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Subject:
Pilot Study Summary Report
AVX Corporation
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801 17th Avenue South
Horry County, Myrtle Beach, South Carolina
SCD 062 690 557

Date:
July 28, 2010

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Our ref:
B0007393.0000

Dear Ms. Minsk and Mr. Berresford:

On behalf of AVX Corporation, ARCADIS respectfully submits five copies of the *Pilot Study Summary Report* for the above-referenced site. If you have any questions, please contact me at 724.742.9180, ext. 518.

Respectfully,

ARCADIS

Mark B. Hanish
Project Manager

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Imagine the result

AVX Corporation

Pilot Study Summary Report

Enhanced Reductive Dechlorination
Myrtle Beach, South Carolina

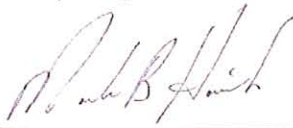
July 2010




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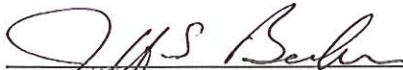
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Pilot Study Summary Report

Enhanced Reductive
Dechlorination

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1. Introduction

ARCADIS, on behalf of the AVX Corporation (AVX), implemented a pilot study in support of the development of a feasibility study (FS) to address off-site dissolved chlorinated volatile organic compounds (VOCs) on the Horry Land Company property located northeast of the AVX facility at 801 17th Avenue South, Myrtle Beach, South Carolina (site) (Figure 1). All work was performed with the permission of the property owner (Horry Land Company).

The South Carolina Department of Health and Environmental Control (SCDHEC) originally requested that an FS be conducted for the site in a January 2, 2008 letter. The purpose of the FS is to select the most effective, implementable, and cost efficient remedial strategy to achieve the remedial action objectives (RAOs). The RAOs discussed within the March 2008 FS Work Plan (ARCADIS, 2008) are to:

1. Control the migration of dissolved-phase chlorinated VOCs from leaving the site and attain the SCDHEC Water Classification and Standards – Regulation 61-68 June 25, 2004.
2. Mitigate elevated concentrations of dissolved chlorinated VOCs in off-site groundwater.

This *Pilot Study Summary Report* (report) summarizes the results of the ongoing pilot study that has been implemented with the objective of evaluating the feasibility of using in-situ enhanced reductive dechlorination (ERD) to address the second RAO. All work was performed in accordance with the May 11, 2009 Addendum 2 to Appendix B (ERD Work Plan) of the FS Work Plan (ARCADIS, 2009a) and the July 2, 2009 Underground Injection Control Permit Application (ARCADIS, 2009b).

1.1 Site Background

A comprehensive summary of the site setting, environmental history, and conceptual site model (CSM) are presented in the FS Work Plan (ARCADIS, 2008). A brief summary of the CSM and information related to the origin, fate, and transport of dissolved chlorinated VOCs off site, which is relevant to the ERD pilot study, is presented below.

Trichloroethene (TCE) and its chlorinated breakdown products (cis-1,2-dichloroethene [cis-1,2-DCE] and vinyl chloride [VC]) are the primary constituents of concern in

groundwater at the site. The primary sources of TCE release to the environment are likely:

- The former TCE underground storage tanks reportedly located on the western side of the main building, which is now beneath an area of building expansion.
- A degreasing unit located adjacent to or beneath the AVX main building.

The geology at the site is characterized by alternating beds of sand and clay. The uppermost strata are referred to as terrace deposits (including an upper and lower unit), which extend to approximately 45 feet below ground surface (bgs). The underlying unit is thought to be the Peedee Formation, a Cretaceous-aged marginal marine unit, consisting of sand and clay, similar to the terrace deposits. The unit extends to approximately 275 feet below sea level, below which is the Black Creek Formation.

In the vicinity of the ERD pilot study, the terrace deposits consist of the following:

- from approximately 0 to 8 feet bgs – interbedded silt and/or clay, occasional organic matter, and partings of sand
- from approximately 8 to 28 feet bgs – fine to medium and medium to coarse sand lenses with shell fragments and occasional silt or clay partings
- from approximately 28 to 45 feet bgs – fine sand and silt with locally partially cemented thin beds of silt or clay
- below approximately 45 feet bgs – interbedded sand and silt or clay and locally calcite-cemented siltstone of the Peedee Formation

The bottom 15 to 20 feet of the sandy units immediately above the Peedee formation represents the zone where elevated concentrations of chlorinated VOCs have been observed, which in turn, is the zone targeted for the ERD pilot study.

1.2 Description of Enhanced Reductive Dechlorination Technology

Reductive dechlorination is a microbiological process in which chlorinated compounds are reduced and undergo dechlorination as a result of either microbial metabolism or co-metabolism. ERD is stimulated by injecting a soluble carbon substrate (e.g.,

molasses, corn syrup, lactate, whey) into the subsurface to create a biological in-situ reactive zone (IRZ). The carbon source is injected to promote the consumption of natural electron acceptors (e.g., oxygen, nitrate, manganese, ferric iron, sulfate, carbon dioxide) by indigenous bacteria within the aquifer matrix. The general sequence of alternative electron acceptor utilization and respiration byproduct formation is as follows (from most thermodynamically favorable to least):

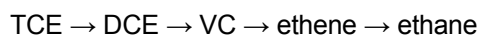
<u>Electron Acceptors</u>		<u>Products</u>
Nitrate (NO ₃ ⁻)	→	Nitrogen (N ₂)
Manganic Manganese (Mn ⁴⁺)	→	Manganous Manganese (Mn ²⁺)
Ferric Iron (Fe ³⁺)	→	Ferrous Iron (Fe ²⁺)
Sulfate (SO ₄ ²⁻)	→	Sulfide/Hydrogen Sulfide (H ₂ S)
Carbon Dioxide (CO ₂)	→	Methane (CH ₄)

The added organic carbon source stimulates microbial activity, driving the groundwater environment to strongly reducing conditions, establishing an anaerobic IRZ. Within the IRZ, there are two primary processes by which microbes can degrade chlorinated VOCs dissolved in groundwater:

- *Co-Metabolism*: In this process, chlorinated VOCs are fortuitously degraded by the enzymes and cofactors produced by microbes as they metabolize excess organic carbon.
- *Dehalorespiration/Metabolism*: In this process, microbes use the chlorinated VOC molecule as an alternate electron acceptor to support respiration under the anaerobic and reducing environment maintained by the presence of excess organic carbon.

The characteristics and extent of an IRZ established are commonly determined by the effectiveness of delivering the carbon source to subsurface microbes. Three basic goals are targeted with the delivery of degradable organic carbon into an aquifer containing targeted chlorinated VOCs:

- *Overcome the natural recharge of electron acceptors:* This includes oxygen, nitrates, and other electron acceptors that tend to support a more aerobic microbial community. As electron acceptors are used up, the environment will become more and more reducing. During this process, the ecology of the microbial community will adapt, encouraging proliferation of the types of bacteria that participate directly in dechlorination reactions.
- *Stimulate fermentation and the production of molecular hydrogen:* In the presence of excess organic carbon and a strongly reducing environment, fermenting bacteria will harvest energy by splitting organic compounds. This process generates hydrogen. The process of fermentation also generates enzymes, cofactors, alcohols, and other compounds that act as surfactants. This surfactant effect drives the dissolution of adsorbed and non-aqueous-phase chlorinated VOC mass, making it available for treatment.
- *Stimulate complete dechlorination of the target chlorinated VOCs:* Certain anaerobic bacteria can use the hydrogen produced during the fermentation processes as an electron donor and the chlorinated alkenes as electron acceptors for respiration. The bacteria involved in these reactions are referred to as “dehalorespirers,” which include bacterial species from several genera, including *Desulfuromonas*, *Dehalospirillum*, *Dehalococcoides*, *Dehalobacter*, and *Desulfomonile*. In this process, the hydrogen atoms are substituted for chlorine atoms, resulting in a step-wise chemical reduction of the chlorinated VOCs or other halogenated organic compounds until they are completely converted to harmless end products. In the case of chlorinated alkenes, this follows the path:



1.3 Objectives

The objectives of the ERD pilot study were to:

1. Overcome the continuous electron acceptor supply and establish an IRZ.
2. Produce molecular hydrogen to facilitate reductive dechlorination.
3. Achieve complete dechlorination of the target chlorinated VOCs.

2. Enhanced Reductive Dechlorination Pilot Study Implementation

To date, the pilot study has included three injection events implemented over a 9-month period (July 2009, November 2009, and April 2010) at the five injection wells shown on Figure 2. Each injection event has included the use of a temporary mixing system to dilute a 50 percent concentrated stock solution of molasses to a 2 percent by volume injection concentration.

The targeted radius of influence (ROI) for each injection well was 25 feet. Groundwater modeling using data collected during the tracer testing performed in November 2008 (ARCADIS, 2009c) was conducted prior to beginning dilute molasses injections to estimate the appropriate injection volume required to reach the design ROI. The performance monitoring has included weekly to biweekly groundwater sampling with total organic carbon (TOC) analysis, as well as observation of field parameters (pH, specific conductivity, oxidation reduction potential, dissolved oxygen, and temperature). The performance monitoring program has also included monthly groundwater sampling and analysis of chlorinated VOCs plus dissolved gases (methane, ethane, and ethene), including observation of field parameters.

2.1 Well Installation

Five injection wells, four performance monitoring wells, and two soil gas monitoring points were installed in support of implementation of the ERD pilot study. Well completion logs are provided in Appendix A. Additionally, existing piezometers P-1D through P-3D were incorporated into the monitoring program. The well details for injection wells IW-2D through IW-6D, piezometers P-1D through P-3D, observation wells OW-7D through OW-10D, and soil gas monitoring points SG-101 and SG-102 are included as Table 1. The ERD pilot study well network layout is shown on Figure 3.

2.2 Injection System Setup

Molasses was the organic substrate injected during this ERD pilot study. Molasses is a readily soluble substrate that provides carbon in the form of sugars, such as sucrose. A 50 percent concentrated solution of molasses was delivered to the site and offloaded through filter housings with 100-micron bag filters into a 21,000-gallon storage tank. A high pressure pump was used to meet the flow and pressure demands for delivery of the 50 percent molasses feedstock to meet the incoming dilution water. Once injections began, the 50 percent molasses solution was again filtered through 100-micron bag filters contained within two filter housings that were plumbed in parallel.

ARCADIS obtained permission from the City of Myrtle Beach to purchase water from a nearby fire hydrant. The City placed a meter on the hydrant to meter water use. This potable water was used to dilute the 50 percent molasses solution to an injection concentration of 2 percent (by volume) through a set of three in-line static mixers that were plumbed in parallel (Photo 1, Appendix B). Downstream of the inline dilution and mixing, the 2 percent molasses solution was distributed to the five injection wells through an injection manifold that was fitted with a flow control valve and a flow meter for each of the five distribution lines (Photo 1, Appendix B).

Each injection well head was equipped with a gate valve and pressure gauge to further regulate and document the injection pressures. A photo of the typical well head setup is provided in Photo 2, Appendix B.

2.3 Injection Summary

Three injection events have been performed as part of the ongoing pilot test that began in July 2009. Approximately 324,000 gallons of the dilute 2 percent molasses solution were distributed evenly into each of the five injection wells during injection events one and two (approximately 64,800 gallons per injection well). Nearly 370,000 gallons of 2 percent molasses solution was distributed into the five injection wells during injection event three. The largest volume was injected into injection well IW-4D (approximately 86,900 gallons), intermediate volumes were injected into injection wells IW-2D and IW-6D (approximately 75,600 and 77,300 gallons, respectively), and the smallest volumes were injected into injection wells IW-3D and IW-5D (approximately 64,900 gallons each). Some additional detail for each injection event is described briefly below:

- *Injection Event #1 – July 2009:* The operational parameters for Injection #1 are summarized on Figure 4 (using injection well IW-4D as a representative injection location). During this event, injection was conducted simultaneously into all five wells during daytime hours.
- *Injection Event #2 – November 2009:* The operational parameters for Injection #2 are summarized on Figure 5 (using injection well IW-4D as a representative injection location). Similar to the first injection event, injection occurred simultaneously into all five wells during daytime hours.
- *Injection Event #3 – April 2010:* The operational parameters for Injection #3 are summarized on Figure 6 (using injection well IW-4D as a representative injection location). This injection event was conducted non-stop from start to

finish, and alternated between simultaneous injections into injection wells IW-2D, IW-4D, and IW-6D, and simultaneous injections into injection wells IW-3D and IW-5D to maximize TOC distribution (discussed further in Section 3.2.1).

2.4 Performance Monitoring

A baseline sampling event was conducted, using low-flow sampling methods, prior to initiating the pilot study and included field parameters, geochemical parameters (nitrate, total and dissolved iron, and sulfate), TOC, light gases, and TCE and its daughter products. This baseline sampling event serves as the benchmark by which remedial progress and establishment of the IRZ can be measured.

Multiple parameters were measured as part of the pilot test performance monitoring activities to gauge the effectiveness of the ERD pilot test. Routine parameters measured during the performance monitoring included pH, as well as TOC, light gases, TCE, and associated daughter product concentrations. Grab samples for TOC and field parameters were collected weekly to biweekly using a weighted bailer, and samples for VOCs and light gases were collected monthly using passive diffusion bags.

These parameters were monitored according to the schedule shown in Table 2. The performance monitoring data for the ERD pilot study well network is summarized in Table 3.

2.5 Assessment of Methane in Vadose Zone Near Injection Wells

On June 14, 2010, soil gas was sampled from the two soil gas monitoring points, SG-101 and SG-102, for analysis of methane. Before sampling, each of the 1-inch-diameter, 5-foot-long soil gas sampling points was purged at a rate of approximately 1 liter per minute over a period of 4 minutes to confirm entry of formation gas into the sampling point. Therefore, approximately 4 liters of gas was purged from each soil gas sampling point prior to sampling. This volume equates to over four sampling point purge volumes.

After purging, the soil gas was sampled by vacuum using a laboratory-provided and cleaned Summa[®] canister. The initial vacuum on the canister was -35 inches of mercury (Hg). The sample was drawn for approximately 33 minutes with the post-sampling vacuum on the canister of approximately -5 inches of Hg.

The canisters were labeled and shipped by overnight courier to Air Toxics Ltd. in Folsom, California for analysis of methane by Modified American Society for Testing and Materials D-1946 Method.

3. Enhanced Reductive Dechlorination Pilot Study Results

Monitoring data were used to assess the performance of the IRZ in achieving reductive dechlorination within the ERD pilot study area. For the purposes of this report, the monitoring wells within the ERD pilot study well network were separated into two categories: observation wells located within the injection ROI (dose response wells) and observation wells downgradient of the injection ROI (downgradient wells). Previously installed piezometers P-1D and P-3D are located side-gradient of the injection wells and were, therefore, not included within this analysis (Figure 3).

