			--	19.20	76.63
	9/1/17			--	30.07	75.76

Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 9R	3/3/17	103.90	37-27	--	29.37	74.53
	3/13/17			--	29.23	74.67
	9/1/17			--	24.97	73.58
MW 9	1/31/17	103.75	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 10 R	3/3/17	104.51	40-30	--	31.58	72.93
	3/13/17			--	31.73	72.78
	9/1/17			--	30.89	73.62
MW 10	1/31/17	104.68	30-20	--	DRY	DRY
	3/13/17			--	DRY	DRY
MW 11	1/31/17	99.24	29-19	--	26.31	72.93
	3/13/17			--	25.63	73.61
	9/1/17			--	17.49	72.85
MW 12	1/31/17	98.96	29-19	--	21.62	77.34
	3/13/17			--	20.59	78.37
	9/1/17			--	17.57	81.39
MW 13	1/31/17	98.51	26-16	--	20.52	77.99
	3/13/17			--	21.20	77.31
	9/1/17			--	24.71	73.80
MW 14	3/3/17	99.77	36-26	--	28.02	71.75
	3/13/17			--	27.24	72.53
	9/1/17			--	28.16	71.61
MW 15	3/3/17	105.72	40-30	--	37.12	68.60
	3/13/17			--	36.72	69.00
	9/1/17			--	37.19	68.53
MW 16	9/1/17	94.17	30-20	--	21.42	77.72
MW 17	9/1/17	98.62	30-20	--	21.57	77.05
MW 18	9/1/17	100.03	32-22	--	25.61	74.42
MW 19	9/1/17	99.24	32-22	--	23.25	75.99
MW 20	9/1/17	98.22	28-18	--	21.59	76.63
MW 21	9/1/17	98.84	35-25	--	27.03	71.81
MW 22	9/1/17	101.55	30-20	--	28.15	73.40
MW 23	9/1/17	99.18	35-25	--	27.00	72.18



Monitoring Well	Date	TOC Elevation	Screened Interval (below land surface)	TOC to FP	TOC to GW	GW Elevation
MW 24	9/1/17	101.20	35-25	--	28.43	72.77
MW 25	9/1/17	99.37	30-20	--	21.59	77.78
MW 26	9/1/17	99.24	28-18	-	26.93	72.31
MW 27	9/1/17	99.35	28-18	--	18.21	81.14
MW 28	9/1/17	99.25	59-49	--	27.18	72.07
MW 29	9/1/17	101.64	64-54	--	28.49	73.15
MW 30	9/1/17	99.41	59-49	--	26.85	72.56
MW 31	9/1/17	101.24	57-47	--	28.40	72.84
MW 32	9/1/17	99.18	56-46	--	21.60	77.58
MW 33	9/1/17	98.90	58-48	--	27.13	71.77
MW 34	9/1/17	99.28	56-46	--	21.84	77.44
MW 35	9/1/17	104.25	50-40	--	31.25	73.00
MW 36	9/1/17	103.59	59-49	--	29.90	73.69
MW 37	9/1/17	105.69	64-54	--	37.22	68.47
DW 1	1/31/17	98.42	75-70	--	21.53	76.89
	3/13/17			--	21.36	77.06
	9/1/17			--	17.32	81.10
DW 2	1/31/17	99.59	75-70	--	22.29	77.30
	3/13/17			--	21.70	77.89
	9/1/17			--	17.59	82.00
DW 3	1/31/17	104.30	75-70	--	31.29	73.01
	3/13/17			--	32.47	71.83
	9/1/17			--	26.10	78.20
DW 4	1/31/17	99.81	120-115	--	28.05	71.76
	3/13/17			--	27.63	72.18
	9/1/17			--	28.30	71.51
DW 5	9/1/17	99.52	150-145	--	21.61	77.91
DW 6	9/1/17	98.54	150-145	--	27.17	71.37
DW 7	9/1/17	99.32	150-145	--	21.40	77.92
DW 8	9/1/17	103.97	150-145	--	30.51	73.46
DW 9	9/1/17	105.79	150-145	--	37.12	68.67
RW 1	9/1/17	98.90	29-19	--	21.12	77.78
RW 2	9/1/17	98.87	29-19	--	21.10	77.77
RW 3	9/1/17	99.01	29-19	--	21.14	77.87

## 2.2 Hydraulic Conductivity & Transmissivity

The hydraulic conductivity ( $K$ ) for wells DW1, DW3 and DW4 were measured as part of the Tier II. The hydraulic conductivity and transmissivity were calculated by the Bouwer-Rice method. The calculated hydraulic conductivity was 0.20 feet per day (FPD) for DW1, 0.04 FPD for DW3, 0.12 FPD for DW4. The average hydraulic conductivity for the wells DW1 and DW3 tested for this scope of work is 0.12 FPD. The transmissivity was calculated for this scope of work was 10.16 f<sup>2</sup>/day for DW1, 2.047 f<sup>2</sup>/day for DW3, 0.642 f<sup>2</sup>/day for DW4.

## 2.3 Average Linear Flow Velocity and Hydraulic Gradient

The hydraulic gradient calculation for the shallow aquifer was performed utilizing data from monitoring wells DW1 and DW3. The resulting hydraulic gradient is calculated to be 0.023 ft/ft. The linear flow velocity is calculated using a modified form of Darcy's Law:

$$V = K/n (\Delta h/\Delta L)$$

where:

- $V$  = the average linear flow velocity (L/t)
- $K$  = the hydraulic conductivity (L/t)
- $n$  = the estimated effective porosity (%) = 25%
- $\Delta h/\Delta L$  = the hydraulic gradient (L/L)

The linear flow velocity is calculated to be 4.0 feet/year. This is used to represent the migration of COC in the shallow aquifer. The vertical gradient was also calculated between the shallow well and the deep well using data from DW-1 and the nearest shallow well, MW-13. The vertical gradient was calculated to be -0.005 ft/ft and is flowing in a downward direction, or recharging the deeper aquifer. Calculations are provided in Appendix F.

## **2.4 Horizontal Plume Delineation**

Delineation of the petroleum hydrocarbon contaminant plume was conducted on various dates between February 18 to February 20, 2016. Plume delineation for the shallow borings was accomplished using a GeoProbe with auger capabilities and a calibrated mobile field Organic Vapor Analyzer (OVA). Probe borings were conducted by augering into the subsurface and insertion of a temporary 1 inch diameter temporary well screen and riser into the well annulus. Groundwater was extracted from each field screen location utilizing a disposable 0.5 inch diameter plastic bailer. Once the groundwater field screen sample was obtained it was introduced into a new non-preserved laboratory supplied VOA container. Groundwater samples were then analyzed by OVA to determine volatile organic concentrations present at each location.

Once data was collected, each boring was abandoned with forced injected grout to the surface. Field screening data is depicted in Table 2 Field Screening results. Field screen locations are depicted on Figure 4 Field Screen Map. Signed well logs for each boring conducted can be located in Appendix D.

**TABLE 2**  
**Delineation OVA Field Data One Accord Ministries Site ID 02131**  
**Richburg, SC**

Sample ID	Depth	OVA PPM
SB1	27	287
SB2	27	44.5
SB3	27	29.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	27	0
SB9	25	Dry hit rock at 25
SB10	18	Dry hit rock at 18
SB10A	20	Dry hit rock at 20
SB11	27	6
SB12	27	4
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27	0
SB22	25	Dry at 25
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27	0

## **2.5 Soil and Groundwater Sampling**

Soil samples collected for grain size analysis were obtained during well installation for this scope of work. A grain size sample was collected from MW10, DW2 and DW3 at the termination point of each borehole. Soil samples were retrieved from the borehole with a split spoon. Soil samples collected from the spoon were inserted into laboratory supplied containers for grain size analysis by PSI, 534 St. Andrews Road, Suite C, Columbia, SC 29210.

Samples were collected from monitoring wells installed during this and prior rounds of assessment. Prior to sampling each well, depths to groundwater were measured utilizing an oil/water interface probe. These measurements were used to construct a piezometric map which is located in Appendix A, as Figure 3. Groundwater was evacuated from each well utilizing a battery operated Monsoon purge pump. As directed by SCDHEC all wells were purged three volumes prior to sampling. Sampling of wells located at the site was completed by utilizing a disposable bailer attached to a new non colored nylon line. Groundwater samples collected were placed into laboratory supplied containers and stored on ice for same day transport for analysis. Katawba personnel submitted all groundwater samples to Shealy Environmental, 106 Vantage Point Drive, Cayce, SC 29033 to the attention of laboratory director Dan Wright who can be contacted at 803-791-9700. The results for the groundwater sampling analysis are as follows.

**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	1/31/17	<b>11000</b>	<b>42000</b>	<b>2800</b>	<b>20000</b>	<b>750</b>	<b>5700</b>	0.010 J	NA	NA	<500
MW 2	1/31/17	<b>13000</b>	<b>41000</b>	<b>3200</b>	<b>20000</b>	<b>760</b>	<b>1800</b>	<0.020	NA	NA	<500
MW 3	1/31/17	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>0.06 FT</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>	<b>FP</b>
MW 4	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10	1/31/17	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
DUP	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	<b>16</b>	NA	<1
MW15	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
MW 16	9/1/17	<b>1400</b>	<b>5500</b>	290	3700	<50	<b>79</b>	<0.020	<10	NA	<50
MW 17	9/1/17	2.4	9.3	<100	7.7	<1	<1	<0.019	12	NA	<1
MW 18	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	0.6	NA	<1
MW 19	9/1/17	<b>980</b>	65	73	580	13	<b>930</b>	<0.019	<10	NA	<5
MW 20	9/1/17	<b>160</b>	410	63	280	4.6 J	<b>97</b>	<0.020	<10	NA	<5
MW 21	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	17	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
MW 22	9/1/17	55 J	<10	<10	<10	<10	950	<0.019	67	NA	<10
MW 23	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	11	NA	<1
MW 24	9/1/17	<1	<1	<1	<1	<1	70	<0.019	6.4	NA	<1
MW 25	9/1/17	<1	1.7	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 26	9/1/17	110	<20	<20	57	<20	1800	<0.019	38	NA	<20
MW 27	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 28	9/1/17	0.87 J	<1	<1	<1	<1	0.85 J	<0.019	<10	NA	<1
MW 29	9/1/17	<10	<10	<10	<10	<10	1100	<0.019	<10	NA	<10
MW 30	9/1/17	<1	<1	<1	<1	<1	11	<0.019	<10	NA	<1
DUP	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 31	9/1/17	<1	<1	<1	7.2	<1	740	<0.019	<10	NA	<1
MW 32	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 33	9/1/17	140	<20	<20	47	<20	2300	<0.019	<10	NA	<20
MW 34	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 35	9/1/17	<1	<1	<1	<1	<1	0.90 J	<0.019	<10	NA	<1
MW 36	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	<10	NA	<1
MW 37	9/1/17	<1	<1	<1	<1	<1	<1	<0.020	6.5	NA	<1
DW 1	1/31/17	990	200	100	1600	37	1000	<0.020	NA	NA	<10
DW 2	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/31/17	<5	4.2 J	<5	<5	<5	190	<0.020	NA	NA	<5
DW 4	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DUP	1/31/17	<1	<1	<1	<1	<1	8.0	<0.020	NA	NA	<1
DW 5	9/1/17	26	4.7 J	5	46	30	330	<0.020	NA	NA	<5
DUP	9/1/17	25	3.6 J	4 J	42	28	360	<0.020	NA	NA	<5
DW 6	9/1/17	22	<5	<5	28	18	400	<0.020	NA	NA	<5
DW 7	9/1/17	3.5	0.91 J	0.93 J	7.8	5.4	40	<0.19	NA	NA	<1
DW 8	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
DW 9	9/1/17	<1	<1	<1	<1	<1	36	<0.019	NA	NA	<1

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RW 1	9/1/17	7700	12000	1800	9400	270	21000	0.028	8.3	NA	<200
RW 2	9/1/17	16000	49000	3700	19000	500	23000	0.12 P	<10	NA	<500
RW 3	9/1/17	4600	6400	1200	11000	170	2500	0.024P	<10	NA	<50
DWW1	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
DWW2	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
DWW3	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
DWW4	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DWW5	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
DWW6	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DUP	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
FB	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
FB2	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
TB	1/31/17	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
FB	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
TB	3/3/17	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1
FB	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	NA	NA	<1
TB	9/1/17	<1	<1	<1	<1	<1	<1	NA	NA	NA	<1



**TABLE 3 Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
MW 3	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
MW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 13	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 14	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 16	9/1/17	<50	<5000	<1000	<50	810 J	<500	<1000	<250
MW 17	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	9/1/17	38	<500	<100	<5	1700	59	220	<25
MW 20	9/1/17	17	<500	<100	<5	1200	5.7 J	140	<25
MW 21	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	9/1/17	32	<1000	<200	<10	290	55 J	<200	<50
MW 23	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	9/1/17	36	<2000	<400	<20	<400	190 J	<400	<100
MW 27	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	9/1/17	35	<1000	<200	<10	310	66 J	<200	<50
MW 30	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	9/1/17	17	<100	<20	<1	58	55	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	9/1/17	<20	<2000	<400	<20	<400	<220	<400	<100
MW 34	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	9/1/17	<5	25000	<100	<5	49 J	35 J	<100	<25
DW 6	9/1/17	<5	16000	<100	<5	130	34 J	46 J	<25
DW 7	9/1/17	<1	2300	<20	<1	10 J	3.9 J	12 J	5
DW 8	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	9/1/17	<5	<500	<100	<5	<100	<50	<100	<25
RW 1	9/1/17	910	<20000	<4000	<200	8500	2900	2000 J	<1000
RW 2	9/1/17	<500	<50000	<10000	<500	15000	4700 J	<10000	<2500
RW 3	9/1/17	<50	<5000	<1000	<50	2700	470 J	<1000	<250

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DWW 1	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 3	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5

**TABLE 3A Groundwater Analytical Data One Accord Site ID 02131**

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
RBSL	-	5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	1/31/17	11000	42000	2800	20000	750	5700	0.010 J	NA	NA	<500
MW 2	12/18/13	13000	44000	4200	22000	<500	3100	<0.020	16	780	<500
	1/31/17	13000	41000	3200	20000	760	1800	<0.020	NA	NA	<500
MW 3	12/18/13	15000	44000	4600	23000	1400	31000	0.074	7.2	860	<1000
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP	FP	FP
MW 4	12/18/13	<1	1	4600	23000	1400	31000	<0.020	9.7	<5	1
	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/31/17	<1	<1	<1	<1	<1	<1	<0.021	NA	NA	<1
MW 7	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10	1/31/17	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/3/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
MW15	3/3/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
DW 1	1/31/17	990	200	100	1600	37	1000	<0.020	NA	NA	<10
DW 2	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DW 3	1/31/17	<5	4.2 J	<5	<5	<5	190	<0.020	NA	NA	<5

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
DW 4	1/31/17	<1	<1	<1	<1	<1	8.3	<0.020	NA	NA	<1
DWW1	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	<0.020	NA	NA	<0.50
DWW2	12/18/13	<1	<1	<1	<1	<1	71	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.020	NA	NA	<0.50
DWW3	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.020	NA	NA	<0.50
DWW4	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50
DWW5	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<0.020	NA	NA	<0.50
DWW6	12/18/13	<1	<1	<1	<1	<1	<1	NA	NA	<5	<1
	1/31/17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.020	NA	NA	<0.50

**TABLE 3A Groundwater Analytical Data One Accord Ministries Site ID 02131**

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert- Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
RBSL		NA	NA	NA	NA	NA	NA	NA	NA
MW 1	12/18/13	NL	NL	NL	NL	NL	NL	NL	NL
MW 1R	1/31/17	840	<50000	<10000	<500	12000	2000 J	<10000	<2500
MW 2	12/18/13	860	<50000	<10000	<500	15000	600	<10000	<2500
	1/31/17	950	<50000	<10000	<500	29000	550 J	<10000	<2500
MW 3	12/18/13	1700	<100000	<20000	<1000	29000	4200	12000	<5000
	1/31/17	FP	FP	FP	0.06 FT	FP	FP	FP	FP
MW 4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 5	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 6	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 7	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 8	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 9	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 10	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 11	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 12	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 13	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 14	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 15	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 16	9/1/17	<50	<5000	<1000	<50	810 J	<500	<1000	<250
MW 17	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 18	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 19	9/1/17	38	<500	<100	<5	1700	59	220	<25
MW 20	9/1/17	17	<500	<100	<5	1200	5.7 J	140	<25
MW 21	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 22	9/1/17	32	<1000	<200	<10	290	55 J	<200	<50
MW 23	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 24	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 25	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 26	9/1/17	36	<2000	<400	<20	<400	190 J	<400	<100
MW 27	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 28	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 29	9/1/17	35	<1000	<200	<10	310	66 J	<200	<50
MW 30	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DUP	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 31	9/1/17	17	<100	<20	<1	58	55	<20	<5



Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
MW 32	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 33	9/1/17	<20	<2000	<400	<20	<400	<220	<400	<100
MW 34	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 35	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 36	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
MW 37	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 1	1/31/17	83	<1000	<200	<10	2200	140	520	<50
DW 2	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 3	1/31/17	<5	<500	<100	<5	<100	4.7 J	<100	<25
DW 4	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 5	9/1/17	<5	29000	<100	<5	68 J	35 J	44 J	<25
DUP	9/1/17	<5	25000	<100	<5	49 J	35 J	<100	<25
DW 6	9/1/17	<5	16000	<100	<5	130	34 J	46 J	<25
DW 7	9/1/17	<1	2300	<20	<1	10 J	3.9 J	12 J	5
DW 8	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
DW 9	9/1/17	<5	<500	<100	<5	<100	<50	<100	<25
RW 1	9/1/17	910	<20000	<4000	<200	8500	2900	2000 J	<1000
RW 2	9/1/17	<500	<50000	<10000	<500	15000	4700 J	<10000	<2500
RW 3	9/1/17	<50	<5000	<1000	<50	2700	470 J	<1000	<250

Well ID	DATE	Isopropyl Ether (IPE) µg/L	Ethanol µg/L	3-3 Dimethyl-1 butanol µg/L	Ethyl tert-Butyl Ether µg/L (ETBE)	t- Amyl Alcohol µg/L (TAA)	Tert-Amyl Methyl Ether µg/L (TAME)	Tertiary Butyl Alcohol µg/L (TBA)	t-Butyl Formate µg/L (TBF)
DWW 1	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 2	12/18/13	2.2	<100	<20	<1	<20	1.8	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 3	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 4	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 5	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
DWW 6	12/18/13	<1	<100	<20	<1	<20	<10	<20	<5
	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	1/31/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	3/3/17	<1	<100	<20	<1	<20	<10	<20	<5
FB	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5
TB	9/1/17	<1	<100	<20	<1	<20	<10	<20	<5

## 2.6 RECEPTOR SURVEY

A receptor survey and drinking water well survey was conducted for this scope of work. Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, drainage ditch and two septic tanks were noted to be the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.

**Table 4 Receptor Data One Accord Ministries Site ID 02131**

Receptor	Depth	Location	Assessed
Water Line	36 inches	Site E Row	Yes
Sewer Line	36 inches	Site E ROW	Yes
Phone Line	36 inches	Site E ROW	Yes
Gas Line	36 inches	Site E ROW	Yes
Septic Tank	36 inches	Site W Property Line	Yes
Septic Tank	36 inches	518 Peggy's Drive	No
DWW1	120 feet	533 Peggy's Drive	Yes
DWW2	110 feet	510 Peggy's Drive	Yes
DWW3	Unknown	568 Kee's Drive	Yes
DWW4	Unknown	603 Kee's Drive	No
DWW5	80 feet	583 Kee's Drive	Yes
DWW6	Unknown	843 Elliot Road	No
DWW7	Unknown	1719 Old Richburg	No
DWW8	Unknown	3571 Lancaster Hwy	No

**Table 4A Drinking Water Well Survey One Accord Ministries Site ID 02131**

1	553 AND 541 KEES DRIVE	BRUCE KEE	803 789 6362	HOUSE	553 AND 541 SAME WELL
2	510 AND 529 PEGGY'S DRIVE	MARION KEE	803 374 0356	HOUSE	510 AND 529 SAME WELL
3	568 KEES DRIVE	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
4	603 KEES DRIVE	PHILLIP KEE	803 379 1714	HOUSE	
5	583 KEES DRIVE	ROB FARRIS	803 209 2244	HOUSE	
6	843 ELLIOTT ROAD	UNKNOWN	UNKNOWN	HOUSE	NO CONTACT
7	1719 OLD RICHBURG ROAD	JAMES KNOX	UNKNOWN	HOUSE	NO POWER NO CONTACT
8	3571 LANCASTER HWY	JOHN FAUST	UNKNOWN	HOUSE	NOT IN USE

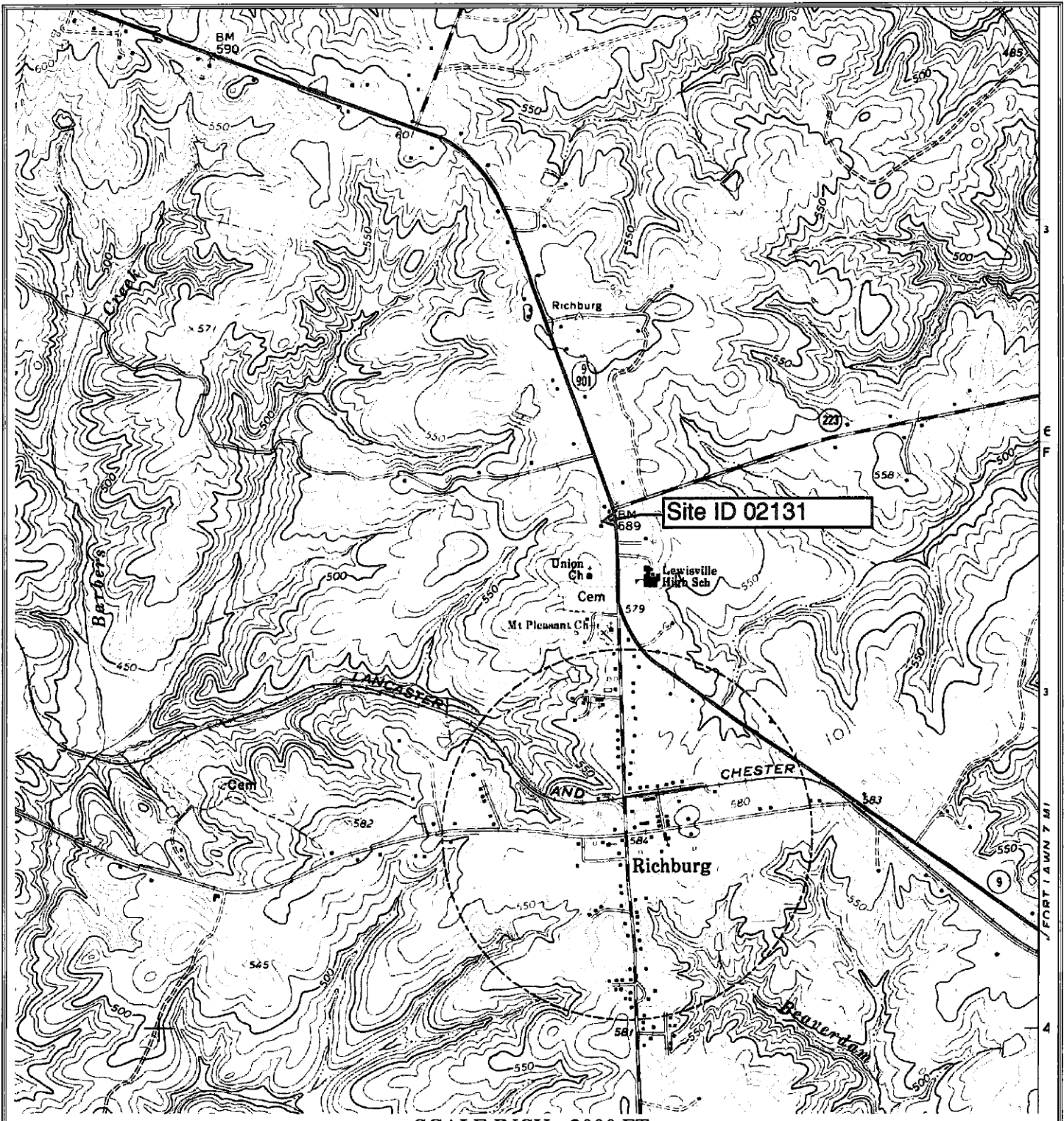
### 3.0 CONCLUSIONS

Findings of the Tier II Assessment indicated that free product plume at the site measures approximately 420 feet on an east northeast / west southwest axis. Additional data obtained during this scope of work are as follows:

- This project included the installation of field screening boring installation to determine the extent of the petroleum hydrocarbon plume. Installation of monitoring wells MW1R, MW9R, MW10R and monitoring wells numbered MW5 through MW37 were completed during this scope of work. Deep wells DW1 to DW9 and recovery wells RW1 to RW3 were installed during this scope of work. As directed by SCDHEC the installation of deep wells within the known free product zone was not conducted. Deep well installation was also avoided near drinking water wells.
- Fourteen receptors were noted during the assessment. Sewer lines, water lines, fiber optic lines, two septic tanks and eight drinking water wells were noted to be within the vicinity of the subject site. Receptor #1 subsurface water line located in the eastern ROW. Receptor #2 is identified as the subsurface sewer line located in the eastern ROW. Receptor #3 is the phone line located in the eastern ROW. Receptor #4 is the gas line located on the eastern ROW. Receptor #5 is the facility septic tank located to the western rear of the facility. Receptor #6 is the septic tank associated with 518 Peggy's Drive. Receptor #7 is DWW1 associated with 553 and 541 Kee's Drive. Receptor #8 is DWW2 associated with 510 and 529 Peggy's Drive. Receptor #9 is DWW3 associated with 568 Kee's Drive. Receptor #10 is DWW4 associated with 603 Kee's Drive. Receptor #11 is DWW5 associated with 583 Kee's Drive. Receptor #12 is DWW6 associated with 843 Elliot Road. Receptor #13 is DWW7 associated with 1719 Old Richburg Road. Receptor #14 is DWW8 associated with 3571 Lancaster Highway. Location of receptors and utilities are depicted on Figure 2 Site map. Location of offsite receptors are depicted on Figure 1A Receptor Location Map.
- Monitoring wells MW1, MW2, MW16, MW19, MW20, MW22, MW24, MW26, MW29, MW31, MW33, DW1, DW3, DW5, DW6, DW7, RW1, RW2, RW3 and DWW2 were above the established RBSL for petroleum based constituents.
- Monitoring well MW3 contained 0.06 feet of free product at the initial time the assessment was conducted.

- Based on the findings it is recommended that multiple AFVRs be conducted as the next scope of work.

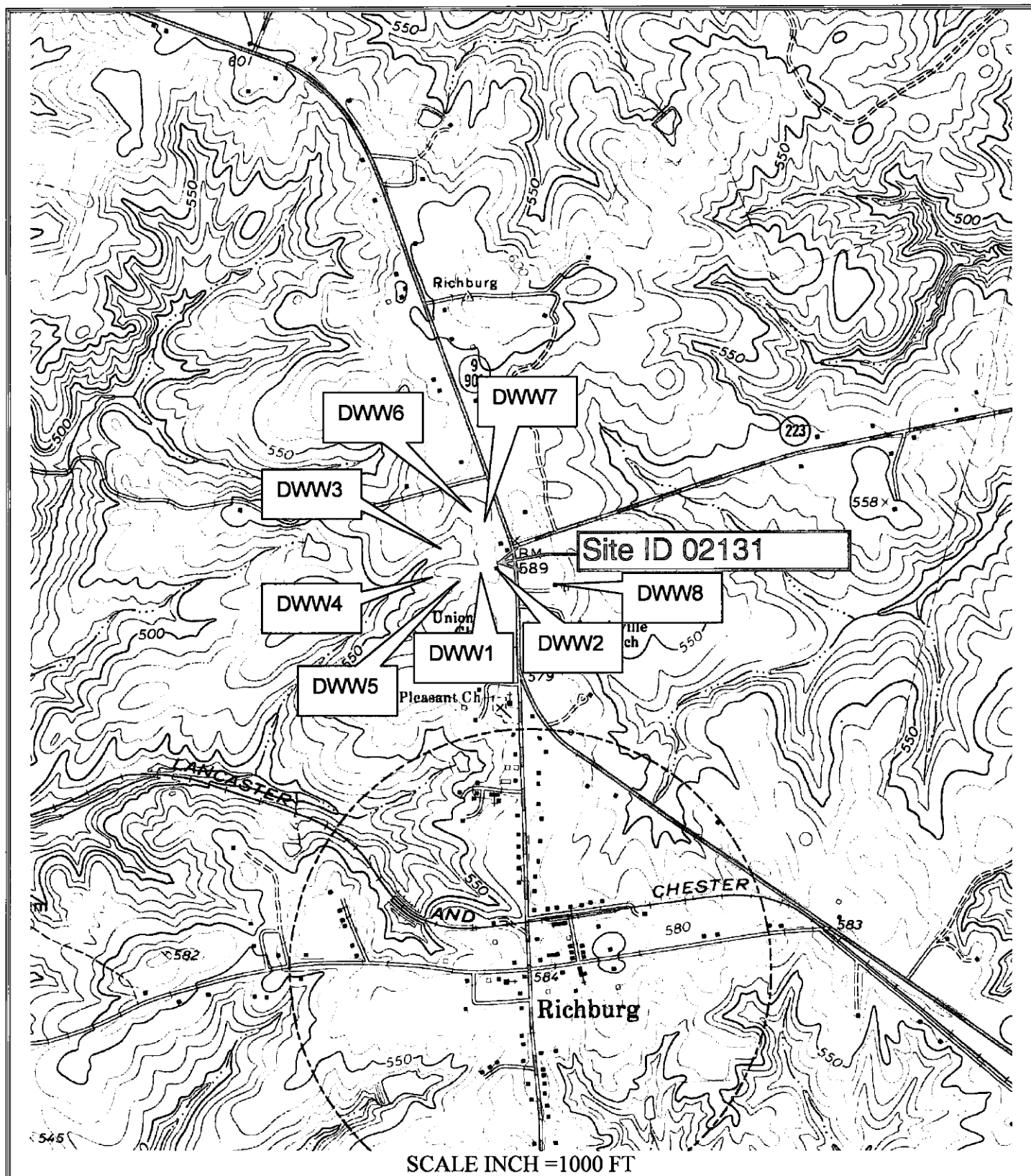
**APPENDIX A**  
**FIGURES**



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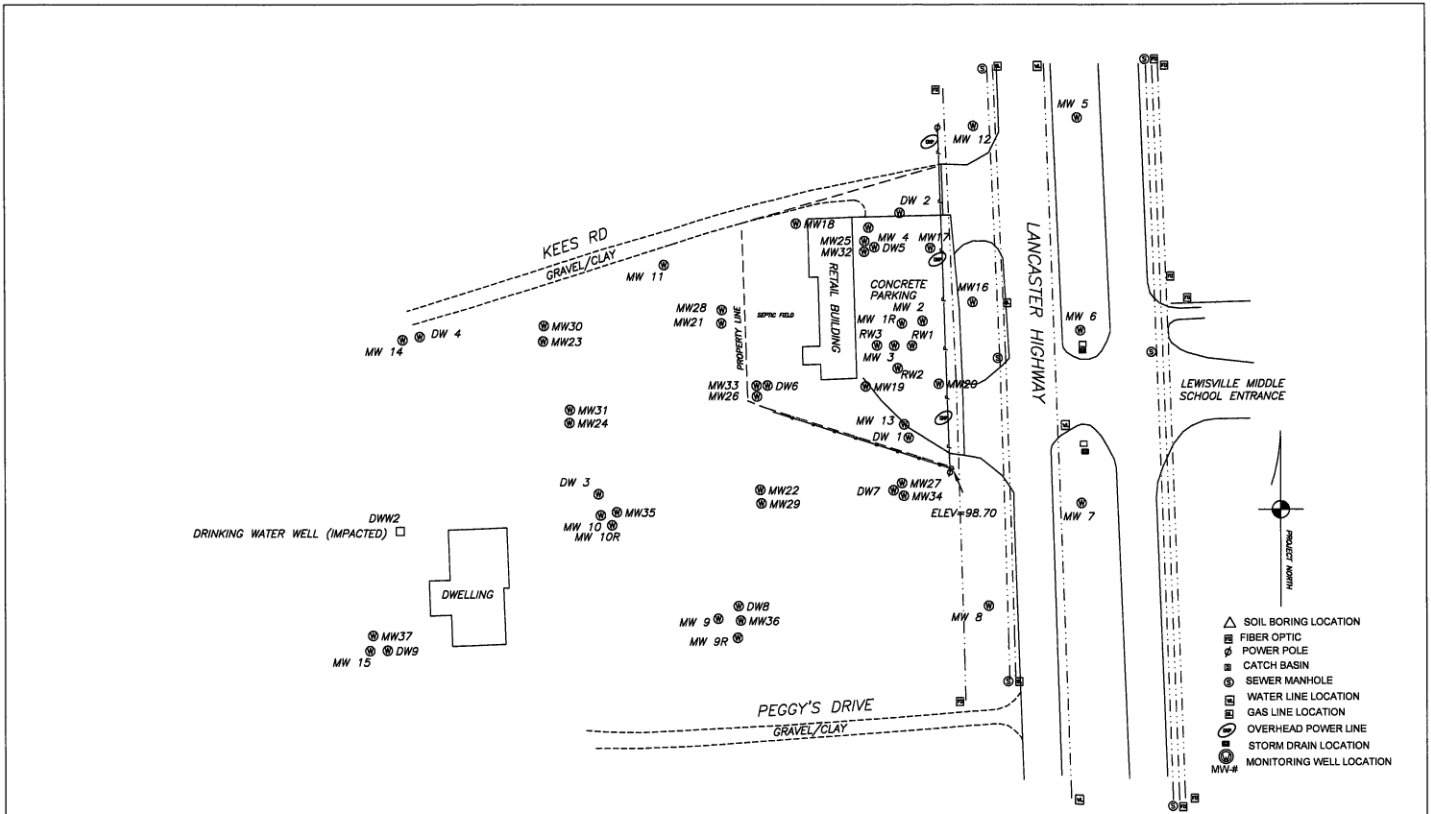
TIER II REPORT  
 ONE ACCORD MINISTRIES SITE ID 02131  
 3570 LANCASTER HWY, RICHBURG, SC  
 FIGURE 1 – SITE LOCATION



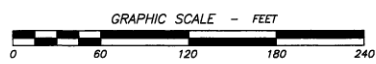


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 FIGURE 1A-DRINKING WATER WELL MAP

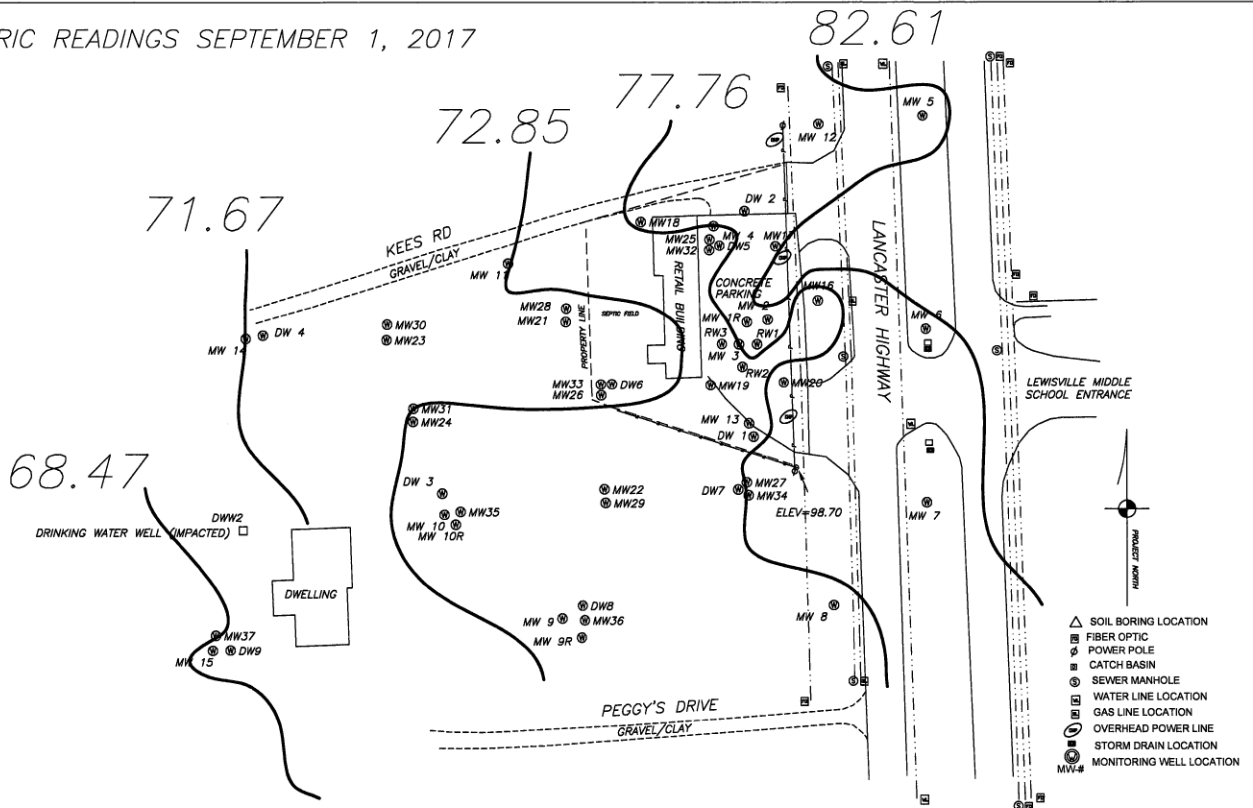


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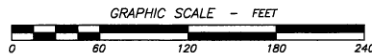