- *Dose Response Well Network:* The wells located within the ROI include observation well OW-7D and pre-existing piezometer P-2D. Observation well OW-7D was not monitored for reductive dechlorination parameters as its primary purpose was to confirm sufficient distribution of organic carbon, thereby confirming overlap of the injection well ROIs (Section 2.2).
- *Downgradient Well Network:* The observation wells located downgradient of the injected ROI include OW-8D, OW-9D, and OW-10D. Based on the calculated groundwater velocity from the tracer test, observation wells OW-8D and OW-9D are located approximately 40 days groundwater travel time downgradient of the injection well transect, and observation well OW-10D is located approximately 100 days downgradient of the injection well transect.
- *Soil Gas Monitoring Points:* Soil gas monitoring points SG-101 and SG-102 were installed approximately 10 feet from injection well IW-4D so that the potential of methane migration near the injection wells could be initially assessed.

3.1 Reductive Dechlorination

To date, the pilot study has been successful in achieving complete reductive dechlorination, as evidenced by the presence of ethene. Laboratory analytical reports are attached as Appendix C.

3.1.1 Dose Response Well Chlorinated Volatile Organic Compound Results

The total chlorinated VOC concentration observed in baseline samples at piezometer P-2D (Figure 7) was approximately 20 milligrams per liter (mg/L), comprised predominantly of TCE (approximately 78 percent). Immediately following the first

injection, a significant drop in all chlorinated VOCs was observed, which is likely attributed, in part, to dilution related to the injection into injection well IW-4D, located approximately 25 feet away. The total chlorinated VOC concentration eventually decreased by a factor of 10 (to approximately 2 mg/L) after 250 days and is presently comprised of approximately 40 percent TCE, 15 percent cis-1,2-DCE, and 50 percent VC. As described in Section 1.2, VC is a late stage degradation product of TCE, indicating a strong presence of reductive dechlorination at this location. The most recent sampling event (Day 250) showed a total reduction of approximately 96 percent in TCE concentrations in groundwater from piezometer P-2D (15 mg/L to 0.5 mg/L) since the beginning of the pilot test. To date, VC represents approximately 60 percent of the total chlorinated VOC mass.

Transient increases in chlorinated VOC concentrations were observed in groundwater samples from piezometer P-2D throughout the pilot study monitoring program. It is possible for residual chlorinated VOC mass that is present either in the immobile pore spaces of an aquifer or sorbed to soil to diffuse or dissolve back into groundwater for a period of time. Accordingly, following substantial mass removal from forced gradient flushing and reductive dechlorination, this dissolution/diffusion may lead to “rebound” in chlorinated VOC concentrations that could continue until the chlorinated VOC mass in the immobile porosity and the sorbed-phase has been removed or destroyed.

The first observation of rebound occurred prior to injection event two and the immediate decrease in total chlorinated VOC following injection event two may be attributed to both dilution from the second injection event and reductive dechlorination.

The second observation of rebound occurred prior to injection event three; however, the magnitude of the rebound was significantly less than that observed prior to injection event two. This suggests that residual chlorinated VOC mass in this location is being destroyed and biological reductive dechlorination is the dominant mechanism, as evidenced by the presence of VC. Ethene has not been detected at significant concentrations at this location to date. It should be noted, however, that this well is located within the ROI; therefore, is early (i.e., located a short travel time from the injection well) within the IRZ. Concentrations of chlorinated VOCs within this location will undergo further treatment as they continue to travel downgradient from the injection wells within the IRZ.

As discussed above, observation well OW-7D was not used to measure chlorinated VOC trends. Results of the TOC sampling performed in this well are discussed below in Section 3.2.

3.1.2 Downgradient Performance Monitoring Well Chlorinated Volatile Organic Compound Results

The total chlorinated VOC concentration observed in baseline samples at the wells located approximately 40 days downgradient of the injection line (observation wells OW-8D and OW-9D) was approximately 10 mg/L (Figures 8 and 9). As shown on Figures 8 and 9, no initial decline in total chlorinated VOC concentrations was observed in groundwater samples collected shortly after each injection event. These observation wells are located outside of the injected ROI; therefore, the groundwater near these wells did not experience any dilution effects from the injected fluid. After approximately 40 days following the initial injection, there was a significant decrease in TCE concentrations in groundwater samples from both OW-8D and OW-9D, as well as with a corresponding increase in cis-1,2-DCE concentrations. After approximately 80 days, the primary component of the total chlorinated VOC mass was cis-1,2-DCE (76 percent at OW-8D, and 96 percent at OW-9D). After 150 days, the conversion of cis-1,2-DCE to VC was observed in groundwater samples from both locations. Ethene was observed in groundwater samples from observation well OW-8D preceding the third injection event (approximately 200 days). The presence of ethene in groundwater samples from this well indicates that complete reductive dechlorination has occurred, which demonstrates that the microbial communities required for the ERD process are present and flourishing within the ERD pilot study area.

The total chlorinated VOC concentration observed during baseline groundwater samples from observation well OW-10D was approximately 35 mg/L (Figure 10). The first injection did not have an effect on groundwater quality at observation well OW-10D because of its location downgradient of the injection zone (approximately 100 days travel time). After approximately 100 days, a significant decrease in TCE concentrations (96 percent) and corresponding increase in cis-1,2-DCE concentrations were observed in groundwater from observation well OW-10D. A decrease in concentrations of cis-1,2-DCE, as well as with a corresponding increase in concentrations of VC, were observed on Day 200.

3.2 Total Organic Carbon Distribution

As discussed above, an IRZ is established by successful delivery of TOC to the targeted treatment zone. TOC distribution, therefore, is a critical design parameter as the success of ERD is dependent on the presence of carbon substrate.

3.2.1 Dose Response Well Total Organic Carbon Results

As discussed above, piezometer P-2D and observation well OW-7D represent the dose response locations to evaluate TOC arrival during an injection. Piezometer P-2D represents the downgradient TOC response during injection, and observation well OW-7D represents the side-gradient TOC response during injection. The objective of monitoring TOC in observation well OW-7D (side-gradient) is to confirm that adequate TOC is delivered between the injection points (i.e., the injected ROI properly overlap).

Data collected from piezometer P-2D, located directly downgradient of injection well IW-4D, indicates that consistent TOC concentrations were maintained directly downgradient of the injection wells (Figure 7). As shown on Figure 11, however, distribution of TOC was not consistently sustained along the line of ambient groundwater flow between the injection wells (a line connecting observation OW-7D and observation well OW-8D) following the first two injection events. Accordingly, these data suggest that full treatment of chlorinated VOCs was not being sustained along thin bands parallel to groundwater flow and located between the injection wells. This lack of treatment sustainability was addressed during the third injection event (discussed in Section 3.2.3).

3.2.2 Downgradient Performance Monitoring Well Total Organic Carbon Results

Observation wells OW-8D and OW-9D each are located on a separate line directly downgradient of the mid-point between injection wells (Figure 3), and can, therefore, be used to assess whether sustainable treatment is occurring along the entire ERD transect. While reductive dechlorination has been demonstrated within these wells, the TOC concentrations suggest that more efficient treatment can likely be achieved with improved delivery and distribution of TOC into the pilot test area. These data were used to optimize the third injection event to achieve better TOC distribution within the pilot test area.

3.2.3 Optimization of Injected Total Organic Carbon Distribution

Groundwater modeling was performed using data collected following the first and second injection event to assess both the best method of delivery and optimum injection volume required to confirm longer-term sustainable distribution of TOC between the injection wells. The modeling results indicated that the upper confining clay layer at this location, coupled with the large injection volumes, were possibly causing hydraulic zones of stagnation at the mid-point between injection wells. Accordingly, the implementation of the third injection event was modified to avoid

hydraulic interferences created by adjacent injection wells by alternating simultaneous injection into injection wells IW-2D, IW-4D, and IW-6D, followed by simultaneous injection into injection wells IW-3D and IW-5D. In addition, a larger volume of injected fluid was delivered to injection wells IW-2D, IW-4D, and IW-6D during this event to confirm that the targeted ROI was achieved.

Real-time data collection via a continuously logging probe was used during the injection event to verify arrival of the injected fluid into observation well OW-7D by evaluating changes in specific conductivity of the groundwater within that well. In addition, composite groundwater samples were collected and sent for laboratory analysis of TOC based upon the observed real-time changes in specific conductivity. The specific conductivity results and TOC results for OW-7D are presented on Figure 12. The analytical results show that the baseline TOC concentration and specific conductivity at observation well OW-7D was approximately 460 mg/L and 1 milliSemens per centimeter degree Celsius (mS/cm°C), respectively. The injection solution contained a TOC concentration and specific conductivity of 7,000 mg/L and 3 mS/cm°C, respectively. A noticeable increase in specific conductivity (4 mS/cm°C) and TOC (1,000 mg/L) were observed at observation well OW-7D following injection of approximately 75,000 gallons of solution. These data indicate that successful distribution of TOC was achieved between the injection wells during the third injection event.

3.3 Operational Monitoring

In addition to TOC and chlorinated VOC trends, data, including groundwater pH and dissolved methane concentrations, were used to track the performance of the IRZ. The majority of pH measurements during the performance monitoring period are consistent with pH values amenable to microbiological activity (between 5.5 and 9). The only variation occurred at OW-8D (Figure 8) where more alkaline pH readings (approximately 12) were detected. Well construction materials, specifically bentonite, can sometimes create local alkaline pH within the well column (i.e., alkalinity is local to observation well OW-8D). To verify this was the case, observation well OW-8D was sampled using low-flow methodology during the two most recent sampling events. The pH dropped dramatically after purging, and subsequent downhole field parameters suggest that a more neutral pH is representative of the surrounding aquifer (Figure 8).

The presence of methane is used to indicate whether the reducing conditions conducive to reductive dechlorination have been achieved within the IRZ. Methane has been observed in all wells above baseline conditions, and, as discussed above, reductive dechlorination is occurring within all the pilot test wells. Accordingly, the

reducing environment required for the ERD process to occur has been established throughout the pilot test area.

3.4 Results of Soil Gas Sampling for Methane

Methane was detected in both soil gas sampling points SG-101 and SG-102 at 12 percent of the total volume of gas in the sample. This relatively elevated concentration of methane provides further proof that the ERD process is producing substantial amounts of methane, as intended. These elevated methane concentrations also indicate that methane gas can migrate through the relatively low-permeability clayey Upper Terrace Deposit confining unit. Furthermore, these data suggests that if ERD is implemented as a final remedy, methane monitoring and potentially methane abatement may be necessary if injection wells are installed in the vicinity of on-grade or sub-grade structures.

3.5 Future Activities

The pilot test will continue with monthly TOC, VOC, and light gases (methane, ethane, ethene) monitoring to document the continued progress of the ERD process. The frequency of monitoring of some parameters, particularly VOCs and light gases, may be reduced in the near future.

4. Conclusions and Recommendations

The following presents the conclusions of the ERD pilot study and provides recommendations on how to proceed to a potentially broader scale implementation of an ERD remedy:

- The purpose of implementing the ERD pilot study was to develop more site-specific data in support of recommending the ERD technology to address the second RAO. The ERD pilot study accomplished the second RAO in the vicinity of the study area.
- ERD objectives were achieved. Reducing conditions characterized by the presence of TOC and methane have been achieved at distances equivalent to at least 100 days groundwater travel time downgradient from the injection well transect (as witnessed at observation well OW-10D). Complete reductive dechlorination from TCE to ethene has been observed at many locations and TCE degradation and resulting VC generation has been observed at every location. Data strongly suggests that the ERD technology can be successfully implemented within groundwater in off-site areas northeast of 17th Avenue South. Based on this, an ERD interim remedial measure should be considered pending the timing submittal, review, public comment, and SCDHEC approval of the FS.
- The injection concentration of 2 percent by volume is appropriate for any broader scale implementation of an ERD system.
- Future injections along injection well transects should be staggered similar to the third injection event. In doing so, the potential negative effect of hydraulic stagnation should be eliminated and delivery and sustainability of TOC between injection wells should be greatly improved.
- The ERD pilot study should continue with a potentially reduced monitoring frequency for VOCs and light gases from once per month to once every 2 months.
- Full-scale design of ERD should consider the potential effect of methane gas migration into the vadose zone and incorporate methane monitoring.

5. References

ARCADIS. 2009a. Addendum 2 to Appendix B (Enhanced Reductive Dechlorination Work Plan) of the March 2008 Feasibility Study Work Plan. May 11.

ARCADIS. 2009b. *Underground Injection Control Permit Application: Modification of Enhanced Reductive Dechlorination Pilot Study*. July 2.

ARCADIS. 2009c. *Tracer Test Summary Report*. March.

ARCADIS. 2008. *Feasibility Study Work Plan*. March.

ARCADIS

Tables

**Table 1
Well Details**

**Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina**

Injection Well	Observation Well/Piezometer/ Point	Approximate Screened Interval	Approximate Distance from Injection Well or Injection Well Transect Line	Estimated Travel Time from Edge of Injection Well ROI	Purpose
Five Injection Wells (screened from ~24 to 39 feet bgs) - IW-2D through IW-6D	OW-7D	24 to 39 feet bgs	25 feet	within IW ROI	Injection-Response Well to confirm ROI
	P-2D	31 to 41 feet bgs	25 feet	within IW ROI	
	P-1D	31 to 41 feet bgs	25 feet	Side-Gradient Near IW ROI	Evaluate Side-Gradient Effects
	P-3D	35 to 45 feet bgs	25 feet	Side-Gradient Near IW ROI	
	OW-8D	24 to 39 feet bgs	50 feet	Approx. 40 Days	Evaluate Downgradient Transport
	OW-9D	24 to 39 feet bgs	50 feet	Approx. 40 Days	
	OW-10D	24 to 39 feet bgs	85 feet	Approx. 100 Days	
	SG-101 and SG-102	4 to 5 feet bgs	10 feet	NA	Evaluation of Methane Production/Migration

Notes:

IW = Injection Well
OW = Observation Well
P = Piezometer
SG = Soil Gas Point
ROI = radius of influence
bgs = below ground surface
NA = not applicable

**Table 2
Performance Monitoring Schedule**

**Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina**

Wells	Well Depth from TOC (feet bgs)	Location	Baseline Sampling	ERD Pilot Test Sampling Frequency		
			Baseline Analytes	Twice Monthly	Monthly	As-Needed
All New Injection Wells	39	Injection Well Transect	1,2,3,4,5,6,7	6, 7 (only at 1 Injection Well)		
OW-7D	39	In ROI for Injection Wells (side gradient)	1,2,3,4,5,6,7	6, 7		1,2,3,4,5
P-2D	41	In ROI for Injection Wells (down gradient)	1,2,3,4,5,6,7	6, 7	1,2,6,7	3,4,5
OW-8D	39	Downgradient of Injection Well Transect (40 day groundwater travel time)	1,2,3,4,5,6,7	6, 7	1,2,6,7	3,4,5
OW-9D	39	Downgradient of Injection Well Transect (40 day groundwater travel time)	1,2,3,4,5,6,7	6, 7	1,2,6,7	3,4,5
OW-10D	39	Downgradient of Injection Well Transect (100 day groundwater travel time)	1,2,3,4,5,6,7	6, 7	1,2,6,7	3,4,5
P-1D	41	Side Gradient Near IW ROI	1,2,3,4,5,6,7	6,7	1,2,6,7	3,4,5
P-3D	45	Side Gradient Near IW ROI	1,2,3,4,5,6,7	6,7	1,2,6,7	3,4,5