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 FIGURE 2 - SITE MAP

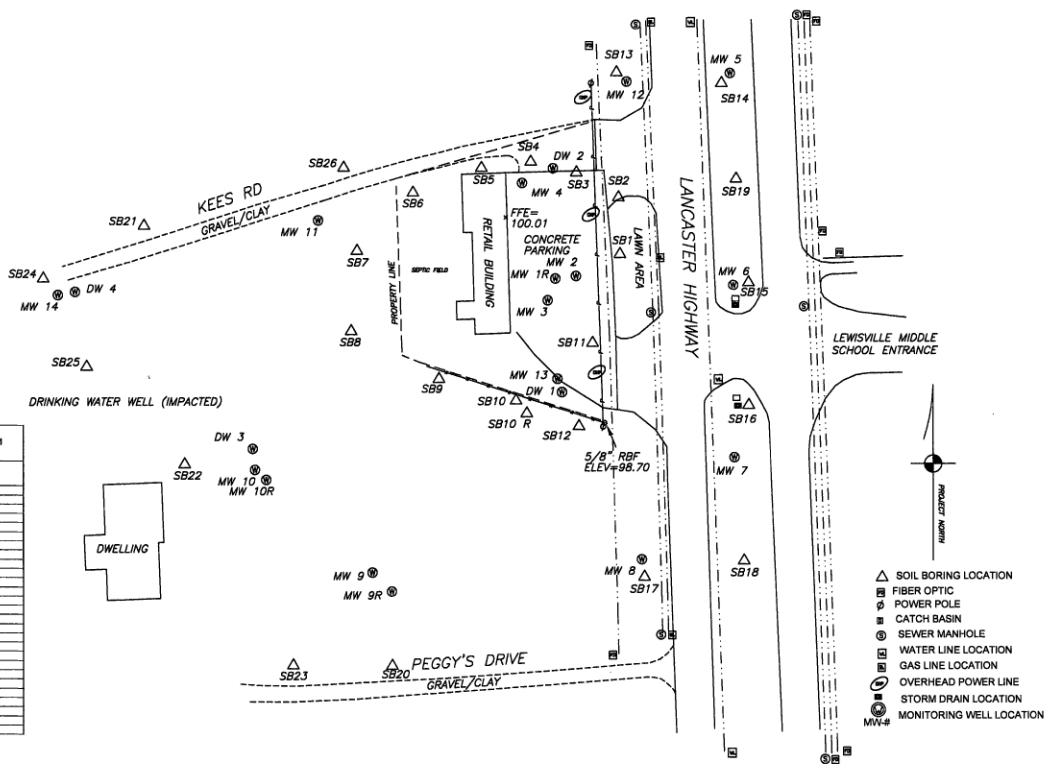
PIEZOMETRIC READINGS SEPTEMBER 1, 2017



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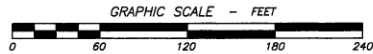
TIER II REPORT  
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 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 3 - PIEZOMETRIC MAP



**TABLE 2**  
Delineation OVA Field Data One Accord Ministries Site ID 02131  
Richburg, SC

Sample ID	Depth	OVA PPM
SB1	27	287
SB2	27	44.5
SB3	27	26.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	27	0
SB9	27	0
SB10	18	Dry hit rock at 18
SB10A	20	Dry hit rock at 20
SB11	27	6
SB12	27	4
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27	0
SB22	27	0
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27	0

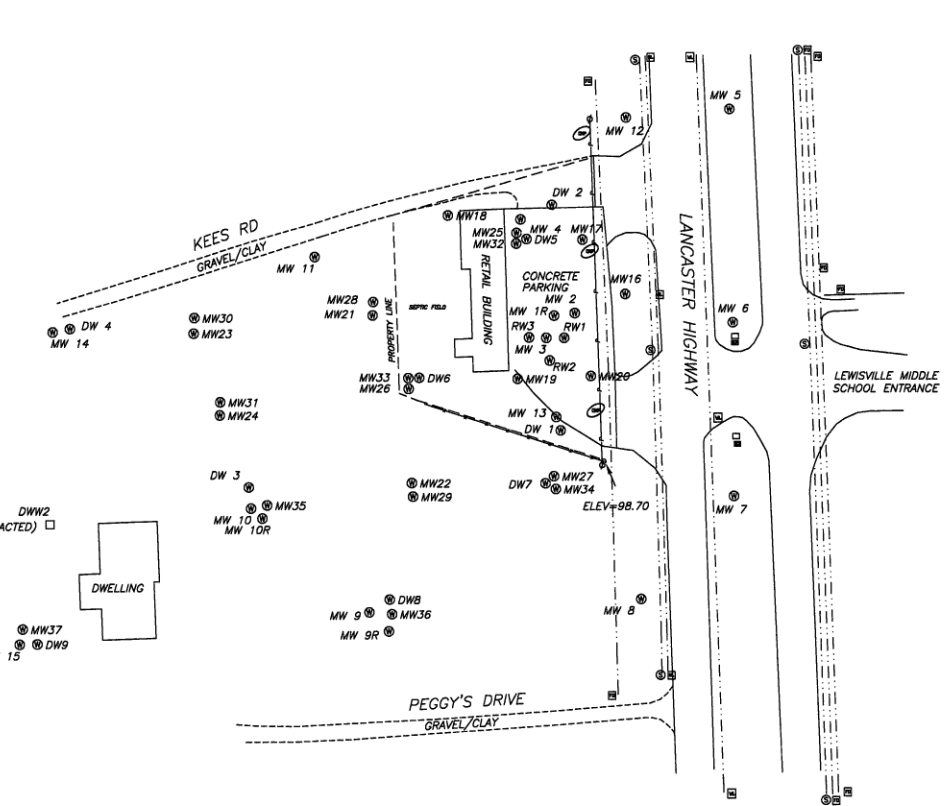
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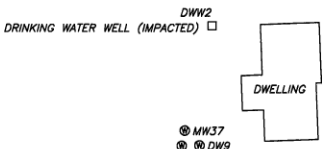
**TIER II REPORT**  
ONE ACCORD SITE ID 02131  
3570 LANCASTER HWY., RICHBURG, SC  
FIGURE 4 - GEOPROBE MAP

**TABLE 3 Groundwater Analytical Data One Accord Site ID 02131**

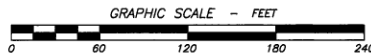
Sample ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	EDB	Lead	PAH (total)	1-2 DCA
		5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
MW 1R	1/31/17	11000	42000	2800	20000	700	6700	0.010 J	NA	NA	<500
MW 2	1/31/17	12000	41000	3200	20000	700	10000	<0.020	NA	NA	<500
MW 3	1/31/17	FP	FP	FP	0.04 FT	FP	FP	FP	FP	FP	FP
MW 4	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 5	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 6	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 7	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 8	1/31/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 9R	3/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 10	1/31/17	DRY	RY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10R	3/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 11	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 12	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
DUP	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 13	1/31/17	<1	<1	<1	<1	<1	<1	<0.020	NA	NA	<1
MW 14	3/31/17	<1	<1	<1	<1	<1	<1	<0.020	10	NA	<1
DUP	3/31/17	<1	<1	<1	<1	<1	<1	<0.020	18	NA	<1
MW15	3/31/17	<1	<1	<1	<1	<1	<1	<0.019	0.5	NA	<1
MW 16	9/1/17	1400	8800	280	3700	<50	78	<0.020	<10	NA	<50
MW 17	9/1/17	2.4	9.3	<100	7.7	<1	<1	<0.019	12	NA	<1
MW 18	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	5.8	NA	<1
MW 19	9/1/17	80	86	72	390	13	830	<0.019	<10	NA	<5
MW 20	9/1/17	180	410	83	280	4.8 J	97	<0.020	<10	NA	<5
MW 21	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	17	NA	<1
MW 22	9/1/17	88 J	<10	<10	<10	<10	860	<0.019	87	NA	<10
MW 23	9/1/17	<1	<1	<1	<1	<1	<1	<0.019	11	NA	<1
MW 24	9/1/17	<1	<1	<1	<1	<1	70	<0.019	8.4	NA	<1



- △ SOIL BORING LOCATION
- ▣ FIBER OPTIC
- ⊕ POWER POLE
- ⊞ CATCH BASIN
- ⊙ SEWER MANHOLE
- ⊞ WATER LINE LOCATION
- ⊞ GAS LINE LOCATION
- ⊞ OVERHEAD POWER LINE
- ⊞ STORM DRAIN LOCATION
- ⊞ MONITORING WELL LOCATION

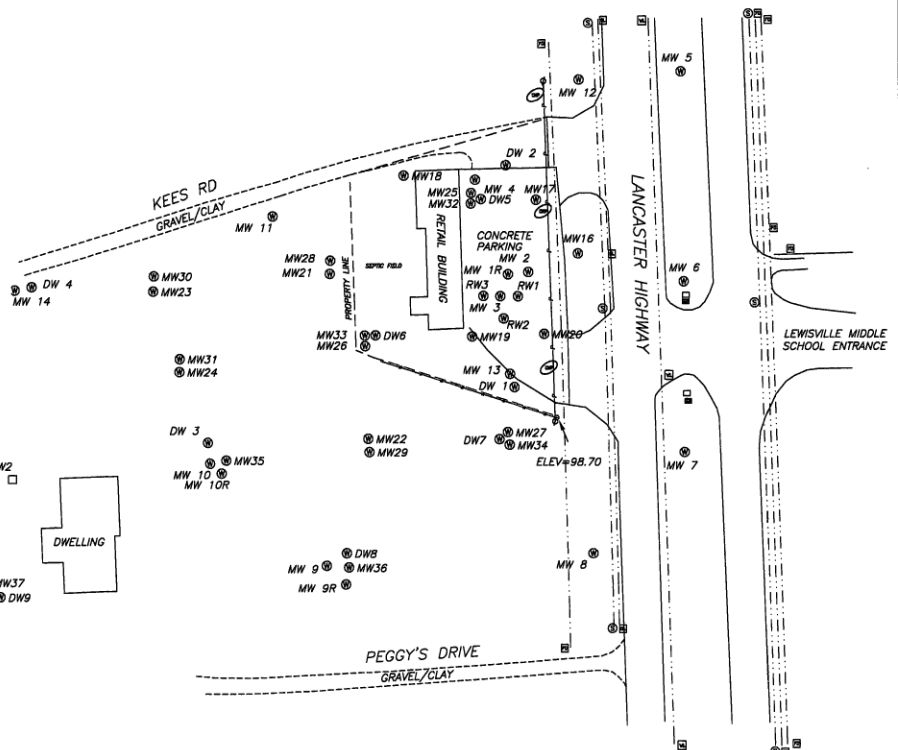


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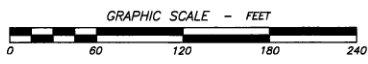
**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

Sample ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphth alene	MTHB	EDB	Lead	PBA (total)	1,2-DCA
		5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	25 ug/l	40 ug/l	0.05 ug/l	15 ug/l	ug/l	ug/l
RBGL	-										
MW25	9/1/17	<1	1.7	<1	<1	<1	<1	<0.09	<10	NA	<1
MW26	9/1/17	110	<20	<20	57	<20	1800	<0.09	38	NA	<20
MW27	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	<10	NA	<1
MW28	9/1/17	0.87 J	<1	<1	<1	<1	0.85 J	<0.09	<10	NA	<1
MW29	9/1/17	<10	<10	<10	<10	<10	1100	<0.09	<10	NA	<10
MW30	9/1/17	<1	<1	<1	<1	<1	11	<0.09	<10	NA	<1
DLP	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	<10	NA	<1
MW31	9/1/17	<1	<1	<1	7.2	<1	760	<0.09	<10	NA	<1
MW32	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	<10	NA	<1
MW33	9/1/17	140	<20	<20	47	<20	2300	<0.09	<10	NA	<20
MW34	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	<10	NA	<1
MW35	9/1/17	<1	<1	<1	<1	<1	0.80 J	<0.09	<10	NA	<1
MW36	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	<10	NA	<1
MW37	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	8.5	NA	<1
DW1	12/1/17	880	200	100	1800	37	1000	<0.09	NA	NA	<10
DW2	12/1/17	<1	<1	<1	<1	<1	<1	<0.09	NA	NA	<1
DW3	12/1/17	<5	4.2 J	<5	<5	<5	190	<0.09	NA	NA	<5
DW4	12/1/17	<1	<1	<1	<1	<1	8.3	<0.09	NA	NA	<1
DLP	12/1/17	<1	<1	<1	<1	<1	8.0	<0.09	NA	NA	<1
DW5	9/1/17	26	4.7 J	5	46	30	330	<0.09	NA	NA	<5
DLP	9/1/17	26	3.6 J	4.1	42	28	360	<0.09	NA	NA	<5
DW8	9/1/17	22	<5	<5	28	18	400	<0.09	NA	NA	<5
DW7	9/1/17	3.5	0.91 J	0.60 J	7.8	8.4	40	<10	NA	NA	<1
DW8	9/1/17	<1	<1	<1	<1	<1	<1	<0.09	NA	NA	<1
DW9	9/1/17	<1	<1	<1	<1	<1	38	<0.09	NA	NA	<1



- △ SOIL BORING LOCATION
- ▣ FIBER OPTIC
- ⊕ POWER POLE
- ▣ CATCH BASIN
- ⊙ SEWER MANHOLE
- ▣ WATER LINE LOCATION
- ▣ GAS LINE LOCATION
- ▣ OVERHEAD POWER LINE
- ⊙ STORM DRAIN LOCATION
- ⊙ MW# MONITORING WELL LOCATION

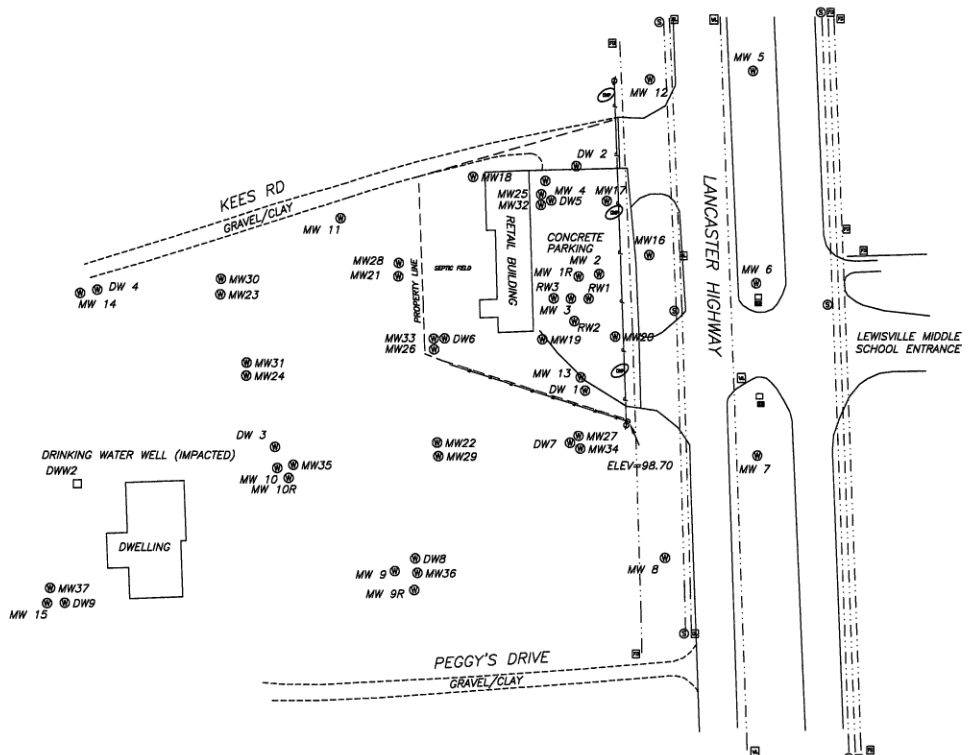
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 4278 DYE ROAD  
 EDGEWOOD, SC 29712  
 (803)327-0469 UCC#18



**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

**TABLE 3 Groundwater Analytical Data One Accord Ministries Site ID 02131**

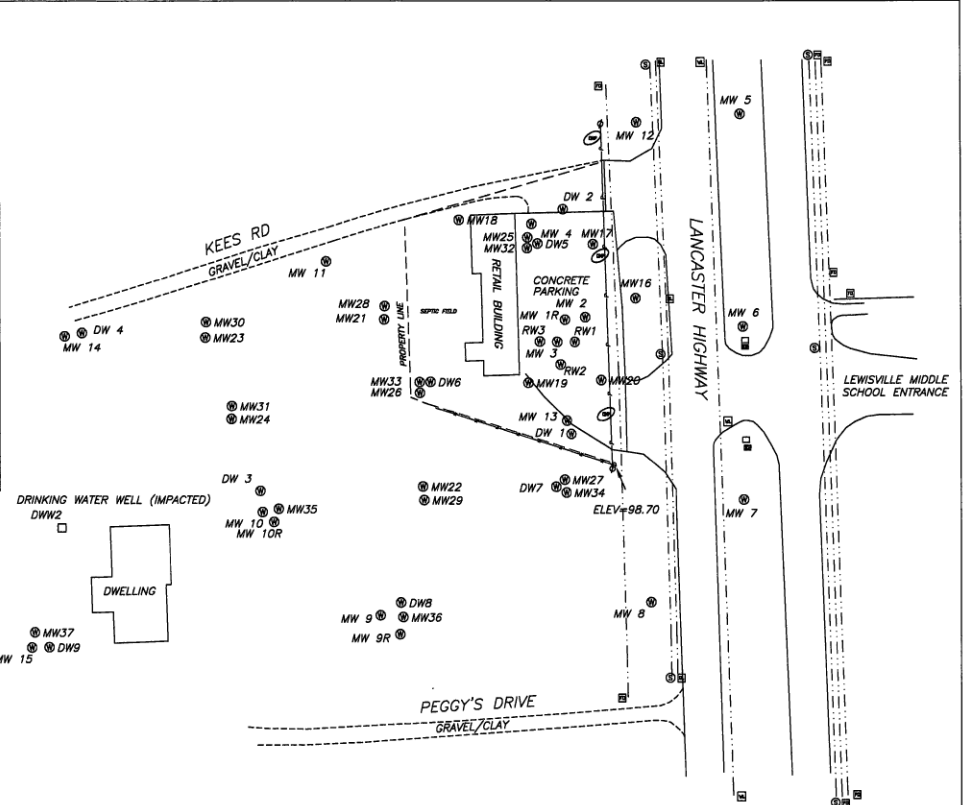
Well ID	DATE	Inorganic Arsenic (ppb)	Barium (ppb)	3,3-Dimethyl 1,2,4-Dioxane (ppb)	1,1,1-Trichloroethane (ppb)	1,1,2-Trichloroethane (ppb)	1,1,2,2-Tetrachloroethane (ppb)	1,1,2,2-Tetrachloroethane (ppb)	1,1,2,2-Tetrachloroethane (ppb)	1,1,2,2-Tetrachloroethane (ppb)
RBEL		NA	NA	NA	NA	NA	NA	NA	NA	NA
MW 1R	12/1/17	ND	<1000	<1000	<100	2000	2000	2000	<10000	<2000
MW 2	12/1/17	ND	<10000	<10000	<100	2000	2000	2000	<10000	<2000
MW 3	12/1/17	PP	PP	PP	0.06 FT	PP	PP	PP	PP	PP
MW 4	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 5	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 6	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 7	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 8	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 9	12/1/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 10	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 11	12/1/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 12	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
SLP	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 13	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 14	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
SLP	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 15	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 16	12/1/17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW 17	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 18	12/1/17	<1	<100	<1	<1	<10	<10	<10	<10	<10
MW 19	12/1/17	38	<100	<100	<10	200	200	200	<1000	<100
MW 20	12/1/17	17	<100	<100	<10	200	200	200	<1000	<100
MW 21	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 22	12/1/17	32	<1000	<1000	<10	200	200	200	<1000	<100
MW 23	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 24	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 25	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 26	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 27	12/1/17	38	<1000	<1000	<10	200	200	200	<1000	<100
MW 28	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100
MW 29	12/1/17	<1	<100	<100	<10	200	200	200	<1000	<100



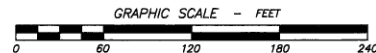
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**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

Well ID	DATE	Acetone Ethyl (PPE) µg/L	Ethanol µg/L	3-4 Dimethyl-1 butanol µg/L	Ethyl tert Butyl Ether µg/L (TBA)	1-Prop Alcohol µg/L (TBA)	Isoprop Alcohol µg/L (TBA)	tert-Butyl Alcohol µg/L (TBA)	Toluene µg/L (TBA)	1,4-Di- benzene µg/L (TBA)
MW 28	8/1/17	35	<1000	<200	<10	310	88 J	<200	<200	<50
MW 30	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DUP	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
MW 31	8/1/17	17	<100	<20	<1	58	85	<20	<20	<5
MW 32	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
MW 33	8/1/17	<20	<2000	<400	<20	<400	<220	<400	<100	<100
MW 34	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
MW 35	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
MW 38	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
MW 37	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 1	12/1/17	83	<1000	<200	<10	2000	140	300	300	<50
DW 2	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 3	12/1/17	<8	<1000	<100	<5	<100	47.7 J	<100	<200	<20
DW 4	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DUP	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DUP	8/1/17	<5	28000	<100	<5	48 J	35 J	<100	<100	<20
DW 8	8/1/17	<8	13000	<100	<8	130	34 J	48 J	<200	<20
DW 7	8/1/17	<1	2000	<20	<1	10.1	3.9 J	12 J	5	<5
DW 8	8/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 9	8/1/17	<5	<100	<20	<5	<100	<50	<100	<100	<20
RW 1	8/1/17	810	<20000	<4000	<200	8000	2800	2000 J	<1000	<1000
RW 2	8/1/17	<200	<40000	<10000	<800	13000	4700 J	<10000	<2000	<2000
RW 3	8/1/17	<20	<6000	<1000	<50	2700	470 J	<1000	<200	<200
DW 1	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 2	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 3	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 4	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 5	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 6	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 7	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DW 8	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
DUP	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
FB	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
FB 2	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
FB	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
FB	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5
FB	12/1/17	<1	<100	<20	<1	<20	<10	<20	<20	<5



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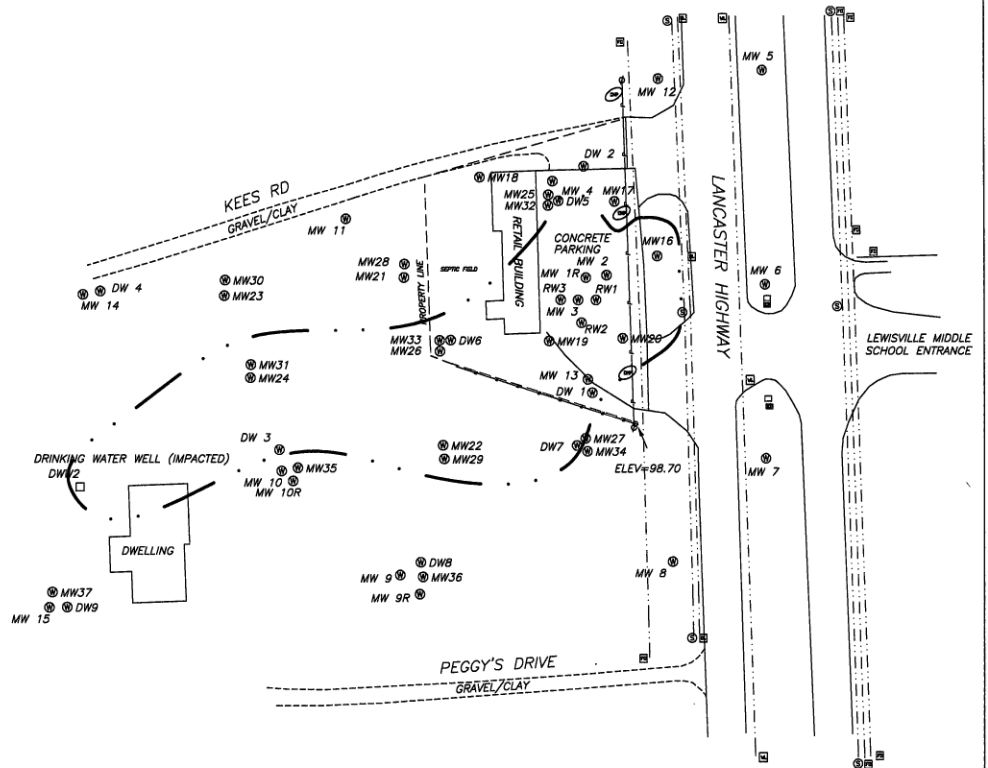


**TIER II REPORT**  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 5 - CONTAMINATION MAP

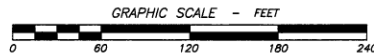


MTBE > 40 ug/L

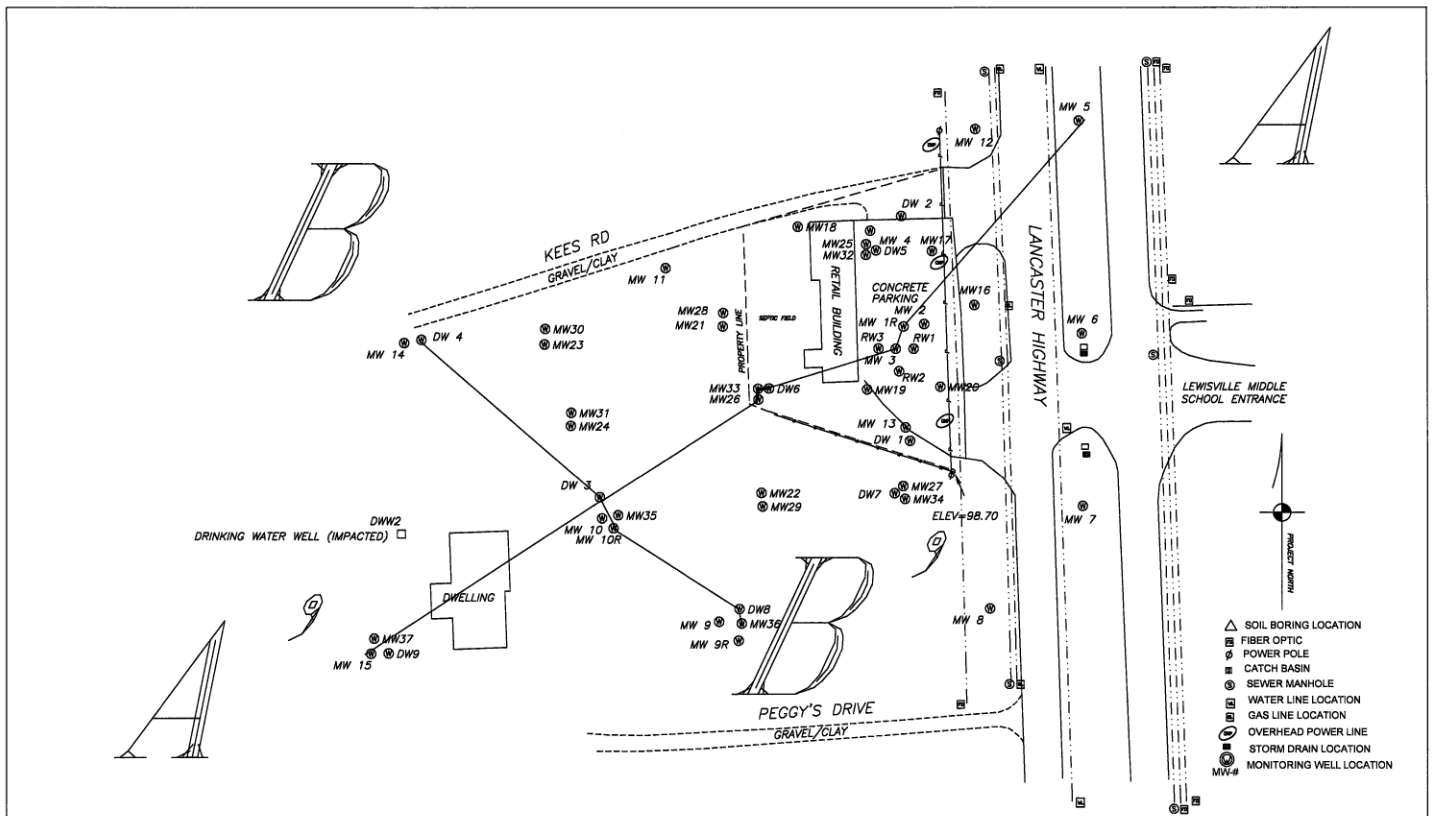
- △ SOIL BORING LOCATION
- ▣ FIBER OPTIC
- ⊙ POWER POLE
- CATCH BASIN
- ⊙ SEWER MANHOLE
- WATER LINE LOCATION
- GAS LINE LOCATION
- OVERHEAD POWER LINE
- STORM DRAIN LOCATION
- ⊙ MW-# MONITORING WELL LOCATION



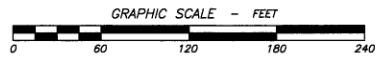
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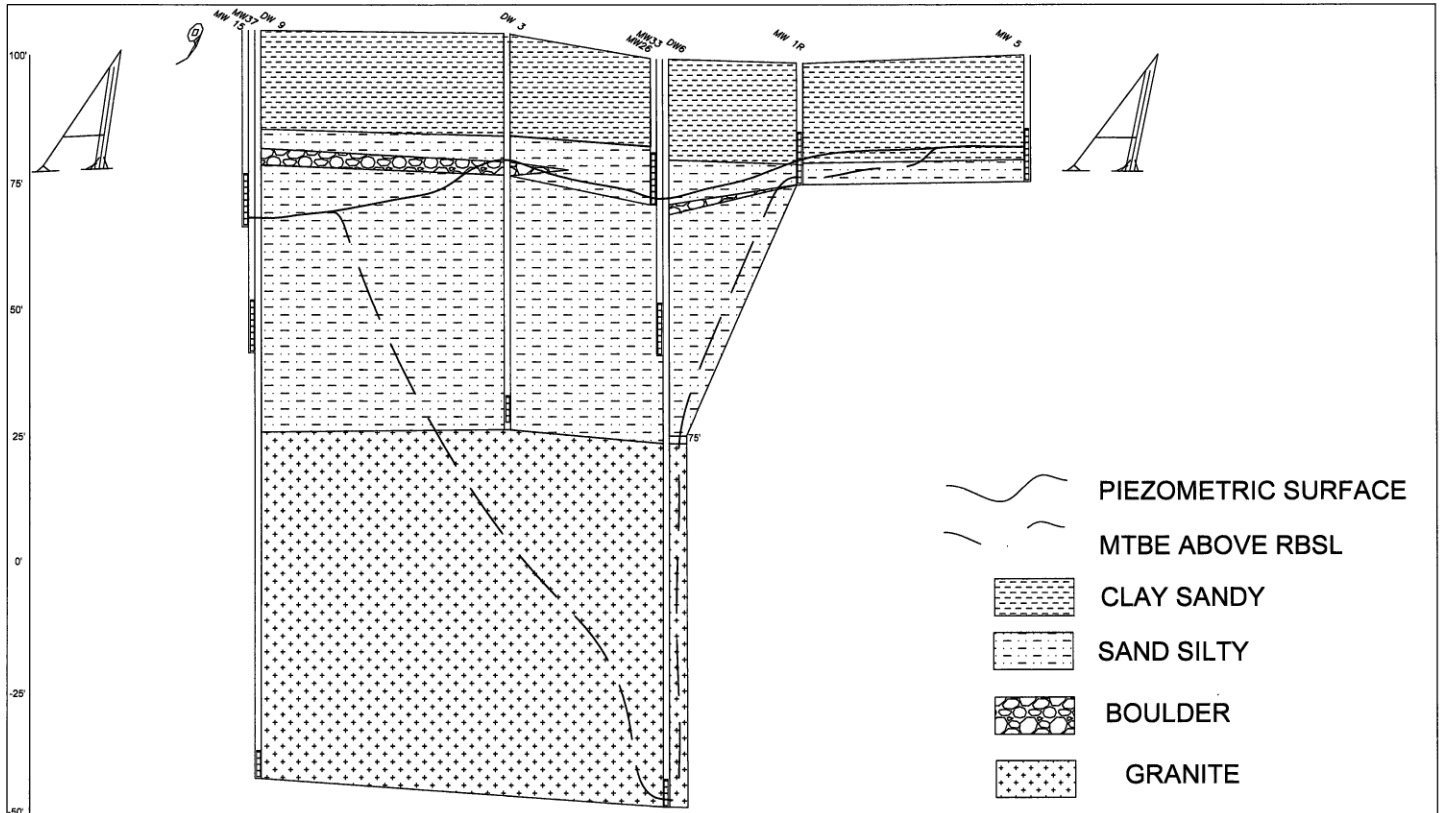
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 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 6 - WELL DELINEATION MAP








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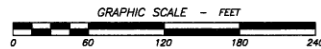


TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 7 - TRANSECT MAP

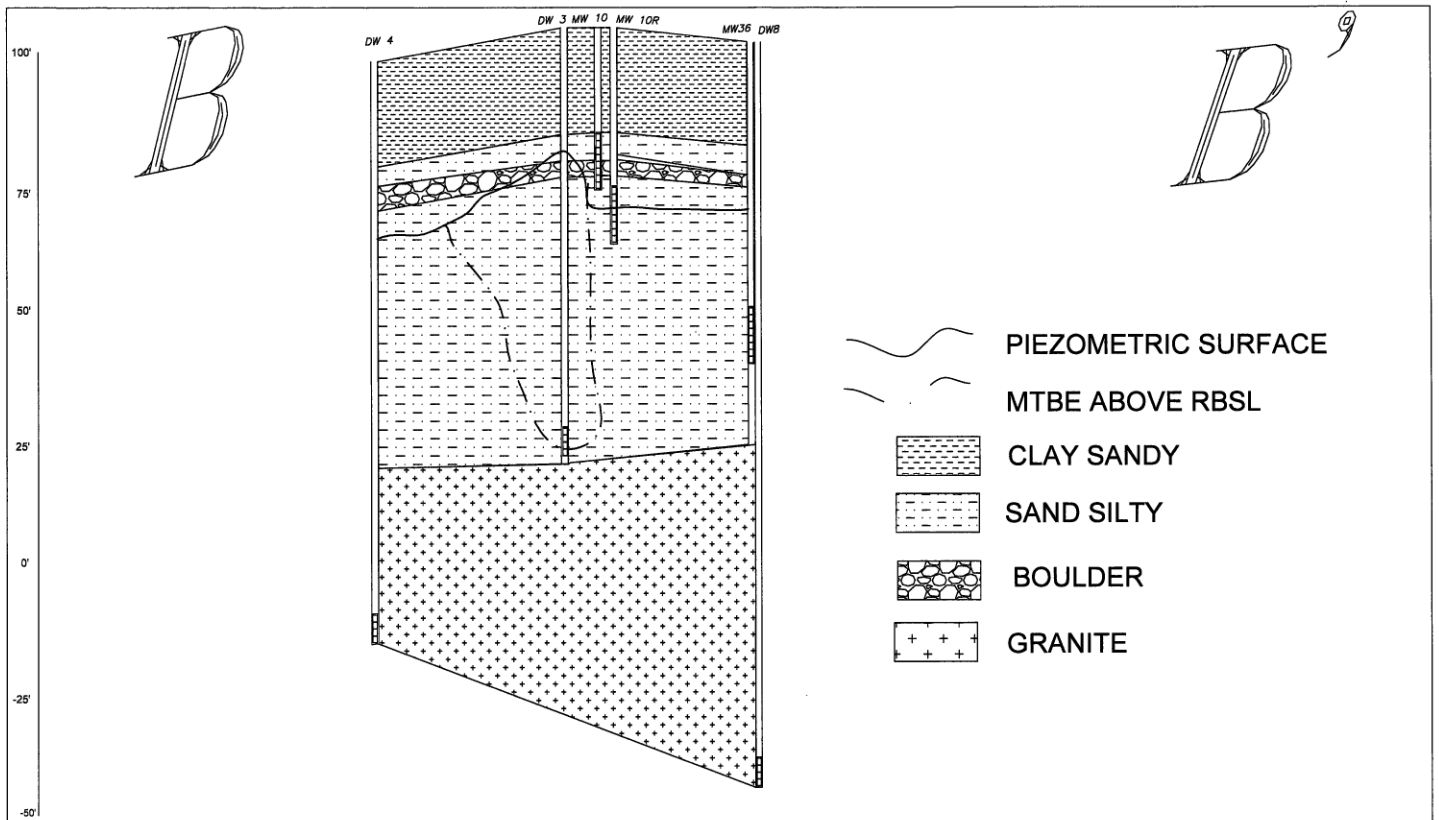


-  PIEZOMETRIC SURFACE
-  MTBE ABOVE RBSL
-  CLAY SANDY
-  SAND SILTY
-  BOULDER
-  GRANITE

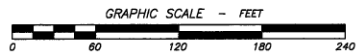
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TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 8 - A A' TRANSECT MAP



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TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 9 - B B' TRANSECT MAP

**APPENDIX B**  
**ANALYTICAL DATA**

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

**Katawba Environmental, Inc.**  
4278 Dye Rd.  
Edgemore, SC 29712  
Attention: Alex Amos

Project Name: One Accord

Lot Number: **SI05052**

Date Completed: 09/12/2017



09/13/2017 10:58 AM  
Approved and released by:  
Project Manager: Lucas Odom



**LABORATORY  
ACCREDITATION  
BUREAU** a division of A-S-3  
**ACCREDITED** ISO/IEC 17025

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Shealy Environmental Services, Inc.  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 [www.shealylab.com](http://www.shealylab.com)

# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## Case Narrative Katawba Environmental, Inc. Lot Number: SI05052

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

### VOCs by GC/MS

The following sample was diluted due to the nature of the sample matrix: SI05052-032. The LOQ has been elevated to reflect the dilution.

### EDB by Microextraction

The surrogate associated with sample -022 recovered above method criteria. No corrective action is required as the associated sample is non-

detect for the target compound. Samples -024, -025, and -026 have been qualified with a "P" as the relative percent difference between the two GC columns exceeded method criteria for EDB. Per SCDHEC, the lesser of the two values has been reported.

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# SHEALY ENVIRONMENTAL SERVICES, INC.

## Sample Summary Katawba Environmental, Inc. Lot Number: SI05052

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	02131 MW16	Aqueous	09/01/2017 1912	09/05/2017
002	02131 MW17	Aqueous	09/01/2017 1933	09/05/2017
003	02131 MW18	Aqueous	09/01/2017 1546	09/05/2017
004	02131 MW19	Aqueous	09/01/2017 1948	09/05/2017
005	02131 MW20	Aqueous	09/01/2017 1813	09/05/2017
006	02131 MW21	Aqueous	09/01/2017 1429	09/05/2017
007	02131 MW22	Aqueous	09/01/2017 1655	09/05/2017
008	02131 MW23	Aqueous	09/01/2017 1229	09/05/2017
009	02131 MW24	Aqueous	09/01/2017 1318	09/05/2017
010	02131 MW25	Aqueous	09/01/2017 1522	09/05/2017
011	02131 MW26	Aqueous	09/01/2017 1340	09/05/2017
012	02131 MW27	Aqueous	09/01/2017 1827	09/05/2017
013	02131 MW28	Aqueous	09/01/2017 1403	09/05/2017
014	02131 MW29	Aqueous	09/01/2017 1628	09/05/2017
015	02131 MW30	Aqueous	09/01/2017 1203	09/05/2017
016	02131 MW30 DUP	Aqueous	09/01/2017 1205	09/05/2017
017	02131 MW31	Aqueous	09/01/2017 1253	09/05/2017
018	02131 MW32	Aqueous	09/01/2017 1458	09/05/2017
019	02131 MW33	Aqueous	09/01/2017 1342	09/05/2017
020	02131 MW34	Aqueous	09/01/2017 1810	09/05/2017
021	02131 MW35	Aqueous	09/01/2017 1717	09/05/2017
022	02131 MW36	Aqueous	09/01/2017 1609	09/05/2017
023	02131 MW37	Aqueous	09/01/2017 1743	09/05/2017
024	02131 RW1	Aqueous	09/01/2017 2059	09/05/2017
025	02131 RW2	Aqueous	09/01/2017 2036	09/05/2017
026	02131 RW3	Aqueous	09/01/2017 2012	09/05/2017
027	02131 DW5	Aqueous	09/01/2017 0720	09/05/2017
028	02131 DW5 DUP	Aqueous	09/01/2017 0722	09/05/2017
029	02131 DW6	Aqueous	09/01/2017 1037	09/05/2017
030	02131 DW7	Aqueous	09/01/2017 1141	09/05/2017
031	02131 DW8	Aqueous	09/01/2017 0934	09/05/2017
032	02131 DW9	Aqueous	09/01/2017 0829	09/05/2017
033	02131 FB	Aqueous	09/01/2017 2120	09/05/2017
034	02131 TB	Aqueous	09/01/2017 2136	09/05/2017

(34 samples)

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# SHEALY ENVIRONMENTAL SERVICES, INC.

## Detection Summary Katawba Environmental, Inc. Lot Number: SI05052

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	02131 MW16	Aqueous	tert-Amyl alcohol (TAA)	8260B	810	J	ug/L	7
001	02131 MW16	Aqueous	Benzene	8260B	1400		ug/L	7
001	02131 MW16	Aqueous	Ethylbenzene	8260B	290		ug/L	7
001	02131 MW16	Aqueous	Methyl tertiary butyl ether	8260B	79		ug/L	7
001	02131 MW16	Aqueous	Toluene	8260B	5500		ug/L	7
001	02131 MW16	Aqueous	Xylenes (total)	8260B	3700		ug/L	7
002	02131 MW17	Aqueous	Benzene	8260B	2.4		ug/L	8
002	02131 MW17	Aqueous	Toluene	8260B	9.3		ug/L	8
002	02131 MW17	Aqueous	Xylenes (total)	8260B	7.7		ug/L	8
002	02131 MW17	Aqueous	Lead	6010D	0.012		mg/L	8
003	02131 MW18	Aqueous	Lead	6010D	0.0060	J	mg/L	9
004	02131 MW19	Aqueous	tert-Amyl alcohol (TAA)	8260B	1700		ug/L	10
004	02131 MW19	Aqueous	tert-Amyl methyl ether	8260B	59		ug/L	10
004	02131 MW19	Aqueous	Benzene	8260B	980		ug/L	10
004	02131 MW19	Aqueous	Diisopropyl ether (IPE)	8260B	38		ug/L	10
004	02131 MW19	Aqueous	Ethylbenzene	8260B	73		ug/L	10
004	02131 MW19	Aqueous	Methyl tertiary butyl ether	8260B	930		ug/L	10
004	02131 MW19	Aqueous	Naphthalene	8260B	13		ug/L	10
004	02131 MW19	Aqueous	tert-butyl alcohol (TBA)	8260B	220		ug/L	10
004	02131 MW19	Aqueous	Toluene	8260B	65		ug/L	10
004	02131 MW19	Aqueous	Xylenes (total)	8260B	580		ug/L	10
005	02131 MW20	Aqueous	tert-Amyl alcohol (TAA)	8260B	1200		ug/L	11
005	02131 MW20	Aqueous	tert-Amyl methyl ether	8260B	5.7	J	ug/L	11
005	02131 MW20	Aqueous	Benzene	8260B	160		ug/L	11
005	02131 MW20	Aqueous	Diisopropyl ether (IPE)	8260B	17		ug/L	11
005	02131 MW20	Aqueous	Ethylbenzene	8260B	63		ug/L	11
005	02131 MW20	Aqueous	Methyl tertiary butyl ether	8260B	97		ug/L	11
005	02131 MW20	Aqueous	Naphthalene	8260B	4.6	J	ug/L	11
005	02131 MW20	Aqueous	tert-butyl alcohol (TBA)	8260B	140		ug/L	11
005	02131 MW20	Aqueous	Toluene	8260B	410		ug/L	11
005	02131 MW20	Aqueous	Xylenes (total)	8260B	280		ug/L	11
006	02131 MW21	Aqueous	Methyl tertiary butyl ether	8260B	2.2		ug/L	12
006	02131 MW21	Aqueous	Lead	6010D	0.017		mg/L	12
007	02131 MW22	Aqueous	tert-Amyl alcohol (TAA)	8260B	290		ug/L	13
007	02131 MW22	Aqueous	tert-Amyl methyl ether	8260B	55	J	ug/L	13
007	02131 MW22	Aqueous	Diisopropyl ether (IPE)	8260B	32		ug/L	13
007	02131 MW22	Aqueous	Methyl tertiary butyl ether	8260B	950		ug/L	13
007	02131 MW22	Aqueous	Lead	6010D	0.067		mg/L	13
008	02131 MW23	Aqueous	Lead	6010D	0.011		mg/L	14
009	02131 MW24	Aqueous	tert-Amyl methyl ether	8260B	3.9	J	ug/L	15
009	02131 MW24	Aqueous	Methyl tertiary butyl ether	8260B	70		ug/L	15
009	02131 MW24	Aqueous	Lead	6010D	0.0064	J	mg/L	15
010	02131 MW25	Aqueous	Toluene	8260B	1.7		ug/L	16
011	02131 MW26	Aqueous	tert-Amyl methyl ether	8260B	190	J	ug/L	17
011	02131 MW26	Aqueous	Benzene	8260B	110		ug/L	17

# Detection Summary (Continued)

Lot Number: SI05052

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
011	02131 MW26	Aqueous	Diisopropyl ether (IPE)	8260B	36		ug/L	17
011	02131 MW26	Aqueous	Methyl tertiary butyl ether	8260B	1800		ug/L	17
011	02131 MW26	Aqueous	Xylenes (total)	8260B	57		ug/L	17
011	02131 MW26	Aqueous	Lead	6010D	0.038		mg/L	17
013	02131 MW28	Aqueous	Benzene	8260B	0.87	J	ug/L	19
013	02131 MW28	Aqueous	Methyl tertiary butyl ether	8260B	0.85	J	ug/L	19
014	02131 MW29	Aqueous	tert-Amyl alcohol (TAA)	8260B	310		ug/L	20
014	02131 MW29	Aqueous	tert-Amyl methyl ether	8260B	66	J	ug/L	20
014	02131 MW29	Aqueous	Diisopropyl ether (IPE)	8260B	35		ug/L	20
014	02131 MW29	Aqueous	Methyl tertiary butyl ether	8260B	1100		ug/L	20
015	02131 MW30	Aqueous	Methyl tertiary butyl ether	8260B	11		ug/L	21
016	02131 MW30 DUP	Aqueous	Methyl tertiary butyl ether	8260B	11		ug/L	22
017	02131 MW31	Aqueous	tert-Amyl alcohol (TAA)	8260B	58		ug/L	23
017	02131 MW31	Aqueous	tert-Amyl methyl ether	8260B	55		ug/L	23
017	02131 MW31	Aqueous	Diisopropyl ether (IPE)	8260B	17		ug/L	23
017	02131 MW31	Aqueous	Methyl tertiary butyl ether	8260B	740		ug/L	23
017	02131 MW31	Aqueous	Xylenes (total)	8260B	7.2		ug/L	23
019	02131 MW33	Aqueous	tert-Amyl methyl ether	8260B	220		ug/L	25
019	02131 MW33	Aqueous	Benzene	8260B	140		ug/L	25
019	02131 MW33	Aqueous	Methyl tertiary butyl ether	8260B	2300		ug/L	25
019	02131 MW33	Aqueous	Xylenes (total)	8260B	47		ug/L	25
021	02131 MW35	Aqueous	Methyl tertiary butyl ether	8260B	0.90	J	ug/L	27
023	02131 MW37	Aqueous	Lead	6010D	0.0065	J	mg/L	29
024	02131 RW1	Aqueous	tert-Amyl alcohol (TAA)	8260B	8500		ug/L	30
024	02131 RW1	Aqueous	tert-Amyl methyl ether	8260B	2900		ug/L	30
024	02131 RW1	Aqueous	Benzene	8260B	7700		ug/L	30
024	02131 RW1	Aqueous	Diisopropyl ether (IPE)	8260B	910		ug/L	30
024	02131 RW1	Aqueous	Ethylbenzene	8260B	1800		ug/L	30
024	02131 RW1	Aqueous	Methyl tertiary butyl ether	8260B	21000		ug/L	30
024	02131 RW1	Aqueous	Naphthalene	8260B	270		ug/L	30
024	02131 RW1	Aqueous	tert-butyl alcohol (TBA)	8260B	2000	J	ug/L	30
024	02131 RW1	Aqueous	Toluene	8260B	12000		ug/L	30
024	02131 RW1	Aqueous	Xylenes (total)	8260B	9400		ug/L	30
024	02131 RW1	Aqueous	1,2-Dibromoethane (EDB)	8011	0.028	P	ug/L	30
024	02131 RW1	Aqueous	Lead	6010D	0.0083	J	mg/L	30
025	02131 RW2	Aqueous	tert-Amyl alcohol (TAA)	8260B	15000		ug/L	31
025	02131 RW2	Aqueous	tert-Amyl methyl ether	8260B	4700	J	ug/L	31
025	02131 RW2	Aqueous	Benzene	8260B	16000		ug/L	31
025	02131 RW2	Aqueous	Ethylbenzene	8260B	3700		ug/L	31
025	02131 RW2	Aqueous	Methyl tertiary butyl ether	8260B	23000		ug/L	31
025	02131 RW2	Aqueous	Naphthalene	8260B	500		ug/L	31
025	02131 RW2	Aqueous	Toluene	8260B	49000		ug/L	31
025	02131 RW2	Aqueous	Xylenes (total)	8260B	19000		ug/L	31
025	02131 RW2	Aqueous	1,2-Dibromoethane (EDB)	8011	0.12	P	ug/L	31
026	02131 RW3	Aqueous	tert-Amyl alcohol (TAA)	8260B	2700		ug/L	32
026	02131 RW3	Aqueous	tert-Amyl methyl ether	8260B	470	J	ug/L	32
026	02131 RW3	Aqueous	Benzene	8260B	4600		ug/L	32
026	02131 RW3	Aqueous	Ethylbenzene	8260B	1200		ug/L	32

## Detection Summary (Continued)

Lot Number: SI05052

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
026	02131 RW3	Aqueous	Methyl tertiary butyl ether	8260B	2500		ug/L	32
026	02131 RW3	Aqueous	Naphthalene	8260B	170		ug/L	32
026	02131 RW3	Aqueous	Toluene	8260B	6400		ug/L	32
026	02131 RW3	Aqueous	Xylenes (total)	8260B	11000		ug/L	32
026	02131 RW3	Aqueous	1,2-Dibromoethane (EDB)	8011	0.024	P	ug/L	32
027	02131 DW5	Aqueous	tert-Amyl alcohol (TAA)	8260B	68	J	ug/L	33
027	02131 DW5	Aqueous	tert-Amyl methyl ether	8260B	35	J	ug/L	33
027	02131 DW5	Aqueous	Benzene	8260B	26		ug/L	33
027	02131 DW5	Aqueous	Ethanol	8260B	29000		ug/L	33
027	02131 DW5	Aqueous	Ethylbenzene	8260B	5.0		ug/L	33
027	02131 DW5	Aqueous	Methyl tertiary butyl ether	8260B	330		ug/L	33
027	02131 DW5	Aqueous	Naphthalene	8260B	30		ug/L	33
027	02131 DW5	Aqueous	tert-butyl alcohol (TBA)	8260B	44	J	ug/L	33
027	02131 DW5	Aqueous	Toluene	8260B	4.7	J	ug/L	33
027	02131 DW5	Aqueous	Xylenes (total)	8260B	46		ug/L	33
028	02131 DW5 DUP	Aqueous	tert-Amyl alcohol (TAA)	8260B	49	J	ug/L	34
028	02131 DW5 DUP	Aqueous	tert-Amyl methyl ether	8260B	35	J	ug/L	34
028	02131 DW5 DUP	Aqueous	Benzene	8260B	25		ug/L	34
028	02131 DW5 DUP	Aqueous	Ethanol	8260B	25000		ug/L	34
028	02131 DW5 DUP	Aqueous	Ethylbenzene	8260B	4.0	J	ug/L	34
028	02131 DW5 DUP	Aqueous	Methyl tertiary butyl ether	8260B	360		ug/L	34
028	02131 DW5 DUP	Aqueous	Naphthalene	8260B	28		ug/L	34
028	02131 DW5 DUP	Aqueous	Toluene	8260B	3.6	J	ug/L	34
028	02131 DW5 DUP	Aqueous	Xylenes (total)	8260B	42		ug/L	34
029	02131 DW6	Aqueous	tert-Amyl alcohol (TAA)	8260B	130		ug/L	35
029	02131 DW6	Aqueous	tert-Amyl methyl ether	8260B	34	J	ug/L	35
029	02131 DW6	Aqueous	Benzene	8260B	22		ug/L	35
029	02131 DW6	Aqueous	Ethanol	8260B	16000		ug/L	35
029	02131 DW6	Aqueous	Methyl tertiary butyl ether	8260B	400		ug/L	35
029	02131 DW6	Aqueous	Naphthalene	8260B	18		ug/L	35
029	02131 DW6	Aqueous	tert-butyl alcohol (TBA)	8260B	46	J	ug/L	35
029	02131 DW6	Aqueous	Xylenes (total)	8260B	28		ug/L	35
030	02131 DW7	Aqueous	tert-Amyl alcohol (TAA)	8260B	10	J	ug/L	36
030	02131 DW7	Aqueous	tert-Amyl methyl ether	8260B	3.9	J	ug/L	36
030	02131 DW7	Aqueous	Benzene	8260B	3.5		ug/L	36
030	02131 DW7	Aqueous	Ethanol	8260B	2300		ug/L	36
030	02131 DW7	Aqueous	Ethylbenzene	8260B	0.93	J	ug/L	36
030	02131 DW7	Aqueous	Methyl tertiary butyl ether	8260B	40		ug/L	36
030	02131 DW7	Aqueous	Naphthalene	8260B	5.4		ug/L	36
030	02131 DW7	Aqueous	tert-butyl alcohol (TBA)	8260B	12	J	ug/L	36
030	02131 DW7	Aqueous	Toluene	8260B	0.91	J	ug/L	36
030	02131 DW7	Aqueous	Xylenes (total)	8260B	7.8		ug/L	36
032	02131 DW9	Aqueous	Methyl tertiary butyl ether	8260B	36		ug/L	38
034	02131 TB	Aqueous	tert-butyl alcohol (TBA)	8260B	21		ug/L	40

(137 detections)

Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-001**Description: **02131 MW16**Matrix: **Aqueous**Date Sampled: **09/01/2017 1912**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	50	09/07/2017 1721	BWS		50839			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260B	810	J	1000	400	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		500	21	ug/L	1		
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>1400</b>		<b>50</b>	<b>20</b>	<b>ug/L</b>	<b>1</b>		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		250	100	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		50	20	ug/L	1		
Diisopropyl ether (IPE)	108-20-3	8260B	ND		50	20	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		1000	400	ug/L	1		
Ethanol	64-17-5	8260B	ND		5000	2000	ug/L	1		
<b>Ethylbenzene</b>	<b>100-41-4</b>	<b>8260B</b>	<b>290</b>		<b>50</b>	<b>20</b>	<b>ug/L</b>	<b>1</b>		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		50	20	ug/L	1		
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>79</b>		<b>50</b>	<b>20</b>	<b>ug/L</b>	<b>1</b>		
Naphthalene	91-20-3	8260B	ND		50	20	ug/L	1		
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		1000	400	ug/L	1		
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>5500</b>		<b>50</b>	<b>20</b>	<b>ug/L</b>	<b>1</b>		
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>3700</b>		<b>50</b>	<b>20</b>	<b>ug/L</b>	<b>1</b>		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,2-Dichloroethane-d4		98	70-130							
Bromofluorobenzene		106	70-130							
Toluene-d8		101	70-130							

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	8011	8011	1	09/07/2017 1334	DAL1	09/06/2017 2110	50794			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1		
Surrogate	Q	Run 1 % Recovery	Acceptance Limits							
1,1,1,2-Tetrachloroethane		128	57-137							

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	3005A	6010D	1	09/06/2017 1801	CJZ	09/06/2017 0847	50713			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1		

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-002**Description: **02131 MW17**Matrix: **Aqueous**Date Sampled: **09/01/2017 1933**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/07/2017 1659	BWS		50839		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>2.4</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>9.3</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
<b>Xylenes (total)</b>	<b>1330-20-7</b>	<b>8260B</b>	<b>7.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	100		70-130
Bromofluorobenzene	104		70-130
Toluene-d8	102		70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/07/2017 1406	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,1,1,2-Tetrachloroethane	99		57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1823	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	0.012		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: Katawba Environmental, Inc.

Laboratory ID: SI05052-003

Description: 02131 MW18

Matrix: Aqueous

Date Sampled: 09/01/2017 1546

Date Received: 09/05/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1219	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		109	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/07/2017 1417	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		81	57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1836	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	0.0060	J	0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL.      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-004**Description: **02131 MW19**Matrix: **Aqueous**Date Sampled: **09/01/2017 1948**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260B	5	09/09/2017 0136	ECP		51030

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	1700		100	40	ug/L	2
tert-Amyl methyl ether (TAME)	994-05-8	8260B	59		50	2.1	ug/L	2
Benzene	71-43-2	8260B	980		5.0	2.0	ug/L	2
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	2
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	2
Dilsopropyl ether (IPE)	108-20-3	8260B	38		5.0	2.0	ug/L	2
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	2
Ethanol	64-17-5	8260B	ND		500	200	ug/L	2
Ethylbenzene	100-41-4	8260B	73		5.0	2.0	ug/L	2
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	930		5.0	2.0	ug/L	2
Naphthalene	91-20-3	8260B	13		5.0	2.0	ug/L	2
tert-butyl alcohol (TBA)	75-65-0	8260B	220		100	40	ug/L	2
Toluene	108-88-3	8260B	65		5.0	2.0	ug/L	2
Xylenes (total)	1330-20-7	8260B	580		5.0	2.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		110	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/07/2017 1427	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1840	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-005**Description: **02131 MW20**Matrix: **Aqueous**Date Sampled: **09/01/2017 1813**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	5030B	8260B	5	09/07/2017 1718	BWS		50841			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
tert-Amyl alcohol (TAA)	75-85-4	8260B	1200		100	40	ug/L	1		
tert-Amyl methyl ether (TAME)	994-05-8	8260B	5.7	J	50	2.1	ug/L	1		
Benzene	71-43-2	8260B	160		5.0	2.0	ug/L	1		
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	1		
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	1		
Dilsopropyl ether (IPE)	108-20-3	8260B	17		5.0	2.0	ug/L	1		
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	1		
Ethanol	64-17-5	8260B	ND		500	200	ug/L	1		
Ethylbenzene	100-41-4	8260B	63		5.0	2.0	ug/L	1		
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	1		
Methyl tertlary butyl ether (MTBE)	1634-04-4	8260B	97		5.0	2.0	ug/L	1		
Naphthalene	91-20-3	8260B	4.6	J	5.0	2.0	ug/L	1		
tert-butyl alcohol (TBA)	75-85-0	8260B	140		100	40	ug/L	1		
Toluene	108-88-3	8260B	410		5.0	2.0	ug/L	1		
Xylenes (total)	1330-20-7	8260B	280		5.0	2.0	ug/L	1		

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	98	70-130	
Bromofluorobenzene	99	70-130	
Toluene-d8	107	70-130	

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	8011	8011	1	09/07/2017 1438	DAL1	09/06/2017 2110	50794			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1		
Surrogate	Run 1 Q	Acceptance % Recovery	Limits							
1,1,1,2-Tetrachloroethane	133	57-137								

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	3005A	6010D	1	09/06/2017 1845	CJZ	09/06/2017 0847	50713			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1		

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-006**Description: **02131 MW21**Matrix: **Aqueous**Date Sampled: **09/01/2017 1429**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1245	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>2.2</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		109	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/07/2017 1449	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		95	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1849	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	0.017		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation  
 ND = Not detected at or above the DL  
 H = Out of holding time  
 B = Detected in the method blank  
 N = Recovery is out of criteria  
 W = Reported on wet weight basis  
 E = Quantitation of compound exceeded the calibration range  
 P = The RPD between two GC columns exceeds 40%  
 DL = Detection Limit  
 J = Estimated result < LOQ and ≥ DL

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-007**Description: **02131 MW22**Matrix: **Aqueous**Date Sampled: **09/01/2017 1655**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	10	09/07/2017 1743	BWS		50841		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)		75-85-4	8260B	290		200	80	ug/L	1
tert-Amyl methyl ether (TAME)		994-05-8	8260B	55	J	100	4.2	ug/L	1
Benzene		71-43-2	8260B	ND		10	4.0	ug/L	1
tert-Butyl formate (TBF)		762-75-4	8260B	ND		50	20	ug/L	1
1,2-Dichloroethane		107-06-2	8260B	ND		10	4.0	ug/L	1
Diisopropyl ether (IPE)		108-20-3	8260B	32		10	4.0	ug/L	1
3,3-Dimethyl-1-butanol		624-95-3	8260B	ND		200	80	ug/L	1
Ethanol		64-17-5	8260B	ND		1000	400	ug/L	1
Ethylbenzene		100-41-4	8260B	ND		10	4.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)		637-92-3	8260B	ND		10	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)		1634-04-4	8260B	950		10	4.0	ug/L	1
Naphthalene		91-20-3	8260B	ND		10	4.0	ug/L	1
tert-butyl alcohol (TBA)		75-85-0	8260B	ND		200	80	ug/L	1
Toluene		108-88-3	8260B	ND		10	4.0	ug/L	1
Xylenes (total)		1330-20-7	8260B	ND		10	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		110	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/07/2017 1500	DAL1	09/06/2017 2110	50794		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)		106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		89	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1854	CJZ	09/06/2017 0847	50713		
Parameter		CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead		7439-92-1	6010D	0.067		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW23**Matrix: **Aqueous**Date Sampled: **09/01/2017 1229**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/07/2017 1310	BWS		50841		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		111	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/07/2017 1510	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		96	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1858	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	0.011		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation  
 ND = Not detected at or above the DL  
 H = Out of holding time  
 B = Detected in the method blank  
 N = Recovery is out of criteria  
 W = Reported on wet weight basis  
 E = Quantitation of compound exceeded the calibration range  
 P = The RPD between two GC columns exceeds 40%  
 DL = Detection Limit  
 J = Estimated result < LOQ and ≥ DL

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-009**Description: **02131 MW24**Matrix: **Aqueous**Date Sampled: **09/01/2017 1318**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	5030B	8260B	1	09/07/2017 1335	BWS		50841				
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run			
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1			
tert-Amyl methyl ether (TAME)	994-05-8	8260B	3.9	J	10	0.42	ug/L	1			
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1			
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1			
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1			
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1			
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1			
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1			
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1			
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1			
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	70		1.0	0.40	ug/L	1			
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1			
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1			
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1			
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,2-Dichloroethane-d4		101	70-130								
Bromofluorobenzene		97	70-130								
Toluene-d8		111	70-130								

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch				
1	8011	8011	1	09/07/2017 1521	DAL1	09/06/2017 2110	50794				
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run			
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1			
Surrogate	Q	Run 1 % Recovery	Acceptance Limits								
1,1,1,2-Tetrachloroethane		81	57-137								

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch			
1	3005A	6010D	1	09/06/2017 1903	CJZ	09/06/2017 0847	50713			
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run		
Lead	7439-92-1	6010D	0.0064	J	0.010	0.0047	mg/L	1		

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-010**Description: **02131 MW25**Matrix: **Aqueous**Date Sampled: **09/01/2017 1522**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/07/2017 1400	BWS		50841		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
<b>Toluene</b>	<b>108-88-3</b>	<b>8260B</b>	<b>1.7</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		111	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/07/2017 1532	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		86	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1907	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-011**Description: **02131 MW26**Matrix: **Aqueous**Date Sampled: **09/01/2017 1340**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	20	09/07/2017 1808	BWS		50841		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		400	160	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	190	J	200	8.4	ug/L	1	
Benzene	71-43-2	8260B	110		20	8.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	40	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		20	8.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	36		20	8.0	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		400	160	ug/L	1	
Ethanol	64-17-5	8260B	ND		2000	800	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		20	8.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20	8.0	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1800		20	8.0	ug/L	1	
Naphthalene	91-20-3	8260B	ND		20	8.0	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		400	160	ug/L	1	
Toluene	108-88-3	8260B	ND		20	8.0	ug/L	1	
Xylenes (total)	1330-20-7	8260B	57		20	8.0	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,2-Dichloroethane-d4		101	70-130						
Bromofluorobenzene		100	70-130						
Toluene-d8		113	70-130						

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/07/2017 1543	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		96	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1912	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	0.038		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-012**Description: **02131 MW27**Matrix: **Aqueous**Date Sampled: **09/01/2017 1827**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1424	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		110	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/07/2017 1553	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		90	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1916	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW28**Matrix: **Aqueous**Date Sampled: **09/01/2017 1403**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/07/2017 1449	BWS		50841		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
<b>Benzene</b>	<b>71-43-2</b>	<b>8260B</b>	<b>0.87</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.85</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		109	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/08/2017 1316	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		88	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1929	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW29**Matrix: **Aqueous**Date Sampled: **09/01/2017 1628**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	10	09/07/2017 1833	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	310		200	80	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	66	J	100	4.2	ug/L	1
Benzene	71-43-2	8260B	ND		10	4.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		50	20	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		10	4.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	35		10	4.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		200	80	ug/L	1
Ethanol	64-17-5	8260B	ND		1000	400	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		10	4.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		10	4.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	1100		10	4.0	ug/L	1
Naphthalene	91-20-3	8260B	ND		10	4.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		200	80	ug/L	1
Toluene	108-88-3	8260B	ND		10	4.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		10	4.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		112	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/08/2017 1326	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		94	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1934	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW30**Matrix: **Aqueous**Date Sampled: **09/01/2017 1203**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1514	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>11</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		113	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/08/2017 1337	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		76	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1938	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Description: **02131 MW30 DUP**Matrix: **Aqueous**Date Sampled: **09/01/2017 1205**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1539	BWS		50841

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>11</b>		<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		112	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/08/2017 1348	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		83	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1943	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: 02131 MW31

Matrix: Aqueous

Date Sampled:09/01/2017 1253

Date Received:09/05/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/07/2017 1603	BWS		50841
2	5030B	8260B	5	09/09/2017 0201	ECP		51030

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	58		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	55		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	17		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	740		5.0	2.0	ug/L	2
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	7.2		1.0	0.40	ug/L	1

Surrogate	Run 1		Run 2	
	Q	% Recovery	Q	% Recovery
1,2-Dichloroethane-d4	101	70-130	102	70-130
Bromofluorobenzene	100	70-130	99	70-130
Toluene-d8	110	70-130	109	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/08/2017 1359	DAL1	09/06/2017 2110	50794

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1

Surrogate	Run 1	
	Q	% Recovery
1,1,1,2-Tetrachloroethane	81	57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/06/2017 1947	CJZ	09/06/2017 0847	50713

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-018**Description: **02131 MW32**Matrix: **Aqueous**Date Sampled: **09/01/2017 1458**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/07/2017 1628	BWS		50841		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		111	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/08/2017 1409	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		92	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1952	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 MW33**Matrix: **Aqueous**Date Sampled: **09/01/2017 1342**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	5030B	8260B	20	09/12/2017 0411	ECP		51139		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		400	160	ug/L	2	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	220		200	8.4	ug/L	2	
Benzene	71-43-2	8260B	140		20	8.0	ug/L	2	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		100	40	ug/L	2	
1,2-Dichloroethane	107-06-2	8260B	ND		20	8.0	ug/L	2	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		20	8.0	ug/L	2	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		400	160	ug/L	2	
Ethanol	64-17-5	8260B	ND		2000	800	ug/L	2	
Ethylbenzene	100-41-4	8260B	ND		20	8.0	ug/L	2	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		20	8.0	ug/L	2	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	2300		20	8.0	ug/L	2	
Naphthalene	91-20-3	8260B	ND		20	8.0	ug/L	2	
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		400	160	ug/L	2	
Toluene	108-88-3	8260B	ND		20	8.0	ug/L	2	
Xylenes (total)	1330-20-7	8260B	47		20	8.0	ug/L	2	

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		100	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/08/2017 1420	DAL1	09/06/2017 2110	50794		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		100	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 1956	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-020**Description: **02131 MW34**Matrix: **Aqueous**Date Sampled: **09/01/2017 1810**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/08/2017 2357	ECP		51030		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		110	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 1936	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		113	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/06/2017 2001	CJZ	09/06/2017 0847	50713		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: Katawba Environmental, Inc.

Laboratory ID: SI05052-021

Description: 02131 MW35

Matrix: Aqueous

Date Sampled: 09/01/2017 1717

Date Received: 09/05/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/09/2017 0022	ECP		51030		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>0.90</b>	<b>J</b>	<b>1.0</b>	<b>0.40</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-85-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,2-Dichloroethane-d4	100		70-130
Bromofluorobenzene	95		70-130
Toluene-d8	107		70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 1947	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1	

Surrogate	Run 1 Q	Acceptance % Recovery	Limits
1,1,1,2-Tetrachloroethane	115		57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1720	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: 02131 MW36

Matrix: Aqueous

Date Sampled: 09/01/2017 1609

Date Received: 09/05/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/09/2017 0047	ECP		51030		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		109	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 1957	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane	N	143	57-137						

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1836	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-023**Description: **02131 MW37**Matrix: **Aqueous**Date Sampled: **09/01/2017 1743**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/09/2017 0112	ECP		51030

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		100	70-130
Toluene-d8		111	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2008	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		123	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1840	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	0.0065	J	0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-024**Description: **02131 RW1**Matrix: **Aqueous**Date Sampled: **09/01/2017 2059**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	200	09/09/2017 1426	BWS		51037

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	8500		4000	1600	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	2900		2000	84	ug/L	1
Benzene	71-43-2	8260B	7700		200	80	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		1000	400	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		200	80	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	910		200	80	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		4000	1600	ug/L	1
Ethanol	64-17-5	8260B	ND		20000	8000	ug/L	1
Ethylbenzene	100-41-4	8260B	1800		200	80	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		200	80	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	21000		200	80	ug/L	1
Naphthalene	91-20-3	8260B	270		200	80	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	2000	J	4000	1600	ug/L	1
Toluene	108-88-3	8260B	12000		200	80	ug/L	1
Xylenes (total)	1330-20-7	8260B	9400		200	80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		100	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2019	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.028	P	0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		76	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1845	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	0.0083	J	0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation  
 ND = Not detected at or above the DL  
 H = Out of holding time  
 B = Detected in the method blank  
 N = Recovery is out of criteria  
 W = Reported on wet weight basis  
 E = Quantitation of compound exceeded the calibration range  
 P = The RPD between two GC columns exceeds 40%  
 DL = Detection Limit  
 J = Estimated result < LOQ and ≥ DL

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-025**Description: **02131 RW2**Matrix: **Aqueous**Date Sampled: **09/01/2017 2036**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	500	09/09/2017 1449	BWS		51037		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	15000		10000	4000	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	4700	J	5000	210	ug/L	1	
Benzene	71-43-2	8260B	16000		500	200	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		2500	1000	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		500	200	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		500	200	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		10000	4000	ug/L	1	
Ethanol	64-17-5	8260B	ND		50000	20000	ug/L	1	
Ethylbenzene	100-41-4	8260B	3700		500	200	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		500	200	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	23000		500	200	ug/L	1	
Naphthalene	91-20-3	8260B	500		500	200	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		10000	4000	ug/L	1	
Toluene	108-88-3	8260B	49000		500	200	ug/L	1	
Xylenes (total)	1330-20-7	8260B	19000		500	200	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		107	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 2030	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	0.12	P	0.019	0.0049	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		62	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1849	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result &lt; LOQ and ≥ DL

H = Out of holding time

W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-026**Description: **02131 RW3**Matrix: **Aqueous**Date Sampled: **09/01/2017 2012**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	09/09/2017 1511	BWS		51037

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	2700		1000	400	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	470	J	500	21	ug/L	1
Benzene	71-43-2	8260B	4600		50	20	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		250	100	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		50	20	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		50	20	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		1000	400	ug/L	1
Ethanol	64-17-5	8260B	ND		5000	2000	ug/L	1
Ethylbenzene	100-41-4	8260B	1200		50	20	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		50	20	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	2500		50	20	ug/L	1
Naphthalene	91-20-3	8260B	170		50	20	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		1000	400	ug/L	1
Toluene	108-88-3	8260B	6400		50	20	ug/L	1
Xylenes (total)	1330-20-7	8260B	11000		50	20	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		113	70-130
Toluene-d8		103	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2040	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	0.024	P	0.019	0.0048	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		111	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1854	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Description: **02131 DW5**Matrix: **Aqueous**Date Sampled: **09/01/2017 0720**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	09/09/2017 1534	BWS		51037

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	68	J	100	40	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	35	J	50	2.1	ug/L	1
Benzene	71-43-2	8260B	26		5.0	2.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	2.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	1
Ethanol	64-17-5	8260B	29000		500	200	ug/L	1
Ethylbenzene	100-41-4	8260B	5.0		5.0	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	330		5.0	2.0	ug/L	1
Naphthalene	91-20-3	8260B	30		5.0	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	44	J	100	40	ug/L	1
Toluene	108-88-3	8260B	4.7	J	5.0	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	46		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		112	70-130
Toluene-d8		100	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2051	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		60	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1859	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-028**Description: **02131 DW5 DUP**Matrix: **Aqueous**Date Sampled: **09/01/2017 0722**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
2	5030B	8260B	5	09/12/2017 0348	ECP		51139		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	49	J	100	40	ug/L	2	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	35	J	50	2.1	ug/L	2	
Benzene	71-43-2	8260B	25		5.0	2.0	ug/L	2	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	2	
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	2	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	2.0	ug/L	2	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	2	
Ethanol	64-17-5	8260B	25000		500	200	ug/L	2	
Ethylbenzene	100-41-4	8260B	4.0	J	5.0	2.0	ug/L	2	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	2	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	360		5.0	2.0	ug/L	2	
Naphthalene	91-20-3	8260B	28		5.0	2.0	ug/L	2	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	40	ug/L	2	
Toluene	108-88-3	8260B	3.6	J	5.0	2.0	ug/L	2	
Xylenes (total)	1330-20-7	8260B	42		5.0	2.0	ug/L	2	

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		111	70-130
Toluene-d8		98	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 2102	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0050	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		67	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1903	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      DL = Detection Limit  
 ND = Not detected at or above the DL      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%      J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time      W = Reported on wet weight basis

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Description: 02131 DW6

Matrix: Aqueous

Date Sampled: 09/01/2017 1037

Date Received: 09/05/2017

## Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	5	09/09/2017 1618	BWS		51037

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	130		100	40	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	34	J	50	2.1	ug/L	1
Benzene	71-43-2	8260B	22		5.0	2.0	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	2.0	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	1
Ethanol	64-17-5	8260B	16000		500	200	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		5.0	2.0	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	400		5.0	2.0	ug/L	1
Naphthalene	91-20-3	8260B	18		5.0	2.0	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	46	J	100	40	ug/L	1
Toluene	108-88-3	8260B	ND		5.0	2.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	28		5.0	2.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		100	70-130

## EDB &amp; DBCP by Microextraction

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2112	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.020	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		60	57-137

## ICP-AES Metals

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1908	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-030**Description: **02131 DW7**Matrix: **Aqueous**Date Sampled: **09/01/2017 1141**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/09/2017 1024	BWS		51037		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	10	J	20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	3.9	J	10	0.42	ug/L	1	
Benzene	71-43-2	8260B	3.5		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	2300		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	0.93	J	1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	40		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	5.4		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	12	J	20	8.0	ug/L	1	
Toluene	108-88-3	8260B	0.91	J	1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	7.8		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		97	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 2123	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		104	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1921	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client:Katawba Environmental, Inc.