Notes:

- 1 - volatile organic compounds (VOCs)^a
- 2 - Dissolved gases (methane, ethane, ethene)^a
- 3 - Anions (bromide, chloride, fluoride, nitrate, nitrite, phosphate, sulfate); alkalinity (total and bicarbonate)^b
- 4 - Alkalinity (total and bicarbonate)^b
- 5 - Dissolved and total iron and manganese
- 6 - Total Organic Carbon (TOC)^c
- 7 - Field parameters (pH, specific conductivity)^d

Additional Notes:

- a. VOCs and dissolved gases will be sampled using passive diffusion bags.
 - b. Biogeochemical parameters will be sampled as needed using low flow methodology
if VOC or TOC data indicate that enhanced dechlorination is not progressing in a particular location.
 - c. TOC will be grab sampled using bailers.
 - d. Field parameters will be sampled downhole using a multi-parameter meter.
- ROI = radius of influence

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC		BATCH	BATCH SAMPLE	BATCH SAMPLE	INJECTATE CONFIRM	INJECTATE	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	IW-2D	
Date Collected:	MCL	Units	CONFIRMATION	07/23/09	07/24/09	11/04/09	(110709)	07/20/09	11/16/09	11/23/09	11/30/09	12/14/09	12/24/09	12/28/09	01/04/10	01/18/10	02/05/10	02/16/10	03/04/10	03/29/10	
Volatile Organics																					
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethene	7	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloropropane	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,2-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Butanone	--	µg/L	NA	NA	NA	NA	NA	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Hexanone	--	µg/L	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acetone	--	µg/L	NA	NA	NA	NA	NA	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzene	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromobenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromochloromethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromodichloromethane	81	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromofrom	81	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromomethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Disulfide	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Tetrachloride	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chlorobenzene	100	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroform	86	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloromethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	NA	NA	903	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibromochloromethane	86	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibromomethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethylbenzene	700	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hexachlorobutadiene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Iodomethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Isopropylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
m-,p-Xylene	--	µg/L	NA	NA	NA	NA	NA	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methyl tert-butyl ether	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methylene Chloride	5	µg/L	NA	NA	NA	NA	NA	34.0 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Propylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	BATCH CONFIRMATION 07/25/09	BATCH SAMPLE 07/23/09	BATCH SAMPLE 07/24/09	INJECTATE CONFIRM 11/04/09	INJECTATE (110709) 11/07/09	IW-2D 07/20/09	IW-2D 11/16/09	IW-2D 11/23/09	IW-2D 11/30/09	IW-2D 12/14/09	IW-2D 12/24/09	IW-2D 12/28/09	IW-2D 01/04/10	IW-2D 01/18/10	IW-2D 02/05/10	IW-2D 02/16/10	IW-2D 03/04/10	IW-2D 03/29/10
Volatile Organics																				
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	100	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	NA	NA	32.0 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	1,630	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	2	µg/L	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Total																				
Iron	--	µg/L	NA	NA	NA	NA	NA	1,400 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	64.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																				
Iron	--	µg/L	NA	NA	NA	NA	NA	1,200 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	60.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																				
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	230,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	230,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	NA	NA	NA	240 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	NA	NA	NA	35,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	320 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	2,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	30 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	NA	NA	NA	9,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,300	2,600	1,500
Total Organic Carbon	--	µg/L	7,000,000	7,800,000	7,700,000	7,000,000	7,500,000	5,000 U	4,600,000	6,000,000	7,100,000	6,300,000	6,100,000	5,500,000	4,900,000	4,100,000	NA	NA	NA	NA
Total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	520 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																				
depth to water	--	feet	NA	NA	NA	NA	NA	NA	8.94	8.88	8.92	7.96	6.42	6.24	6.6	7.28	5.83	5.68	5.96	6.88
depth to water	--	feet bgs	NA	NA	NA	NA	NA	9.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.94	0.27	0.46	7.8
Dissolved Oxygen	--	µg/L	NA	NA	NA	NA	NA	50	NA	NA	NA	24,390	NA	NA	NA	1,070	NA	NA	NA	NA
oxidation reduction potentia	--	mV	NA	NA	NA	NA	NA	-100.5	NA	NA	NA	-130.7	NA	NA	NA	-196.3	-153.2	-166	-150.9	-94.2
pH	--	SU	NA	NA	NA	NA	NA	6.98	5.29	5.52	5.63	5.86	6.13	6.18	6.17	6.31	6.41	6.6	6.64	6.64
salinity	--	PSU	NA	NA	NA	NA	NA	NA	4.3	5.7	6.7	NA	NA	6.2	5.4	NA	NA	NA	NA	NA
specific conductivity	--	uS/cm	NA	NA	NA	NA	NA	0.589	7.25	8.9	10.6	11.39	NA	9.44	7.054	9.093	8.875	7.331	7.125	6.465
temperature	--	°C	NA	NA	NA	NA	NA	NA	20.1	19	20.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
temperature	--	°Celcius	NA	NA	NA	NA	NA	21.29	NA	19	NA	18.31	18.2	17.5	13.5	21.29	17.2	20.2	18.68	19.96
Dissolved Gases																				
Ethane	--	µg/L	NA	NA	NA	NA	NA	0.24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	--	ug/L	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	--	ug/L	NA	NA	NA	NA	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	IW-3D 07/20/09	IW-3D 08/17/09	IW-3D 09/03/09	IW-3D 09/16/09	IW-3D 09/28/09	IW-3D 10/12/09	IW-3D 10/26/09	IW-3D 11/02/09	IW-4D 07/20/09	IW-4D 11/16/09	IW-4D 11/23/09	IW-4D 11/30/09	IW-4D 12/14/09	IW-4D 12/24/09	IW-4D 12/28/09	IW-4D 01/04/10	IW-4D 01/18/10	IW-4D 02/05/10	IW-4D 02/16/10	IW-4D 03/04/10	IW-4D 03/29/10	IW-4D 04/13/10	IW-4D 04/14/10	
Volatile Organics																										
1,1,1,2-Tetrachloroethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,1-Trichloroethane	200	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2-Trichloroethane	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethene	7	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloropropene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichlorobenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichloropropane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	70	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dibromoethane	0.05	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichlorobenzene	600	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloropropane	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3,5-Trimethylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichlorobenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichloropropane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,4-Dichlorobenzene	75	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,2-Dichloropropane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Butanone	--	µg/L	10,000 U	NA	NA	NA	NA	NA	NA	NA	20,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Chlorotoluene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Hexanone	--	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chlorotoluene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Methyl-2-pentanone	--	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acetone	--	µg/L	10,000 U	NA	NA	NA	NA	NA	NA	NA	20,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzene	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromobenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromochloromethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromodichloromethane	81	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromoform	81	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromomethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Disulfide	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Tetrachloride	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chlorobenzene	100	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroform	86	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloromethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,2-Dichloroethene	70	µg/L	1,960	NA	NA	NA	NA	NA	NA	NA	3,880	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,3-Dichloropropene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibromochloromethane	86	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibromomethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dichlorodifluoromethane	--	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Diisopropyl ether (DIPE)	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethylbenzene	700	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Hexachlorobutadiene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Iodomethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Isopropylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
m,p-Xylene	--	µg/L	800 U	NA	NA	NA	NA	NA	NA	NA	1,600 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methyl tert-butyl ether	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methylene Chloride	5	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	392 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Propylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	IW-3D 07/20/09	IW-3D 08/17/09	IW-3D 09/03/09	IW-3D 09/16/09	IW-3D 09/28/09	IW-3D 10/12/09	IW-3D 10/26/09	IW-3D 11/02/09	IW-4D 07/20/09	IW-4D 11/16/09	IW-4D 11/23/09	IW-4D 11/30/09	IW-4D 12/14/09	IW-4D 12/24/09	IW-4D 12/28/09	IW-4D 01/04/10	IW-4D 01/18/10	IW-4D 02/05/10	IW-4D 02/16/10	IW-4D 03/04/10	IW-4D 03/29/10	IW-4D 04/13/10	IW-4D 04/14/10	
Volatiles Organics																										
o-Xylene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
p-Isopropyltoluene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
sec-Butylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Styrene	100	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
tert-Butylbenzene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Tetrachloroethene	5	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Toluene	1,000	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
trans-1,2-Dichloroethene	100	µg/L	104 J	NA	NA	NA	NA	NA	NA	NA	296 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
trans-1,3-Dichloropropene	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
trans-1,4-Dichloro-2-butene	--	µg/L	2,000 U	NA	NA	NA	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Trichloroethene	5	µg/L	4,690	NA	NA	NA	NA	NA	NA	NA	14,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Trichlorofluoromethane	--	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Vinyl Chloride	2	µg/L	400 U	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics - Total																										
Iron	--	µg/L	2,000 L	NA	NA	NA	NA	NA	NA	NA	1,900 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	64.0 L	NA	NA	NA	NA	NA	NA	NA	65.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics - Dissolved																										
Iron	--	µg/L	1,400 L	NA	NA	NA	NA	NA	NA	NA	1,600 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	53.0 L	NA	NA	NA	NA	NA	NA	NA	60.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Wet Chemistry																										
Alkalinity as CaCO3	--	µg/L	220,000	NA	NA	NA	NA	NA	NA	NA	260,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Alkalinity Bicarbonate as CaCO3	--	µg/L	220,000	NA	NA	NA	NA	NA	NA	NA	260,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromide	--	µg/L	200 J	NA	NA	NA	NA	NA	NA	NA	220 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloride	--	µg/L	35,000	NA	NA	NA	NA	NA	NA	NA	41,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoride	4,000	µg/L	310 J	NA	NA	NA	NA	NA	NA	NA	300 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrate (as N)	10,000	µg/L	500 U	NA	NA	NA	NA	NA	NA	NA	3,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrite (as N)	1,000	µg/L	500 U	NA	NA	NA	NA	NA	NA	NA	30 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phosphate	--	µg/L	1,000 U	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Sulfate	--	µg/L	10,000	NA	NA	NA	NA	NA	NA	NA	19,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8,400	7,800	6,300	4,300	8,300	
Total Organic Carbon	--	µg/L	5,000 U	10,000,000	14,000,000	15,000,000	6,100	6,800,000	5,900,000	5,300,000	5,000 U	4,900,000	11,000,000	13,000,000	12,000,000	11,000,000	11,000,000	10,000,000	10,000,000	10,000,000	NA	NA	NA	NA	NA	
Total Phosphate as PO4-P	--	µg/L	460 L	NA	NA	NA	NA	NA	NA	NA	800 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Parameters																										
depth to water	--	feet	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.89	9.89	9.94	9.19	7.46	7.62	7.6	8.21	6.83	6.65	6.91	7.89	NA	NA	
depth to water	--	feet bgs	9.52	9.86	NA	11.12	9.96	10.71	10.18	NA	9.79	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.27	0.11	0.34	5.82	NA	
Dissolved Oxygen	--	µg/L	150	770	NA	300	470	360	660	NA	320	NA	NA	NA	17,300	NA	NA	NA	1,050	NA	NA	NA	NA	NA	NA	
oxidation reduction potentia	--	mV	-115.8	167	NA	-219.1	-203.7	-175.2	-106.8	NA	-92.3	NA	NA	NA	-152.5	NA	NA	NA	-180.6	-178.2	-156.9	-168.8	-158.9	NA	NA	
pH	--	SU	7.4	4.93	NA	5.5	5.63	5.71	6.09	NA	6.83	5.27	5.38	5.61	5.43	5.56	5.87	5.87	5.91	5.95	6.14	6.25	6.4	NA	NA	
salinity	--	PSU	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	9.7	8.3	NA	NA	10.4	9.2	NA	NA	NA	NA	NA	NA	NA	
specific conductivity	--	uS/cm	0.568	6.915	NA	13.79	13.71	12	11.67	NA	0.688	8.26	14.4	10.9	17.64	NA	14.73	12.78	14.87	14.66	12.98	12.92	11.41	NA	NA	
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.2	18.4	19.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
temperature	--	°Celsius	22.55	29.14	NA	27.19	27.16	25.39	20.94	NA	23.01	NA	NA	NA	20.98	17.4	16.7	15.5	22.63	19.45	20.14	20.87	20.07	NA	NA	
Dissolved Gases																										
Ethane	--	µg/L	0.26	NA	NA	NA	NA	NA	NA	NA	0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethene	--	ug/L	2.1	NA	NA	NA	NA	NA	NA	NA	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methane	--	ug/L	150	NA	NA	NA	NA	NA	NA	NA	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC	Units	IW-4D	IW-4D	IW-5D	IW-5D	IW-5D	IW-5D	IW-6D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D		
Date Collected:	MCL		04/18/10	04/19/10	07/20/09	04/16/10	04/17/10	07/20/09	07/20/09	07/25/09	08/17/09	09/03/09	09/16/09	09/28/09	10/12/09	10/26/09	11/02/09	11/07/09	11/16/09	11/23/09	11/30/09	12/14/09	12/24/09	12/28/09	01/04/10	01/18/10	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	7	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloropropene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	500 U	NA	NA	100 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.05	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	--	µg/L	NA	NA	2,500 U	NA	NA	500 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	--	µg/L	NA	NA	500 U	NA	NA	100 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	--	µg/L	NA	NA	500 U	NA	NA	100 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	--	µg/L	NA	NA	2,500 U	NA	NA	500 U	5,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromobenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromochloromethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	81	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	81	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	100	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	86	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	µg/L	NA	NA	676	NA	NA	117	1,470	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	86	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	--	µg/L	NA	NA	500 U	NA	NA	100 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	700	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-p-Xylene	--	µg/L	NA	NA	200 U	NA	NA	40.0 U	400 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	5	µg/L	NA	NA	32.0 J	NA	NA	10.2 J	60.0 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA																	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	IW-4D 04/18/10	IW-4D 04/19/10	IW-5D 07/20/09	IW-5D 04/16/10	IW-5D 04/17/10	IW-6D 07/20/09	OW-7D 07/20/09	OW-7D 07/25/09	OW-7D 08/17/09	OW-7D 09/03/09	OW-7D 09/16/09	OW-7D 09/28/09	OW-7D 10/12/09	OW-7D 10/26/09	OW-7D 11/02/09	OW-7D 11/07/09	OW-7D 11/16/09	OW-7D 11/23/09	OW-7D 11/30/09	OW-7D 12/14/09	OW-7D 12/24/09	OW-7D 12/28/09	OW-7D 01/04/10	OW-7D 01/18/10	
Volatile Organics																											
o-Xylene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	100	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	1,000	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	100	µg/L	NA	NA	56.0 J	NA	NA	20.0 U	148 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	500 U	NA	NA	100 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5	µg/L	NA	NA	1,350	NA	NA	301	3,080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	--	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	2	µg/L	NA	NA	100 U	NA	NA	20.0 U	200 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Total																											
Iron	--	µg/L	NA	NA	1,800 L	NA	NA	4,200 L	1,900 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	57.0 L	NA	NA	68.0 L	59.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	1,400 L	NA	NA	1,600 L	1,500 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	51.0 L	NA	NA	52.0 L	55.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	240,000	NA	NA	270,000	240,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	240,000	NA	NA	270,000	240,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	160 J	NA	NA	170 J	200 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	38,000	NA	NA	35,000	35,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	280 J	NA	NA	290 J	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	2,400	NA	NA	6,000	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	500 U	NA	NA	20 J	40 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	1,000 U	NA	NA	1,000 U	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	15,000	NA	NA	17,000	14,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	7,900	7,900	NA	7,700	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	5,000 U	NA	NA	900 J	5,000 U	15,000	27,000	34,000	28,000	20,000	11,000	17,000	13,000	260,000	490,000	710,000	110,000	4,100,000	87,000 M	70,000	72,000	84,000	
total Phosphate as PO4-P	--	µg/L	NA	NA	860 L	NA	NA	1,100 L	670 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																											
depth to water	--	feet	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.31	9.29	9.31	8.35	6.79	6.83	6.99	7.71	
depth to water	--	feet bgs	NA	NA	10.05	NA	NA	9.47	NA	9.58	9.09	9.64	10.26	9.062	10.28	10.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	NA	100	NA	NA	170	NA	110	130	210	350	2,040	280	250	NA	NA	NA	NA	NA	20,100	NA	NA	NA	290	
oxidation reduction potentia	--	mV	NA	NA	-109.7	NA	NA	-98	NA	-98.5	-217.2	-129.6	-249.8	-277.4	-188.7	-244.9	NA	NA	NA	NA	NA	-135.6	NA	NA	NA	-232.1	
pH	--	µV	NA	NA	6.95	NA	NA	6.89	NA	6.88	6.49	6.45	6.61	6.62	6.65	6.67	NA	NA	6.12	5.91	6.15	5.7	6.03	6.16	6.05	6.52	
salinity	--	PSU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	1.6	0.6	NA	NA	0.5	0.6	NA	
specific conductivity	--	µS/cm	NA	NA	0.627	NA	NA	0.678	NA	0.632	1.171	1.174	0.829	0.937	0.799	1.162	NA	NA	2.2	2.967	1.2	7.532	1.667	1.05	1.323	1.089	
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.4	24	23.8	NA	NA	NA	NA	NA	
temperature	--	°Celsius	NA	NA	22.72	NA	NA	21.39	NA	22.89	23.45	23.85	24.13	24.3	24.32	24.17	NA	NA	NA	24	23.8	21.81	23.8	24	23.8	24.44	
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	0.14	NA	NA	0.11	0.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethene	--	µg/L	NA	NA	1.3	NA	NA	0.45	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Methane	--	µg/L	NA	NA	48	NA	NA	54	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC	Units	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-7D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D			
Date Collected:	MCL		02/05/10	02/16/10	03/04/10	03/29/10	04/13/10	04/16/10	04/17/10	04/18/10	04/19/10	07/20/09	07/25/09	08/17/09	09/01/09	09/16/09	09/28/09	10/12/09	10/26/09	11/02/09	11/07/09	11/16/09	11/23/09	11/30/09	12/14/09	12/24/09	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1-Dichloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1-Dichloroethene	7	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,1-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2-Dichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,2-Dichloropropane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,3-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
2,2-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
2-Butanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	10,000 U	NA	NA	25,000 U	NA	25,000 U	NA	NA	NA	NA	25,000 U	NA	NA	NA	NA	
2-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
2-Hexanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
4-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
Acetone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	10,000 U	NA	NA	25,000 U	NA	25,000 U	NA	NA	NA	NA	25,000 U	NA	NA	NA	NA	
Benzene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Bromobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Bromochloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Bromodichloromethane	81	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Bromoform	81	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Bromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Carbon Disulfide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Carbon Tetrachloride	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Chlorobenzene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Chloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Chloroform	86	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Chloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,120	NA	NA	7,990	NA	9,640	NA	NA	NA	NA	7,800	NA	NA	NA	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Dibromochloromethane	86	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Dibromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Ethylbenzene	700	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Hexachlorobutadiene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Iodomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Isopropylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
m,p-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	800 U	NA	NA	2,000 U	NA	2,000 U	NA	NA	NA	NA	2,000 U	NA	NA	NA	NA	
Methyl tert-butyl ether	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Methylene Chloride	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	188 J	NA	NA	5,000 U	NA	130 J	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
Naphthalene	--	µg/L	NA																								