Laboratory ID:SI05052-031

Description: 02131 DW8

Matrix: Aqueous

Date Sampled:09/01/2017 0934

Date Received:09/05/2017

**Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/09/2017 1046	BWS		51037

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	8011	8011	1	09/11/2017 2134	DAL1	09/10/2017 1308	51058

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0049	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		64	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010D	1	09/07/2017 1925	CJZ	09/06/2017 1704	50781

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1

LOQ = Limit of Quantitation  
 ND = Not detected at or above the DL  
 H = Out of holding time  
 B = Detected in the method blank  
 N = Recovery is out of criteria  
 W = Reported on wet weight basis  
 E = Quantitation of compound exceeded the calibration range  
 P = The RPD between two GC columns exceeds 40%  
 DL = Detection Limit  
 J = Estimated result < LOQ and ≥ DL

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Description: **02131 DW9**Matrix: **Aqueous**Date Sampled: **09/01/2017 0829**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	5	09/09/2017 1639	BWS		51037		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		100	40	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		50	2.1	ug/L	1	
Benzene	71-43-2	8260B	ND		5.0	2.0	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		25	10	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	2.0	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		5.0	2.0	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		100	40	ug/L	1	
Ethanol	64-17-5	8260B	ND		500	200	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		5.0	2.0	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		5.0	2.0	ug/L	1	
<b>Methyl tertiary butyl ether (MTBE)</b>	<b>1634-04-4</b>	<b>8260B</b>	<b>36</b>		<b>5.0</b>	<b>2.0</b>	<b>ug/L</b>	<b>1</b>	
Naphthalene	91-20-3	8260B	ND		5.0	2.0	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		100	40	ug/L	1	
Toluene	108-88-3	8260B	ND		5.0	2.0	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		5.0	2.0	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		115	70-130
Toluene-d8		102	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 2144	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	
Surrogate	Q	Run 1 % Recovery	Acceptance Limits						
1,1,1,2-Tetrachloroethane		110	57-137						

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1930	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-033**Description: **02131 FB**Matrix: **Aqueous**Date Sampled: **09/01/2017 2120**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	5030B	8260B	1	09/06/2017 1248	BWS		50725		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1	
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1	
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1	
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1	
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1	
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1	
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1	
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1	
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1	
Ethyl-tert-butyl ether (ETBE)	837-92-3	8260B	ND		1.0	0.40	ug/L	1	
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1	
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1	
tert-butyl alcohol (TBA)	75-65-0	8260B	ND		20	8.0	ug/L	1	
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1	
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		99	70-130

**EDB & DBCP by Microextraction**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	8011	8011	1	09/11/2017 2155	DAL1	09/10/2017 1308	51058		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
1,2-Dibromoethane (EDB)	106-93-4	8011	ND		0.019	0.0048	ug/L	1	

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,1,1,2-Tetrachloroethane		119	57-137

**ICP-AES Metals**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch		
1	3005A	6010D	1	09/07/2017 1934	CJZ	09/06/2017 1704	50781		
Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run	
Lead	7439-92-1	6010D	ND		0.010	0.0047	mg/L	1	

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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Client: **Katawba Environmental, Inc.**Laboratory ID: **SI05052-034**Description: **02131 TB**Matrix: **Aqueous**Date Sampled: **09/01/2017 2136**Date Received: **09/05/2017****Volatile Organic Compounds by GC/MS**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	09/06/2017 1309	BWS		50725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260B	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260B	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260B	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260B	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260B	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260B	ND		100	40	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260B	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260B	ND		1.0	0.40	ug/L	1
<b>tert-butyl alcohol (TBA)</b>	<b>75-65-0</b>	<b>8260B</b>	<b>21</b>		<b>20</b>	<b>8.0</b>	<b>ug/L</b>	<b>1</b>
Toluene	108-88-3	8260B	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	70-130
Bromofluorobenzene		96	70-130
Toluene-d8		101	70-130

LOQ = Limit of Quantitation    B = Detected in the method blank    E = Quantitation of compound exceeded the calibration range    DL = Detection Limit  
 ND = Not detected at or above the DL    N = Recovery is out of criteria    P = The RPD between two GC columns exceeds 40%    J = Estimated result < LOQ and ≥ DL  
 H = Out of holding time    W = Reported on wet weight basis

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**Chain of Custody  
and  
Miscellaneous Documents**



Chain of Custody Record

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108 Vantage Point Drive • West Columbia, SC 29172
Telephone No. 803-791-9700 Fax No. 803-791-9111
www.shealylab.com

Number 73867

Client: Katakba Lnw, Report to Contact: Alex Amos, Telephone No: (F-me), Quote No.
Address: 4278 Oyc Rd, Edgemoor, SC 29712, Project Name: One Accord, Project No.: One Accord, PO No.: One Accord, Matrix: MW16-MW25, Analysis: GDB, Lead, etc.

DISTRIBUTION: W/HTC & YELLOW-Return to laboratory with Sample(s); PINK-Field/Cuent Copy, Document Number: E-AD-133 Effective Date: 08/01/2014

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Page 42 of 46

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**Chain of Custody Record**

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www.shealylab.com

Number 73868

Client <b>Katawba Tru</b>		Report to Contact <b>Alucamas</b>		Telephone No. / E-mail		Quote No.	
Address <b>4278 Dye Rd</b>		Service's Signature <b>Billy Morris</b>		Analysis (Attach list if more space is needed)		Page <b>2</b> of <b>4</b>	
City <b>Edgemoor</b>		State / Zip Code <b>SC 29112</b>		Printed Name <b>Billy Morris</b>		<p><b>SI05052</b></p>	
Project Name <b>One Accord</b>		P.O. No. <b>One Accord</b>		Matrix <b>CPB Lead</b>			
Sample ID / Description		Date		Time		Remarks / Cooler I.D.	
<small>(Containers for each sample may be combined on one Row.)</small>							
<b>02151 MW26</b>		<b>9-1-17</b>		<b>1340</b>			
<b>02131 MW27</b>				<b>1827</b>			
<b>02131 MW28</b>				<b>1407</b>			
<b>02131 MW29</b>				<b>1628</b>			
<b>02151 MW30</b>				<b>1203</b>			
<b>02131 MW30 Dup</b>				<b>1205</b>			
<b>02131 MW31</b>				<b>1253</b>			
<b>02131 MW32</b>				<b>1458</b>			
<b>02131 MW33</b>				<b>1342</b>			
<b>02131 MW34</b>		<b>9-1-17</b>		<b>1816</b>			
Turn Around Time Required (Prior lab approval required for expedited TAT.) <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify) <b>7 Days TAT</b>				Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Toxic <input type="checkbox"/> Infect <input type="checkbox"/> Poison <input type="checkbox"/> Other	
1. Retrievished by <b>Billy Morris</b>		Date <b>9-5-17</b>		Time <b>8:20</b>		1. Received by <b>James Chen</b>	
2. Retrievished by <b>James Chen</b>		Date <b>9-5-17</b>		Time <b>1110</b>		2. Received by <b>Phil Chapman</b>	
3. Retrievished by <b>Phil Chapman</b>		Date <b>9-5-17</b>		Time <b>1515</b>		3. Received by	
4. Retrievished by		Date		Time		4. Laboratory received by <b>Erin Coyle</b>	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ice Pack		Receipt Temp. <b>2.2/1.8</b>	

SHEALY ENVIRONMENTAL SERVICES, INC.






**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive • West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

Number 73869

Client: <b>Katawby twu</b>		Request by Contact: <b>Alex Thomas</b>		Telephone No. / E-mail:		Quote No.:																																																																																																																																																																																																																		
Address: <b>4278 Dye Rd</b>		Sampler's Signature: <b>Billy Mims</b>		Analysis (Attach list if more than is recorded):		Page <b>3</b> of <b>4</b>																																																																																																																																																																																																																		
City: <b>Edgewater</b>		Printed Name: <b>Billy Mims</b>		Analysis (Attach list if more than is recorded): 6 DB Lead 12 DB 6 DB Lead		 <b>SI05052</b> HANBANK / C/OBER L.L.C.																																																																																																																																																																																																																		
State: <b>SC</b> Zip Code: <b>29712</b>		Project Name: <b>One Accord</b>																																																																																																																																																																																																																						
Project No: <b>One Accord</b>		P.O. No: <b>One Accord</b>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample ID / Description <small>(Containers for each sample may be combined in one lot.)</small></th> <th rowspan="2">Date</th> <th rowspan="2">Time</th> <th rowspan="2">Archived</th> <th colspan="10">Matrix</th> <th rowspan="2">6 DB</th> <th rowspan="2">Lead</th> </tr> <tr> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> <th>Asst</th> </tr> </thead> <tbody> <tr><td>02131 MW35</td><td>9-1-17</td><td>1717</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td>X</td></tr> <tr><td>02131 MW36</td><td></td><td>1609</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 MW37</td><td></td><td>1743</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 RWS</td><td></td><td>2059</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 RWL</td><td></td><td>2036</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 AWS</td><td></td><td>2012</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 DWS</td><td></td><td>720</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 DWS Dup</td><td></td><td>722</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 DW6</td><td></td><td>1037</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>02131 DW7</td><td>9-1-17</td><td>1141</td><td>X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td>X</td><td></td></tr> </tbody> </table>				Sample ID / Description <small>(Containers for each sample may be combined in one lot.)</small>	Date	Time	Archived	Matrix										6 DB	Lead	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	Asst	02131 MW35	9-1-17	1717	X												X	X	X	02131 MW36		1609																02131 MW37		1743																02131 RWS		2059																02131 RWL		2036																02131 AWS		2012																02131 DWS		720																02131 DWS Dup		722																02131 DW6		1037																02131 DW7	9-1-17	1141	X											X	X	X	
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02131 DW7	9-1-17	1141	X											X	X	X																																																																																																																																																																																																								
Turn Around Time Required (Prior lab approval required for expedited TAT): Standards <input type="checkbox"/> Rush (Specify) <b>7 Day TAT</b>		Sample Disposal: <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		Possible Hazard Identification: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Polym <input type="checkbox"/> Other				QC Requirements (Specify):																																																																																																																																																																																																																
1. Relinquished by: <b>Billy Mims</b>		Date: <b>9-5-17</b> Time: <b>820</b>		1. Received by: <b>Alex Thomas</b>				Date: <b>9.5.17</b> Time: <b>820</b>																																																																																																																																																																																																																
2. Relinquished by: <b>Alex Thomas</b>		Date: <b>9.5.17</b> Time: <b>1110</b>		2. Received by: <b>Billy Mims</b>				Date: <b>9.5.17</b> Time: <b>1110</b>																																																																																																																																																																																																																
3. Relinquished by: <b>Billy Mims</b>		Date: <b>9.5.17</b> Time: <b>7515</b>		3. Received by:				Date: Time:																																																																																																																																																																																																																
4. Relinquished by:		Date: Time:		4. Laboratory received by: <b>Erin Cobb</b>				Date: <b>9.5.17</b> Time: <b>1515</b>																																																																																																																																																																																																																
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				LAB USE ONLY Received on Ice (Circle) <input checked="" type="checkbox"/> No Ice Pack Receipt Temp: <b>22/1.8°C</b>																																																																																																																																																																																																																				


SHEALY ENVIRONMENTAL SERVICES, INC.



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
106 Vantage Point Drive • West Columbia, SC 29172  
Telephone No. 803-791-9700 Fax No. 803-791-9111  
www.shealylab.com

Number 73870

Client <b>Katowba Env</b>		Report to Contact <b>Abel Adams</b>		Telephone No. / E-mail		Quote No.	
Address <b>4270 Dye Rd</b>		Sampler's Signature <i>Billy Morris</i>		Analysis (Attach list if more space is needed)		Page <u>4</u> of <u>4</u>	
City <b>Edge Moor</b>	State <b>SC</b>	Zip Code <b>29712</b>	Printed Name <b>Billy Morris</b>		 <b>S105052</b> Remarks / Cooler I.D.		
Project Name <b>One Accord</b>		P.O. No. <b>One Accord</b>		Matrix			
Sample ID / Description		Date	Time	No. of Containers by Preservative Type			
(Containers for each sample may be combined on one line.)				Asph	Met	Soil	Water
<b>02131 DW8</b>	<b>7-1-17</b>	<b>934</b>	<b>X</b>			<b>X</b>	<b>X</b>
<b>02131 DW9</b>	<b>1</b>	<b>829</b>	<b>1</b>			<b>1</b>	<b>1</b>
<b>02131 PB</b>		<b>2120</b>	<b>1</b>			<b>X</b>	<b>X</b>
<b>02131 TB</b>	<b>9-1-17</b>	<b>2136</b>	<b>F</b>			<b>X</b>	

Turn Around Time Required (Prior lab approval required by expedited DAT.)  
 1 Standard **Rush (Specify) 70 days TAT**

Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab		Possible Hazard Identification <input type="checkbox"/> Vol-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> SKN Irritant <input type="checkbox"/> Poscor <input type="checkbox"/> Unknown		QC Requirements (Specify)	
1. Relinquished by <i>Billy Morris</i>	Date <b>9-5-17</b>	Time <b>820</b>	1. Received by <i>Kevin Allen</i>	Date <b>9-5-17</b>	Time <b>820</b>
2. Relinquished by <i>Kevin Allen</i>	Date <b>9-5-17</b>	Time <b>1110</b>	2. Received by <i>Mark Chyba</i>	Date <b>9-5-17</b>	Time <b>1110</b>
3. Relinquished by <i>Mark Chyba</i>	Date <b>9-5-17</b>	Time <b>1515</b>	3. Received by	Date	Time
4. Relinquished by	Date	Time	4. Laboratory received by <i>Kevin Allen</i>	Date <b>9-5-17</b>	Time <b>1515</b>

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on Ice (Circle)  Yes  No Im: Rank  
 Receipt Temp: **22/18°C**

SHEALY ENVIRONMENTAL SERVICES, INC.

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-5**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 25 ft.  
 Depth to GW (DGW) 22.71 ft.

Length of Water Column (LWC=TWD-DGW) 2.29 FT

1 Csg. Volume (LWC\*C) = 2.29 X 0.163 = 0.37 gals.  
 3 Csg. Volumes = 3 X 0.37 = 1.11 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 0.35 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35						
<b>Time (military)</b>	1223	1226	1235					
<b>pH (s.u.)</b>	6.72	6.75	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	64.5	64.5						
<b>Water Temp (°C)</b>	18.5	18.2						
<b>Turbidity (*)</b>	189	190						
<b>Dissolved Oxygen</b>	4.31	4.38						

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-1R**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 21.83 ft.

Length of Water Column (LWC=TWD-DGW) 2.17 FT

1 Csg. Volume (LWC\*C) = 2.17 X 0.163 = 0.35 gals.  
 3 Csg. Volumes = 3 X 0.35 = 1.06 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35	0.75	1.25				
<b>Time (military)</b>	1624	1629	1633	1638				
<b>pH (s.u.)</b>	5.66	5.63	5.60	5.53				
<b>Specific Cond. (umhos/cm)</b>	188	188	187	187				
<b>Water Temp (°C)</b>	22.0	22.1	22.3	22.4				
<b>Turbidity (*)</b>	129	147	159	160				
<b>Dissolved Oxygen</b>	2.20	2.13	2.10	2.06				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.69</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>6.31 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>6.31 X 0.163</u> = <u>1.02</u> gals.          3 Csg. Volumes = 3 X <u>1.02</u> = <u>3.08</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.25				
<b>Time (military)</b>	1559	1604	1609	1613				
<b>pH (s.u.)</b>	5.64	5.60	5.53	5.50				
<b>Specific Cond. (umhos/cm)</b>	178	178	177	176				
<b>Water Temp (°C)</b>	5.64	5.60	5.53	5.50				
<b>Turbidity (*)</b>	137	149	158	165				
<b>Dissolved Oxygen</b>	2.76	2.70	2.63	2.57				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-4**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 21.94 ft.

Length of Water Column (LWC=TWD-DGW) 6.06 FT

1 Csg. Volume (LWC\*C) =  $6.06 \times 0.163 = 0.98$  gals.  
 3 Csg. Volumes =  $3 \times 0.98 = 2.96$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 3.0 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3				
<b>Time (military)</b>	1504	1508	1512	1517				
<b>pH (s.u.)</b>	5.63	5.48	5.45	5.38				
<b>Specific Cond. (umhos/cm)</b>	70.5	63.2	62.6	62.1				
<b>Water Temp (°C)</b>	20.3	19.8	19.5	19.3				
<b>Turbidity (*)</b>	141	169	185	189				
<b>Dissolved Oxygen</b>	2.10	2.07	2.02	1.97				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-6**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 24 ft.  
 Depth to GW (DGW) 20.79 ft.

Length of Water Column (LWC=TWD-DGW) 3.21 FT

1 Csg. Volume (LWC\*C) = 3.21 X 0.163 = 0.52 gals.  
 3 Csg. Volumes = 3 X 0.52 = 1.56 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 0.50 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.50						
<b>Time (military)</b>	1256	1302	1307					
<b>pH (s.u.)</b>	6.37	6.41	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	126	128						
<b>Water Temp (°C)</b>	18.8	18.9						
<b>Turbidity (*)</b>	180	186						
<b>Dissolved Oxygen</b>	1.62	1.75						



**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-7**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 23 ft.  
 Depth to GW (DGW) 19.86 ft.

Length of Water Column (LWC=TWD-DGW) 3.14 FT

1 Csg. Volume (LWC\*C) = 3.14 X 0.163 = 0.51 gals.  
 3 Csg. Volumes = 3 X 0.51 = 1.53 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 0.50 gals

**Used purge pump to evacuate**

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.50						
<b>Time (military)</b>	1316	1320	1329					
<b>pH (s.u.)</b>	6.12	6.15	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	83.0	89.5						
<b>Water Temp (°C)</b>	18.1	18.2						
<b>Turbidity (*)</b>	207	209						
<b>Dissolved Oxygen</b>	7.06	7.04						

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>23</u> ft.          Depth to GW (DGW) <u>19.16</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>3.84</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>3.84 X 0.163</u> = <u>0.62</u> gals.          3 Csg. Volumes = 3 X <u>0.62</u> = <u>1.87</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.75						
<b>Time (military)</b>	1353	1344	1353					
<b>pH (s.u.)</b>	6.93	6.99	Purge Dry					
<b>Specific Cond. (umhos/cm)</b>	61.3	62.5						
<b>Water Temp (°C)</b>	19.0	19.4						
<b>Turbidity (*)</b>	212	190						
<b>Dissolved Oxygen</b>	1.62	1.65						





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<p>Date (mm/dd/yy) <u>1/31/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>38</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-11</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.                  Depth to GW (DGW) <u>26.31</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>2.69</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>2.69 X 0.163</u> = <u>0.43</u> gals.                  3 Csg. Volumes = 3 X <u>0.43</u> = <u>1.31</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>0.35</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.35	Purge Dry					
<b>Time (military)</b>	1440	1443	1452					
<b>pH (s.u.)</b>	6.38	6.42						
<b>Specific Cond. (umhos/cm)</b>	60.6	62.5						
<b>Water Temp (°C)</b>	18.9	19.1						
<b>Turbidity (*)</b>	19.9	20.1						
<b>Dissolved Oxygen</b>	2.07	2.09						

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-12</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.62</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.38 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>7.38 X 0.163 = 1.20</u> gals.          3 Csg. Volumes = 3 X <u>1.20</u> = <u>3.60</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.75 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.25	2.50	3.75				
<b>Time (military)</b>	1408	1413	1418	1424				
<b>pH (s.u.)</b>	6.28	6.29	6.27	6.25				
<b>Specific Cond. (umhos/cm)</b>	92.8	89.1	87.3	86.7				
<b>Water Temp (°C)</b>	18.8	19.2	19.3	19.4				
<b>Turbidity (*)</b>	201	227	239	246				
<b>Dissolved Oxygen</b>	1.97	1.26	1.20	1.13				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-13</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>26</u> ft.          Depth to GW (DGW) <u>20.52</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>5.48 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>5.48 X 0.163</u> = <u>0.89</u> gals.          3 Csg. Volumes = 3 X <u>0.89</u> = <u>2.67</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>2.75 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>d</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	2.75				
<b>Time (military)</b>	1534	1538	1542	1547				
<b>pH (s.u.)</b>	5.60	5.48	5.45	5.41				
<b>Specific Cond. (umhos/cm)</b>	119	125	126	126				
<b>Water Temp (°C)</b>	19.5	19.7	19.8	19.9				
<b>Turbidity (*)</b>	183	207	212	217				
<b>Dissolved Oxygen</b>	2.88	2.65	2.60	2.56				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 1/31/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 38  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # DW-1**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 75 ft.  
 Depth to GW (DGW) 21.53 ft.

Length of Water Column (LWC=TWD-DGW) 53.47 FT

1 Csg. Volume (LWC\*C) =  $53.47 \times 0.163 = 8.71$  gals.  
 3 Csg. Volumes =  $3 \times 8.71 = 26.13$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 26.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26.5				
<b>Time (military)</b>	1034	1040	1048	1056				
<b>pH (s.u.)</b>	5.60	5.62	5.64	5.67				
<b>Specific Cond. (umhos/cm)</b>	111	127	128	128				
<b>Water Temp (°C)</b>	20.1	20.0	19.8	19.6				
<b>Turbidity (*)</b>	12.9	10.8	10.5	10.2				
<b>Dissolved Oxygen</b>	2.03	1.95	1.91	1.86				



**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>38</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">pH=4.0</td> <td style="width: 33%;">4.0=4.0</td> <td style="width: 33%;">Standard</td> <td style="width: 33%;">10.0=10.0</td> </tr> <tr> <td>pH=7.0</td> <td>7.0=7.0</td> <td>Standard</td> <td>100.0=100.0</td> </tr> <tr> <td>pH=10.0</td> <td>10.0=10.0</td> <td>Standard</td> <td>1000.0=1000.0</td> </tr> </table> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	pH=4.0	4.0=4.0	Standard	10.0=10.0	pH=7.0	7.0=7.0	Standard	100.0=100.0	pH=10.0	10.0=10.0	Standard	1000.0=1000.0	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-2</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.          Depth to GW (DGW) <u>22.29</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>52.71FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>52.71 X 0.163 = 8.59</u> gals.          3 Csg. Volumes = 3X <u>8.59</u> = <u>25.77</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>26</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
pH=4.0	4.0=4.0	Standard	10.0=10.0																		
pH=7.0	7.0=7.0	Standard	100.0=100.0																		
pH=10.0	10.0=10.0	Standard	1000.0=1000.0																		
Relinquished by	Date/Time	Received by	Date/Time																		

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	8.5	17	26				
<b>Time (military)</b>	917	922	929	937				
<b>pH (s.u.)</b>	5.50	5.38	5.33	5.27				
<b>Specific Cond. (umhos/cm)</b>	187	200	201	201				
<b>Water Temp (°C)</b>	20.3	20.3	20.2	20.1				
<b>Turbidity (*)</b>	74.3	107	113	118				
<b>Dissolved Oxygen</b>	2.51	2.24	2.16	2.10				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>38</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-3</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>75</u> ft.                  Depth to GW (DGW) <u>31.29</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>43.71FT</u></p> <p>1 Csg. Volume (LWC*C) = <math>43.71 \times 0.163 = 7.12</math> gals.                  3 Csg. Volumes = <math>3 \times 7.12 = 21.37</math> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>21.5 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	7	14	21.5				
<b>Time (military)</b>	1150	1157	1205	1213				
<b>pH (s.u.)</b>	5.97	5.84	5.81	5.95				
<b>Specific Cond. (umhos/cm)</b>	43.0	37.3	36.8	36.2				
<b>Water Temp (°C)</b>	18.0	17.8	17.7	17.5				
<b>Turbidity (*)</b>	13.9	11.6	10.4	9.8				
<b>Dissolved Oxygen</b>	8.51	7.09	7.02	6.93				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>1/31/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>38</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-4</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>120</u> ft.                  Depth to GW (DGW) <u>28.05</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>91.95FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>91.95 X 0.163 = 14.98</u> gals.                  3 Csg. Volumes = 3X <u>14.98 = 44.96</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>45.0 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	15	30	45				
<b>Time (military)</b>	749	758	807	817				
<b>pH (s.u.)</b>	6.39	6.40	6.43	6.45				
<b>Specific Cond. (umhos/cm)</b>	97.0	103	104	104				
<b>Water Temp (°C)</b>	15.4	16.0	16.3	16.5				
<b>Turbidity (*)</b>	13.9	12.6	12.1	11.7				
<b>Dissolved Oxygen</b>	3.34	2.77	2.70	2.63				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>3/3/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Cloudy</u>                  Ambient Air Temperature <u>73</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-9R</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>37</u> ft.                  Depth to GW (DGW) <u>29.37</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.63</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.63 X 0.163 = 1.24</u> gals.                  3 Csg. Volumes = <u>3 X 1.24 = 3.73</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1050	1054	1101	1107				
<b>pH (s.u.)</b>	5.69	5.48	5.43	5.35				
<b>Specific Cond. (umhos/cm)</b>	47.7	46.6	43.3	44.8				
<b>Water Temp (°C)</b>	17.9	17.8	17.7	17.6				
<b>Turbidity (*)</b>	127	149	168	173				
<b>Dissolved Oxygen</b>	4.38	3.95	3.86	3.81				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/3/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Cloudy  
 Ambient Air Temperature 73  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-10R**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 40 ft.  
 Depth to GW (DGW) 31.58 ft.

Length of Water Column (LWC=TWD-DGW) 8.42 FT

1 Csg. Volume (LWC\*C) = 8.42 X 0.163 = 1.37 gals.  
 3 Csg. Volumes = 3 X 1.37 = 4.11 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.25				
<b>Time (military)</b>	1117	1121	1128	1134				
<b>pH (s.u.)</b>	5.74	5.71	5.67	5.65				
<b>Specific Cond. (umhos/cm)</b>	52.5	45.6	48.2	47.7				
<b>Water Temp (°C)</b>	17.9	18.1	18.2	18.3				
<b>Turbidity (*)</b>	139	157	165	168				
<b>Dissolved Oxygen</b>	5.67	4.74	4.68	4.61				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/3/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Cloudy  
 Ambient Air Temperature 73  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-14**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 36 ft.  
 Depth to GW (DGW) 28.02 ft.

Length of Water Column (LWC=TWD-DGW) 7.98 FT

1 Csg. Volume (LWC\*C) = 7.98 X 0.163 = 1.30 gals.  
 3 Csg. Volumes = 3 X 1.30 = 3.90 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1005	1011	1017	1021				
<b>pH (s.u.)</b>	5.31	5.54	5.55	5.57				
<b>Specific Cond. (umhos/cm)</b>	69.9	59.5	58.7	59.1				
<b>Water Temp (°C)</b>	17.0	16.8	16.6	16.5				
<b>Turbidity (*)</b>	115	153	169	171				
<b>Dissolved Oxygen</b>	9.89	7.29	7.21	7.13				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 3/3/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Cloudy  
 Ambient Air Temperature 73  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-15**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 40 ft.  
 Depth to GW (DGW) 37.12 ft.

Length of Water Column (LWC=TWD-DGW) 2.88 FT

1 Csg. Volume (LWC\*C) = 2.88 X 0.163 = 0.46 gals.  
 3 Csg. Volumes = 3 X 0.46 = 1.40 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.5	1	2				
<b>Time (military)</b>	1203	1208	1214	1219				
<b>pH (s.u.)</b>	5.71	5.75	5.78	5.81				
<b>Specific Cond. (umhos/cm)</b>	113	73.9	73.1	72.6				
<b>Water Temp (°C)</b>	17.5	17.2	17.1	17.0				
<b>Turbidity (*)</b>	127	149	158	163				
<b>Dissolved Oxygen</b>	4.07	4.22	4.13	4.07				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-16</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>21.42</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.58 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>8.58 X 0.163</u> = <u>1.39</u> gals.          3 Csg. Volumes = 3 X <u>1.39</u> = <u>4.19</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4.25 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	1857	1903	1908	1912				
<b>pH (s.u.)</b>	7.19	7.16	7.14	7.12				
<b>Specific Cond. (umhos/cm)</b>	71	71.4	71.9	72.1				
<b>Water Temp (°C)</b>	22.1	22.0	21.9	21.8				
<b>Turbidity (*)</b>	119	147	145	145				
<b>Dissolved Oxygen</b>	7.93	6.85	6.81	6.74				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-17**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 30 ft.  
 Depth to GW (DGW) 21.57 ft.

Length of Water Column (LWC=TWD-DGW) 8.43 FT

1 Csg. Volume (LWC\*C) =  $8.43 \times 0.163 = 1.37$  gals.  
 3 Csg. Volumes =  $3 \times 1.37 = 1.88$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 2.0 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	1.5	2				
<b>Time (military)</b>	1917	1922	1927	1933				
<b>pH (s.u.)</b>	6.78	6.75	6.70	6.64				
<b>Specific Cond. (umhos/cm)</b>	119	118	118	119				
<b>Water Temp (°C)</b>	22.1	22.0	21.8	21.5				
<b>Turbidity (*)</b>	139	157	168	173				
<b>Dissolved Oxygen</b>	5.12	3.42	3.55	3.50				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>84</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-18</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>32</u> ft.                  Depth to GW (DGW) <u>25.61</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>6.39 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>6.39 X 0.163</u> = <u>1.04</u> gals.                  3 Csg. Volumes = 3 X <u>1.04</u> = <u>3.12</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.25 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3				
<b>Time (military)</b>	1532	1537	1542	1546				
<b>pH (s.u.)</b>	6.49	6.33	6.30	6.26				
<b>Specific Cond. (umhos/cm)</b>	86.8	82.5	81.6	80.2				
<b>Water Temp (°C)</b>	19.5	18.9	18.7	18.6				
<b>Turbidity (*)</b>	101	119	133	137				
<b>Dissolved Oxygen</b>	6.98	4.86	4.80	4.73				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-19**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 32 ft.  
 Depth to GW (DGW) 23.25 ft.

Length of Water Column (LWC=TWD-DGW) 8.75 FT

1 Csg. Volume (LWC\*C) =  $8.75 \times 0.163 = 1.42$  gals.  
 3 Csg. Volumes =  $3 \times 1.42 = 4.27$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	1932	1938	1943	1948				
<b>pH (s.u.)</b>	6.63	6.56	6.51	6.49				
<b>Specific Cond. (umhos/cm)</b>	137	137	136	136				
<b>Water Temp (°C)</b>	21.0	20.9	20.5	20.7				
<b>Turbidity (*)</b>	108	129	129	130				
<b>Dissolved Oxygen</b>	2.27	2.03	1.98	1.95				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p align="center"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p align="center"><b>Chain of Custody</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-20</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>21.59</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>6.41 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>6.41 X 0.163</u> = <u>1.04</u> gals.          3 Csg. Volumes = 3 X <u>1.04</u> = <u>3.13</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>3.25 gals</u></p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1	2	3.25				
<b>Time (military)</b>	1757	1803	1808	1813				
<b>pH (s.u.)</b>	6.62	6.56	6.51	6.46				
<b>Specific Cond. (umhos/cm)</b>	198	197	197	195				
<b>Water Temp (°C)</b>	21.8	21.7	21.6	21.5				
<b>Turbidity (*)</b>	106	113	124	129				
<b>Dissolved Oxygen</b>	5.71	3.23	3.17	3.12				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-21**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 27.03 ft.

Length of Water Column (LWC=TWD-DGW) 7.97 FT

1 Csg. Volume (LWC\*C) = 7.97 X 0.163 = 1.29 gals.  
 3 Csg. Volumes = 3 X 1.29 = 3.89 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.0 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1412	1417	1423	1429				
<b>pH (s.u.)</b>	6.77	6.69	6.61	6.56				
<b>Specific Cond. (umhos/cm)</b>	64.4	57.6	57.1	56.3				
<b>Water Temp (°C)</b>	18.7	18.5	18.3	18.2				
<b>Turbidity (*)</b>	89.3	137	137	139				
<b>Dissolved Oxygen</b>	6.92	6.29	6.20	6.13				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border-bottom: 1px solid black;">Relinquished by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> <td style="width: 25%; border-bottom: 1px solid black;">Received by</td> <td style="width: 25%; border-bottom: 1px solid black;">Date/Time</td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time	<p><b>Well # <u>MW-22</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>28.15</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>1.85</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>1.85 X 0.163</u> = <u>0.30</u> gals.          3 Csg. Volumes = 3 X <u>0.30</u> = <u>0.90</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>1.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time		

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.3	.75	1.25				
<b>Time (military)</b>	1638	1644	1650	1656				
<b>pH (s.u.)</b>	7.37	7.30	7.26	7.23				
<b>Specific Cond. (umhos/cm)</b>	58.8	57.2	56.8	56.8				
<b>Water Temp (°C)</b>	18.9	18.8	18.7	18.6				
<b>Turbidity (*)</b>	175	192	201	208				
<b>Dissolved Oxygen</b>	6.39	5.87	5.82	5.78				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-23**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 27.00 ft.

Length of Water Column (LWC=TWD-DGW) 8.0 FT

1 Csg. Volume (LWC\*C) =  $8.0 \times 0.163 = 1.30$  gals.  
 3 Csg. Volumes =  $3 \times 1.30 = 3.9$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.0 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4				
<b>Time (military)</b>	1217	1221	1225	1229				
<b>pH (s.u.)</b>	7.66	7.50	7.43	7.39				
<b>Specific Cond. (umhos/cm)</b>	54.7	54.0	53.9	53.1				
<b>Water Temp (°C)</b>	17.6	18.3	18.4	18.5				
<b>Turbidity (*)</b>	112	129	143	147				
<b>Dissolved Oxygen</b>	7.29	7.65	7.53	7.48				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-24**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 35 ft.  
 Depth to GW (DGW) 28.43 ft.

Length of Water Column (LWC=TWD-DGW) 6.57 FT

1 Csg. Volume (LWC\*C) = 6.57 X 0.163 = 1.07 gals.  
 3 Csg. Volumes = 3 X 1.07 = 3.21 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 4.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	1304	1309	1314	1318				
<b>pH (s.u.)</b>	7.13	7.08	7.05	7.01				
<b>Specific Cond. (umhos/cm)</b>	48.5	41.9	41.8	41.1				
<b>Water Temp (°C)</b>	17.8	17.5	17.6	17.7				
<b>Turbidity (*)</b>	133	147	155	157				
<b>Dissolved Oxygen</b>	6.87	4.99	4.95	4.89				



**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-25</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>30</u> ft.          Depth to GW (DGW) <u>21.59</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.41</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>8.41 X 0.163</u> = <u>1.37</u> gals.          3 Csg. Volumes = 3 X <u>1.37</u> = <u>4.11</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.25				
<b>Time (military)</b>	1507	1512	1517	1522				
<b>pH (s.u.)</b>	6.44	6.38	6.35	6.28				
<b>Specific Cond. (umhos/cm)</b>	114	114	113	113				
<b>Water Temp (°C)</b>	20.4	20.5	20.2	20.1				
<b>Turbidity (*)</b>	73.4	107	112	117				
<b>Dissolved Oxygen</b>	3.44	3.32	3.17	3.12				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-26**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 28 ft.  
 Depth to GW (DGW) 26.93 ft.

Length of Water Column (LWC=TWD-DGW) 1.07 FT

1 Csg. Volume (LWC\*C) =  $1.07 \times 0.163 = 0.17$  gals.  
 3 Csg. Volumes =  $3 \times 0.17 = 0.52$  gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 1 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	0.3	0.6	1				
<b>Time (military)</b>	1326	1331	1335	1340				
<b>pH (s.u.)</b>	7.55	7.51	7.47	7.43				
<b>Specific Cond. (umhos/cm)</b>	67.9	62.3	61.9	61.8				
<b>Water Temp (°C)</b>	18.9	18.1	18.1	18.1				
<b>Turbidity (*)</b>	89	93	98	97				
<b>Dissolved Oxygen</b>	2.38	2.67	2.61	2.63				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-27</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>28</u> ft.          Depth to GW (DGW) <u>18.21</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>8.58 FT</u></p> <p>1 Csg. Volume (LWC*C) = <u>8.58 X 0.163</u> = <u>1.39</u> gals.          3 Csg. Volumes = 3 X <u>1.39</u> = <u>4.19</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>4.25</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	1.5	3	4.5				
<b>Time (military)</b>	1812	1817	1822	1827				
<b>pH (s.u.)</b>	6.89	6.93	6.95	6.98				
<b>Specific Cond. (umhos/cm)</b>	201	201	201	200				
<b>Water Temp (°C)</b>	19.7	19.2	19.1	19.0				
<b>Turbidity (*)</b>	105	147	150	151				
<b>Dissolved Oxygen</b>	6.61	4.25	4.21	4.16				

**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-28**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 59 ft.  
 Depth to GW (DGW) 27.18 ft.

Length of Water Column (LWC=TWD-DGW) 31.82 FT

1 Csg. Volume (LWC\*C) = 31.82 X 0.163 = 5.18 gals.  
 3 Csg. Volumes = 3 X 5.18 = 15.5 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 15.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.5				
<b>Time (military)</b>	1341	1349	1356	1403				
<b>pH (s.u.)</b>	6.60	6.58	6.55	6.51				
<b>Specific Cond. (umhos/cm)</b>	194	187	187	186				
<b>Water Temp (°C)</b>	19.0	18.5	18.4	18.1				
<b>Turbidity (*)</b>	30	49	57	60.4				
<b>Dissolved Oxygen</b>	5.62	5.54	5.47	5.42				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-29</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>64</u> ft.          Depth to GW (DGW) <u>28.49</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>35.51</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>35.51</u> X <u>0.163</u> = <u>5.78</u> gals.          3 Csg. Volumes = 3 X <u>5.78</u> = <u>17.5</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>17.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	17.5				
<b>Time (military)</b>	1608	1615	1621	1628				
<b>pH (s.u.)</b>	7.39	7.29	7.25	7.22				
<b>Specific Cond. (umhos/cm)</b>	57	69	70	71				
<b>Water Temp (°C)</b>	18.8	18.4	18.7	18.6				
<b>Turbidity (*)</b>	104	131	139	143				
<b>Dissolved Oxygen</b>	3.23	3.21	3.17	3.13				

**South Carolina Department of Health and Environmental Control  
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<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-30</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>59</u> ft.          Depth to GW (DGW) <u>26.85</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>32.15</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>32.15</u> X <u>0.163</u> = <u>5.24</u> gals.          3 Csg. Volumes = 3 X <u>5.24</u> = <u>15.7</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>15.75</u>gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.75				
<b>Time (military)</b>	1140	1148	1156	1203				
<b>pH (s.u.)</b>	7.31	7.20	7.14	7.09				
<b>Specific Cond. (umhos/cm)</b>	54.8	47.7	47.3	47.0				
<b>Water Temp (°C)</b>	18.0	17.6	17.5	17.3				
<b>Turbidity (*)</b>	83	103	107	112				
<b>Dissolved Oxygen</b>	9.13	8.49	8.38	8.12				

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Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-31**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 57 ft.  
 Depth to GW (DGW) 28.40 ft.

Length of Water Column (LWC=TWD-DGW) 28.6 FT

1 Csg. Volume (LWC\*C) = 28.6 X 0.163 = 4.66 gals.  
 3 Csg. Volumes = 3 X 4.66 = 13.98 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 14.0 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	4.5	9	14				
<b>Time (military)</b>	1232	1238	1246	1253				
<b>pH (s.u.)</b>	7.02	7.01	6.98	6.96				
<b>Specific Cond. (umhos/cm)</b>	115	114	114	113				
<b>Water Temp (°C)</b>	18.1	17.8	17.5	17.2				
<b>Turbidity (*)</b>	79.8	104	113	118				
<b>Dissolved Oxygen</b>	4.27	3.75	3.70	3.64				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	6	12	17				
<b>Time (military)</b>	1341	1349	1356	1458				
<b>pH (s.u.)</b>	6.35	6.04	5.92	5.83				
<b>Specific Cond. (umhos/cm)</b>	38.5	35.1	34.6	33.8				
<b>Water Temp (°C)</b>	20.3	20.1	20.0	19.9				
<b>Turbidity (*)</b>	32.1	30.8	32.4	35.2				
<b>Dissolved Oxygen</b>	8.53	4.67	4.61	4.53				



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 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-33**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 58 ft.  
 Depth to GW (DGW) 27.13 ft.

Length of Water Column (LWC=TWD-DGW) 30.87 FT

1 Csg. Volume (LWC\*C) = 30.87 X 0.163 = 5.03 gals.  
 3 Csg. Volumes = 3 X 5.03 = 15.0 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 15 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15				
<b>Time (military)</b>	1326	1331	1337	1342				
<b>pH (s.u.)</b>	6.83	6.81	6.77	6.75				
<b>Specific Cond. (umhos/cm)</b>	63.7	34.7	34.7	34.2				
<b>Water Temp (°C)</b>	18.1	18.0	17.9	17.7				
<b>Turbidity (*)</b>	41.4	33.9	32.3	31.7				
<b>Dissolved Oxygen</b>	6.42	5.49	5.42	5.37				

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Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Relinquished by</td> <td style="width: 25%;">Date/Time</td> <td style="width: 25%;">Received by</td> <td style="width: 25%;">Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>MW-34</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>56</u> ft.          Depth to GW (DGW) <u>21.84</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>34.16</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>34.16</u> X <u>0.163</u> = <u>5.56</u> gals.          3 Csg. Volumes = 3 X <u>5.56</u> = <u>16.7</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>16.75</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5.5	11	16.75				
<b>Time (military)</b>	1749	1756	1803	1810				
<b>pH (s.u.)</b>	6.95	6.87	6.82	6.82				
<b>Specific Cond. (umhos/cm)</b>	100	100	99.3	98.6				
<b>Water Temp (°C)</b>	20.3	20.1	19.8	19.7				
<b>Turbidity (*)</b>	121	139	145	147				
<b>Dissolved Oxygen</b>	7.34	7.21	7.13	7.06				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by \_\_\_\_\_ Date/Time \_\_\_\_\_ Received by \_\_\_\_\_ Date/Time \_\_\_\_\_

**Well # MW-35**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 50 ft.  
 Depth to GW (DGW) 31.25 ft.

Length of Water Column (LWC=TWD-DGW) 18.75 FT

1 Csg. Volume (LWC\*C) = 18.75 X 0.163 = 3.05 gals.  
 3 Csg. Volumes = 3 X 3.05 = 9.16 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 9.25 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	3	6	9.25				
<b>Time (military)</b>	1700	1704	1710	1717				
<b>pH (s.u.)</b>	6.93	6.87	6.82	6.78				
<b>Specific Cond. (umhos/cm)</b>	92.1	91.4	91.1	90.3				
<b>Water Temp (°C)</b>	19.3	18.6	18.5	18.3				
<b>Turbidity (*)</b>	90.9	124	131	137				
<b>Dissolved Oxygen</b>	7.61	7.20	7.16	7.10				

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 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # MW-36**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 59 ft.  
 Depth to GW (DGW) 29.90 ft.

Length of Water Column (LWC=TWD-DGW) 29.10 FT

1 Csg. Volume (LWC\*C) = 29.10 X 0.163 = 4.74 gals.  
 3 Csg. Volumes = 3 X 4.74 = 14.2 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 14.5 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	14.5				
<b>Time (military)</b>	1552	1558	1603	1609				
<b>pH (s.u.)</b>	7.60	7.51	7.43	7.37				
<b>Specific Cond. (umhos/cm)</b>	51.7	48.5	48.1	47.3				
<b>Water Temp (°C)</b>	18.3	18.0	17.9	17.8				
<b>Turbidity (*)</b>	64.9	78	102	113				
<b>Dissolved Oxygen</b>	6.64	5.06	4.93	4.87				

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 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Well # MW-37**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 64 ft.  
 Depth to GW (DGW) 37.22 ft.

Length of Water Column (LWC=TWD-DGW) 26.78 FT

1 Csg. Volume (LWC\*C) = 26.78 X 0.163 = 4.36 gals.  
 3 Csg. Volumes = 3 X 4.36 = 13.0 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 13 gals

**Used purge pump to evacuate**

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	4	8	13				
<b>Time (military)</b>	1730	1734	1738	1743				
<b>pH (s.u.)</b>	6.82	6.77	6.81	6.84				
<b>Specific Cond. (umhos/cm)</b>	142	141	141	140				
<b>Water Temp (°C)</b>	18.0	18.1	18.0	18.8				
<b>Turbidity (*)</b>	58	37	36	35				
<b>Dissolved Oxygen</b>	5.92	5.25	5.20	5.13				

**South Carolina Department of Health and Environmental Control  
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Field Data Information Sheet for Ground Water Sampling/Development**

<p>Date (mm/dd/yy) <u>9/1/17</u>                  Field Personnel <u>Cal Funderburk / Billy Morris</u>                  General Weather Condition <u>Clear and cold</u>                  Ambient Air Temperature <u>84</u>                  Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>                  serial no. <u>08366812</u> serial no. <u>11G100871</u>                  pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>                  pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>                  pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <p>Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____</p>	<p><b>Well # <u>DW-6</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet                  for a 2 inch well C=0.163                  4 inch well C=0.652                  Total Well Depth (TWD) <u>150</u> ft.                  Depth to GW (DGW) <u>27.17</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>122.83</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>122.83</u> X <u>0.163</u> = <u>20.02</u> gals.                  3 Csg. Volumes = 3 X <u>20.0</u> = <u>60</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>60</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
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	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	60				
<b>Time (military)</b>	1008	1017	1025	1037				
<b>pH (s.u.)</b>	6.54	6.63	6.67	6.75				
<b>Specific Cond. (umhos/cm)</b>	198	198	199	199				
<b>Water Temp (°C)</b>	18.5	18.2	18.1	18.0				
<b>Turbidity (*)</b>	40.3	72.4	80.3	84.3				
<b>Dissolved Oxygen</b>	2.92	2.85	2.81	2.76				

**South Carolina Department of Health and Environmental Control  
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Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # DW-7**

Well Diameter(D) 2 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652

Total Well Depth (TWD) 150 ft.  
 Depth to GW (DGW) 21.40 ft.

Length of Water Column (LWC=TWD-DGW) 128.6 FT

1 Csg. Volume (LWC\*C) = 128.6 X 0.163 = 20.9 gals.  
 3 Csg. Volumes = 3 X 20.9 = 62.8 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 63 gals

**Used purge pump to evacuate**

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	63				
<b>Time (military)</b>	1111	1121	1132	1141				
<b>pH (s.u.)</b>	6.90	6.87	6.83	6.80				
<b>Specific Cond. (umhos/cm)</b>	222	219	218	218				
<b>Water Temp (°C)</b>	21.0	20.9	20.8	20.7				
<b>Turbidity (*)</b>	18	17	16	16				
<b>Dissolved Oxygen</b>	8.38	7.65	7.60	7.52				

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<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u></p> <p>pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Relinquished by</th> <th>Date/Time</th> <th>Received by</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>DW-8</u></b></p> <p>Well Diameter(D) <u>2</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652</p> <p>Total Well Depth (TWD) <u>150</u> ft.          Depth to GW (DGW) <u>30.51</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>119.49</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>119.49</u> X <u>0.163</u> = <u>19.47</u> gals.          3 Csg. Volumes = 3 X <u>19.47</u> = <u>58.43</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>58.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	58.5				
<b>Time (military)</b>	859	911	923	934				
<b>pH (s.u.)</b>	6.75	7.62	7.65	7.69				
<b>Specific Cond. (umhos/cm)</b>	117	118	119	119				
<b>Water Temp (°C)</b>	18.8	18.1	17.7	17.5				
<b>Turbidity (*)</b>	4.31	3.29	3.21	3.17				
<b>Dissolved Oxygen</b>	12.91	5.00	4.93	4.89				



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	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	20	40	55.5				
<b>Time (military)</b>	757	807	817	829				
<b>pH (s.u.)</b>	6.97	7.03	7.07	7.11				
<b>Specific Cond. (umhos/cm)</b>	108	107	107	106				
<b>Water Temp (°C)</b>	18.2	18.2	18.1	18.0				
<b>Turbidity (*)</b>	20.4	39.7	46.9	42.8				
<b>Dissolved Oxygen</b>	7.69	2.90	2.73	2.68				

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Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.5				
<b>Time (military)</b>	2038	2046	2052	2059				
<b>pH (s.u.)</b>	6.45	6.49	6.55	6.58				
<b>Specific Cond. (umhos/cm)</b>	308	308	309	309				
<b>Water Temp (°C)</b>	21.6	21.5	21.4	21.3				
<b>Turbidity (*)</b>	182	202	209	203				
<b>Dissolved Oxygen</b>	2.70	2.75	2.96	2.82				

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<p>Date (mm/dd/yy) <u>9/1/17</u>          Field Personnel <u>Cal Funderburk / Billy Morris</u>          General Weather Condition <u>Clear and cold</u>          Ambient Air Temperature <u>84</u>          Facility Name <u>One Accord Ministries</u> Site ID# <u>02131</u></p> <p style="text-align: center;"><b>Quality Assurance:</b></p> <p>pH Meter <u>Hannah</u> Conductivity Meter: <u>YSI</u>          serial no. <u>08366812</u> serial no. <u>11G100871</u>          pH=4.0 <u>4.0=4.0</u> Standard <u>10.0=10.0</u>          pH=7.0 <u>7.0=7.0</u> Standard <u>100.0=100.0</u>          pH=10.0 <u>10.0=10.0</u> Standard <u>1000.0=1000.0</u></p> <p style="text-align: center;"><b>Chain of Custody</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Relinquished by</td> <td>Date/Time</td> <td>Received by</td> <td>Date/Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Relinquished by	Date/Time	Received by	Date/Time					<p><b>Well # <u>RW-2</u></b></p> <p>Well Diameter(D) <u>4</u> inches or _____ Feet          for a 2 inch well C=0.163          4 inch well C=0.652          Total Well Depth (TWD) <u>29</u> ft.          Depth to GW (DGW) <u>21.10</u> ft.</p> <p>Length of Water Column (LWC=TWD-DGW) <u>7.90</u> FT</p> <p>1 Csg. Volume (LWC*C) = <u>7.90</u> X <u>0.652</u> = <u>5.15</u> gals.          3 Csg. Volumes = 3 X <u>5.15</u> = <u>15.45</u> gals. (Std. Purge Volume)</p> <p>Total Volume of Water Purged Before Sampling <u>15.5</u> gals</p> <p><b>Used purge pump to evacuate</b></p>
Relinquished by	Date/Time	Received by	Date/Time						

	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.5				
<b>Time (military)</b>	2018	2024	2029	2036				
<b>pH (s.u.)</b>	6.38	6.47	6.51	6.57				
<b>Specific Cond. (umhos/cm)</b>	384	384	384	385				
<b>Water Temp (°C)</b>	22.1	22.0	21.9	21.8				
<b>Turbidity (*)</b>	106	131	146	153				
<b>Dissolved Oxygen</b>	4.43	4.47	4.52	4.57				

**South Carolina Department of Health and Environmental Control  
Bureau of Underground Storage Tank Management  
Field Data Information Sheet for Ground Water Sampling/Development**

Date (mm/dd/yy) 9/1/17  
 Field Personnel Cal Funderburk / Billy Morris  
 General Weather Condition Clear and cold  
 Ambient Air Temperature 84  
 Facility Name One Accord Ministries Site ID# 02131

**Quality Assurance:**

pH Meter Hannah Conductivity Meter: YSI  
 serial no. 08366812 serial no. 11G100871  
 pH=4.0 4.0=4.0 Standard 10.0=10.0  
 pH=7.0 7.0=7.0 Standard 100.0=100.0  
 pH=10.0 10.0=10.0 Standard 1000.0=1000.0

**Chain of Custody**

Relinquished by	Date/Time	Received by	Date/Time

**Well # RW-3**

Well Diameter(D) 4 inches or \_\_\_\_\_ Feet  
 for a 2 inch well C=0.163  
 4 inch well C=0.652  
 Total Well Depth (TWD) 29 ft.  
 Depth to GW (DGW) 21.14 ft.

Length of Water Column (LWC=TWD-DGW) 7.86 FT

1 Csg. Volume (LWC\*C) = 7.86 X 0.652 = 5.12 gals.  
 3 Csg. Volumes = 3 X 5.12 = 15.37 gals. (Std. Purge Volume)

Total Volume of Water Purged Before Sampling 15.5 gals

**Used purge pump to evacuate**

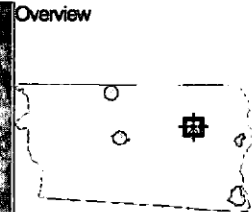
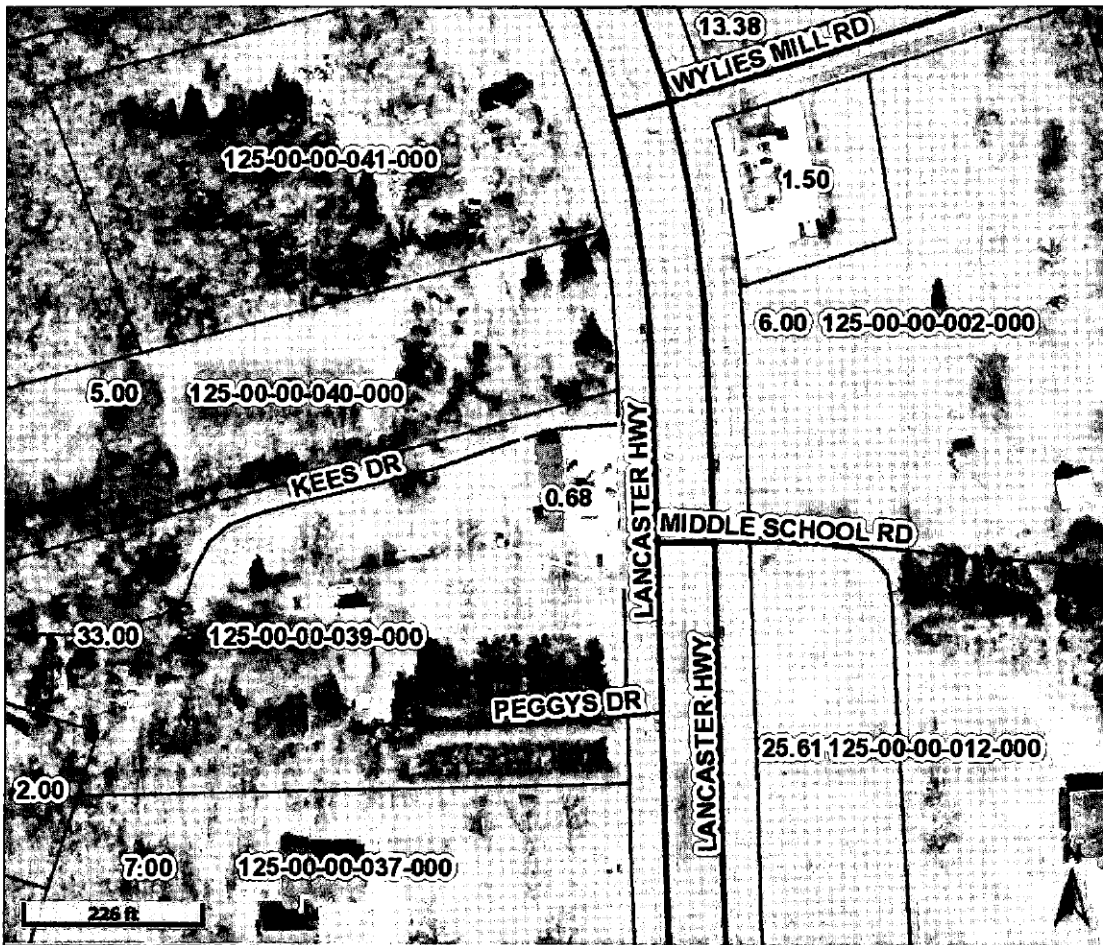
	Initial	1 <sup>st</sup> vol.	2 <sup>nd</sup> vol.	3 <sup>rd</sup> vol.	4 <sup>th</sup> vol.	5 <sup>th</sup> vol.	Post	Sampling
<b>Volume Purged (gallons)</b>	0	5	10	15.5				
<b>Time (military)</b>	1956	2001	2007	2012				
<b>pH (s.u.)</b>	6.39	6.42	6.42	6.51				
<b>Specific Cond. (umhos/cm)</b>	339	341	343	345				
<b>Water Temp (°C)</b>	21.7	21.7	21.5	21.2				
<b>Turbidity (*)</b>	102	119	126	133				
<b>Dissolved Oxygen</b>	2.39	2.45	2.52	2.55				

**APPENDIX C**

**TAX MAP**

ONE ACCORD TAX MAP

TM NUMBER	ADDRESS	OWNER	
125-00-00-059-000	3570 Lancaster Hwy	Angela and Melvin Hough	PO Box 220, Richburg, SC 29729
125-00-00-039-000	518 Peggys Drive	Marion Kee	518 Peggy's Drive, Richburg, SC 29729
125-00-00-002-000	3571 Lancaster Hwy	John Darnell Faust	PO Box 202, Richburg, SC 29729
125-00-00-012-000	Lancaster Hwy	Chester County School Board	1 Hinton Street, Chester, SC 29706
125-00-00-040-000	Lancaster Hwy	James Gill Knox Life Estate	1719 Old Richburg Road, Chester, SC 29706
125-00-00-037-000	Lancaster Hwy	Union Church	Highway 9, Richburg, SC 29729



- Legend**
- Roads**
    - Secondary Road
    - SC Highway
  - Municipals
  - Parcels
  - County Boundary

<b>Parcel ID</b>	125-00-00-059-000	<b>Alternate ID</b>	n/a	<b>Owner Address</b>	HOUGH ANGELA D-SURVIVORSHIP
<b>Sec/Twp/Rng</b>	n/a	<b>Class</b>	EX		HUGHES MELVIN E SR-SURVIVORSHI
<b>Property Address</b>		<b>Acreage</b>	n/a		PO BOX 220
					RICHBURG SC 29729
<b>District</b>	04				
<b>Brief Tax Description</b>	KEES SERVICE STATION				
	(Note: Not to be used on legal documents)				

Last Data Upload: 3/13/2014 2:14:20 AM

**APPENDIX D**  
**FIELD SCREEN RESULTS**

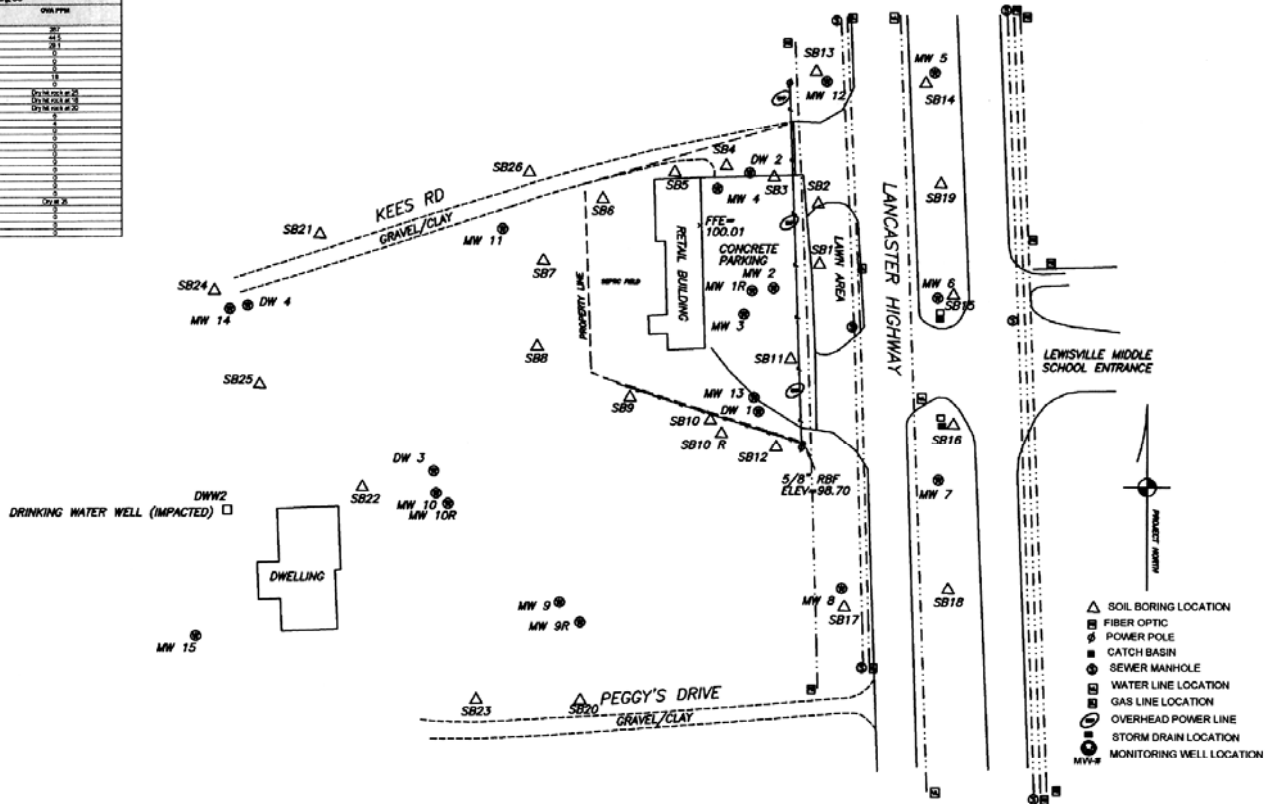


**TABLE 2**  
**Delineation OVA Field Data One Accord Ministries Site ID 02131**  
**Richburg, SC**

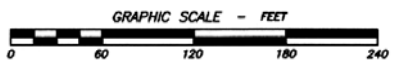
Sample ID	Depth	OVA PPM
SB1	27	287
SB2	27	44.5
SB3	27	29.1
SB4	27	0
SB5	27	0
SB6	27	0
SB7	27	18
SB8	27	0
SB9	25	Dry hit rock at 25
SB10	18	Dry hit rock at 18
SB10A	20	Dry hit rock at 20
SB11	27	6
SB12	27	4
SB13	27	0
SB14	27	0
SB15	27	0
SB16	27	0
SB17	27	0
SB18	27	0
SB19	27	0
SB20	27	0
SB21	27	0
SB22	25	Dry at 25
SB23	27	0
SB24	27	0
SB25	27	0
SB26	27	0

**TABLE B**  
 Definition CVA Field Data One Accord Mobile Site ID 02131  
 Richburg, SC

Sample ID	Depth	CVA PPM
SB1	2'	25.5
SB2	2'	25.1
SB3	2'	25.1
SB4	2'	25.1
SB5	2'	25.1
SB6	2'	25.1
SB7	2'	25.1
SB8	2'	25.1
SB9	2'	25.1
SB10	2'	25.1
SB11	2'	25.1
SB12	2'	25.1
SB13	2'	25.1
SB14	2'	25.1
SB15	2'	25.1
SB16	2'	25.1
SB17	2'	25.1
SB18	2'	25.1
SB19	2'	25.1
SB20	2'	25.1
SB21	2'	25.1
SB22	2'	25.1
SB23	2'	25.1
SB24	2'	25.1
SB25	2'	25.1
SB26	2'	25.1
SB27	2'	25.1
SB28	2'	25.1
SB29	2'	25.1
SB30	2'	25.1
SB31	2'	25.1
SB32	2'	25.1
SB33	2'	25.1
SB34	2'	25.1
SB35	2'	25.1
SB36	2'	25.1
SB37	2'	25.1
SB38	2'	25.1
SB39	2'	25.1
SB40	2'	25.1
SB41	2'	25.1
SB42	2'	25.1
SB43	2'	25.1
SB44	2'	25.1
SB45	2'	25.1
SB46	2'	25.1
SB47	2'	25.1
SB48	2'	25.1
SB49	2'	25.1
SB50	2'	25.1
SB51	2'	25.1
SB52	2'	25.1
SB53	2'	25.1
SB54	2'	25.1
SB55	2'	25.1
SB56	2'	25.1
SB57	2'	25.1
SB58	2'	25.1
SB59	2'	25.1
SB60	2'	25.1
SB61	2'	25.1
SB62	2'	25.1
SB63	2'	25.1
SB64	2'	25.1
SB65	2'	25.1
SB66	2'	25.1
SB67	2'	25.1
SB68	2'	25.1
SB69	2'	25.1
SB70	2'	25.1
SB71	2'	25.1
SB72	2'	25.1
SB73	2'	25.1
SB74	2'	25.1
SB75	2'	25.1
SB76	2'	25.1
SB77	2'	25.1
SB78	2'	25.1
SB79	2'	25.1
SB80	2'	25.1
SB81	2'	25.1
SB82	2'	25.1
SB83	2'	25.1
SB84	2'	25.1
SB85	2'	25.1
SB86	2'	25.1
SB87	2'	25.1
SB88	2'	25.1
SB89	2'	25.1
SB90	2'	25.1
SB91	2'	25.1
SB92	2'	25.1
SB93	2'	25.1
SB94	2'	25.1
SB95	2'	25.1
SB96	2'	25.1
SB97	2'	25.1
SB98	2'	25.1
SB99	2'	25.1
SB100	2'	25.1

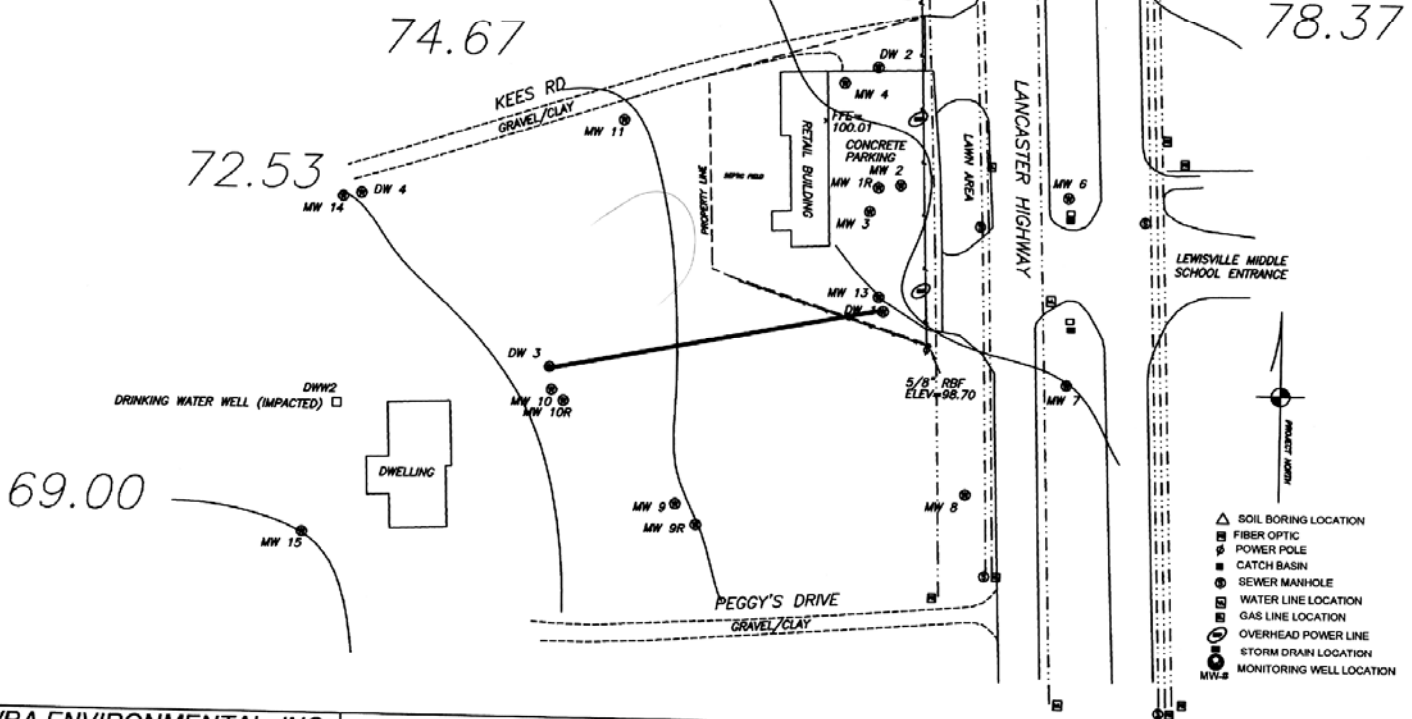


KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18

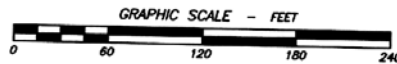


TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE 4 - GEOPROBE MAP

GRADIENT  $77.06 - 71.83 / 218\text{FT} = 0.023 \text{ FT/FT}$   
 $V = (0.12 \text{ FT/DAY}) (1/0.25) (2.3/100 \text{ FT}) 77.32$   
 $= 0.011 \text{ FT/DAY}$



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE F-1 - AQUIFER CALC

**APPENDIX E**  
**WELL LOGS**



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

<b>1. WELL OWNER INFORMATION:</b> Name: <u>One Accord</u> (last) <u>(first)</u> Address: <u>PO Box 220</u> City: <u>Richburg</u> State: <u>SC</u> Zip: <u>29729-0000</u> Telephone: Work: _____ Home: _____			<b>7. PERMIT NUMBER:</b> <u>02131</u>																																									
<b>2. LOCATION OF WELL: COUNTY:</b> <u>Chester</u> Name: <u>One Accord</u> Street Address: <u>3570 Lancaster Highway</u> City: <u>Richburg</u> Zip: <u>29729-0000</u> Latitude: _____ Longitude: _____			<b>8. USE:</b> <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement																																									
<b>3. PUBLIC SYSTEM NAME:</b> _____ <b>PUBLIC SYSTEM NUMBER:</b> _____ <u>MW-16</u>			<b>9. WELL DEPTH (completed)</b> _____ Date Started: <u>7/15/17</u> <u>30</u> ft. Date Completed: <u>7/18/17</u>																																									
<b>4. ABANDONMENT:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.			<b>10. CASING:</b> <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: <u>2</u> Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other <u>2</u> in. to <u>20</u> ft. depth _____ in. to _____ ft. depth Height: Above <input type="checkbox"/> Below <input checked="" type="checkbox"/> Surface <u>2</u> inches _____ ft. Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																									
<b>11. SCREEN:</b> Type: <u>PVC</u> Diam.: <u>2 inch</u> Slot/Gauge: <u>.01</u> Length: <u>10 feet</u> Set Between: <u>30</u> ft. and <u>20</u> ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			<b>12. STATIC WATER LEVEL</b> <u>26.00</u> ft. below land surface after 24 hours																																									
<table border="1"> <thead> <tr> <th>Formation Description</th> <th>*Thickness of Stratum</th> <th>Depth to Bottom of Stratum</th> </tr> </thead> <tbody> <tr> <td>CLAY Orange Sandy</td> <td>20</td> <td>20</td> </tr> <tr> <td>SAND Brown Silty</td> <td>10</td> <td>30</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum	CLAY Orange Sandy	20	20	SAND Brown Silty	10	30																															<b>13. PUMPING LEVEL Below Land Surface.</b> <u>na</u> ft. after <u>na</u> hrs. Pumping <u>na</u> G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: <u>na</u>		
Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum																																										
CLAY Orange Sandy	20	20																																										
SAND Brown Silty	10	30																																										
<b>14. WATER QUALITY</b> Chemical Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.			<b>15. ARTIFICIAL FILTER (filter pack)</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from <u>30</u> ft. to <u>19</u> ft. Effective size <u>2</u> Uniformity Coefficient <u>Coarse</u>																																									
<b>16. WELL GROUTED?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From <u>18</u> ft. to <u>0</u> ft.			<b>17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:</b> <u>0</u> ft. W direction Type <u>Petroleum</u> Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____																																									
<b>18. PUMP:</b> Date installed: _____ Not installed <input checked="" type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal			<b>19. WELL DRILLER: Tommy Bolyard</b> CERT. NO.: <u>1846</u> Address: (Print) <u>17538 Greenhill Road</u> Level: <input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D (circle one) <u>Charlotte, NC 28278</u> Telephone No.: <u>803 548 2253</u> Fax No.: _____																																									
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)			<b>20. WATER WELL DRILLER'S CERTIFICATION:</b> This well was drilled under my direction and this report is true to the best of my knowledge and belief.																																									
<b>5. REMARKS:</b>   			Signed: <u>[Signature]</u> Date: <u>8/1/17</u> _____ Well Driller																																									
<b>6. TYPE:</b> <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other			If D Level Driller, provide supervising driller's name: _____																																									



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
 (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/15/17  
 \_\_\_\_\_ ft. Date Completed: 7/18/17  
**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 20 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above \_\_\_\_\_ Below  \_\_\_\_\_ ft.  
 Surface 4 inches  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-17

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 30 ft. and 20 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 27.50 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30

CLAY Orange Sandy

SAND Brown Silty

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 30 ft. to 19 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

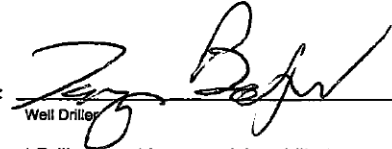
**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** **CERT. NO.:** 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2253 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**9. WELL DEPTH (completed)** Date Started: 7/15/17  
32 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 22 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** PUBLIC SYSTEM NUMBER:  
 MW-18

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 32 ft. and 22 ft. \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 28.00 ft. below land surface after 24 hours  
**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na  
**NOTE: MULTIPLE SCREENS USE SECOND SHEET**

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	12	32

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.  
**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 32 ft. to 21 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 20 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) Level:  A  B  C  D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under  
 my direction and this report is true to the best of my knowledge and belief.  
 Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller  
 If D Level Driller, provide supervising driller's name:

**5. REMARKS:**  
**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other







**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-20

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 28 ft. Date Started: 7/15/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 18 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below  \_\_\_\_\_  
 Surface 4 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 28 ft. and 18 ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 28 ft. to 18 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 17 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2253 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:**  
MW-21

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	15	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/15/17  
 Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 25 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 35 ft. and 25 ft. **NOTE: MULTIPLE SCREENS**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 35 ft. to 24 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 23 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name: \_\_\_\_\_



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (first) (last)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 30 ft. Date Started: 8/25/17  
 Date Completed: 8/25/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 20 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-22

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 30 ft. and 20 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 28.15 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 30 ft. to 19 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: [Signature] Date: 9/15/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:





## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord (last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

Residential       Public Supply       Process

Irrigation       Air Conditioning       Emergency

Test Well       Monitor Well       Replacement

**2. LOCATION OF WELL:**      COUNTY: Chester

Name: One Accord

Street Address: 3570 Lancaster Highway

City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** \_\_\_\_\_ Date Started: 7/15/17

35 ft.      Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded

Diam.: 2 \_\_\_\_\_

Type:  PVC  Galvanized

Steel  Other \_\_\_\_\_

2 in. to 25 ft. depth

\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below  \_\_\_\_\_ ft.