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	OW-7D 02/05/10	OW-7D 02/16/10	OW-7D 03/04/10	OW-7D 03/29/10	OW-7D 04/13/10	OW-7D 04/16/10	OW-7D 04/17/10	OW-7D 04/18/10	OW-7D 04/19/10	OW-8D 07/20/09	OW-8D 07/25/09	OW-8D 08/17/09	OW-8D 09/01/09	OW-8D 09/16/09	OW-8D 09/28/09	OW-8D 10/12/09	OW-8D 10/26/09	OW-8D 11/02/09	OW-8D 11/07/09	OW-8D 11/16/09	OW-8D 11/23/09	OW-8D 11/30/09	OW-8D 12/14/09	OW-8D 12/24/09	
Volatiles Organics																											
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Styrene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	168 J	NA	NA	490 J	NA	230 J	NA	NA	NA	NA	160 J	NA	NA	NA	NA	
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	NA	
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,940	NA	NA	18,100	NA	1,000 U	NA	NA	NA	NA	1,010	NA	NA	NA	NA	
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	
Vinyl Chloride	2	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	400 U	NA	NA	1,000 U	NA	390 J	NA	NA	NA	NA	1,350	NA	NA	NA	NA	
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,600 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	55.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,300 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	52.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	230,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	230,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	210 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	37,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	320 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	410 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	13,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	6.4	130	52	3,600	460	330	76	940	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,100 J	4,100 J	10,000	9,000	9,600	10,000	6,100	27,000	34,000	38,000	360,000	54,000	18,000	17,000	13,000 M	
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	740 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Parameters																											
depth to water	--	feet	6.25	6.1	6.35	7.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.34	9.27	9.31	8.33	6.79	
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.57	8.98	9.6	10.25	9.57	10.25	10.1	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	0.25	0.05	0.38	11.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	380	140	350	180	1,450	240	360	NA	NA	NA	NA	NA	NA	24,000	NA	
oxidation reduction potentia	--	mV	-230.4	-213.5	-155.1	-123.7	NA	NA	NA	NA	NA	-103.3	-235.6	-79.8	-301.1	-303	-253.7	-255.5	NA	NA	NA	NA	NA	NA	-223.6	NA	
pH	--	SU	6.35	6.53	6.93	5.74	NA	NA	NA	NA	NA	7.21	7.36	7.22	7.44	7.14	7.18	6.52	NA	NA	NA	6.66	6.81	7.45	10.68	11.94	
salinity	--	PSU	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4	0.3	0.3	NA	NA	
specific conductivity	--	uS/cm	1.47	1.064	0.326	5.54	NA	NA	NA	NA	NA	0.602	0.569	0.551	0.47	0.605	0.544	1.805	NA	NA	NA	0.864	0.661	0.6	1.455	2.001	
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.5	23.3	23.4	NA	NA	
temperature	--	°Celsius	24.27	24.17	20.89	21.47	NA	NA	NA	NA	NA	22.59	23.41	22.62	24.54	23.88	24.22	23.16	NA	NA	NA	NA	23.3	23.4	21.85	24.1	
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.3	NA	NA	0.42	NA	0.59	NA	0.67	NA	NA	0.84	NA	NA	0.73	NA	
Ethene	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4	NA	NA	6.3	NA	4.7	NA	5.5	NA	NA	14	NA	NA	18	NA	
Methane	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	NA	NA	160	NA	190	NA	310	NA	NA	1,200	NA	NA	8,400	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC	Units	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-8D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D	OW-9D			
Date Collected:	MCL		12/28/09	01/04/10	01/18/10	02/05/10	02/16/10	03/04/10	03/29/10	04/13/10	04/19/10	07/20/09	07/25/09	08/17/09	09/01/09	09/16/09	09/28/09	10/12/09	10/26/09	11/02/09	11/07/09	11/16/09	11/23/09	11/30/09	12/14/09	12/24/09	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1-Dichloroethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1-Dichloroethene	7	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,1-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	NA	NA	5,000 U	NA	NA	NA	5,000 U	NA	NA	4,000 U	NA	4,000 U	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,2-Dichloropropane	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,3-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
2,2-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
2-Butanone	--	µg/L	NA	NA	NA	NA	NA	25,000 U	946 J	NA	NA	25,000 U	NA	NA	20,000 U	NA	20,000 U	NA	NA	NA	NA	20,000 U	NA	NA	NA	NA	NA
2-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
2-Hexanone	--	µg/L	NA	NA	NA	NA	NA	5,000 U	NA	NA	NA	5,000 U	NA	NA	4,000 U	NA	4,000 U	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA
4-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	NA	NA	5,000 U	NA	NA	NA	5,000 U	NA	NA	4,000 U	NA	4,000 U	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA
Acetone	--	µg/L	NA	NA	NA	NA	NA	25,000 U	NA	NA	NA	25,000 U	NA	NA	20,000 U	NA	20,000 U	NA	NA	NA	NA	20,000 U	NA	NA	NA	NA	NA
Benzene	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Bromobenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Bromochloromethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Bromodichloromethane	81	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Bromoform	81	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Bromomethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Carbon Disulfide	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Carbon Tetrachloride	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Chlorobenzene	100	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Chloroethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Chloroform	86	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Chloromethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	7,290	NA	3,330	1,950	NA	NA	3,640	NA	NA	7,240	NA	16,500	NA	NA	NA	NA	32,700	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Dibromochloromethane	86	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Dibromomethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	NA	NA	5,000 U	NA	NA	NA	5,000 U	NA	NA	4,000 U	NA	4,000 U	NA	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Ethylbenzene	700	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Hexachlorobutadiene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Iodomethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
Isopropylbenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	NA	800 U	NA	NA	NA	NA	NA
m,p-Xylene	--	µg/L	NA	NA	NA	NA	NA	2,000 U	NA	NA	NA	2,000 U	NA	NA	1,600 U	NA	1,600 U	NA	NA	NA	NA	1,600 U	NA	NA	NA	NA	NA
Methyl tert-butyl ether	--																										

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	OW-8D 12/28/09	OW-8D 01/04/10	OW-8D 01/18/10	OW-8D 02/05/10	OW-8D 02/16/10	OW-8D 03/04/10	OW-8D 03/29/10	OW-8D 04/13/10	OW-8D 04/19/10	OW-9D 07/20/09	OW-9D 07/25/09	OW-9D 08/17/09	OW-9D 09/01/09	OW-9D 09/16/09	OW-9D 09/28/09	OW-9D 10/12/09	OW-9D 10/26/09	OW-9D 11/02/09	OW-9D 11/07/09	OW-9D 11/16/09	OW-9D 11/23/09	OW-9D 11/30/09	OW-9D 12/14/09	OW-9D 12/24/09	
Volatile Organics																											
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
Styrene	100	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	160 J	NA	1,000 U	224	NA	NA	170 J	NA	NA	400 J	NA	352 J	NA	NA	NA	488 J	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	5,000 U	NA	NA	NA	5,000 U	NA	NA	4,000 U	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	NA	NA	NA
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	490 J	1,530	NA	NA	8,420	NA	NA	16,700	NA	1,250	NA	NA	NA	384 J	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	NA	NA	NA
Vinyl Chloride	2	µg/L	NA	NA	NA	5,300	NA	4,480	3,190	NA	NA	1,000 U	NA	NA	800 U	NA	800 U	NA	NA	NA	696 J	NA	NA	NA	NA	NA	NA
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,500 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	59.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	41,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	370 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	880	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	60 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	18,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	NA	260	380	2,000	2,900	1,000	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	11,000	3,600 J	38,000	NA	NA	NA	NA	NA	NA	5,000 U	20,000	35,000	32,000	34,000	30,000	19,000	11,000	11,000	9,900	22,000	31,000	10,000	4,700,000	17,000 M	
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	860 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																											
depth to water	--	feet	6.87	7.01	6.97	6.33	6.13	6.4	7.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7	9.65	9.68	8.71	7.14	
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.95	9.39	9.98	10.62	9.96	10.65	10.49	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	1.79	0.03	0.19	0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	NA	360	NA	NA	NA	NA	NA	NA	320	210	530	230	1,720	270	190	NA	NA	NA	NA	NA	20,970	NA	NA	
oxidation reduction potentia	--	mV	NA	NA	-309.6	-194	-334.6	-248.3	-195.9	NA	NA	NA	-99.1	-85.9	-131.1	-279	-301.2	-219.8	-262.7	NA	NA	NA	NA	NA	-206.6	NA	
pH	--	SU	7.48	9.53	11.33	6.31	11.8	5.81	5.75	NA	NA	NA	6.82	7.09	7.16	7.02	7.02	6.98	7.16	NA	NA	6.74	6.76	6.91	6.24	6.81	
salinity	--	PSU	0.4	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4	0.4	0.4	NA	NA	
specific conductivity	--	uS/cm	0.8	1.264	1.076	2.857	2.65	5.04	5.518	NA	NA	0.663	0.665	0.634	0.573	0.727	0.695	0.732	NA	NA	0.771	0.77	0.7	8.999	0.815		
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24.5	22.8	23.5	NA	NA	
temperature	--	°Celcius	23.9	23.1	24.17	23.9	23.57	22.75	21.4	NA	NA	NA	22.95	22.94	23.08	26.54	23.17	23.36	23.32	NA	NA	NA	22.8	NA	21.96	23.2	
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	NA	2	NA	1.8	0.68	NA	NA	0.27	NA	NA	0.46	NA	0.36	NA	0.26	NA	NA	1.2	NA	NA	2.3	NA	
Ethene	--	ug/L	NA	NA	NA	110	NA	140	220	NA	NA	3.9	NA	NA	6.1	NA	5	NA	3.2	NA	NA	27	NA	NA	48	NA	
Methane	--	ug/L	NA	NA	NA	7,700	NA	5,700	3,500	NA	NA	64	NA	NA	130	NA	110	NA	76	NA	NA	200	NA	NA	240	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC MCL	Units	OW-9D 12/28/09	OW-9D 01/04/10	OW-9D 01/05/10	OW-9D 01/18/10	OW-9D 02/05/10	OW-9D 02/16/10	OW-9D 03/04/10	OW-9D 03/29/10	OW-9D 04/13/10	OW-9D 04/19/10	OW-10D 07/20/09	OW-10D 07/25/09	OW-10D 08/17/09	OW-10D 09/01/09	OW-10D 09/16/09	OW-10D 09/28/09	OW-10D 10/12/09	OW-10D 10/26/09	OW-10D 11/02/09	OW-10D 11/07/09	OW-10D 11/16/09	OW-10D 11/23/09	OW-10D 11/30/09	OW-10D 12/14/09	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1,1-Trichloroethane	200	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1,2-Trichloroethane	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1-Dichloroethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1-Dichloroethene	7	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,1-Dichloropropene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2,3-Trichloropropane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	20,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	
1,2-Dibromoethane	0.05	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2-Dichlorobenzene	600	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2-Dichloroethane	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,2-Dichloropropane	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,3-Dichlorobenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,3-Dichloropropane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
1,4-Dichlorobenzene	75	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
2,2-Dichloropropane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
2-Butanone	--	µg/L	NA	NA	20,000 U	NA	NA	NA	20,000 U	NA	NA	NA	100,000 U	NA	NA	25,000 U	NA	25,000 U	NA	NA	NA	NA	25,000 U	NA	NA	NA	
2-Chlorotoluene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
2-Hexanone	--	µg/L	NA	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	20,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	
4-Chlorotoluene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
4-Methyl-2-pentanone	--	µg/L	NA	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	20,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	
Acetone	--	µg/L	NA	NA	20,000 U	NA	NA	NA	20,000 U	NA	NA	NA	100,000 U	NA	NA	25,000 U	NA	25,000 U	NA	NA	NA	NA	25,000 U	NA	NA	NA	
Benzene	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Bromobenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Bromochloromethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Bromodichloromethane	81	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Bromoform	81	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Bromomethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Carbon Disulfide	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Carbon Tetrachloride	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Chlorobenzene	100	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Chloroethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Chloroform	86	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Chloromethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
cis-1,2-Dichloroethene	70	µg/L	NA	NA	14,100	NA	5,520	NA	2,690	2,930	NA	NA	6,720	NA	NA	6,290	NA	5,050	NA	NA	NA	NA	17,200	NA	NA	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Dibromochloromethane	86	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Dibromomethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Dichlorodifluoromethane	--	µg/L	NA	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	20,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Ethylbenzene	700	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Hexachlorobutadiene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Iodomethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Isopropylbenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
m,p-Xylene	--	µg/L	NA	NA	1,600 U	NA	NA	NA	1,600 U	NA	NA	NA	8,000 U	NA	NA	2,000 U	NA	2,000 U	NA	NA	NA	NA	2,000 U	NA	NA	NA	
Methyl tert-butyl ether	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U														

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	OW-9D 12/28/09	OW-9D 01/04/10	OW-9D 01/05/10	OW-9D 01/18/10	OW-9D 02/05/10	OW-9D 02/16/10	OW-9D 03/04/10	OW-9D 03/29/10	OW-9D 04/13/10	OW-9D 04/19/10	OW-10D 07/20/09	OW-10D 07/25/09	OW-10D 08/17/09	OW-10D 09/01/09	OW-10D 09/16/09	OW-10D 09/28/09	OW-10D 10/12/09	OW-10D 10/26/09	OW-10D 11/02/09	OW-10D 11/07/09	OW-10D 11/16/09	OW-10D 11/23/09	OW-10D 11/30/09	OW-10D 12/14/09	
Volatiles Organics																											
o-Xylene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
p-Isopropyltoluene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
sec-Butylbenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Styrene	100	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
tert-Butylbenzene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Tetrachloroethene	5	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Toluene	1,000	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
trans-1,2-Dichloroethene	100	µg/L	NA	NA	344 J	NA	192 J	NA	800 U	98.0 J	NA	NA	400 J	NA	NA	430 J	NA	410 J	NA	NA	NA	NA	330 J	NA	NA	NA	
trans-1,3-Dichloropropene	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	4,000 U	NA	NA	NA	4,000 U	NA	NA	NA	20,000 U	NA	NA	5,000 U	NA	5,000 U	NA	NA	NA	NA	5,000 U	NA	NA	NA	
Trichloroethene	5	µg/L	NA	NA	2,700	NA	4,590	NA	3,310	1,530	NA	NA	28,100	NA	NA	23,000	NA	25,500	NA	NA	NA	NA	1,020	NA	NA	NA	
Trichlorofluoromethane	--	µg/L	NA	NA	800 U	NA	NA	NA	800 U	NA	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	1,000 U	NA	NA	NA	
Vinyl Chloride	2	µg/L	NA	NA	1,830	NA	3,280	NA	1,970	2,810	NA	NA	4,000 U	NA	NA	1,000 U	NA	1,000 U	NA	NA	NA	NA	460 J	NA	NA	NA	
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,100 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,600 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	290,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	290,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	15	70	21	4,600	4,000	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	43,000	13,000	NA	180,000	NA	NA	NA	NA	NA	NA	800 J	16,000	38,000	31,000	15,000	21,000	18,000	13,000	15,000	13,000	38,000	11,000	5,600	310,000	
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	920 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Parameters																											
depth to water	--	feet	6.72	7.36	NA	8.09	6.67	6.48	6.73	7.71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.42	9.34	9.34	8.4	
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.66	NA	8.97	9.63	10.31	9.62	10.34	10.15	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	0.11	0.1	0.66	0.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	NA	NA	190	NA	NA	NA	NA	NA	NA	90	NA	120	580	110	1,840	240	370	NA	NA	NA	NA	NA	30,050	
oxidation reduction potentia	--	mV	NA	NA	NA	-282.3	-144.8	-217.4	-189	-178.6	NA	NA	-95.4	NA	-148.4	-123.7	-300.2	-322.5	-143.2	-110.7	NA	NA	NA	NA	NA	-157.9	
pH	--	SU	6.95	6.17	NA	6.91	6.93	6.97	6.92	5.69	NA	NA	6.8	NA	6.98	7.24	7.08	7.03	6.97	7.13	NA	NA	6.79	6.89	7	6.75	
salinity	--	PSU	0.4	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4	0.3	0.3	NA	
specific conductivity	--	uS/cm	0.81	0.851	NA	0.681	0.745	0.704	0.78	8.57	NA	NA	0.751	NA	0.69	0.618	0.617	0.678	0.721	0.747	NA	NA	0.724	0.664	0.7	1.664	
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.3	22.1	22.8	NA	
temperature	--	°Celcius	23.3	22.2	NA	24.33	23.73	24	19.75	21.64	NA	NA	22.69	NA	22.74	22.82	25.15	24.07	23	23.17	NA	NA	NA	22.1	NA	21.4	
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	NA	NA	1.2	NA	0.58	0.13	NA	NA	0.7	NA	NA	0.75	NA	0.56	NA	0.46	NA	NA	0.48	NA	NA	0.6	
Ethene	--	ug/L	NA	NA	NA	NA	38	NA	19	14	NA	NA	6.4	NA	NA	6	NA	5.4	NA	4.5	NA	NA	5.2	NA	NA	8.4	
Methane	--	ug/L	NA	NA	NA	NA	830	NA	1,200	680	NA	NA	240	NA	NA	200	NA	170	NA	140	NA	NA	220	NA	NA	230	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC	Units	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	OW-10D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D	P-1D		
Date Collected:	MCL		12/24/09	12/28/09	01/04/10	01/05/10	01/18/10	02/05/10	02/16/10	03/04/10	03/29/10	04/13/10	04/19/10	11/05/08	07/20/09	07/25/09	08/17/09	09/01/09	09/16/09	09/28/09	10/12/09	10/26/09	11/02/09	11/07/09	11/16/09	11/23/09	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,1-Dichloroethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	0.900 J	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,1-Dichloroethene	7	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	1.20 J	NA	
1,1-Dichloropropene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	5,000 U	NA	NA	NA	4,000 U	NA	NA	NA	50.0 U	50.0 U	NA	NA	50.0 U	NA	50.0 U	NA	NA	NA	NA	50.0 U	NA	
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2-Dichloroethane	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,2-Dichloropropane	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,3-Dichloropropane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
2,2-Dichloropropane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
2-Butanone	--	µg/L	NA	NA	NA	25,000 U	NA	NA	NA	20,000 U	NA	NA	NA	250 U	250 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	250 U	NA	
2-Chlorotoluene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
2-Hexanone	--	µg/L	NA	NA	NA	5,000 U	NA	NA	NA	4,000 U	NA	NA	NA	50.0 U	50.0 U	NA	NA	50.0 U	NA	50.0 U	NA	NA	NA	NA	50.0 U	NA	
4-Chlorotoluene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	5,000 U	NA	NA	NA	4,000 U	NA	NA	NA	50.0 U	50.0 U	NA	NA	50.0 U	NA	50.0 U	NA	NA	NA	NA	50.0 U	NA	
Acetone	--	µg/L	NA	NA	NA	25,000 U	NA	NA	NA	20,000 U	NA	NA	NA	250 U	250 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	250 U	NA	
Benzene	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Bromobenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Bromochloromethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Bromodichloromethane	81	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Bromoform	81	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Bromomethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Carbon Disulfide	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Carbon Tetrachloride	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Chlorobenzene	100	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Chloroethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Chloroform	86	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Chloromethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	17,500	NA	14,900	NA	17,900	12,800	NA	NA	124	158	NA	NA	231	NA	172	NA	NA	NA	NA	355	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Dibromochloromethane	86	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Dibromomethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	5,000 U	NA	NA	NA	4,000 U	NA	NA	NA	50.0 U	50.0 U	NA	NA	50.0 U	NA	50.0 U	NA	NA	NA	NA	50.0 U	NA	
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Ethylbenzene	700	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Hexachlorobutadiene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Iodomethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
Isopropylbenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	10.0 U	NA	
m,p-Xylene	--	µg/L	NA	NA	NA	2,000 U	NA	NA	NA	1,600 U	NA	NA	NA	20.0 U	20.0 U	NA	NA	20.0 U	NA	20.0 U	NA	NA					

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	OW-10D 12/24/09	OW-10D 12/28/09	OW-10D 01/04/10	OW-10D 01/05/10	OW-10D 01/18/10	OW-10D 02/05/10	OW-10D 02/16/10	OW-10D 03/04/10	OW-10D 03/29/10	OW-10D 04/13/10	OW-10D 04/19/10	P-1D 11/05/08	P-1D 07/20/09	P-1D 07/25/09	P-1D 08/17/09	P-1D 09/01/09	P-1D 09/16/09	P-1D 09/28/09	P-1D 10/12/09	P-1D 10/26/09	P-1D 11/02/09	P-1D 11/07/09	P-1D 11/16/09	P-1D 11/23/09	
Volatiles Organics																											
o-Xylene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
p-Isopropyltoluene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
sec-Butylbenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
Styrene	100	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
tert-Butylbenzene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
Tetrachloroethene	5	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
Toluene	1,000	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	350 J	NA	350 J	NA	344 J	296 J	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	5,000 U	NA	NA	NA	4,000 U	NA	NA	NA	50.0 U	50.0 U	NA	NA	50.0 U	NA	50.0 U	NA	NA	NA	NA	NA	50.0 U	NA
Trichloroethene	5	µg/L	NA	NA	NA	640 J	NA	260 J	NA	800 U	NA	NA	NA	178	120	NA	NA	17.5	NA	34.4	NA	NA	NA	NA	6.00 J	NA	
Trichlorofluoromethane	--	µg/L	NA	NA	NA	1,000 U	NA	NA	NA	800 U	NA	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
Vinyl Chloride	2	µg/L	NA	NA	NA	630 J	NA	760 J	NA	1,940	3,080	NA	NA	10.0 U	10.0 U	NA	NA	10.0 U	NA	10.0 U	NA	NA	NA	NA	NA	10.0 U	NA
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,700 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	78.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,500 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	290,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	290,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	200 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	56 [16]	5.1	8.3	4,500	1,700	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	5,700 M	1,300 J	700 J	NA	12,000	NA	NA	NA	NA	NA	NA	NA	1,100 J	54,000	2,800 J	5,400	3,100 J	5,000 U	2,300 J	7,600	12,000	16,000	2,500 J	1,000 J	
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	950 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																											
depth to water	--	feet	6.87	6.93	7.06	NA	7.78	6.42	6.19	6.46	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.23	9.18
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.09	9.56	15.5	9.58	10.18	10	NA	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	0.23	0.1	0.48	0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	NA	NA	NA	540	NA	NA	NA	NA	NA	NA	NA	1,870	4,990	2,390	3,540	1,750	7,550	NA	NA	NA	NA	NA	NA	
oxidation reduction potentia	--	mV	NA	NA	NA	NA	-251.8	-97.3	-171.7	-167.5	-157.8	NA	NA	NA	NA	NA	-190	-106.1	-126.6	-23.1	-408.2	-77	NA	NA	NA	NA	
pH	--	SU	7.03	7.05	6.78	NA	7	7.04	7.13	7.05	5.68	NA	NA	NA	NA	NA	7.26	7.25	5.33	7.05	6.49	8.57	NA	NA	6.82	8.32	
salinity	--	PSU	NA	0.4	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	0.1	
specific conductivity	--	uS/cm	0.72	0.719	0.667	NA	0.687	0.684	0.625	0.674	9.561	NA	NA	NA	NA	NA	0.131	0.05	0.014	0.119	0.152	0.091	NA	NA	0.145	0.105	
temperature	--	°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.9	18.7
temperature	--	°Celcius	22.7	22.9	22.5	NA	23.57	23.32	22.31	19.56	21.2	NA	NA	NA	NA	NA	26.04	22.16	24.3	23.34	23.11	20.22	NA	NA	NA	NA	
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	NA	NA	NA	0.43	NA	0.62	0.7	NA	NA	NA	0.094	NA	NA	0.13	NA	0.13	NA	0.091	NA	NA	0.14	NA	
Ethene	--	ug/L	NA	NA	NA	NA	NA	5.8	NA	11	18	NA	NA	NA	0.27	NA	NA	0.45	NA	0.33	NA	0.29	NA	NA	0.64	NA	
Methane	--	ug/L	NA	NA	NA	NA	NA	280	NA	240	640	NA	NA	NA	30	NA	NA	46	NA	43	NA	26	NA	NA	44	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	P-1D 11/30/09	P-1D 12/14/09	P-1D 12/24/09	P-1D 12/28/09	P-1D 01/04/10	P-1D 01/18/10	P-1D 02/05/10	P-1D 02/16/10	P-1D 03/04/10	P-1D 03/29/10	P-1D 04/13/10	P-1D 04/19/10	P-2D 10/16/08	P-2D 07/20/09	P-2D 07/25/09	P-2D 08/17/09	P-2D 09/01/09	P-2D 09/16/09	P-2D 09/28/09	P-2D 10/12/09	P-2D 10/26/09	P-2D 11/02/09	P-2D 11/07/09	P-2D 11/16/09	
Volatiles Organics																											
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
Styrene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	540 J	380 J	NA	NA	52.5 J	NA	42.5 J	NA	NA	NA	NA	NA	200 U
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	50.0 U	NA	NA	NA	5,000 U	5,000 U	NA	NA	1,250 U	NA	1,250 U	NA	NA	NA	NA	NA	1,000 U
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	25,800 J	15,800	NA	NA	3,660	NA	610	NA	NA	NA	NA	NA	526
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	10.0 U	NA	NA	NA	1,000 U	1,000 U	NA	NA	250 U	NA	250 U	NA	NA	NA	NA	NA	200 U
Vinyl Chloride	2	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	7.00 J	34.4	NA	NA	1,000 U	1,000 U	NA	NA	290	NA	765	NA	NA	NA	NA	NA	166 J
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,800 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,800 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62.0 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	270,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	270,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	260 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	2.8 J	13	9.2	340	170	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	5,000 U	1,500,000	5,000 UM	6,100	1,100 J	7,500	NA	NA	NA	NA	NA	NA	NA	5,000 U	1,300,000	990,000	170,000	110,000	80,000	66,000	49,000	90,000	830,000	4,600,000	
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	800 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																											
depth to water	--	feet	9.21	8.19	6.6	6.74	6.91	7.59	6.15	5.96	6.25	7.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.59
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2	9.75	10.32	9.71	10.39	10.23	NA	NA	NA	
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	6.27	5.83	7.53	3.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Oxygen	--	µg/L	NA	19,820	NA	NA	NA	NA	5,760	NA	NA	NA	NA	NA	NA	NA	NA	990	770	1,000	1,760	1,270	1,150	NA	NA	NA	
oxidation reduction potentia	--	mV	NA	-98	NA	NA	NA	-111.7	103.2	-188.8	-56.2	-98.9	NA	NA	NA	NA	NA	-140.3	-119.6	-218.1	-215.7	-205.4	-142.4	NA	NA	NA	
pH	--	SU	7.92	6.13	7.77	7.32	7.8	7.19	6.28	7.11	9.56	6.17	NA	NA	NA	NA	NA	5.57	6.75	6.6	6.78	6.71	6.92	NA	NA	5.78	
salinity	--	PSU	0.1	NA	NA	0.3	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3	
specific conductivity	--	uS/cm	0	2.709	0.06	0.484	0.1124	0.149	0.122	0.176	0.574	0.894	NA	NA	NA	NA	NA	2.085	0.859	0.874	0.866	0.838	0.893	NA	NA	0.793	
temperature	--	°C	19.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.4
temperature	--	°Celcius	NA	19.07	15.7	14.9	8.6	18.79	15	14.42	13.73	18.44	NA	NA	NA	NA	NA	27.73	27.01	25.14	24.97	26.43	24.19	NA	NA	NA	
Dissolved Gases																											
Ethane	--	µg/L	NA	0.13	NA	NA	NA	NA	0.086	NA	0.069	0.007 J	NA	NA	NA	0.45	NA	NA	0.36	NA	0.42	NA	0.31	NA	NA	0.045	
Ethene	--	ug/L	NA	0.43	NA	NA	NA	NA	0.35	NA	1.2	8.7	NA	NA	NA	4.6	NA	NA	6.4	NA	46	NA	77	NA	NA	4.3	
Methane	--	ug/L	NA	59	NA	NA	NA	NA	1,800	NA	6,200	9,300	NA	NA	NA	190	NA	NA	280	NA	550	NA	1,900	NA	NA	280	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID:	USEPA/SCDHEC MCL	Units	P-2D 11/23/09	P-2D 11/30/09	P-2D 12/14/09	P-2D 12/24/09	P-2D 12/28/09	P-2D 01/04/10	P-2D 01/05/10	P-2D 01/18/10	P-2D 02/05/10	P-2D 02/16/10	P-2D 03/04/10	P-2D 03/29/10	P-2D 04/13/10	P-2D 04/16/10	P-2D 04/19/10	P-2D 04/19/10	P-3D 11/05/08	P-3D 07/20/09	P-3D 07/25/09	P-3D 08/17/09	P-3D 09/01/09	P-3D 09/16/09	P-3D 09/28/09	P-3D 10/12/09	
Volatile Organics																											
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1-Dichloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1-Dichloroethene	7	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,1-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA	NA	10.0 U	25.0 U	NA	NA	100 U	NA	800 U	NA	
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2-Dichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,2-Dichloropropane	5	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,3-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
2,2-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
2-Butanone	--	µg/L	NA	NA	NA	NA	NA	NA	190 J	NA	442 J	NA	539 J	480 J	NA	NA	NA	NA	50.0 U	125 U	NA	NA	500 U	NA	4,000 U	NA	
2-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
2-Hexanone	--	µg/L	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA	NA	10.0 U	25.0 U	NA	NA	100 U	NA	800 U	NA	
4-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA	NA	10.0 U	25.0 U	NA	NA	100 U	NA	800 U	NA	
Acetone	--	µg/L	NA	NA	NA	NA	NA	NA	1,000 U	NA	439 J	NA	290 J	224 J	NA	NA	NA	NA	50.0 U	125 U	NA	NA	500 U	NA	4,000 U	NA	
Benzene	5	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Bromobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Bromochloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Bromodichloromethane	81	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Bromoform	81	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Bromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Carbon Disulfide	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Carbon Tetrachloride	5	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Chlorobenzene	100	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Chloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Chloroform	86	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Chloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	NA	NA	NA	84.0	NA	309	NA	298	215	NA	NA	NA	NA	27.3	43.6	NA	NA	836	NA	1,580	NA	
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Dibromochloromethane	86	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Dibromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA	NA	10.0 U	25.0 U	NA	NA	100 U	NA	800 U	NA	
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Ethylbenzene	700	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	6.40 J	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Hexachlorobutadiene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Iodomethane	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Isopropylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
m,p-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	80.0 U	NA	NA	NA	80.0 U	NA	NA	NA	NA	NA	4.00 U	10.0 U	NA	NA	40.0 U	NA	320 U	NA	
Methyl tert-butyl ether	--	µg/L	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Methylene Chloride	5	µg/L	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA										