Surface 2 inches

Weight \_\_\_\_\_ lb./ft.

Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_

MW-24

**11. SCREEN:**

Type: PVC \_\_\_\_\_ Diam.: 2 inch

Slot/Gauge: .01 \_\_\_\_\_ Length: 10 feet

Set Between: 35 ft. and 25 ft. **NOTE: MULTIPLE SCREENS**

\_\_\_\_\_ ft. and \_\_\_\_\_ ft. **USE SECOND SHEET**

Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 34.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	7	35

**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.

Pumping Test:  Yes (please enclose)  No

Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No

Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 35 ft. to 24 ft.

Effective size 2 \_\_\_\_\_ Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_

Depth: From 23 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w \_\_\_\_\_ direction

Type Petroleum

Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_

H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm

TYPE:  Submersible  Jet (shallow)  Turbine

Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard      CERT. NO.: 1846

Address: (Print) \_\_\_\_\_      Level:  A  B  C  D (circle one)

17538 Greenhill Road

Charlotte, NC 28278

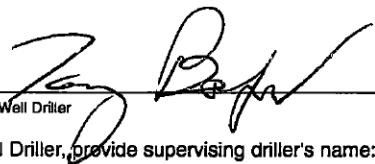
Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

**5. REMARKS:**

\_\_\_\_\_

\_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:  \_\_\_\_\_ Date: 8/1/17

Well Driller

**6. TYPE:**  Mud Rotary       Jetted       Bored

Dug       Air Rotary       Driven

Cable tool       Other

If D Level Driller, provide supervising driller's name:

\_\_\_\_\_



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord  
          (last)                                  (first)  
Address: PO Box 220  
City: Richburg      State: SC      Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL: COUNTY:** Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg      Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
MW-25

**4. ABANDONMENT:**       Yes       No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
<u>CLAY Orange Sandy</u>	<u>20</u>	<u>20</u>
<u>SAND Brown Silty</u>	<u>10</u>	<u>30</u>

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum

**5. REMARKS:**

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**6. TYPE:**       Mud Rotary       Jetted       Bored  
                   Dug                       Air Rotary       Driven  
                   Cable tool       Other

**7. PERMIT NUMBER:**      02131

**8. USE:**  
 Residential                       Public Supply                       Process  
 Irrigation                           Air Conditioning                   Emergency  
 Test Well                               Monitor Well                       Replacement

**9. WELL DEPTH (completed)**      Date Started: 7/17/17  
30 ft.      Date Completed: 7/18/17

**10. CASING:**       Threaded       Welded  
Diam.: 2 \_\_\_\_\_  
Type:       PVC       Galvanized       Steel       Other  
2 in. to 20 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
Height: Above  Below   
Surface 2 INCHES ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?       Yes       No

**11. SCREEN:**  
Type: PVC      Diam.: 2 inch  
Slot/Gauge: .01      Length: 10 feet  
Set Between: 30 ft. and 20 ft.      **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
Sieve Analysis       Yes (please enclose)       No

**12. STATIC WATER LEVEL** 28.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:       Yes (please enclose)       No  
Yield: na

**14. WATER QUALITY**  
Chemical Analysis       Yes       No      Bacterial Analysis       Yes       No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**       Yes       No  
Installed from 30 ft. to 19 ft.  
Effective size 2      Uniformity Coefficient Coarse

**16. WELL GROUTED?**       Yes       No  
 Neat Cement       Bentonite       Bentonite/Cement       Other \_\_\_\_\_  
Depth: From 18 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
Type Petroleum  
Well Disinfected       Yes       No      Type: \_\_\_\_\_      Amount: \_\_\_\_\_

**18. PUMP:**      Date installed: \_\_\_\_\_      Not installed        
Mfr. Name: \_\_\_\_\_      Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_      Volts \_\_\_\_\_      Length of drop pipe \_\_\_\_\_ ft.      Capacity \_\_\_\_\_ gpm  
TYPE:       Submersible       Jet (shallow)       Turbine  
                   Jet (deep)       Reciprocating       Centrifugal

**19. WELL DRILLER:** Tommy Bolyard      **CERT. NO.:** 1846  
Address: (Print)      Level: A  B  C  D  (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 348 2233      Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under  
my direction and this report is true to the best of my knowledge and belief.

Signed: \_\_\_\_\_      Date: 8/1/17  
Well Driller: (Signature)

If D Level Driller, provide supervising driller's name: \_\_\_\_\_









## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 7/16/17  
59 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 49 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
 MW-28

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 59 ft. and 49 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	18	38
Boulder	2	40
SAND Brown Silty	19	59

**12. STATIC WATER LEVEL** 53.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 59 ft. to 48 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 47 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

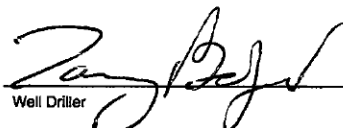
**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed:   
 Well Driller Date: 8/1/17

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: Home:

7. PERMIT NUMBER: 02131

**8. USE:**

- Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:**

**COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000

Latitude: Longitude:

9. WELL DEPTH (completed) 64 ft. Date Started: 8/25/17  
 Date Completed: 8/25/17

10. CASING:  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 54 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

3. PUBLIC SYSTEM NAME: MW-29 PUBLIC SYSTEM NUMBER:

11. SCREEN: Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 64 ft. and 54 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

4. ABANDONMENT:  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

12. STATIC WATER LEVEL 28.49 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30
Boulder	2	32
SAND Brown Silty	32	64

13. PUMPING LEVEL Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

14. WATER QUALITY  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack)  Yes  No  
 Installed from 64 ft. to 53 ft.  
 Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUDED?  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 52 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

18. PUMP: Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

19. WELL DRILLER: **Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.:

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

5. REMARKS:

Signed: [Signature] Date: 9/15/17  
 Well Driller

6. TYPE:  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**9. WELL DEPTH (completed)** Date Started: 7/16/17  
 59 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
 2 in. to 49 ft. depth  
 Height: Above  Below   
 Surface  $\angle$  inches ft.  
 Weight lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** PUBLIC SYSTEM NUMBER:  
 MW-30

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 59 ft. and 49 ft. NOTE: MULTIPLE SCREENS USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from ft. to ft.

**12. STATIC WATER LEVEL** 51.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	3	27
SAND Brown Silty	32	59

**13. PUMPING LEVEL** Below Land Surface.  
 na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 59 ft. to 49 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other  
 Depth: From 48 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: Amount:

**18. PUMP:** Date installed: Not installed   
 Mfr. Name: Model No.:  
 H.P. Volts Length of drop pipe ft. Capacity gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) Level: A B C D (circle one)  
 17538 Greenhill Road      
 Charlotte, NC 28278  
 Telephone No.: 803 348 2253 Fax No.:

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: *Tommy Bolyard* Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

<b>1. WELL OWNER INFORMATION:</b> Name: <u>One Accord</u> (last) (first) Address: <u>PO Box 220</u> City: <u>Richburg</u> State: <u>SC</u> Zip: <u>29729-0000</u> Telephone: Work: _____ Home: _____			<b>7. PERMIT NUMBER:</b> <u>02131</u>																																																								
<b>2. LOCATION OF WELL: COUNTY:</b> <u>Chester</u> Name: <u>One Accord</u> Street Address: <u>3570 Lancaster Highway</u> City: <u>Richburg</u> Zip: <u>29729-0000</u> Latitude: _____ Longitude: _____			<b>8. USE:</b> <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement																																																								
<b>3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:</b> <u>MW-31</u>			<b>9. WELL DEPTH (completed)</b> Date Started: <u>7/16/17</u> <u>57</u> ft.     Date Completed: <u>7/18/17</u>																																																								
<b>4. ABANDONMENT:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.			<b>10. CASING:</b> <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: <u>2</u> Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other <u>2</u> in. to <u>47</u> ft. depth _____ in. to _____ ft. depth																																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Formation Description</th> <th style="width: 20%;">*Thickness of Stratum</th> <th style="width: 20%;">Depth to Bottom of Stratum</th> </tr> </thead> <tbody> <tr><td>CLAY Orange Sandy</td><td style="text-align: center;">20</td><td style="text-align: center;">20</td></tr> <tr><td>SAND Brown Silty</td><td style="text-align: center;">4</td><td style="text-align: center;">24</td></tr> <tr><td>Boulder</td><td style="text-align: center;">4</td><td style="text-align: center;">28</td></tr> <tr><td>SAND Brown Silty</td><td style="text-align: center;">29</td><td style="text-align: center;">57</td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum	CLAY Orange Sandy	20	20	SAND Brown Silty	4	24	Boulder	4	28	SAND Brown Silty	29	57																																								<b>11. SCREEN:</b> Type: <u>PVC</u> Diam.: <u>2 inch</u> Slot/Gauge: <u>.01</u> Length: <u>10 feet</u> Set Between: <u>57</u> ft. and <u>47</u> ft.     NOTE: MULTIPLE SCREENS _____ ft. and _____ ft.     USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		
Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum																																																									
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*Indicate Water Bearing Zones (Use a 2nd sheet if needed)			<b>12. STATIC WATER LEVEL</b> <u>54.00</u> ft. below land surface after 24 hours																																																								
<b>5. REMARKS:</b>			<b>13. PUMPING LEVEL Below Land Surface.</b> <u>na</u> ft. after <u>na</u> hrs. Pumping <u>na</u> G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: <u>na</u>																																																								
<b>6. TYPE:</b> <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other			<b>14. WATER QUALITY</b> Chemical Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No     Bacterial Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please enclose lab results.																																																								
<b>19. WELL DRILLER:</b> <u>Tommy Bolyard</u> <b>CERT. NO.:</b> <u>1846</u> Address: (Print)     Level: A     B     C     D (circle one) <u>17538 Greenhill Road</u> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <u>Charlotte, NC 28278</u> Telephone No.: <u>803 548 2255</u> Fax No.: _____			<b>15. ARTIFICIAL FILTER (filter pack)</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from <u>57</u> ft. to <u>46</u> ft. Effective size <u>2</u> Uniformity Coefficient <u>Coarse</u>																																																								
<b>20. WATER WELL DRILLER'S CERTIFICATION:</b> This well was drilled under my direction and this report is true to the best of my knowledge and belief.			<b>16. WELL GROUTED?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From <u>45</u> ft. to <u>0</u> ft.																																																								
Signed: _____     Date: <u>8/1/17</u> Well Driller			<b>17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:</b> <u>0</u> ft. W direction Type <u>Petroleum</u> Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No     Type: _____ Amount: _____																																																								
If D Level Driller, provide supervising driller's name:			<b>18. PUMP:</b> Date installed: _____     Not installed <input checked="" type="checkbox"/> Mfr. Name: _____     Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input checked="" type="checkbox"/> Centrifugal																																																								



### Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
 (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** Date Started: 7/17/17  
56 ft. Date Completed: 7/18/17  
**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 46 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 INCHES \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
MW-32

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 56 ft. and 46 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 52.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30
Boulder	2	32
SAND Brown Silty	24	56

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 56 ft. to 45 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 44 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) \_\_\_\_\_ Level:  A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**7. PERMIT NUMBER:** 02131

**8. USE:**

<input type="checkbox"/> Residential	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Process
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Air Conditioning	<input type="checkbox"/> Emergency
<input type="checkbox"/> Test Well	<input checked="" type="checkbox"/> Monitor Well	<input type="checkbox"/> Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**9. WELL DEPTH (completed)** Date Started: 7/16/17  
 58 ft. Date Completed: 7/18/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
 2 in. to 48 ft. depth  
 in. to ft. depth

Height: Above  Below   
 Surface 2 INCHES ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** MW-33 **PUBLIC SYSTEM NUMBER:**

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 58 ft. and 48 ft. NOTE: MULTIPLE SCREENS  
 ft. and ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28
Boulder	3	31
SAND Brown Silty	27	58

**5. REMARKS:**

**12. STATIC WATER LEVEL** 51.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
 na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 58 ft. to 47 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 46 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) Level: A B C D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 348 2255 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



# Water Well Record

## Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

### 1. WELL OWNER INFORMATION:

Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: Home:

7. PERMIT NUMBER: 02131

### 8. USE:

- Residential  Public Supply  Process
- Irrigation  Air Conditioning  Emergency
- Test Well  Monitor Well  Replacement

### 2. LOCATION OF WELL: COUNTY: Chester

Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: Longitude:

9. WELL DEPTH (completed) Date Started: 7/17/17  
56 ft. Date Completed: 7/18/17

10. CASING:  Threaded  Welded  
Diam.: 2  
Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 46 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 2 INCHES ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

### 3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: MW-34

11. SCREEN:  
Type: PVC Diam.: 2 inch  
Slot/Gauge: .01 Length: 10 feet  
Set Between: 56 ft. and 46 ft. NOTE: MULTIPLE SCREENS  
\_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
Sieve Analysis  Yes (please enclose)  No

### 4. ABANDONMENT: Yes No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

12. STATIC WATER LEVEL 52.00 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28
Boulder	3	31
SAND Brown Silty	25	56

14. WATER QUALITY  
Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack)  Yes  No  
Installed from 56 ft. to 45 ft.  
Effective size 2 Uniformity Coefficient Coarse

16. WELL GROUTED?  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 44 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 0 ft. W direction  
Type Petroleum  
Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

18. PUMP: Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

19. WELL DRILLER: Tommy Bolyard CERT. NO.: 1846  
Address: (Print) Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 548 2255 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones

(Use a 2nd sheet if needed)

### 5. REMARKS:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
Well Driller

6. TYPE:  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:







# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: **One Accord** (last) (first)  
 Address: **PO Box 220**  
 City: **Richburg** State: **SC** Zip: **29729-0000**  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:**

**COUNTY:** Chester  
 Name: **One Accord**  
 Street Address: **3570 Lancaster Highway**  
 City: **Richburg** Zip: **29729-0000**  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:**  
 MW-36

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	5	25
Boulder	3	28
SAND Brown Silty	31	59

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** 59 ft. Date Started: **8/25/17**  
 Date Completed: **8/25/17**

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 49 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above \_\_\_\_\_ Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 59 ft. and 49 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 29.90 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 59 ft. to 49 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 48 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w/ direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) Level:  A  B  C  D (circle one)  
 17538 Greenhill Road  
 Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under  
 my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 9/15/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** MW-37

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	36	64

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ Date Started: 8/25/17  
64 ft. Date Completed: 8/25/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 54 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
 Surface 4 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 10 feet  
 Set Between: 64 ft. and 54 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 37.22 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 64 ft. to 53 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 52 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
 Address: (Print) 17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2253 Fax No.: \_\_\_\_\_  
 Level:  A  B  C  D (circle one)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 9/15/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL: COUNTY:** Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/19/17  
150 ft. Date Completed: 7/22/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** DW-5

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL:** 35.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	10	30
Boulder	2	32
SAND Brown Silty	43	75
Rock Granite	75	150

**13. PUMPING LEVEL Below Land Surface:**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A  B  C  D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:



# Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/19/17  
150 ft. Date Completed: 7/22/17

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
DW-6

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  
 Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
 Type: PVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.  
 Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
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**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours

CLAY Orange Sandy	20	20
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**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

SAND Brown Silty	8	28
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**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

Boulder	3	31
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**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

SAND Brown Silty	44	75
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**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

Rock Granite	75	150
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**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

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**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

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**19. WELL DRILLER:** Tommy Bolyard CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2255 Fax No.: \_\_\_\_\_

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**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

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Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

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If D Level Driller, provide supervising driller's name:

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**5. REMARKS:**  
 \_\_\_\_\_

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



**Water Well Record  
Bureau of Water**

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: Home:

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: Longitude:

**3. PUBLIC SYSTEM NAME:** PUBLIC SYSTEM NUMBER:  
 DW-7

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	8	28
Boulder	3	31
SAND Brown Silty	44	75
Rock Granite	75	150

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** Date Started: 7/19/17  
150 ft. Date Completed: 7/22/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**11. SCREEN:**  
 Type: DVC Diam.: 2 inch  
 Slot/Gauge: .01 Length: 5 feet  
 Set Between: 150 ft. and 145 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. NOTE: MULTIPLE SCREENS  
 USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. W direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) Level: A B C D (circle one)  
 17538 Greenhill Road      
 Charlotte, NC 28278  
 Telephone No.: 803 548 2253 Fax No.:

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature] Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:



## Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
(last) (first)

Address: PO Box 220

City: Richburg State: SC Zip: 29729-0000

Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:**

02131

**8. USE:**

- |                                      |  |                                      |
|--------------------------------------|--|--------------------------------------|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Public Supply           | <input type="checkbox"/> Process     |
| <input type="checkbox"/> Irrigation  | <input type="checkbox"/> Air Conditioning        | <input type="checkbox"/> Emergency   |
| <input type="checkbox"/> Test Well   | <input checked="" type="checkbox"/> Monitor Well | <input type="checkbox"/> Replacement |

**9. WELL DEPTH (completed)**Date Started: 7/19/17150 ft.Date Completed: 7/22/17**10. CASING:**  Threaded  Welded

Diam.: 2

Type:  PVC  Galvanized  
 Steel  Other

2 in. to 145 ft. depth  
6 in. to 75 ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**2. LOCATION OF WELL:****COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**3. PUBLIC SYSTEM NAME:****PUBLIC SYSTEM NUMBER:**

DW-8

**4. ABANDONMENT:** Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**

Type: PVC Diam.: 2 inch

Slot/Gauge: .01 Length: 5 feet

Set Between: 150 ft. and 145 ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.

Sieve Analysis  Yes (please enclose)  No

**12. STATIC WATER LEVEL** 35.00 ft. below land surface after 24 hours**13. PUMPING LEVEL Below Land Surface.**

na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 150 ft. to 142 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w. directionType PetroleumWell Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_**18. PUMP:** Date installed: \_\_\_\_\_ Not installed 

Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy BolyardCERT. NO.: 1846

Address: (Print)

Level: A B C D (circle one)17538 Greenhill RoadCharlotte, NC 28278Telephone No.: 803 348 2233

Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.Signed: Date: 8/1/17

Well Driller

If D Level Driller, provide supervising driller's name:

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	5	25
Boulder	3	28
SAND Brown Silty	47	75
Rock Granite	75	150

\*Indicate Water Bearing Zones

(Use a 2nd sheet if needed)

**5. REMARKS:****6. TYPE:**

- |                                     |                                     |   |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> Mud Rotary | <input type="checkbox"/> Jetted     | <input checked="" type="checkbox"/> Bored |
| <input type="checkbox"/> Dug        | <input type="checkbox"/> Air Rotary | <input type="checkbox"/> Driven           |
| <input type="checkbox"/> Cable tool | <input type="checkbox"/> Other      |   |



## Water Well Record

### Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord  
(last)(first)  
 Address: PO Box 220  
 City: Richburg      State: SC      Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

<input type="checkbox"/> Residential	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Process
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Air Conditioning	<input type="checkbox"/> Emergency
<input type="checkbox"/> Test Well	<input checked="" type="checkbox"/> Monitor Well	<input type="checkbox"/> Replacement

**2. LOCATION OF WELL:**      **COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg      Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)**      Date Started: 7/19/17

150 ft.      Date Completed: 7/22/17

**10. CASING:**  Threaded  Welded  
 Diam.: 2  
 Type:  PVC  Galvanized  Steel  Other  
2 in. to 145 ft. depth  
6 in. to 75 ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_      **PUBLIC SYSTEM NUMBER:** \_\_\_\_\_  
 DW-9

**11. SCREEN:**  
 Type: PVC      Diam.: 2 inch  
 Slot/Gauge: .01      Length: 5 feet  
 Set Between: 150 ft. and 145 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft.      **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL:** 35.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	4	24
Boulder	4	28
SAND Brown Silty	47	75
Rock Granite	75	150

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No      Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 150 ft. to 142 ft.  
 Effective size 2      Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 140 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No      Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**19. WELL DRILLER: Tommy Bolyard**      **CERT. NO.: 1846**  
 Address: (Print)      Level: A  B  C  D  (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 348 2255      Fax No.: \_\_\_\_\_

**5. REMARKS:**

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: [Signature]      Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name: \_\_\_\_\_



**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
 Name: One Accord (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131  
**8. USE:**  
 Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**2. LOCATION OF WELL:** COUNTY: Chester  
 Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/19/17  
29 ft. Date Completed: 7/20/17  
**10. CASING:**  Threaded  Welded  
 Diam.: 4  
 Type:  PVC  Galvanized  
 Steel  Other  
4 in. to 14 ft. depth  
 \_\_\_\_\_ in. to \_\_\_\_\_ ft. depth  
 Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:**  
RW-1

**11. SCREEN:**  
 Type: PVC Diam.: 4 inch  
 Slot/Gauge: .01 Length: 15 feet  
 Set Between: 29 ft. and 14 ft. NOTE: MULTIPLE SCREENS  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. USE SECOND SHEET  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**  Yes  No  
 Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	9	29

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

**14. WATER QUALITY**  
 Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
 Installed from 29 ft. to 13 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
 Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
 Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard** CERT. NO.: 1846  
 Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road      
Charlotte, NC 28278  
 Telephone No.: 803 348 2233 Fax No.:

\*Indicate Water Bearing Zones  
 (Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

Signed: [Signature] Date: 8/1/17  
 Well Driller

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other

If D Level Driller, provide supervising driller's name:





**Water Well Record**  
**Bureau of Water**  
 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**

Name: One Accord  
 (last) (first)  
 Address: PO Box 220  
 City: Richburg State: SC Zip: 29729-0000  
 Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**

- Residential  Public Supply  Process  
 Irrigation  Air Conditioning  Emergency  
 Test Well  Monitor Well  Replacement

**9. WELL DEPTH (completed)** \_\_\_\_\_ Date Started: 7/19/17  
29 ft. Date Completed: 7/20/17

**2. LOCATION OF WELL:**

**COUNTY:** Chester

Name: One Accord  
 Street Address: 3570 Lancaster Highway  
 City: Richburg Zip: 29729-0000  
 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**10. CASING:**  Threaded  Welded  
 Diam.: 4  
 Type:  PVC  Galvanized  
 Steel  Other  
4 in. to 14 ft. depth

Height: Above  Below   
 Surface 2 inches \_\_\_\_\_ ft.  
 Weight \_\_\_\_\_ lb./ft.  
 Drive Shoe?  Yes  No

**3. PUBLIC SYSTEM NAME:**

**PUBLIC SYSTEM NUMBER:**

RW-2

**11. SCREEN:**

Type: PVC Diam.: 4 inch  
 Slot/Gauge: .01 Length: 15 feet  
 Set Between: 29 ft. and 14 ft.  
 \_\_\_\_\_ ft. and \_\_\_\_\_ ft. **NOTE: MULTIPLE SCREENS USE SECOND SHEET**  
 Sieve Analysis  Yes (please enclose)  No

**4. ABANDONMENT:**

Yes  No

Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	9	29

**13. PUMPING LEVEL** Below Land Surface.  
na ft. after na hrs. Pumping na G.P.M.  
 Pumping Test:  Yes (please enclose)  No  
 Yield: na

SAND Brown Silty

**14. WATER QUALITY**

Chemical Analysis  Yes  No Bacterial Analysis  Yes  No  
 Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No

Installed from 29 ft. to 13 ft.  
 Effective size 2 Uniformity Coefficient Coarse

**16. WELL GROUDED?**  Yes  No

Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
 Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w \_\_\_\_\_ direction

Type Petroleum  
 Well Disinfected  Yes  No Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed

Mr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
 H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
 TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER: Tommy Bolyard**

**CERT. NO.:** 1846

Address: (Print) \_\_\_\_\_  
17538 Greenhill Road  
Charlotte, NC 28278  
 Telephone No.: 803 548 2233 Fax No.: \_\_\_\_\_

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Tommy Bolyard Date: 8/1/17  
 Well Driller

If D Level Driller, provide supervising driller's name:

**5. REMARKS:**

**6. TYPE:**  Mud Rotary  Jetted  Bored  
 Dug  Air Rotary  Driven  
 Cable tool  Other



**Water Well Record**  
**Bureau of Water**  
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

**1. WELL OWNER INFORMATION:**  
Name: One Accord (last) (first)  
Address: PO Box 220  
City: Richburg State: SC Zip: 29729-0000  
Telephone: Work: \_\_\_\_\_ Home: \_\_\_\_\_

**7. PERMIT NUMBER:** 02131

**8. USE:**  
 Residential       Public Supply       Process  
 Irrigation       Air Conditioning       Emergency  
 Test Well       Monitor Well       Replacement

**2. LOCATION OF WELL:** **COUNTY:** Chester  
Name: One Accord  
Street Address: 3570 Lancaster Highway  
City: Richburg Zip: 29729-0000  
Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**9. WELL DEPTH (completed)** \_\_\_\_\_ ft. Date Started: 7/19/17  
29 \_\_\_\_\_ ft. Date Completed: 7/20/17

**3. PUBLIC SYSTEM NAME:** \_\_\_\_\_ **PUBLIC SYSTEM NUMBER:** RW-3

**10. CASING:**  Threaded  Welded  
Diam.: 4  
Type:  PVC  Galvanized  
 Steel  Other  
4 in. to 14 ft. depth  
\_\_\_\_\_ in. to \_\_\_\_\_ ft. depth

Height: Above  Below   
Surface 2 INCHES \_\_\_\_\_ ft.  
Weight \_\_\_\_\_ lb./ft.  
Drive Shoe?  Yes  No

**4. ABANDONMENT:**  Yes  No  
Grouted Depth: from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**11. SCREEN:**  
Type: PVC Diam.: 4 inch  
Slot/Gauge: .01 Length: 15 feet  
Set Between: 29 ft. and 14 ft.  
\_\_\_\_\_  
NOTE: MULTIPLE SCREENS  
USE SECOND SHEET

Sieve Analysis  Yes (please enclose)  No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
CLAY Orange Sandy	20	20
SAND Brown Silty	9	29

**12. STATIC WATER LEVEL** 26.00 ft. below land surface after 24 hours

**13. PUMPING LEVEL Below Land Surface.**  
na ft. after na hrs. Pumping na G.P.M.  
Pumping Test:  Yes (please enclose)  No  
Yield: na

**14. WATER QUALITY**  
Chemical Analysis  Yes  No      Bacterial Analysis  Yes  No  
Please enclose lab results.

**15. ARTIFICIAL FILTER (filter pack)**  Yes  No  
Installed from 29 ft. to 13 ft.  
Effective size 2      Uniformity Coefficient Coarse

**16. WELL GROUTED?**  Yes  No  
 Neat Cement  Bentonite  Bentonite/Cement  Other \_\_\_\_\_  
Depth: From 12 ft. to 0 ft.

**17. NEAREST SOURCE OF POSSIBLE CONTAMINATION:** 0 ft. w direction  
Type Petroleum  
Well Disinfected  Yes  No      Type: \_\_\_\_\_ Amount: \_\_\_\_\_

**18. PUMP:** Date installed: \_\_\_\_\_ Not installed   
Mfr. Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
H.P. \_\_\_\_\_ Volts \_\_\_\_\_ Length of drop pipe \_\_\_\_\_ ft. Capacity \_\_\_\_\_ gpm  
TYPE:  Submersible  Jet (shallow)  Turbine  
 Jet (deep)  Reciprocating  Centrifugal

**19. WELL DRILLER:** Tommy Bolyard **CERT. NO.:** 1846  
Address: (Print) \_\_\_\_\_ Level: A B C D (circle one)  
17538 Greenhill Road  
Charlotte, NC 28278  
Telephone No.: 803 348 2233 Fax No.: \_\_\_\_\_

\*Indicate Water Bearing Zones  
(Use a 2nd sheet if needed)

**20. WATER WELL DRILLER'S CERTIFICATION:** This well was drilled under my direction and this report is true to the best of my knowledge and belief.

**5. REMARKS:**

**6. TYPE:**  Mud Rotary       Jetted       Bored  
 Dug       Air Rotary       Driven  
 Cable tool       Other

Signed: [Signature] Date: 8/1/17  
Well Driller  
If D Level Driller, provide supervising driller's name: \_\_\_\_\_



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Ben Myers - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW14 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 28.55 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 38 ft. Screen Interval 38 ft. to 28 ft.  
 Length of water column (LWC=TWD-DGW) 9.45 ft. Type of Drilling Fluids used: N/A  
 Total Gallons of Water Removed \_\_\_\_\_ gals. Drilling Fluids recovered N/A gals.

Time (military)							
pH (s.u.)*	7.21	7.19	7.15	7.13			
Specific Conductivity (mmhos/cm)*	00774	00762	00759	00755			
Water Temperature (C)*	22.0	21.8	21.7	21.6			
Turbidity (NTU) *	239	197	80.2	74.6			
Physical Characteristics (color/odor)	cloudy	cloudy	cloudy	cloudy			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID# 02131  
 Date 8-2-17 Field Personnel: Billy Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>0</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# mw17 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 21.90 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 30 ft. Screen Interval 30 ft. to 20 ft.  
 Length of water column (LWC=TWD-DGW) 8.10 ft. Type of Drilling Fluids used: N/A  
 Total Gallons of Water Removed \_\_\_\_\_ gals. Drilling Fluids recovered N/A gals.