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	P-2D 11/23/09	P-2D 11/30/09	P-2D 12/14/09	P-2D 12/24/09	P-2D 12/28/09	P-2D 01/04/10	P-2D 01/05/10	P-2D 01/18/10	P-2D 02/05/10	P-2D 02/16/10	P-2D 03/04/10	P-2D 03/29/10	P-2D 04/13/10	P-2D 04/16/10	P-2D 04/19/10	P-2D 04/19/10	P-3D 11/05/08	P-3D 07/20/09	P-3D 07/25/09	P-3D 08/17/09	P-3D 09/01/09	P-3D 09/16/09	P-3D 09/28/09	P-3D 10/12/09	
Volatiles Organics																											
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Styrene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	14.0 J	NA	11.6 J	NA	18.4 J	9.60 J	NA	NA	NA	2.00 U	5.00 U	NA	NA	16.6 J	NA	38.4 J	NA	
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	200 U	NA	NA	NA	200 U	NA	NA	NA	NA	10.0 U	25.0 U	NA	NA	100 U	NA	800 U	NA	
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	211	NA	940	NA	918	571	NA	NA	NA	33.5	6.80	NA	NA	578	NA	160 U	NA	
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	40.0 U	NA	NA	NA	NA	2.00 U	5.00 U	NA	NA	20.0 U	NA	160 U	NA	
Vinyl Chloride	2	µg/L	NA	NA	NA	NA	NA	NA	NA	263	NA	134	NA	1730	716	NA	NA	NA	2.00 U	7.90	NA	NA	20.2	NA	160 U	NA	
Inorganics - Total																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	8,700 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	300 L	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	1,200 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	57.0 L	NA	NA	NA	NA	NA	NA	
Inorganics - Dissolved																											
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	9,600 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	240 L	NA	NA	NA	NA	NA	NA	
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	1,200 L	NA	NA	NA	NA	NA	NA	NA	NA	NA	52.0 L	NA	NA	NA	NA	NA	NA	
Wet Chemistry																											
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	3,300,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	260,000	NA	NA	NA	NA	NA	NA	
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	3,300,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	260,000	NA	NA	NA	NA	NA	NA	
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	210,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	410 J	NA	NA	NA	NA	NA	NA	
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	220,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	110,000	NA	NA	NA	NA	NA	NA	
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	85,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	270 J	NA	NA	NA	NA	NA	NA	
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	250 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	2,500 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	NA	NA	
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	15,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000 U	NA	NA	NA	NA	NA	NA	
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	14,000	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	NA	4,200	3,600	4,200	4,500	5,200	5,700	5,900	5,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Organic Carbon	--	µg/L	2,500,000	4,400,000	5,200,000	4,000,000 M	4,200,000	4,100,000	NA	4,400,000	NA	NA	NA	NA	NA	NA	NA	NA	5,000 U	190,000	110,000	9,100	11,000	8,100,000	3,900 J		
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	520 L	NA	NA	NA	NA	NA	NA	
Field Parameters																											
depth to water	--	feet	9.55	9.59	8.61	7.02	7.13	7.17	NA	7.95	6.53	6.32	6.62	7.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
depth to water	--	feet bgs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.21	8.81	9.45	8.81	NA		
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	0.22	0.22	0.24	3.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Dissolved Oxygen	--	µg/L	NA	NA	19,640	NA	NA	NA	NA	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,370	2,270	2,400	1,790	1,780		
oxidation reduction potentia	--	mV	NA	NA	-211.4	NA	NA	NA	NA	-300.8	-269.3	-197.7	-281.4	-200.2	NA	NA	NA	NA	NA	NA	-186.9	-141.2	-101.7	-148.2	-532.6		
pH	--	SU	5.83	5.84	5.84	5.88	5.86	6.03	NA	5.81	5.77	5.96	5.69	5.66	NA	NA	NA	NA	NA	NA	6.84	6.3	5.56	5.39	5.4		
salinity	--	PSU	4.2	4.1	NA	NA	4.3	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
specific conductivity	--	uS/cm	0.0076	7.2	8.887	NA	7.66	6.03	NA	7.384	8.341	6.165	8.076	8.603	NA	NA	NA	NA	NA	NA	0.532	0.052	0.032	0.045	0.043		
temperature	--	°C	0.352	22.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
temperature	--	°Celcius	NA	NA	21.57	18.5	21.3	17	NA	24.11	17.2	21.06	23.13	21.51	NA	NA	NA	NA	NA	NA	23.87	22.53	24.9	24.63	23.44		
Dissolved Gases																											
Ethane	--	µg/L	NA	NA	0.1	NA	NA	NA	NA	NA	0.092	NA	0.16	0.11	NA	NA	NA	NA	NA	0.037	NA	NA	0.25	NA	0.66	NA	
Ethene	--	ug/L	NA	NA	4.4	NA	NA	NA	NA	NA	2	NA	18	6.6	NA	NA	NA	NA	NA	0.5	NA	NA	0.9	NA	2.7	NA	
Methane	--	ug/L	NA	NA	580	NA	NA	NA	NA	NA	650	NA	510	270	NA	NA	NA	NA	NA	33	NA	NA	51	NA	210	NA	

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	P-3D 10/26/09	P-3D 11/02/09	P-3D 11/07/09	P-3D 11/16/09	P-3D 11/23/09	P-3D 11/30/09	P-3D 12/14/09	P-3D 12/24/09	P-3D 12/28/09	P-3D 01/04/10	P-3D 01/05/10	P-3D 01/18/10	P-3D 02/05/10	P-3D 02/16/10	P-3D 03/04/10	P-3D 03/05/10	P-3D 03/29/10	P-3D 04/13/10	P-3D 04/19/10
Volatile Organics																					
1,1,1,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1,1-Trichloroethane	200	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1,2,2-Tetrachloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1,2-Trichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1-Dichloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1-Dichloroethene	7	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,1-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2,3-Trichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2,3-Trichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2,4-Trichlorobenzene	70	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2,4-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.2	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
1,2-Dibromoethane	0.05	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2-Dichlorobenzene	600	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2-Dichloroethane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,2-Dichloropropane	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,3,5-Trimethylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,3-Dichlorobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,3-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
1,4-Dichlorobenzene	75	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
2,2-Dichloropropane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
2-Butanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	2,500 U	57.6 J	NA	NA
2-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
2-Hexanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
4-Chlorotoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
4-Methyl-2-pentanone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
Acetone	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500 U	NA	NA	NA	NA	2,500 U	NA	NA	NA
Benzene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Bromobenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Bromochloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Bromodichloromethane	81	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Bromoform	81	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Bromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Carbon Disulfide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Carbon Tetrachloride	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Chlorobenzene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Chloroethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Chloroform	86	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Chloromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
cis-1,2-Dichloroethene	70	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81.8	NA	1,440	NA	NA	624	43.6	NA	NA
cis-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Dibromochloromethane	86	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Dibromomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Dichlorodifluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
Diisopropyl ether (DIPE)	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Ethylbenzene	700	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Hexachlorobutadiene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Iodomethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Isopropylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
m-p-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.0 U	NA	NA	NA	NA	200 U	NA	NA	NA
Methyl tert-butyl ether	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Methylene Chloride	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
Naphthalene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
n-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
n-Propylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA

Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

Location ID: Date Collected:	USEPA/SCDHEC MCL	Units	P-3D 10/26/09	P-3D 11/02/09	P-3D 11/07/09	P-3D 11/16/09	P-3D 11/23/09	P-3D 11/30/09	P-3D 12/14/09	P-3D 12/24/09	P-3D 12/28/09	P-3D 01/04/10	P-3D 01/05/10	P-3D 01/18/10	P-3D 02/05/10	P-3D 02/16/10	P-3D 03/04/10	P-3D 03/05/10	P-3D 03/29/10	P-3D 04/13/10	P-3D 04/19/10
Volatile Organics																					
o-Xylene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
p-Isopropyltoluene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
sec-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Styrene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
tert-Butylbenzene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Tetrachloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Toluene	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
trans-1,2-Dichloroethene	100	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
trans-1,3-Dichloropropene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
trans-1,4-Dichloro-2-butene	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 U	NA	NA	NA	NA	500 U	NA	NA	NA
Trichloroethene	5	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	30.0 J	NA	NA	NA
Trichlorofluoromethane	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	100 U	NA	NA	NA
Vinyl Chloride	2	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	151	NA	1,680	NA	NA	341	430	NA	NA
Inorganics - Total																					
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics - Dissolved																					
Iron	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Wet Chemistry																					
Alkalinity as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate as CaCO3	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromide	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoride	4,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate (as N)	10,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (as N)	1,000	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16	9.6	NA	13	150	14	2,700
Total Organic Carbon	--	µg/L	6,000	11,000	23,000	7,400	30,000	25,000	27,000	120,000 M	18,000	19,000	NA	14,000	NA	NA	NA	NA	NA	NA	NA
total Phosphate as PO4-P	--	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																					
depth to water	--	feet	NA	NA	NA	8.53	9.49	8.68	7.5	6.04	6.07	6.21	NA	6.9	5.49	5.35	5.66	NA	6.52	NA	NA
depth to water	--	feet bgs	9.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Oxygen	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.57	1.36	1.15	NA	2.26	NA	NA	NA
Dissolved Oxygen	--	µg/L	2,020	NA	NA	NA	NA	NA	22,240	NA	NA	NA	NA	1,690	NA	NA	NA	NA	NA	NA	NA
oxidation reduction potentia	--	mV	-178.3	NA	NA	NA	NA	NA	-218.5	NA	NA	NA	NA	-163	-125	-168.7	-165.6	NA	-183.5	NA	NA
pH	--	SU	6.37	NA	NA	7.3	7.02	7.27	7.12	6.91	7.29	7.7	NA	7.15	7.08	6.95	6.91	NA	6.62	NA	NA
salinity	--	PSU	NA	NA	NA	0.1	0.2	0.2	NA	NA	0.3	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
specific conductivity	--	uS/cm	0.078	NA	NA	0.269	0.352	0.3	0.92	1.007	0.518	0.742	NA	0.554	0.643	0.28	0.976	NA	1.102	NA	NA
temperature	--	°C	NA	NA	NA	20.2	19.3	20.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
temperature	--	°Celcius	20.33	NA	NA	NA	NA	NA	19.33	15.8	18.7	12.4	NA	19.2	15.9	16.88	19.16	NA	19.26	NA	NA
Dissolved Gases																					
Ethane	--	µg/L	0.62	NA	NA	0.67	NA	NA	0.11	NA	NA	NA	NA	NA	0.39	NA	NA	0.12	0.13	NA	NA
Ethene	--	ug/L	2.3	NA	NA	5.5	NA	NA	1.8	NA	NA	NA	NA	NA	69	NA	NA	52	67	NA	NA
Methane	--	ug/L	180	NA	NA	360	NA	NA	300	NA	NA	NA	NA	NA	3,700	NA	NA	1,400	3,500	NA	NA