Time (military)							
pH (s.u.)*	7.23	7.18	7.15	7.10			
Specific Conductivity (mmhos/cm)*	1315	1309	1292	1287			
Water Temperature (C)*	22.7	24.2	24.1	24.0			
Turbidity (NTU) *	297	192	88.4	80.2			
Physical Characteristics (color/odor)	cloudy	cloudy	cloudy	cloudy			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Billy Madders - Tommy Buzard  
 Drilling Company: EDPS Driller's Name: Tommy Buzard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW15 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 38 ft Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 28.41 ft Screen Interval 38 ft to 28 ft  
 Length of water column (LWC=TWD-DGW) 9.59 ft Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>6.87</u>	<u>6.83</u>	<u>6.79</u>	<u>6.75</u>			
Specific Conductivity (mmhos/cm)*	<u>0.0989</u>	<u>0.0980</u>	<u>0.0973</u>	<u>0.0967</u>			
Water Temperature (C)*	<u>19.9</u>	<u>19.7</u>	<u>19.6</u>	<u>19.5</u>			
Turbidity (NTU) *	<u>230</u>	<u>191</u>	<u>152</u>	<u>90.9</u>			
Physical Characteristics (color/odor)	<u>Cloudy</u>	<u>Cloudy</u>	<u>Cloudy</u>	<u>Cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: ONE Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Benj Mosers - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW19 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 38 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 28.95 ft. Screen Interval 35 ft to 25 ft.  
 Length of water column (LWC=TWD-DGW) 9.05 ft. Type of Drilling Fluids used: N/A  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered N/A gals

Time (military)							
pH (s.u.)*	<u>6.84</u>	<u>6.76</u>	<u>6.70</u>	<u>6.62</u>			
Specific Conductivity (mmhos/cm)*	<u>2610</u>	<u>1602</u>	<u>1593</u>	<u>1587</u>			
Water Temperature (C)*	<u>21.4</u>	<u>21.3</u>	<u>21.0</u>	<u>20.9</u>			
Turbidity (NTU) *	<u>187</u>	<u>114</u>	<u>90.8</u>	<u>78.3</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: OK Accord Site ID#: 02121  
 Date: 8-2-17 Field Personnel: Ben Morris - Tommy Buzard  
 Drilling Company: EDPS Driller's Name: Tommy Buzard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW20 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 28 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 18.80 ft. Screen Interval 28 ft. to 18 ft.  
 Length of water column (LWC=TWD-DGW) 9.20 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.49</u>	<u>7.37</u>	<u>7.30</u>	<u>7.19</u>			
Specific Conductivity (mmhos/cm)*	<u>0.2217</u>	<u>0.2240</u>	<u>0.2203</u>	<u>0.2194</u>			
Water Temperature (C)*	<u>21.9</u>	<u>21.7</u>	<u>21.6</u>	<u>21.5</u>			
Turbidity (NTU) *	<u>180</u>	<u>148</u>	<u>102</u>	<u>98.7</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Award Site ID#: 01251  
 Date: 8-2-17 Field Personnel: Benj Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW21 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 37 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 27.90 ft. Screen Interval 37 ft. to 27 ft.  
 Length of water column (LWC=TWD-DGW) 9.10 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.12</u>	<u>7.07</u>	<u>6.93</u>	<u>6.89</u>			
Specific Conductivity (mmhos/cm)*	<u>.0917</u>	<u>.0942</u>	<u>.0793</u>	<u>.0736</u>			
Water Temperature ( C)*	<u>19.5</u>	<u>19.3</u>	<u>19.2</u>	<u>19.1</u>			
Turbidity (NTU) *	<u>177</u>	<u>122</u>	<u>104</u>	<u>89.7</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surface Borehole - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17





**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: Civil Account  
 Date: 8-25-17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Bray Means / Terry Beard  
 Driller's Name: Terry Beard  
 Weather Conditions: Rain

Well Development Method

Surge Block       Submersible Pump       Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers       Solid Flight Augers       Direct Push   
 Air Rotary       Mud Rotary       Sonic

Monitoring Well ID# MW 22      Well Casing Diameter 2 inches      Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 29 ft.      Screen Length/Slot Size 10 ft. / 10 in.  
 Total Well Depth (TWD) 30 ft.      Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 1 ft.      Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 6 gals.      Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)	1550					
pH (s.u.)*	7.56	7.44	7.41	7.39		
Specific Conductivity (mmhos/cm)*	103	62	60	61		
Water Temperature (C)*	18.5	18.5	18.5	18.5		
Turbidity (NTU) *	506	249	236	231		
Physical Characteristics (color/odor)						
Water Level Measurement (ft) from TOC						
Total Well Depth (ft) from TOC						
Cumulative Gallons Removed	1 gals	3 gals	5 gals	6 gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block / Submersible Pump

Driller Signature: Terry Beard      Date: 8-25-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Benj Messers - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting

\* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# mw 23 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 35 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 25.61 ft. Screen Interval 35 ft. to 25 ft.  
 Length of water column (LWC=TWD-DGW) 9.39 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.89</u>	<u>7.84</u>	<u>7.73</u>	<u>7.68</u>			
Specific Conductivity (mmhos/cm)*	<u>.0649</u>	<u>.0643</u>	<u>.0635</u>	<u>.0630</u>			
Water Temperature (C)*	<u>18.9</u>	<u>18.6</u>	<u>18.5</u>	<u>18.3</u>			
Turbidity (NTU)*	<u>193</u>	<u>145</u>	<u>108</u>	<u>94.3</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Blay Morris - Tommy Buzard  
 Drilling Company: EDPS Driller's Name: Tommy Buzard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW24 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 35 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 27.20 ft. Screen Interval 35 ft. to 25 ft.  
 Length of water column (LWC=TWD-DGW) 7.80 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.93</u>	<u>7.87</u>	<u>7.81</u>	<u>7.73</u>			
Specific Conductivity (mmhos/cm)*	<u>0.0619</u>	<u>0.0615</u>	<u>0.0607</u>	<u>0.0601</u>			
Water Temperature (C)*	<u>18.4</u>	<u>18.2</u>	<u>18.1</u>	<u>18.0</u>			
Turbidity (NTU)*	<u>173</u>	<u>139</u>	<u>124</u>	<u>94.2</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Benj Moore - Tommy Beyer  
 Drilling Company: EDPS Driller's Name: Tommy Beyer  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW25 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 35 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 25.82 ft. Screen Interval 35 ft to 25 ft.  
 Length of water column (LWC=TWD-DGW) 9.10 ft. Type of Drilling Fluids used: N/A  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	6.57	6.63	6.73	6.65			
Specific Conductivity (mmhos/cm)*	1313	1302	1295	1289			
Water Temperature (C)*	21.0	20.9	20.7	20.6			
Turbidity (NTU) *	109	90.4	82.7	80.7			
Physical Characteristics (color/odor)	cloudy						
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Blay Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW26 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 28.0 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 26.10 ft. Screen Interval 28 ft. to 14 ft.  
 Length of water column (LWC=TWD-DGW) 2.90 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>6.77</u>						
Specific Conductivity (mmhos/cm)*	<u>6728</u>	<u>Purged DW</u>					
Water Temperature (C)*	<u>18.5</u>						
Turbidity (NTU) *	<u>193</u>						
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .  
 Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: Oni Account Site ID#: 0231  
 Date: 8-25-17 Field Personnel: Bray Means / Terry Beard  
 Drilling Company: EDPS Driller's Name: Terry Beard  
 Driller's Certification Number: 1846 Weather Conditions: Rain

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>6</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW 27 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 23.46 ft. Screen Length/Slot Size 10 ft. / 1/4 in.  
 Total Well Depth (TWD) 28 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 4.54 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 12 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.45	6.86	6.90	6.91			
Specific Conductivity (mmhos/cm)*	218	234	211	215			
Water Temperature (C)*	19.0	18.9	18.9	18.9			
Turbidity (NTU) *	406	321	119	123			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	3 gals	6 gals	9 gals	12 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .  
 Detailed description of Well Development process: Surge Block ; Submersible Pump

Driller Signature: Terry Beard Date: 8-25-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Blay Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW28 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 58 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 26.0 / 26.9' Screen Interval 58 ft. to 48 ft.  
 Length of water column (LWC=TWD-DGW) 31.49 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.18</u>	<u>7.13</u>	<u>7.06</u>	<u>6.94</u>			
Specific Conductivity (mmhos/cm)*	<u>2294</u>	<u>2283</u>	<u>2277</u>	<u>2273</u>			
Water Temperature (C)*	<u>19.5</u>	<u>19.4</u>	<u>19.3</u>	<u>19.1</u>			
Turbidity (NTU) *	<u>198</u>	<u>137</u>	<u>129</u>	<u>109</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Account  
 Date: 8-25-17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Bing Means / Terry Bland  
 Driller's Name: Terry Bland  
 Weather Conditions: Rain

Well Development Method

Surge Block       Submersible Pump       Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers       Solid Flight Augers       Direct Push   
 Air Rotary       Mud Rotary       Sonic

Monitoring Well ID# MW29      Well Casing Diameter 2 inches      Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 36 ft.      Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 64 ft.      Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 28 ft.      Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 17 gals.      Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.56	7.34	7.25	7.28			
Specific Conductivity (mmhos/cm)*	103	99	68	65			
Water Temperature (C)*	18.9	19.1	19.1	19.0			
Turbidity (NTU) *	146	138	131	130			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	6 gals	10 gals	15 gals	17 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block + Submersible Pump

Driller Signature: Terry Bland      Date: 8-25-17





**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: DM Accord Site ID#: 02531  
 Date: 8-2-17 Field Personnel: Blay Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW30 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 25.81 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 59 ft. Screen Interval 59 ft to 49 ft.  
 Length of water column (LWC=TWD-DGW) 33.19 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.49</u>	<u>7.41</u>	<u>7.33</u>	<u>7.27</u>			
Specific Conductivity (mmhos/cm)*	<u>00657</u>	<u>00650</u>	<u>00647</u>	<u>00641</u>			
Water Temperature (C)*	<u>18.3</u>	<u>18.2</u>	<u>18.1</u>	<u>18.0</u>			
Turbidity (NTU) *	<u>194</u>	<u>136</u>	<u>109</u>	<u>90.7</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: ONE Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Benj Morris - Tammy Buzard  
 Drilling Company: EDPS Driller's Name: Tammy Buzard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW3 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 27.50 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 57 ft. Screen Interval 57 ft. to 47 ft.  
 Length of water column (LWC=TWD-DGW) 29.70 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	7.47	7.41	7.36	7.32			
Specific Conductivity (mmhos/cm)*	01483	01471	01464	01453			
Water Temperature (C)*	18.7	18.6	18.5	18.4			
Turbidity (NTU) *	166	121	107	89.4			
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .  
 Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Blay Madsen - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW32 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 20.81 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 56 ft. Screen Interval: 56 ft. to 46 ft.  
 Length of water column (LWC=TWD-DGW) 35.19 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed. \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	6.49	6.36	6.28	6.19			
Specific Conductivity (mmhos/cm)*	60517	60502	60443	60487			
Water Temperature (C)*	20.7	20.6	20.5	20.7			
Turbidity (NTU)*	102	80.3	63.7	51.9			
Physical Characteristics (color/odor)	cloudy	cloudy	cloudy	cloudy			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Ben Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW33 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 26.10 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 58 ft. Screen Interval 58 ft. to 48 ft.  
 Length of water column (LWC=TWD-DGW) 31.90 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>7.52</u>	<u>7.06</u>	<u>6.93</u>	<u>6.87</u>			
Specific Conductivity (mmhos/cm)*	<u>0812</u>	<u>00810</u>	<u>0794</u>	<u>0790</u>			
Water Temperature (C)*	<u>19.3</u>	<u>19.2</u>	<u>19.1</u>	<u>19.0</u>			
Turbidity (NTU)*	<u>153</u>	<u>107</u>	<u>50.3</u>	<u>72.7</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>						
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Account Site ID#: 02131  
 Date: 8-25-17 Field Personnel: Bing Moore / Tony Board  
 Drilling Company: EDPS Driller's Name: Tony Board  
 Driller's Certification Number: 1846 Weather Conditions: Rain

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# M-34 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 22.48 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 56 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 33.52 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.48	6.99	6.83	6.81			
Specific Conductivity (mmhos/cm)*	114	123	109	106			
Water Temperature (C)*	20.1	19.8	19.6	19.5			
Turbidity (NTU) *	246	305	141	140			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	8 gals	16 gals	24 gals	32 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block : Submersible Pump

Driller Signature: Tony Board Date: 8-25-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accent  
 Date: 8-25-17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Billy Moore / Tony Beard  
 Driller's Name: Tony Beard  
 Weather Conditions: Rain

Well Development Method

Surge Block       Submersible Pump       Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>6</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers       Solid Flight Augers       Direct Push   
 Air Rotary       Mud Rotary       Sonic

Monitoring Well ID# MW 35      Well Casing Diameter 2 inches      Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 43.07 ft.      Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 50 ft.      Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 6.93 ft.      Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 12 gals.      Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	6.99	6.74	6.81	6.80			
Specific Conductivity (mmhos/cm)*	103	101	100	101			
Water Temperature (C)*	19.5	19.2	19.1	19.1			
Turbidity (NTU) *	306	158	103	101			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	3 gals	5 gals	9 gals	12 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block + Submersible Pump

Driller Signature: Tony Beard      Date: 8-25-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accent Site ID#: 02131  
 Date: 8-25-17 Field Personnel: Bray Means / Terry Beard  
 Drilling Company: EPPS Driller's Name: Terry Beard  
 Driller's Certification Number: 1846 Weather Conditions: Rain

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW 36 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 42.98 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 64 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 21.02 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 18 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.49	7.31	7.35	7.34			
Specific Conductivity (mmhos/cm)*	101	76	74	74			
Water Temperature (C)*	18.1	17.5	17.6	17.6			
Turbidity (NTU) *	438	146	131	130			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	5 gals	8 gals	13 gals	18 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block / Submersible Pump

Driller Signature: Terry Beard Date: 8-25-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Account Site ID#: 02131  
 Date: 8-25-17 Field Personnel: Bryon Means / Terry Beard  
 Drilling Company: EDPS Driller's Name: Terry Beard  
 Driller's Certification Number: 1846 Weather Conditions: Rain

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# MW 37 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 41.87 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 64 ft. Screen Interval ft. to ft.  
 Length of water column (LWC=TWD-DGW) 22.13 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 16 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.03	6.79	6.83	6.81			
Specific Conductivity (mmhos/cm)*	201	156	150	151			
Water Temperature (C)*	19.3	18.5	18.5	18.5			
Turbidity (NTU) *	106	94	63	62			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	6 gals	10 gals	13 gals	16 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block & Submersible Pump

Driller Signature: Terry Beard Date: 8-25-17





**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: OR Accord Site ID#: 0233  
 Date: 8-2-17 Field Personnel: Ben Morris - Tenny Boyard  
 Drilling Company: EDPS Driller's Name: Tenny Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DWS Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 20.63 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 150 ft. Screen Interval 150 ft. to 145 ft.  
 Length of water column (LWC=TWD-DGW) 124.37 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	<u>6.58</u>	<u>6.52</u>	<u>6.70</u>	<u>6.64</u>			
Specific Conductivity (mmhos/cm)*	<u>1493</u>	<u>1582</u>	<u>1173</u>	<u>1166</u>			
Water Temperature (C)*	<u>20.7</u>	<u>20.2</u>	<u>20.5</u>	<u>20.9</u>			
Turbidity (NTU)*	<u>102</u>	<u>79.8</u>	<u>59.2</u>	<u>48.1</u>			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: Due Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Billy Moore - Tommy Bryant  
 Drilling Company: EDPS Driller's Name: Tommy Bryant  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

**Well Development Method**

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development

**Quality Assurance**

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

**Drilling Method**

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW6 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 25.47 ft. Screen Length/Slot Size 10 ft / .01 in  
 Total Well Depth (TWD) 150 ft. Screen Interval: 150 ft. to 145 ft  
 Length of water column (LWC=TWD-DGW) 124.53 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	6.62	6.50	6.43	6.31			
Specific Conductivity (mmhos/cm)*	2394	2387	2381	2377			
Water Temperature (C)*	18.7	18.5	18.4	18.2			
Turbidity (NTU) *	50.1	41.6	32.8	31.3			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Bing Morris - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW7 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 20.57 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 150 ft. Screen Interval 150 ft. to 145ft.  
 Length of water column (LWC=TWD-DGW) 129.43 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.13	7.02	6.94	6.87			
Specific Conductivity (mmhos/cm)*	2531	2522	2517	2510			
Water Temperature (C)*	21.7	21.6	21.4	21.3			
Turbidity (NTU) *	28.2	20.4	17.4	12.9			
Physical Characteristics (color/odor)	cloudy	cloudy	cloudy	cloudy			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Account  
 Date: 8-25-17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Billy Moore / Terry Beard  
 Driller's Name: Terry Beard  
 Weather Conditions: Rain

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>6</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# DW 8 Well Casing Diameter 2 inches Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 30.81 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 150 ft. Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 119.19 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 80 gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	5.99	6.46	7.40	7.41			
Specific Conductivity (mmhos/cm)*	227	128	121	123			
Water Temperature (C)*	19.1	17.4	17.1	17.1			
Turbidity (NTU) *	56	8	7	6			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	20 gals	40 gals	60 gals	80 gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block + Submersible Pump

Driller Signature: Terry Beard Date: 8-25-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Account  
 Date: 8-25-17  
 Drilling Company: EDPS  
 Driller's Certification Number: 1846

Site ID#: 02131  
 Field Personnel: Billy Means / Tony Burt  
 Driller's Name: Tony Burt  
 Weather Conditions: Rain

Well Development Method

Surge Block       Submersible Pump       Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers       Solid Flight Augers       Direct Push   
 Air Rotary       Mud Rotary       Sonic

Monitoring Well ID# DW9      Well Casing Diameter 2 inches      Borehole Diameter 6 inches  
 Depth to Ground Water (DGW) 37.38 ft.      Screen Length/Slot Size 10 ft./ 101 in.  
 Total Well Depth (TWD) 150 ft.      Screen Interval \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Length of water column (LWC=TWD-DGW) 112.62 ft.      Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: 80 gals.      Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	7.41	7.26	7.21	7.27			
Specific Conductivity (mmhos/cm)*	146	118	123	121			
Water Temperature (C)*	19.0	18.3	18.4	18.2			
Turbidity (NTU) *	68	31	30	18			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed	20 gals	40 gals	60 gals	80 gals			

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block / Submersible Pump

Driller Signature: Tony Burt      Date: 8-25-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: One Accord Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Ben Myers - Tommy Boyard  
 Drilling Company: EDPS Driller's Name: Tommy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>0</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# RW1 Well Casing Diameter 4 inches Borehole Diameter 10 inches  
 Depth to Ground Water (DGW) 20.15 ft. Screen Length/Slot Size 10 ft. / .01 in.  
 Total Well Depth (TWD) 29 ft. Screen Interval 27 ft. to 19 ft.  
 Length of water column (LWC=TWD-DGW) 8.85 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	6.89	6.63	6.69	6.74			
Specific Conductivity (mmhos/cm)*	3402	3477	3484	3493			
Water Temperature (C)*	21.9	21.5	21.6	21.5			
Turbidity (NTU)*	219	107	90.2	91.2			
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.  
 Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form  
Underground Storage Tank Management Division**

Facility Name: One Accord J Site ID#: 02131  
 Date: 8-2-17 Field Personnel: Ben Myers - Tommy Bayard  
 Drilling Company: EDPS Driller's Name: Tommy Bayard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting

\* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# RW2 Well Casing Diameter 4 inches Borehole Diameter 10 inches  
 Depth to Ground Water (DGW) 20.21 ft. Screen Length/Slot Size 10 ft./ .01 in.  
 Total Well Depth (TWD) 29 ft. Screen Interval 27 ft. to 19 ft.  
 Length of water column (LWC=TWD-DGW) 8.79 ft. Type of Drilling Fluids used: NA  
 Total Gallons of Water Removed \_\_\_\_\_ gals. Drilling Fluids recovered NA gals.

Time (military)							
pH (s.u.)*	6.47	6.41	6.33	6.25			
Specific Conductivity (mmhos/cm)*	4137	4441	4447	4455			
Water Temperature (C)*	22.4	22.3	22.1	22.0			
Turbidity (NTU)*	177						
Physical Characteristics (color/odor)							
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							

\* Development is completed once groundwater turbidity is  $\leq 10$  NTU and all parameters are  $\pm 10\%$ .

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Well Development Data Verification Form**  
**Underground Storage Tank Management Division**

Facility Name: \_\_\_\_\_ Site ID#: \_\_\_\_\_  
 Date: \_\_\_\_\_ Field Personnel: Bing Morris - Tammy Boyard  
 Drilling Company: EDPS Driller's Name: Tammy Boyard  
 Driller's Certification Number: 1846 Weather Conditions: Sunny

Well Development Method

Surge Block  Submersible Pump  Air Lifting   
 \* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. _____	serial no. _____	serial no. _____	serial no. _____
pH=4.0 <u>4</u>	standard <u>10</u>		NTU=0.0 <u>0</u>
pH=7.0 <u>7</u>			NTU=1.0 <u>1</u>
pH=10.0 <u>10</u>			NTU=10.0 <u>10</u>

Drilling Method

Hollow Stem Augers  Solid Flight Augers  Direct Push   
 Air Rotary  Mud Rotary  Sonic

Monitoring Well ID# RW3 Well Casing Diameter 4 inches Borehole Diameter 10 inches  
 Depth to Ground Water (DGW) 20.25 ft. Screen Length/Slot Size 10 ft / .01 in.  
 Total Well Depth (TWD) 29 ft. Screen Interval \_\_\_\_\_ ft to \_\_\_\_\_ ft  
 Length of water column (LWC=TWD-DGW) 8.75 ft. Type of Drilling Fluids used: \_\_\_\_\_  
 Total Gallons of Water Removed: \_\_\_\_\_ gals. Drilling Fluids recovered \_\_\_\_\_ gals.

Time (military)							
pH (s.u.)*	<u>6.47</u>	<u>6.41</u>	<u>6.33</u>	<u>6.26</u>			
Specific Conductivity (mmhos/cm)*	<u>63489</u>	<u>3507</u>	<u>3519</u>	<u>3524</u>			
Water Temperature (C)*	<u>22.0</u>	<u>21.8</u>	<u>21.7</u>	<u>21.6</u>			
Turbidity (NTU) *	<u>181</u>	<u>1.53</u>	<u>144</u>	<u>102</u>			
Physical Characteristics (color/odor)	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>			
Water Level Measurement (ft) from TOC							
Total Well Depth (ft) from TOC							
Cumulative Gallons Removed							
	gals	gals	gals	gals	gals	gals	gals

\* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surge Block - Submersible Pump

Driller Signature: [Signature] Date: 8-2-17



**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 16
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	1 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					23
30				SAND Brown Silty	515
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 17
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	2 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					6
30				SAND Brown Silty	8
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 18
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	3 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	32	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					1
20				SAND Brown Silty	0
25					0
30					0
35				SAND Brown Silty	0
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 19
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	4 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	32	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	56
25					127
30					286
35				SAND Brown Silty	220
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 20
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	5 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	11
25					217
30				SAND Brown Silty	215
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 21
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	6 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	35	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30					1
35				SAND Brown Silty	0
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 22
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	7 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					3
30				SAND Brown Silty	12
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 23
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	8 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	35	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	Drop	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder	0
30				SAND Brown Silty	0
35				SAND Brown Silty	0
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 24
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	9 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	35	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder	0
30				SAND Brown Silty	15
35				SAND Brown Silty	26
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 25
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	10 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	30	<b>Date</b>	7/17/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 26
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	11 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	19
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 27
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	12 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	28	<b>Date</b>	7/15/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
		<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 28
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	13 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	59	<b>Date</b>	7/16/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
		<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30					0
35				SAND Brown Silty	0
40				Boulder 2 ft 38-40	0
45				SAND Brown Silty	0
50					0
55					0
60				SAND Brown Silty	0
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 29
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	13 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	64	<b>Date</b>	8/25/17
<b>Wt Hammer</b>	<b>Drop</b> _____	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				Boulder 2 ft 30-32	0
35				SAND Brown Silty	2
40					15
45					17
50					13
55					18
60					19
65				SAND Brown Silty	8
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 30
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	15 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	59	<b>Date</b>	7/16/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20					0
25				SAND Brown Silty	0
30				Boulder 3 ft 24-27	0
35				SAND Brown Silty	1
40					0
45					1
50					0
55					1
60				SAND Brown Silty	1
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 31
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	16 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	57	<b>Date</b>	7/16/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20					0
25				SAND Brown Silty	0
30				Boulder 4 ft 24-28	0
35				SAND Brown Silty	5
40					15
45					28
50					36
55					25
60					27
65				SAND Brown Silty	18
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 32
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	17 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	56	<b>Date</b>	7/17/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35				Boulder 2 ft 30-32	0
40				SAND Brown Silty	0
45					0
50					0
55				SAND Brown Silty	0
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 33
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	18 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	58	<b>Date</b>	7/16/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 3 ft 28-31	0
35				SAND Brown Silty	16
40					32
45					103
50					119
55					128
60				SAND Brown Silty	127
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 34
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	19 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	56	<b>Date</b>	7/17/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 3 ft 28-31	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60				SAND Brown Silty	0
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**  
**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 35
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	20 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	50	<b>Date</b>	8/25/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder 4 ft 24-28	0
30				SAND Brown Silty	0
35					0
40					0
45					0
50					0
55					0
60				SAND Brown Silty	0
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 36
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	21 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	59	<b>Date</b>	8/25/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder 3 ft 25-28	0
30				SAND Brown Silty	0
35					0
40					0
45					0
50					0
55					0
60				SAND Brown Silty	0
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	MW 37
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	22 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	89	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	64	<b>Date</b>	7/16/17
<b>Wt Hammer</b>	Drop	<b>Hole Diam.</b>	6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				Boulder 4 ft 24-28	0
30				SAND Brown Silty	0
35					0
40					0
45					0
50					0
55					0
60					0
65				SAND Brown Silty	0
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 5
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	23 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	150	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	10-6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
		<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25					0
30				SAND Brown Silty	0
35				Boulder 2 ft 30-32	0
40				SAND Brown Silty	0
45					0
50					0
55					0
60					0
65					0
70					0
75				SAND Brown Silty	0
80				Rock Granite Fractured	0
85					1
90					0
95					5
100					7
105					8
110					6
115					8
120					5
125					6
130					8
135					9
140					9
145					8
150				Rock Granite	

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 6
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	24 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	150	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	10-6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 3 ft 28-31	0
35				SAND Brown Silty	19
40					45
45					118
50					146
55					159
60					45
65					62
70					38
75				SAND Brown Silty	45
80				Rock Granite Fractured	35
85					8
90					15
95					23
100					17
105					26
110					28
115					31
120					23
125					20
130					18
135					26
140					15
145					9
150				Rock Granite	

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis



**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 7
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	25 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	150	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	Drop	<b>Hole Diam.</b>	10-6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen</b>		<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Diameter</b>	N/A	<b>Date W.L.</b>	N/A
		<b>Time W.L.</b>	N/A		

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 3 ft 28-31	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60					0
65					0
70					0
75				SAND Brown Silty	0
80				Rock Granite Fractured	0
85					0
90					1
95					1
100					1
105					1
110					1
115					0
120					2
125					1
130					2
135					1
140					2
145					2
150				Rock Granite	2

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW 8
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	26 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	150	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	Drop	<b>Hole Diam.</b>	10-6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 3 ft 25-28	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60					0
65					0
70					0
75				SAND Brown Silty	0
80				Rock Granite Fractured	0
85					0
90					0
95					0
100					0
105					0
110					0
115					0
120					0
125					0
130					0
135					0
140					0
145					0
150				Rock Granite	0

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	DW9
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	27 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	150	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	10-6.25	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	0
25				SAND Brown Silty	0
30				Boulder 4 ft 25-28	0
35				SAND Brown Silty	0
40					0
45					0
50					0
55					0
60					0
65					0
70					0
75				SAND Brown Silty	0
80				Rock Granite Fractured	0
85					0
90					0
95					0
100					0
105					0
110					0
115					0
120					0
125					0
130					0
135					0
140					0
145					0
150				Rock Granite	0

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	RW1
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	28 Of
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	29	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	Drop	<b>Hole Diam.</b>	8	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	45
25					289
30				SAND Brown Silty	415
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.  
Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	RW2
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	29 <b>Of</b> _____
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	_____
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	29	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	8	<b>Started</b>	_____
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	_____
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	56
25					403
30				SAND Brown Silty	899
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**Katawba Environmental, Inc.**

**Boring Log**

<b>Project Name</b>	One Accord	<b>Inspector</b>	Cal Funderburk	<b>Boring No.</b>	RW3
<b>Project Number</b>	02131	<b>Weather</b>	Sunny	<b>Sheet</b>	30 <b>Of</b>
<b>Drilling Company</b>	EDPS	<b>Temperature</b>	93	<b>Surface Elev.</b>	
<b>Drill Rig</b>	Geoprobe	<b>Hole Depth</b>	29	<b>Date</b>	7/19/17
<b>Wt Hammer</b>	<b>Drop</b>	<b>Hole Diam.</b>	8	<b>Started</b>	
<b>Driller</b>	Tommy Bolyard 1846	<b>Screen Length</b>	N/A	<b>Completed</b>	
<b>Sampling Method</b>	Grab	<b>Screen Diameter</b>	N/A	<b>No. UD. S.A.</b>	N/A
<b>Depth W.L.</b>	N/A	<b>Time W.L.</b>	N/A	<b>Date W.L.</b>	N/A

**Boring Description**

Depth (ft)	Sample No.	Blows 0.5'	% Rec	Lithologic Description	Comments OVA PPM
5				CLAY Orange Sandy	0
10					0
15					0
20				SAND Brown Silty	67
25					876
30				SAND Brown Silty	503
35					
40					
45					
50					
55					
60					
65					
70					
75					
80					
85					
90					
95					
100					
105					
110					
115					
120					
125					
130					
135					
140					
145					
150					

Note: 1) VOCs reported in parts per million (PPM) \* Indicates interval that soil sample collected for analysis

**APPENDIX F**  
**AQUIFER CALCULATIONS**

**Vertical Potential Hydraulic Gradient  
Between Shallow MW13 and Deep DW1**

$$\frac{Dh}{DI} = \frac{[(GW \text{ Elevation DW-1})-(GW \text{ Elevation MW-13})]}{[(\text{Base of Screen MW-13})-(\text{Base of Screen DW-1})]}$$

$$\frac{Dh}{DI} = \frac{77.06-77.31}{72.51-23.42} = \frac{-0.25 \text{ ft/ft}}{49.09} = -0.005$$

Head Elevation of DW-1 is lower than MW-13 so Vertical Flow is downward (recharging)





**SOUTH CAROLINA**  
**Department of Health and Environmental Control**  
**Summary of Slug Test Form**

**Site Data**

UST Permit # 02131 County: CHESTER  
 Facility Name ONE ACCORD

**Slug Data**

See Appendix F Table \_\_\_\_\_ Figure F-1 for a list of all data measurements.  
 (water level logs, etc.) (Complete as appropriate).

Water Level Recovery Data was measured by WATER LEVEL INDICATOR.  
 (Hermit Data Logger, Manually with Water Level Indicator, etc.) (List Method).

Complete the following table for each well tested.

**COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED**

Slug Test Conducted in well(s) number	DW1	DW3	DW4	
Initial Rise/Drawdown in well (feet)	1.21	1.51	1.43	
Radius of Well Casing (feet)	8.33 <sup>2</sup>	8.33 <sup>2</sup>	8.33 <sup>2</sup>	
Effective Radius of Well (feet)	.45	.95	.95	
Static Saturated Aquifer Thickness (feet)	50	50	5	
Length of Well Screen (feet)	5	5	5	
Static Height of Water Column in Well (ft)	21.20	30.69	27.41	

**Calculations**

See Appendix F Table \_\_\_\_\_ Figure F-1 for calculations. (Complete as appropriate).

The method for aquifer calculations was BOWEN & RICE

Calculated values by well were as follows:

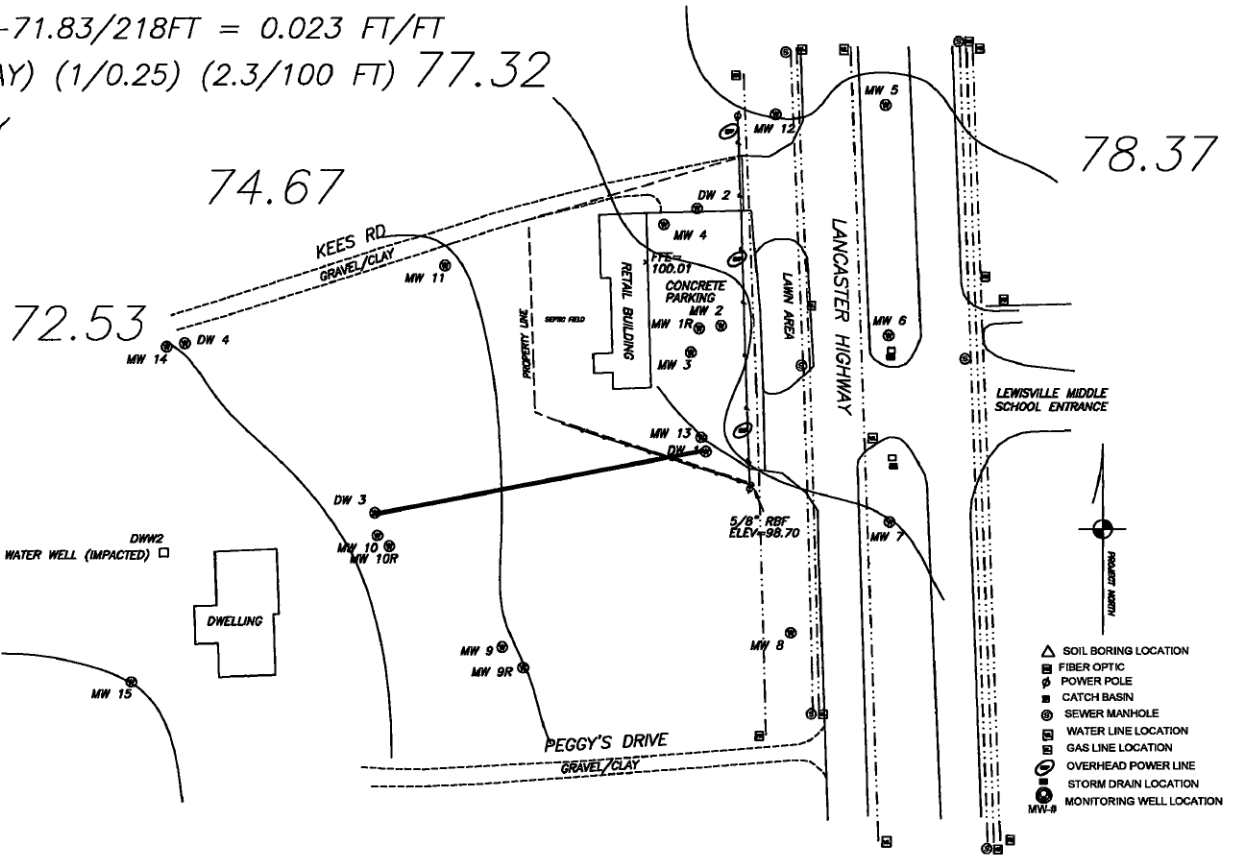
Slug Test Conducted in well(s) number	DW1	DW3	DW4	
Hydraulic Conductivity	0.20	0.04	0.12	

Thickness of the aquifer used to calculate hydraulic conductivity was 50 feet.

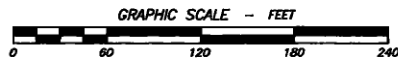
The aquifer is \_\_\_\_\_ confined \_\_\_\_\_ semi-confined X water table (Check as appropriate).

The estimated seepage velocity is 4 feet per year based on  
 a hydraulic conductivity of 0.12, a hydraulic gradient of 0.023, and  
 a porosity of 25 per cent for SAND soil (list type i.e., silty sand ,clay, etc).