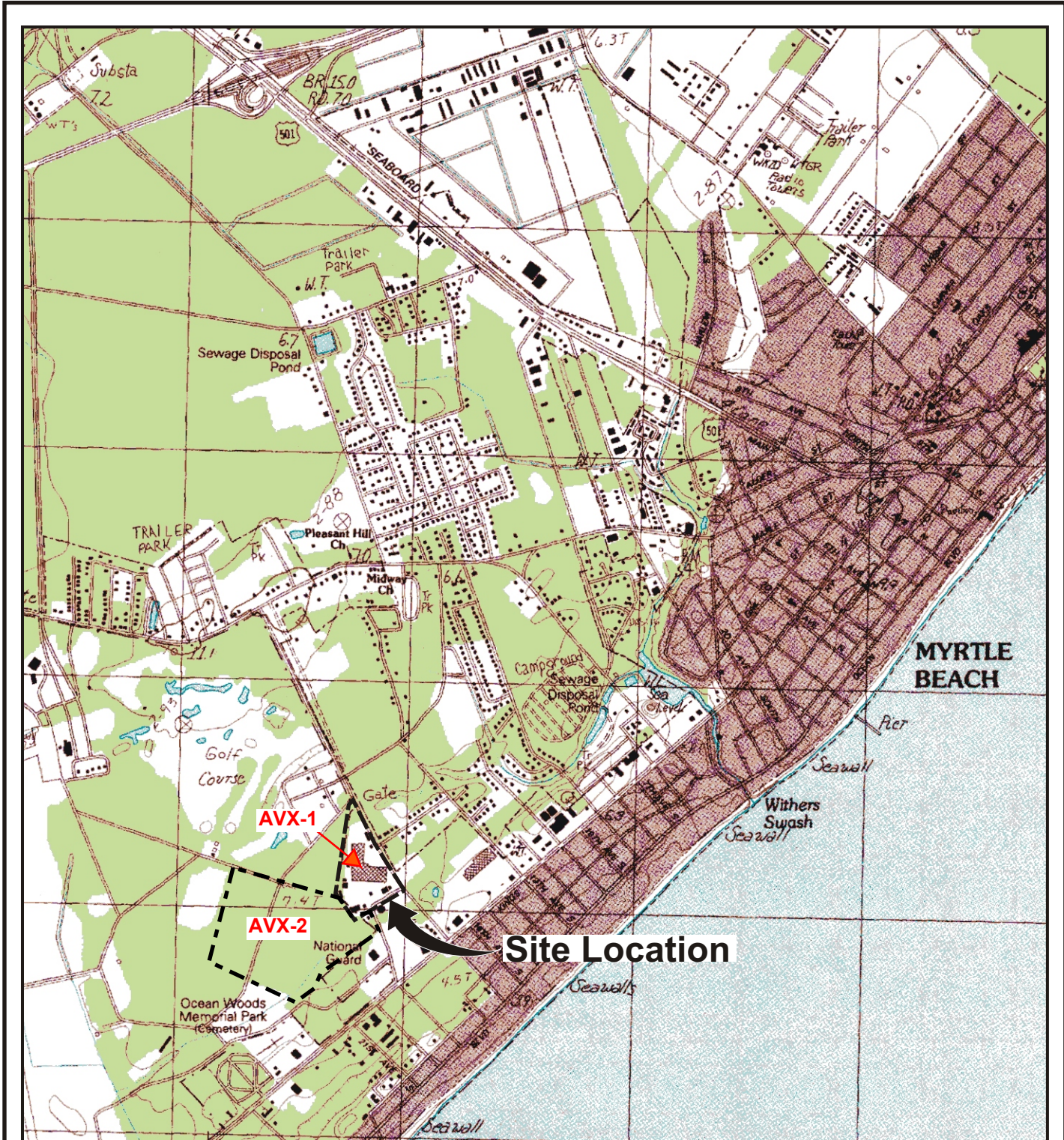
Table 3
Summary of Performance Monitoring Results

Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina

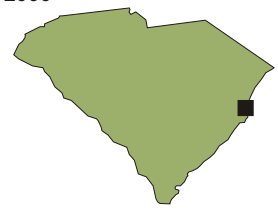
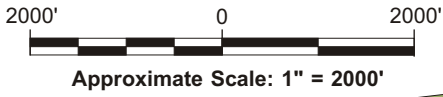
Qualifier Type	Lab Qualifiers	Definition
Inorganic	J	Indicates an estimated value.
Inorganic	L	Sample analysis subcontracted to Pace Analytical Services.
Inorganic	M	
Inorganic	U	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
Inorganic	UM	
Organic	J	Indicates an estimated value.
Organic	U	The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

ARCADIS

Figures



REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., MYRTLE BEACH, SOUTH CAROLINA, PHOTOREVISED 1984.



AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

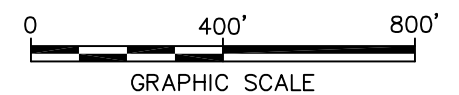
SITE LOCATION MAP



FIGURE
1

01/31/08 SYR-D85-DJH
 B0007393/000/00001/CDR/07393N01.CDR

CITY: SYRACUSE, NY; GROUP: ENV/CAD; DB: A. SCHILLING; P. LISTER; LD: A. SCHILLING; PM: W. POPHAM; TM/TR: M. HANISH; LVR: ON; OFF-REF: (ERZ);
G:\ENV\CAD\SYRACUSE\ACT\18007393\0000\000006\DWG\07393802.DWG; LAYOUT: 2; SAVER: 7/13/2010 2:06 PM; ACADVER: 17.0S (LMS TECH); PAGES: 17;
XREFS: IMAGES: 07393x01; PROJECTNAME: ---; PLOTSTYLETABLE: PLT\FULL.CTB; PLOTTED: 7/13/2010 2:06 PM; BY: LISTER, PAUL



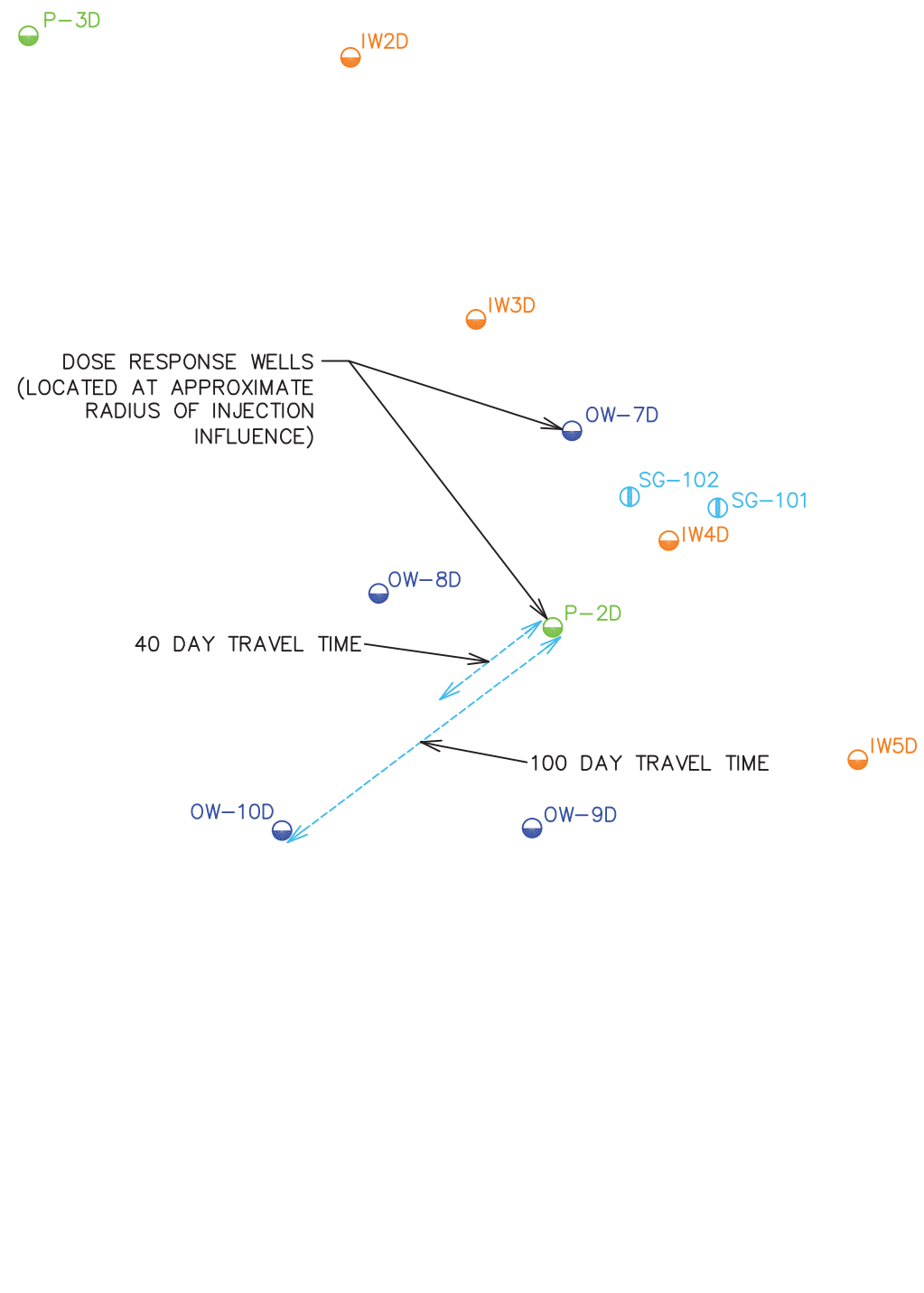
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
PILOT STUDY SUMMARY REPORT

SITE PLAN

 **ARCADIS**

FIGURE
2

CITY: SYRACUSE, NY GROUP: ENVCAD DB: A. SCHILLING, R. BASSETT, P. LISTER, LD: A. SCHILLING PIMTR: M. HANISH LVR: ON=OFF=REF: (FRZ)
 G:\ENVCAD\SYRACUSE\ACT19007393\0000\00006\DWG\G073939803.DWG LAYOUT: 2. SAVED: 7/9/2009 10:28 AM ACADVER: 17.0S (LMS TECH) PAGES: 17
 XREFS: 07393X01 07393X00
 IMAGES: PROJECTNAME: ---
 PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 7/9/2009 10:28 AM BY: LISTER, PAUL

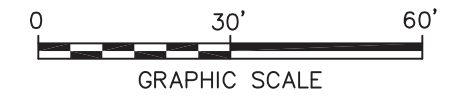


LEGEND:

- OW-7D ● LOCATION OF MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- IW6D ● LOCATION OF INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- P-2D ● LOCATION OF PIEZOMETERS SCREENED IN THE LOWER TERRACE DEPOSITS
- SG-101 ① LOCATION OF SOIL GAS SAMPLING POINTS IN SHALLOW VADOSE ZONE

NOTE:

ALL LOCATIONS ARE APPROXIMATE.



AVX CORPORATION MYRTLE BEACH FACILITY MYRTLE BEACH, SOUTH CAROLINA PILOT STUDY SUMMARY REPORT	
ERD TEST LAYOUT	
	FIGURE 3