GRADIENT  $77.06 - 71.83 / 218\text{FT} = 0.023 \text{ FT/FT}$   
 $V = (0.12 \text{ FT/DAY}) (1/0.25) (2.3/100 \text{ FT}) 77.32$   
 $= 0.011 \text{ FT/DAY}$



KATAWBA ENVIRONMENTAL, INC.  
 4278 DYE ROAD  
 EDGEMOOR, SC 29712  
 (803)327-0469 UCC#18



TIER II REPORT  
 ONE ACCORD SITE ID 02131  
 3570 LANCASTER HWY., RICHBURG, SC  
 FIGURE F-1 - AQUIFER CALC

One Accord

## Slug Test

Site Name: One Accord  
Location: Richburg  
Test Date: 3/13/17  
Client: One Accord  
Project Number: Tier II

---

Well Label: DW-1  
Aquifer Thickness: 50. feet  
Screen Length: 5. feet  
Casing Radius: 8.333e-002 feet  
Effective Radius: 0.95 feet  
Static Water Level: 0. feet  
Water Table to Screen Bottom: 53.8 feet  
Anisotropy Ratio: 1.  
Time Adjustment: 5. Seconds

Test starts with trial 1

There are 25 time and drawdown measurements

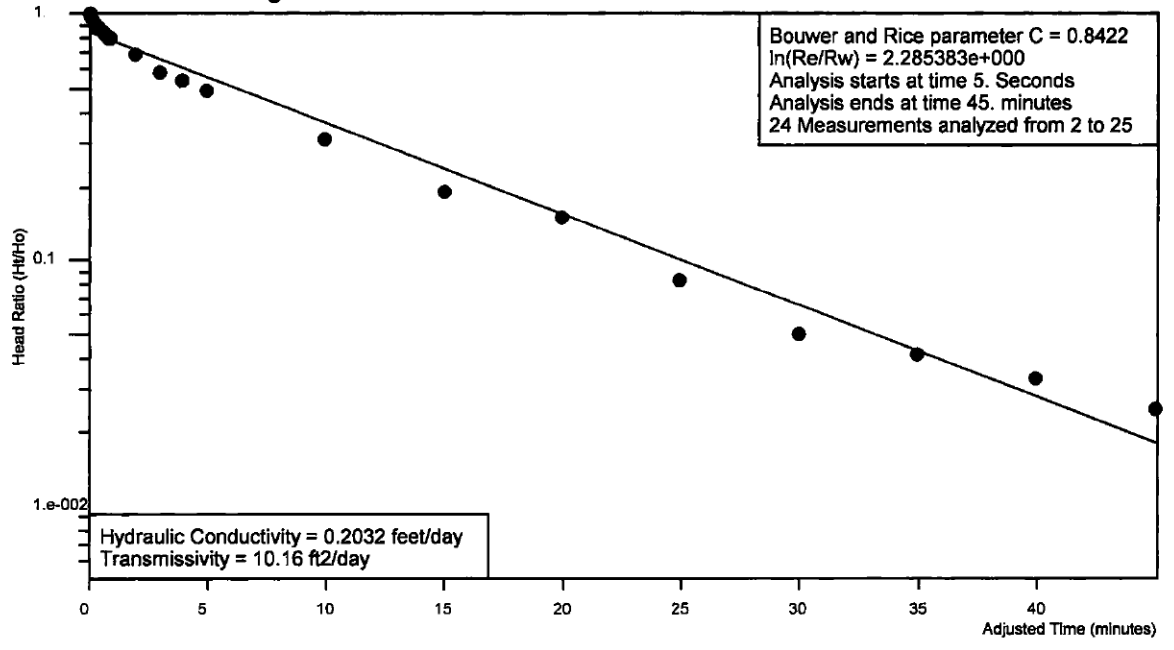
Maximum head is 1.21 feet

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.21	1.21	1.
3	10.	5.	1.19	1.19	0.9835
4	15.	10.	1.15	1.15	0.9504
5	20.	15.	1.12	1.12	0.9256
6	25.	20.	1.09	1.09	0.9008
7	30.	25.	1.06	1.06	0.876
8	35.	30.	1.05	1.05	0.8678
9	40.	35.	1.03	1.03	0.8512
10	45.	40.	1.02	1.02	0.843
11	50.	45.	1.	1.	0.8264
12	55.	50.	0.98	0.98	0.8099
13	60.	55.	0.97	0.97	0.8017
14	120.	115.	0.83	0.83	0.686
15	180.	175.	0.71	0.71	0.5868
16	240.	235.	0.66	0.66	0.5455
17	300.	295.	0.6	0.6	0.4959
18	600.	595.	0.38	0.38	0.314
19	900.	895.	0.23	0.23	0.1901
20	1200	1195	0.18	0.18	0.1488
21	1500	1495	0.1	0.1	8.264e-002
22	1800	1795	6.e-002	6.e-002	4.959e-002
23	2100	2095	5.e-002	5.e-002	4.132e-002
24	2400	2395	4.e-002	4.e-002	3.306e-002
25	2700	2695	3.e-002	3.e-002	2.479e-002

**Slug Test 3/13/17**  
One Accord Richburg

**Bouwer and Rice Graph**  
DW-1



Project Number: Tier II for One Accord  
Analysis by Starpoint Software

$H_o$  is 1.21 feet at 5. Seconds

One Accord

### Slug Test

Site Name: One Accord  
Location: Richburg  
Test Date: 3/13/17  
Client: One Accord  
Project Number: Tier II

---

Well Label: DW-3  
Aquifer Thickness: 50. feet  
Screen Length: 5. feet  
Casing Radius: 8.333e-002 feet  
Effective Radius: 0.95 feet  
Static Water Level: 0. feet  
Water Table to Screen Bottom: 44.31 feet  
Anisotropy Ratio: 1.  
Time Adjustment: 5. Seconds

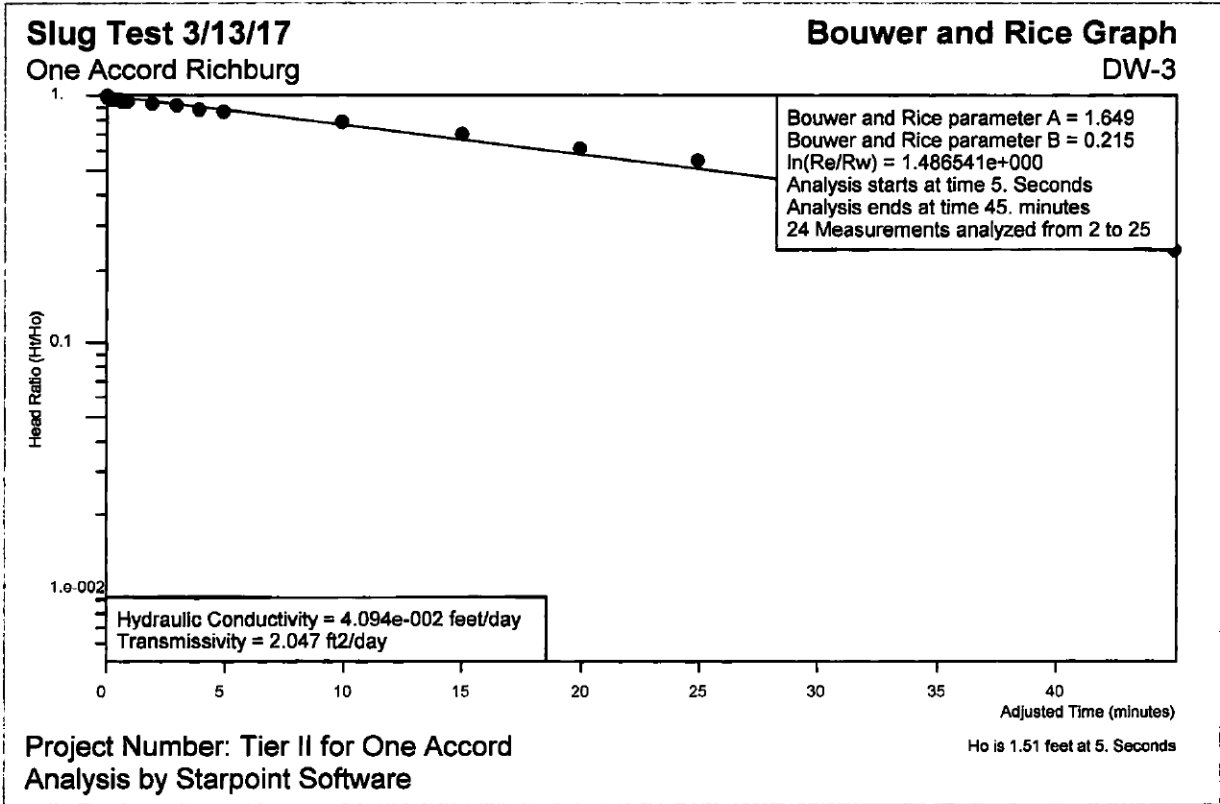
Test starts with trial 1

There are 25 time and drawdown measurements

Maximum head is 1.51 feet

Minimum head is 0. feet

Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.51	1.51	1.
3	10.	5.	1.5	1.5	0.9934
4	15.	10.	1.49	1.49	0.9868
5	20.	15.	1.48	1.48	0.9801
6	25.	20.	1.48	1.48	0.9801
7	30.	25.	1.47	1.47	0.9735
8	35.	30.	1.47	1.47	0.9735
9	40.	35.	1.46	1.46	0.9669
10	45.	40.	1.45	1.45	0.9603
11	50.	45.	1.45	1.45	0.9603
12	55.	50.	1.45	1.45	0.9603
13	60.	55.	1.45	1.45	0.9603
14	120.	115.	1.42	1.42	0.9404
15	180.	175.	1.39	1.39	0.9205
16	240.	235.	1.34	1.34	0.8874
17	300.	295.	1.31	1.31	0.8675
18	600.	595.	1.19	1.19	0.7881
19	900.	895.	1.06	1.06	0.702
20	1200	1195	0.94	0.94	0.6225
21	1500	1495	0.83	0.83	0.5497
22	1800	1795	0.72	0.72	0.4768
23	2100	2095	0.61	0.61	0.404
24	2400	2395	0.5	0.5	0.3311
25	2700	2695	0.36	0.36	0.2384



One Accord

## Slug Test

Site Name: One Accord  
Location: Richburg  
Test Date: 3/13/17  
Client: One Accord  
Project Number: Tier II

---

Well Label: DW-4  
Aquifer Thickness: 5. feet  
Screen Length: 5. feet  
Casing Radius: 8.333e-002 feet  
Effective Radius: 0.95 feet  
Static Water Level: 0. feet  
Water Table to Screen Bottom: 92.59 feet  
Anisotropy Ratio: 1.  
Time Adjustment: 5. Seconds

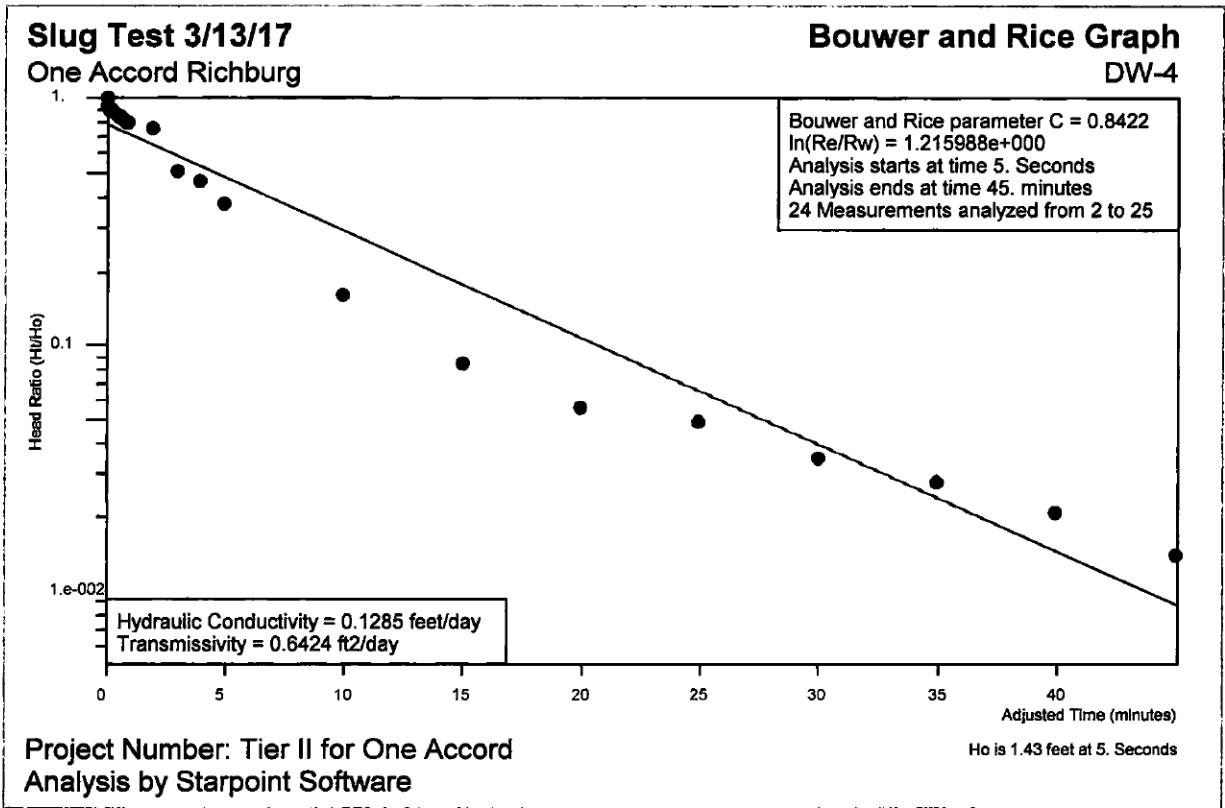
Test starts with trial 1

There are 25 time and drawdown measurements

Maximum head is 1.43 feet

Minimum head is 0. feet


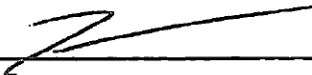
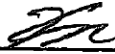
Trial	Time (Seconds)	Adjusted Time (Seconds)	Drawdown (feet)	Head (feet)	Head Ratio
1	0.	-5.	0.	0.	0.
2	5.	0.	1.43	1.43	1.
3	10.	5.	1.33	1.33	0.9301
4	15.	10.	1.3	1.3	0.9091
5	20.	15.	1.29	1.29	0.9021
6	25.	20.	1.27	1.27	0.8881
7	30.	25.	1.24	1.24	0.8671
8	35.	30.	1.22	1.22	0.8531
9	40.	35.	1.21	1.21	0.8462
10	45.	40.	1.19	1.19	0.8322
11	50.	45.	1.17	1.17	0.8182
12	55.	50.	1.16	1.16	0.8112
13	60.	55.	1.14	1.14	0.7972
14	120.	115.	1.09	1.09	0.7622
15	180.	175.	0.73	0.73	0.5105
16	240.	235.	0.66	0.66	0.4615
17	300.	295.	0.54	0.54	0.3776
18	600.	595.	0.23	0.23	0.1608
19	900.	895.	0.12	0.12	8.392e-002
20	1200	1195	8.e-002	8.e-002	5.594e-002
21	1500	1495	7.e-002	7.e-002	4.895e-002
22	1800	1795	5.e-002	5.e-002	3.497e-002
23	2100	2095	4.e-002	4.e-002	2.797e-002
24	2400	2395	3.e-002	3.e-002	2.098e-002
25	2700	2695	2.e-002	2.e-002	1.399e-002





**APPENDIX G**  
**DISPOSAL MANIFESTS**

# SPECIAL WASTE MANIFEST

WASTE ID NUMBER VA1052	<i>Richland Landfill</i> 1047 Highway Church Road Elgin, SC 29045 		
EXPIRATION DATE August 20, 2016			
SPECIAL WASTE PHONE: 803-744-3373 or 803-744-3345		FAX: 803-736-0995	
Prepared by:		ALLEAN LARKIN	
GENERATOR OF WASTE:	KATAWBA ENVIRONMENTAL	ACCOUNT NUMBER:	
CUSTOMER:	KATAWBA ENVIRONMENTAL	820-537	
LOCATION OF WASTE:			
CITY:	EDGEMOOR	COUNTY:	CHESTER
PHONE NUMBER:	803-417-4568	CONTACT:	ALEX AMOS
FAX NUMBER:			
GENERATOR'S SIGNATURE		DATE:	8-3-16
DESCRIPTION OF WASTE:	SOIL WITH VIRGIN PETROLEUM	WASTE CLASS:	
TRANSPORTER OF WASTE:	<i>Furnell's Hauling</i>		
DATE:	8-3-16	TRUCK NUMBER:	WF1
DRIVER'S SIGNATURE	<i>William D. Furnell</i>		
**** TO BE COMPLETED BY RICHLAND LANDFILL****			
DISPOSAL SITE:	RICHLAND LANDFILL ELGIN, SC		
TICKET NUMBER:	1473256		1279
RECEIVED BY:		DATE:	8-3-16



# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of				
<b>3. Generator's Mailing Address:</b> KATAWBA ENVIRONMENTAL, INC. 4278 DYE ROAD EDGEMOORE, SC 29712 <b>4. Generator's Phone</b> 803.327.0469		<b>Generator's Site Address (if different than mailing):</b>		<b>A. Manifest Number</b> <b>WMNA</b> «number»	<b>B. State Generator's ID</b>			
<b>5. Transporter 1 Company Name</b>		<b>6. US EPA ID Number</b>		<b>C. State Transporter's ID</b> <b>D. Transporter's Phone</b>				
<b>7. Transporter 2 Company Name</b>		<b>8. US EPA ID Number</b>		<b>E. State Transporter's ID</b> <b>F. Transporter's Phone</b>				
<b>9. Designated Facility Name and Site Address</b> RICHLAND LANDFILL 1047 HIGHWAY CHURCH ROAD ELGIN, SC 29045		<b>10. US EPA ID Number</b>		<b>G. State Facility ID</b> <b>H. State Facility Phone</b> 803-744-3345				
GENERATOR	<b>11. Description of Waste Materials</b> SOIL IMPACTED WITH VIRGIN DIESEL  WM Profile #      VA1052		<b>12. Containers</b> No.      Type		<b>13. Total Quantity</b>	<b>14. Unit Wt./Vol</b>	<b>I. Misc Comments</b>	
			1		DT	3.8c	TON	
	<b>b.</b>  WM Profile #							
	<b>c.</b>  WM Profile #							
	<b>d.</b>  WM Profile #							
	<b>J. Additional Descriptions for Materials Listed Above</b>		<b>K. Disposal Location</b> Cell Grid					
<b>15. Special Handling Instructions and Additional Information</b>								
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:				
<b>16. GENERATOR'S CERTIFICATE:</b> I hereby certify that the above-described materials are not hazardous wastes as defined by 40CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.								
Printed Name <i>Alex Amas</i>		Signature On behalf of <i>[Signature]</i>			Month 08	Day 17	Year 2007	
<b>17. Transporter 1 Acknowledgement of Receipt of Materials</b>								
Printed Name <i>Daniel H. Arbage</i>		Signature <i>[Signature]</i>			Month 08	Day 17	Year 07	
<b>18. Transporter 2 Acknowledgement of Receipt of Materials</b>								
Printed Name		Signature			Month	Day	Year	
<b>19. Certificate of Final Treatment/Disposal</b> I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
<b>20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.</b>								
Printed Name <i>Dwayne Moody</i>		Signature <i>[Signature]</i>			Month 08	Day 17	Year 07	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
 Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
 Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

TRANSPORTER FACILITY



# NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of		
3. Generator's Mailing Address: KATAWBA ENVIRONMENTAL, INC 4278 DYE ROAD EDGEMOORE, SC 29712 4. Generator's Phone 803.327.0469				Generator's Site Address (if different than mailing):		A. Manifest Number WMNA «number» B. State Generator's ID		
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone		
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone		
9. Designated Facility Name and Site Address RICHLAND LANDFILL 1047 HIGHWAY CHURCH ROAD ELGIN, SC 29045		10. US EPA ID Number		G. State Facility ID		H. State Facility Phone 803-744-3345		
11. Description of Waste Materials SOIL IMPACTED WITH VIRGIN DIESEL WM Profile # VA1052		12. Containers		13. Total Quantity	14. Unit Wt./Vol	1. Misc. Comments		
		No.	Type					
b. WM Profile #		1	DT	4.67	Ton			
c. WM Profile #								
d. WM Profile #								
1. Additional Descriptions for Materials Listed Above		2. Disposal Location		3. Cell		4. Level		
15. Special Handling Instructions and Additional Information		Grid						
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:						
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by 40CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.								
Printed Name		Signature "On behalf of"				Month	Day	Year
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed Name Alex Amos		Signature <i>[Signature]</i>		Month 05	Day 17	Year 21
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed Name Daniel H. A. Burgess		Signature <i>[Signature]</i>		Month 05	Day 11	Year 21
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
Printed Name Dwayne Moody		Signature <i>[Signature]</i>				Month 05	Day 17	Year 21

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of			
3. Generator's Mailing Address: KATAWBA ENVIRONMENTAL, INC. 4278 DYE ROAD EDGEMOORE, SC 29712		Generator's Site Address (if different than mailing):		A. Manifest Number <b>WMNA</b>	«number»		
4. Generator's Phone 803.327.0469				B. State Generator's ID			
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Transporter's ID			
				D. Transporter's Phone			
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID			
				F. Transporter's Phone			
9. Designated Facility Name and Site Address RICHLAND LANDFILL 1047 HIGHWAY CHURCH ROAD ELGIN, SC 29045		10. US EPA ID Number		G. State Facility ID			
				H. State Facility Phone <b>803-744-3345</b>			
GENERATOR	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	
	SOIL IMPACTED WITH VIRGIN DIESEL		No.	Type			
	WM Profile # <b>VA1052</b>		<b>1</b>	<b>DT</b>	<b>14.71</b>	<b>TON</b>	
	b.						
	WM Profile #						
	c.						
WM Profile #							
d.							
WM Profile #							
J. Additional Descriptions for Materials Listed Above		K. Disposal Location					
		Cell		Level			
		Grid					
15. Special Handling Instructions and Additional Information							
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by 40CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name <b>Alex Amos</b>		Signature "On behalf of"			Month <b>08</b>	Day <b>30</b>	
					Year <b>2017</b>		
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		Signature			Month <b>8</b>	
	Printed Name <b>Daniel A. Berger</b>					Day <b>30</b>	
						Year <b>17</b>	
FACILITY	18. Transporter 2 Acknowledgement of Receipt of Materials		Signature			Month	
	Printed Name					Day	
						Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name <b>Dwayne Moody</b>		Signature <b>Dwayne Moody</b>			Month <b>9</b>	Day <b>30</b>	
					Year <b>17</b>		

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>KATAWISS ENVIRONMENTAL</i> <i>4275 DYE ROAD</i> <i>EDGEWOOD, SC 29712</i>		4. Generator's Phone ( )			
5. Transporter 1 Company Name <i>KATAWISS ENVIRONMENTAL</i>		6. US EPA ID Number		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone	
9. Designated Facility Name and Site Address <i>HAZ UNIT</i> <i>221 DALTON DR</i> <i>CHARLOTTE, NC</i>		10. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION <i>PURE WATER UST STPS</i>		12. Containers		13. Total Quantity	
		No.	Type	14. Unit Wt./Vol.	
		<i>1</i>	<i>TOTE</i>	<i>187</i>	
		<i>2</i>	<i>DR</i>	<i>76</i>	
		<i>1</i>	<i>DR</i>	<i>38</i>	
<i>a. ONE ACCORD, Hwy 9 RICHBURG, SC</i>		<i>1</i>		<i>GM</i>	
<i>b. Jims Variety, 1401 McCreary St</i> <i>PAGEWOOD, SC</i>		<i>2</i>		<i>GM</i>	
<i>c. SPORTS ARTS CENTER #6, MORRISTOWN NJ</i> <i>Clark Hill, SC</i>		<i>1</i>		<i>GM</i>	
<i>d. METHEORS ONLY, METHEORS cats DR,</i> <i>ORANEBURG, SC</i>		<i>1</i>		<i>GM</i>	
G. Additional Descriptions for Materials Listed Above				H. Handling Codes for Wastes Listed Above	
16. Special Handling Instructions and Additional Information					
<b>16. GENERATOR'S CERTIFICATION:</b> I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name <i>Carl Funderburk</i>		Signature <i>Carl Funderburk</i>		Date Month Day Year <i>6 1 16</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Date	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name <i>Mike Hinds</i>		Signature <i>Mike Hinds</i>		Date Month Day Year <i>6 1 16</i>	

NON-HAZARDOUS WASTE

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on site (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>KATANA ENVIRONMENTAL</i> <i>4278 V-76 RD</i> <i>ROCK HILL SC 29712</i>					
4. Generator's Phone ( <i>803</i> ) <i>417-4568</i>		6. US EPA ID Number		A. State Transporter's ID	
5. Transporter 1 Company Name <i>KATANA ENVIRONMENTAL</i>		8. US EPA ID Number		B. Transporter 1 Phone	
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID	
9. Designated Facility Name and Site Address <i>Home Mfg</i> <i>221 Dalton Dr</i> <i>Charlotte, NC</i>		10. US EPA ID Number		D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION			12. Containers		13. Total Quantity
			No.	Type	14. Unit Wt./Vol.
a. <i>Purge Water US-512</i>					
a. <i>CSIII, Anderson Rd, Rock Hill SC</i>			1	Dr	52 Gal
b. <i>Fonne Mays, Funder Rd, Rock Hill SC</i>			1	Dr	7 Gal
c. <i>ONE ACCOUNT, Hwy 9, RICHMOND, SC</i>			3	Dr	148 Gal
d. <i>Henry II Hwy E2 Step 33 Courty Rd E2000</i>			1	Dr	15 Gal
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name <i>Doby Mays</i>		Signature <i>Doby Mays</i>		Date Month Day Year <i>2 13 17</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator, Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name <i>Mike Hinds</i>		Signature <i>Mike Hinds</i>		Date Month Day Year <i>2 13 17</i>	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address <i>KATAWSA ENGINEERING 4276 Dye Rd ROCKAWAY, SC 29712</i>		4. Generator's Phone <i>(803) 417-4568</i>			
5. Transporter 1 Company Name <i>KATAWSA ENGINEERING INC</i>	6. US EPA ID Number	A. State Transporter's ID		B. Transporter 1 Phone	
7. Transporter 2 Company Name	8. US EPA ID Number	C. State Transporter's ID		D. Transporter 2 Phone	
9. Designated Facility Name and Site Address <i>Harz Mat 221 DARTON DR CHARLOTTE, NC</i>		10. US EPA ID Number		E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION <i>PURGE WATER UST SLO</i>		12. Containers		13. Total Quantity	14. Unit WL/Vol.
		No.	Type		
a. <i>LANING, HAZEN ST, ROCK HAV, SC</i>		1	Dr	8	GAL
b. <i>Lucky 7 Mart, Anderson Rd, Rock Hill SC</i>		1	Dr	45	GAL
c. <i>ONE ACCOUNT, Highway 9, Rock Hill, SC</i>		6	Dr	258	GAL
d.					
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information  <i>NON-HAZARDOUS PURGE WATER</i>					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name <i>Betsy Morris</i>		Signature <i>Betsy Morris</i>		Date Month Day Year <i>7 30 17</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name <i>Mike Hinds</i>		Signature <i>Mike Hinds</i>		Date Month Day Year <i>7 30 17</i>	

NON-HAZARDOUS WASTE GENERATOR FACILITY



# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of
3. Generator's Name and Mailing Address		<i>Vastawon Environment 4278 Old Rd Edgemont, SC 29712</i>			
4. Generator's Phone		<i>803 417-4566</i>			
5. Transporter 1 Company Name		6. US EPA ID Number		A. State Transporter's ID	
<i>Vastawon Environment</i>				B. Transporter 1 Phone	
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
9. Designated Facility Name and Site Address		10. US EPA ID Number		E. State Facility's ID	
<i>Highway 221 Dole Rd Charlotte, NC</i>				F. Facility's Phone	
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity	14. Unit Wt/Vol.
		No.	Type		
a. <i>One Barrel, Lancaster Hwy, Denmark, SC</i>		3	Dr	129	Gm
b. <i>CS112, Leslie Hwy, Lenoir, SC</i>		3	Dr	146	Gm
c.					
d.					
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name				Date	
<i>Bry Morris</i>				Month Day Year	
Signature				<i>Bry Morris</i>	
				9   15   17	
17. Transporter 1 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name				Month Day Year	
Signature					
18. Transporter 2 Acknowledgement of Receipt of Materials				Date	
Printed/Typed Name				Month Day Year	
Signature					
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name				Date	
<i>Mike Hinds</i>				Month Day Year	
Signature				<i>Mike Hinds</i>	
				9   14   17	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

**APPENDIX H**  
**ZONING REGULATIONS**

## ZONING REGULATIONS

One Accord Ministries Site ID 02131 further identified by Chester County Tax ID 1250000059000 is zoned LC (Limited Commercial). A copy of the current zoning regulations were too lengthy for inclusion within this report. This designation does not prohibit the use of onsite drinking water wells or irrigation wells according to Chester County Zoning. The subject site is located in an area serviced by public water and sewer lines. No future development plans include the installation of a drinking water or irrigation well.

**APPENDIX I**  
**FATE TRANSPORT MODELING**

## FATE AND TRANSPORT MODELING

Fate and transport modeling was not required for this scope of work.

**APPENDIX J**  
**ACCESS AGREEMENTS**



# Katawba Environmental, Inc.

---

November 16, 2015

Mr. John Darnell Faust  
PO Box 202  
Richburg, SC 29729

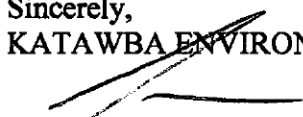
Dear Mr. Faust:

On behalf of One Accord Ministries and the South Carolina Department of Health and Environmental Control (SCDHEC) we are requesting access to your property on Lancaster Highway, Richburg, South Carolina.

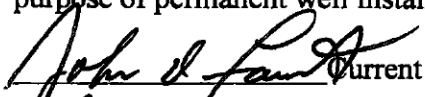
Analytical testing of groundwater sampled from Kee's Service Station / Fireballs Service Station / One Accord Ministries, near your parcel indicated the presence of petroleum hydrocarbons from an underground storage tank (UST) release at the facility. In order to determine the horizontal extent of the release, groundwater sampling and well installation will be required on your property at the locations identified on the attached map. Please be advised remedial efforts will not begin until a full assessment of the release has been completed so your cooperation is greatly appreciated.

Please sign the bottom of this correspondence and remit to my office at 4278 Dye Road, Edgemoor, SC 29712 or scan and send the approval via email to [katawba@comporium.net](mailto:katawba@comporium.net). Please provide us with you phone number so that we contact you regarding this case. Should you need to discuss this matter further please do not hesitate to contact me at (803) 327-0469 office or (803) 417-4568 cell.

Sincerely,  
KATAWBA ENVIRONMENTAL, INC.

  
Alex "Chip" Amos, PG CEO

As owner/representative of the parcel of property described above, I hereby grant Katawba Environmental, Inc. and all subcontractors access to my property for the purpose of permanent well installation and groundwater sampling.

  
John D. Faust  
803-789-5856  
Current Owner/Representative



# Application for Encroachment Permit

S.C. Department of Transportation

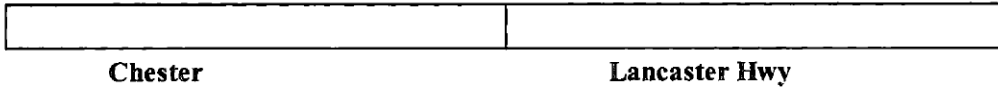
Form 637 (Rev 10/2015)

## Contact Information

**Applicant:** Katawba Environmental, Inc.  
**Street:** 4278 Dye Rd  
  
**City:** Edgemoor  
**State:** SC                    ▾      **Zip Code:** 29712  
**Phone:** (803)417-4568      **Fax:** (843)225-1360  
**Email:** katawba@comporium.net  
**Contact:** Alex Amos

## Project Location

**Primary County:** Chester                    ▾



**1. Type of Encroachment:** ENVIRONMENTAL  
Installation of monitoring wells in SCDOT ROW.

**2. Description of Location:**  
3570 Lancaster Highway, Richburg, SC. Installation of monitoring wells as indicated by the attached site drawing.

(Attach sketch indicating roadway features such as: pavement width, shoulder width, sidewalk and curb and gutter location, significant drainage structure, north arrow, right of way width, and location of the proposed encroachment with respect to the roadway centerline and the nearest intersecting road on the State system.)



3. The undersigned applicant hereby requests the SCDOT to permit encroachment on the SCDOT right of way as described herein. It is expressly understood that the encroachment, if and when constructed, shall be installed in accordance with the sketch attached hereto and made a part hereof. The applicant agrees to comply with and be bound by the SCDOT's "A Policy for Accommodating Utilities on Highways Rights of way", "Standard Specifications for Highway Construction", the "General Provisions" and "Special Provisions", attached hereto or made a part hereof by reference, during the installation, operation and maintenance of said encroachment within the SCDOT's Right of Way. **DISCHARGES OF STORM WATER AND NON-STORM WATER:** Work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit(s) issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The encroachment permit will not be issued until the applicant has received an NPDES construction permit from SC Department of Health and Environmental Control.

The applicant agrees to comply with all current SCDOT Standards Specifications for Highway Construction including all Supplemental Technical Specifications. The applicant hereby further agrees, and binds his/her/its heirs, personal representatives, successors, assigns, to assume any and all liability for accidents or injuries to persons, or damage to property, including the highway, that may be caused by the construction, maintenance, use, moving or removing of the physical appurtenances contemplated herein, and the applicant agrees to indemnify and hold SCDOT harmless from and against any and all claims for personal injury and/or property damage which may be sustained by reason of the construction, maintenance or existence of said encroachment on the SCDOT's right of way.

Applicant's Name: Alex Amos

Date: 11/16/2015

(Please print or type)

Applicant's Sig: \_\_\_\_\_

Title: *CEO*

### For Office Use Only

In accordance with your request and subject to all the provisions, terms, conditions, and restrictions stated in the application and the general and special provisions attached hereto, the SCDOT hereby approves your application for an encroachment permit. This permit shall become null and void unless the work contemplated herein shall have been completed prior to:

**See Attached Special Provision and/or Permit Requirements**

NPDES Permit

Nbr:

(Date received by res. Maint. Engr.)

(SCDOT Approval)

(Date)

**Application for Encroachment Permit**  
**General Provisions**

1. **DEFINITIONS:** The word "Permittee" used herein shall mean the name of the person, firm, or corporation to whom this permit is addressed, his, her, its, heirs, personal representatives, successors and assigns. The word "DEPARTMENT" shall mean the South Carolina Department of Transportation.
2. **NOTICE PRIOR TO STARTING WORK:** Before starting the work contemplated herein within the limits of the highway right of way, the Department's Resident Maintenance Engineer in the county in which the proposed work is located shall be notified 24 hours in advance so that he may be present while the work is under way.
3. **PERMIT SUBJECT TO INSPECTION:** This permit shall be kept at the site of the work at all times while said work is under way and must be shown to any representative of the Department or law enforcement officer on demand.
4. **PROTECTION OF HIGHWAY TRAFFIC:** The applicant shall be responsible for the protection of the highway traffic at all times during the construction, maintenance, removing or moving of the encroachment permitted herein. Detours, barricades, warning signs and flagmen, as necessary, shall be provided by and at the expense of the Permittee and shall be in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD). The work shall be planned and carried out so that there will be the least possible inconvenience to the motoring public. The Permittee agrees to observe all rules and regulations of the Department while carrying on the work contemplated herein and take all other precautions that circumstances warrant.
5. **STANDARDS OF CONSTRUCTION:** All work shall conform to the Department's standards of construction and shall be performed in a workman-like manner. The applicant shall make adequate provisions for maintaining the proper drainage of the highway as it may be affected by the encroachment permitted herein. All work shall be subject to the supervision and satisfaction of the Department.
6. **FUTURE MOVING OF PHYSICAL APPURTENANCES:** If, in the opinion of the State Highway Engineer, it should ever become necessary to move or remove the physical appurtenances, or any part thereof contemplated herein, on account of change in location of the highway, widening of the highway, or for any other sufficient reason, such moving shall be done on demand of the Department at the expense of the Permittee.
7. **RESTORATION OF HIGHWAY FACILITIES UPON MOVING OR REMOVING OF PHYSICAL APPURTENANCES:** If, and when, the physical appurtenances contemplated herein shall be moved or removed, either on the demand of the Department or at the option of the Permittee, the highway and facilities shall immediately be restored to their original condition at the expense of the Permittee.
8. **COSTS:** All work in connection with the construction, maintenance, moving or removing of the physical appurtenances contemplated herein shall be done by and at the expense of the Permittee.
9. **ADDITIONAL PERMISSIONS:**
  - (a) It is distinctly understood that this permit does not in any way grant or release any rights lawfully possessed by the abutting property owners. The Permittee shall secure any such rights, as necessary, from said abutting property owners.
  - (b) The Permittee shall be responsible for obtaining all other approvals or permits necessary for installation of the encroachment from other government entities.

**APPENDIX K**  
**QAPP CHECKLIST**

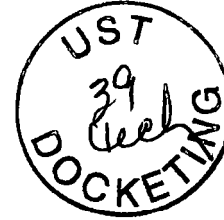
QAPP Contractor Checklist One Accord Ministries Site ID 02131

Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	X		
2	Is UST Owner/Operator name, address, & phone number	X		
3	Is name, address, & phone number of current property owner	X		
4	Is the DHEC Certified UST Site Rehabilitation Contractor's Name, Address, telephone number, and certification number	X		
5	Is the name, address, telephone number, and certification number of the well driller that installed borings/monitoring wells	X		
6	Is the name, address, telephone number, and certification number of the certified laboratory(ies) performing analytical analyses	X		
7	Has the facility history been summarized?	X		
8	Has the regional geology and hydrogeology been described?	X		
9	Are the receptor survey results provided as required?	X		
10	Has current use of the site and adjacent land been described?	X		
11	Has the site-specific geology and hydrogeology been described?	X		
12	Has the primary soil type been described?	X		
13	Have field screening results been described?	X		
14	Has a description of the soil sample collection and preservation been detailed?	X		
15	Has the field screening methodology and procedure been	X		
16	Has the monitoring well installation and development dates been	X		
17	Has the method of well development been detailed?	X		
18	Has justification been provided for the locations of the	X		
19	Have the monitoring wells been labeled in accordance with the UST QAPP	X		
20	Has the groundwater sampling methodology been detailed?	X		
21	Have the groundwater sampling dates and groundwater measurements been provided?	X		
22	Has the purging methodology been detailed?	X		
23	Has the volume of water purged from each well been provided along with measurements to verify that purging is complete?	X		
24	If free-product is present, has the thickness been provided?			X
25	Does the report include a brief discussion of the assessment done and the results?	X		
26	Does the report include a brief discussion of the aquifer evaluation and results?	X		
27	Does the report include a brief discussion of the fate & transport models used?			X

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk			X
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2			X
31	Have recommendations for further action been provided and	X		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	X		
34	Has the current and historical laboratory data been provided in tabular format?	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?	X		
36	Have the Site conceptual model tables been included? (Tier 1 Risk			X
37	Has the topographic map been provided with all required elements? (Figure	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	X		
40	Has the site potentiometric map been provided? (Figure 5)	X		
41	Have the geologic cross-sections been provided? (Figure 6)	X		
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements? (Appendix A)	X		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements?	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?	X		
47	Have the soil boring/field screening logs been provided?	X		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	X		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)	X		
50	Have the disposal manifests been provided? (Appendix G)	X		
51	Has a copy of the local zoning regulations been provided?	X		
52	Has all fate and transport modeling been provided? (Appendix I)	X		
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)	X		
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	X		



OCT 27 2017



ANGELA HOUGH  
ONE ACCORD MINISTRIES  
PO BOX 220  
RICHBURG SC 29729-0220

Re: **Site-Specific Work Plan Directive for Additional Assessment**  
One Accord Ministries, 3570 Lancaster Hwy, Richburg, SC  
UST Permit #02131  
Release Reported March 23, 2009  
Tier II Assessment Report Addendum received September 28, 2017  
Chester County

Dear Ms. Hough:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report. The report indicates the presence of petroleum chemicals of concern (CoCs) in the groundwater above Risk-Based Screening Levels (RBSLs).

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, Additional Assessment and a comprehensive groundwater sampling event to include sampling all water supply wells and surface water bodies within 1,000 feet of the facility or 500 feet past the down gradient edge of the plume as outlined in the UST Quality Assurance Program Plan (UST QAPP) Revision 3.1 is necessary.

**Your contractor must complete and submit an approvable Site-Specific Work Plan (SSWP) and cost proposal within thirty (30) days of the date of this letter. The SSWP must be prepared using the format in the UST QAPP (available on-line at <http://www.scdhec.gov/Environment/LW/UST/ReleaseAssessmentClean-up/QualityAssurance/>).**

A cost proposal is required that includes the installation of a shallow, intermediate, deep well cluster down gradient of DWW-2, abandonment of MW-9, MW-10 and sampling all of the monitoring wells for BTEX, Naphthalene, MTBE, 1,2-DCA, 8 oxygenates, ethanol, EDB and all water supply wells and surface water bodies within 1,000 feet of the facility and 500 feet down gradient of the edge of the plume. **Please note that approval from the DHEC must be issued before work begins.** The AFVR and Tier II Assessment or groundwater sampling event must be conducted in accordance with the UST QAPP and all applicable regulations once the SSWP is approved.

On all correspondence concerning this site, please reference UST Permit #02131. If there are any questions concerning this project, you may contact me at (803) 898-0586 or by email at [mendenje@dhec.sc.gov](mailto:mendenje@dhec.sc.gov).

Sincerely,

Ed Mendenhall, Hydrogeologist  
Assessment and Unregulated Petroleum Section  
UST Management Division  
Bureau of Land and Waste Management

cc: Katawba Environmental, Inc., 4278 Dye Road, Edgemoor, SC 29712  
Technical File