Figure 4 - Injection #1 IW-4D Parameters

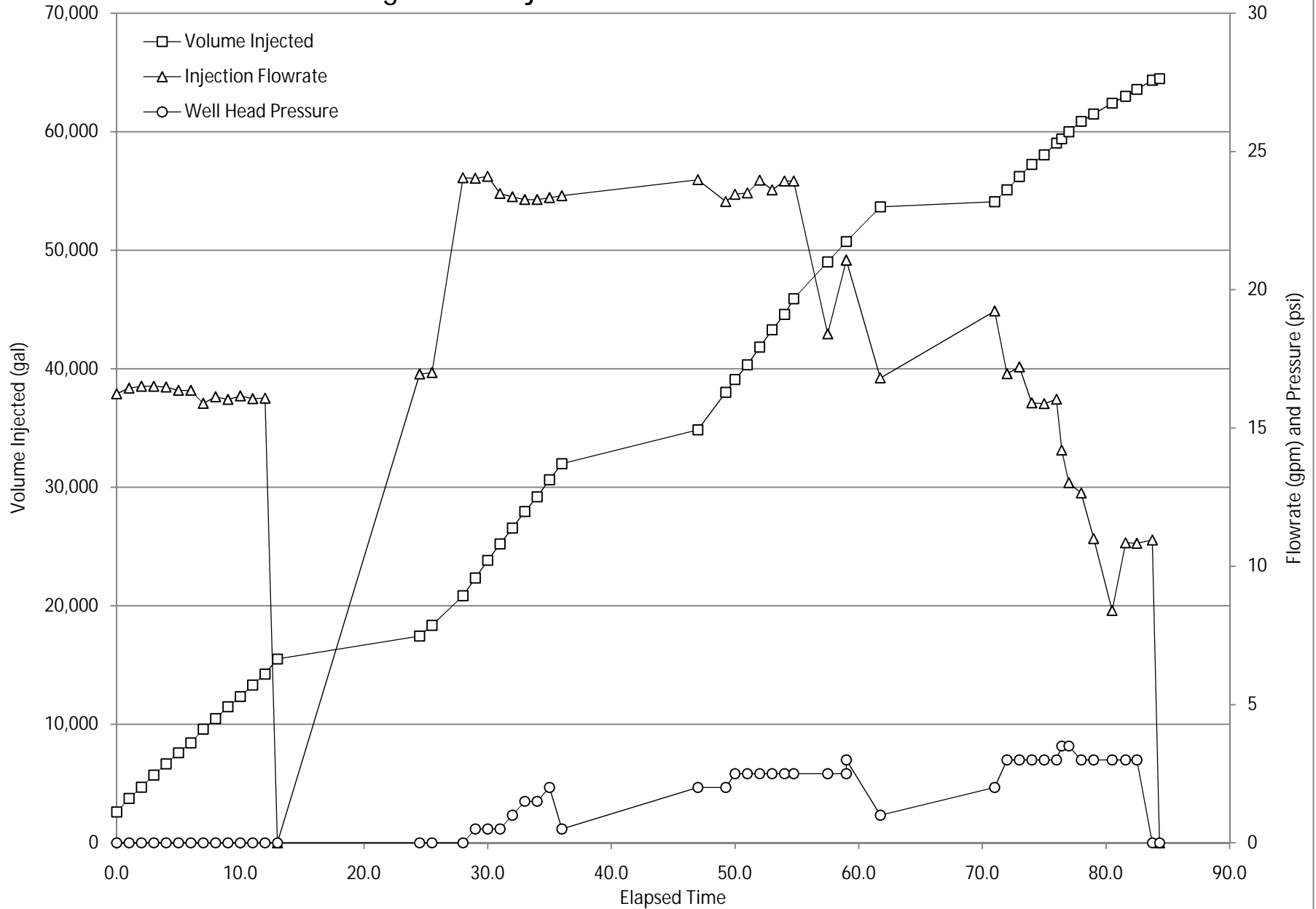


Figure 5 - Injection #2 IW-4D Parameters

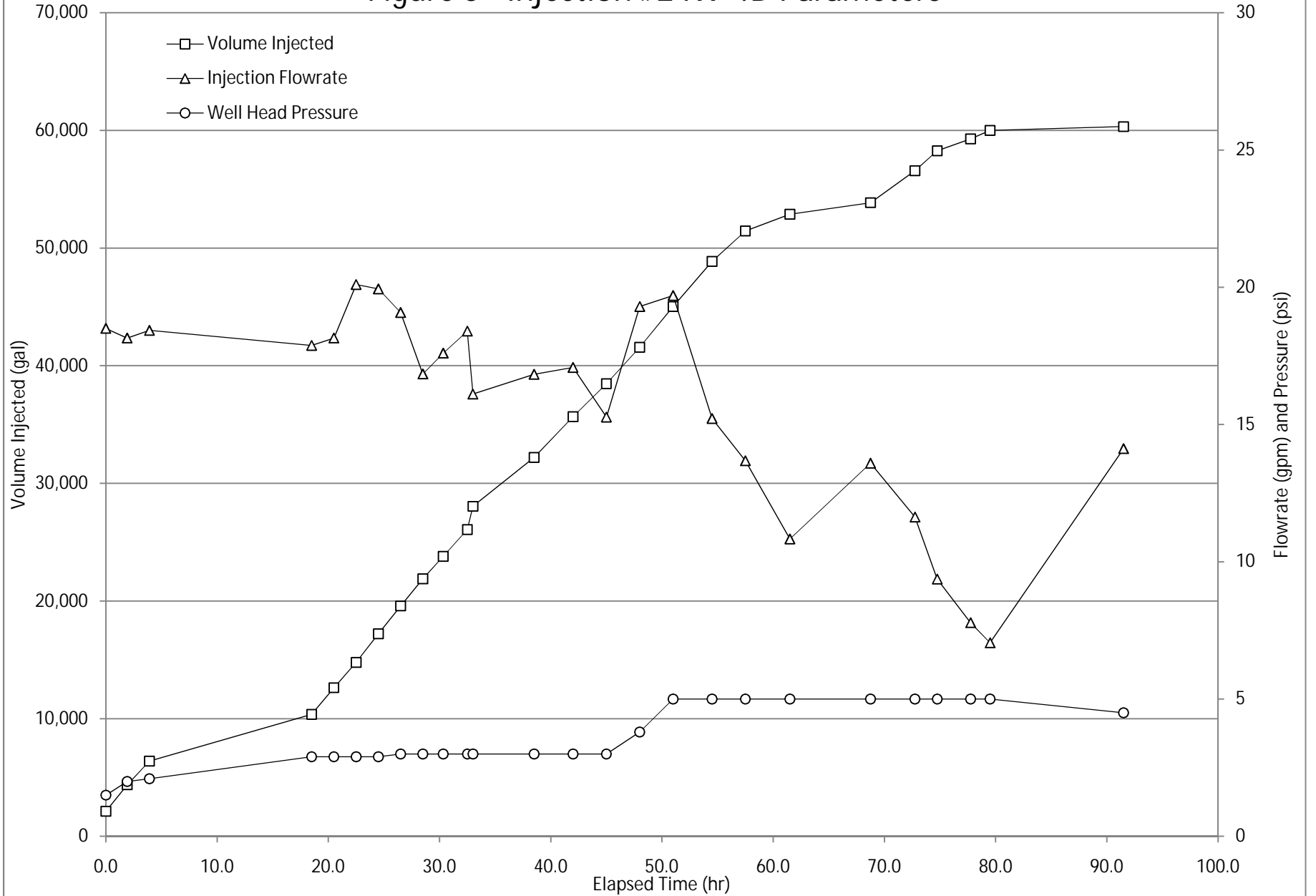


Figure 6 - Injection #3 IW-4D Parameters

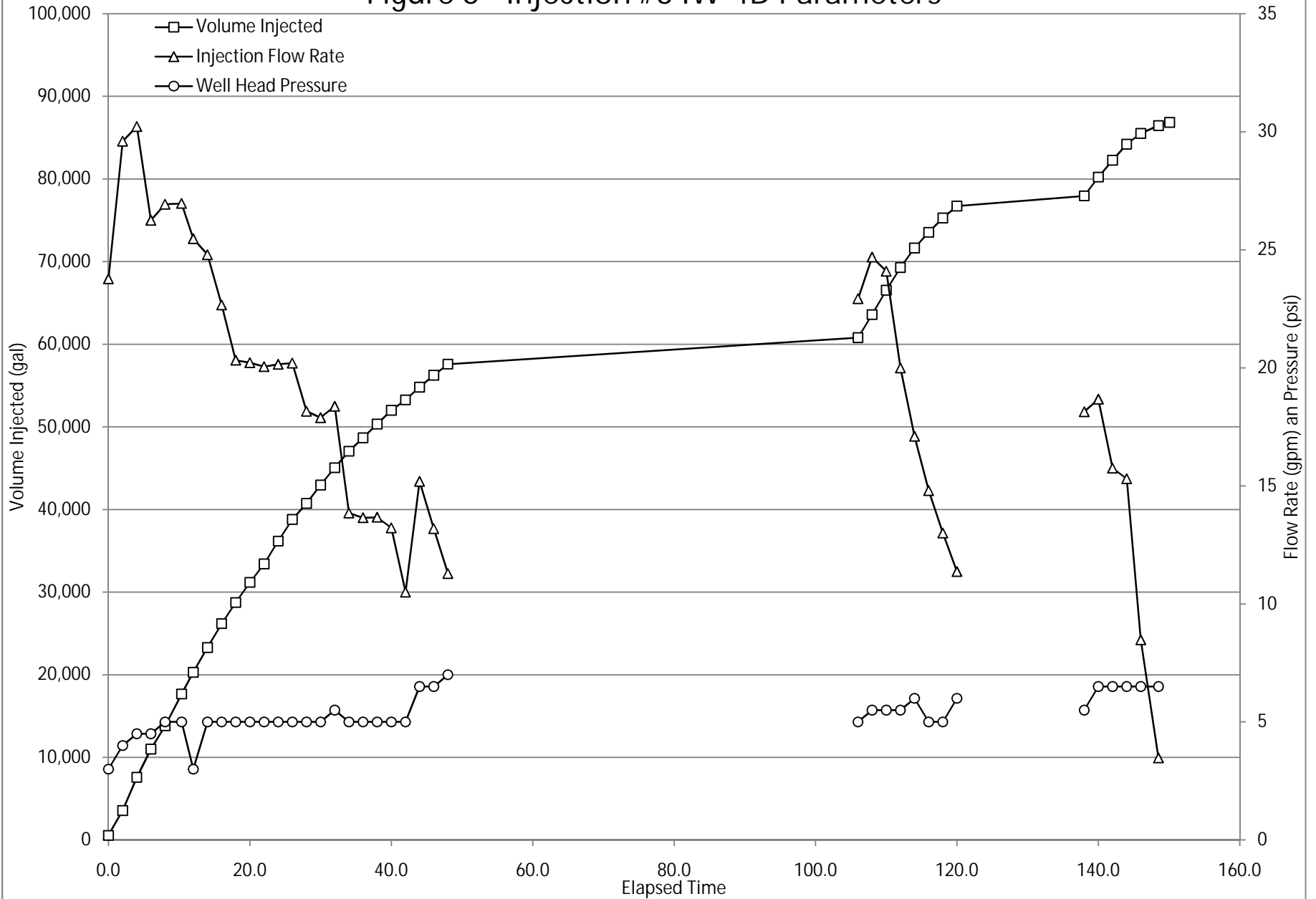


Figure 7: P-2D Performance Monitoring Results

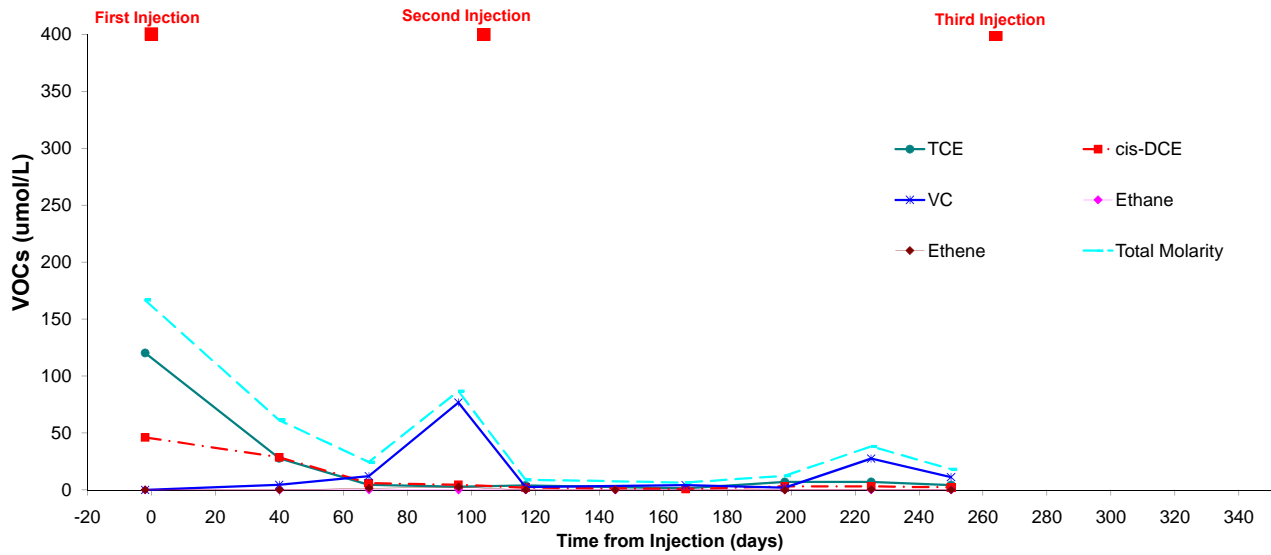
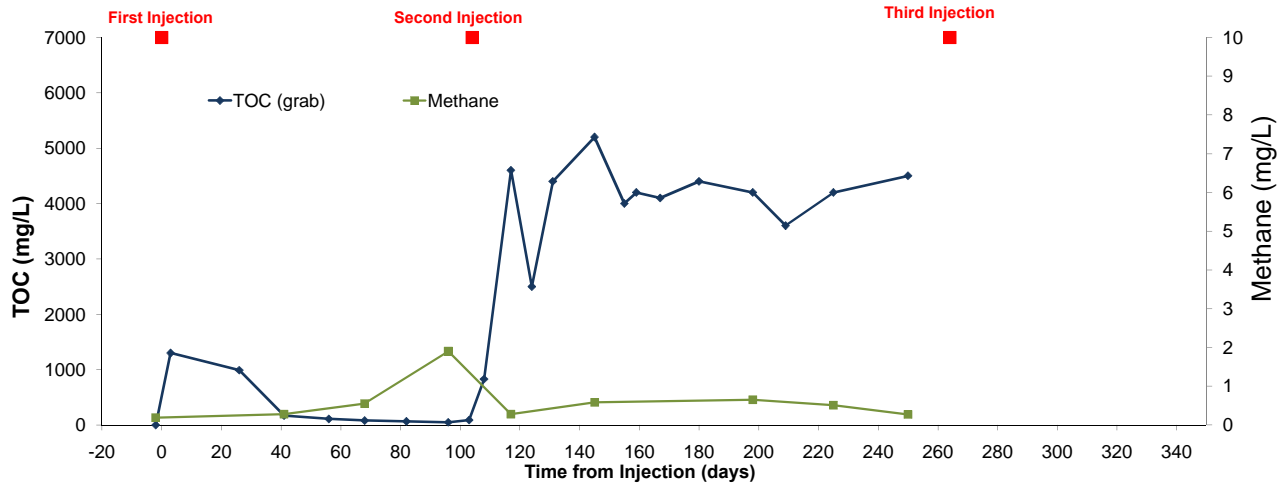
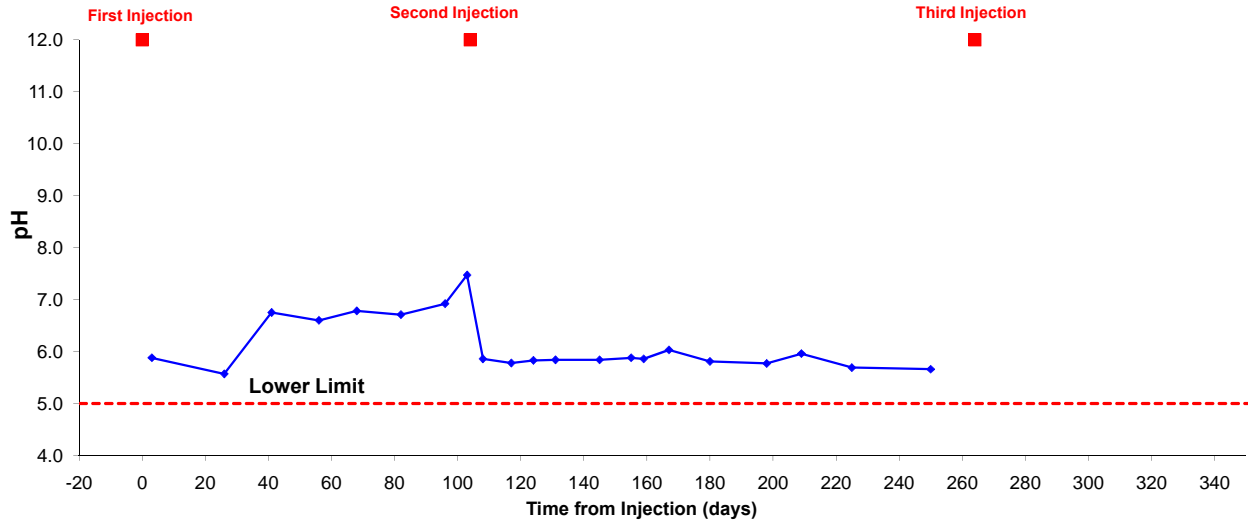


Figure 8: OW-8D Performance Monitoring Results

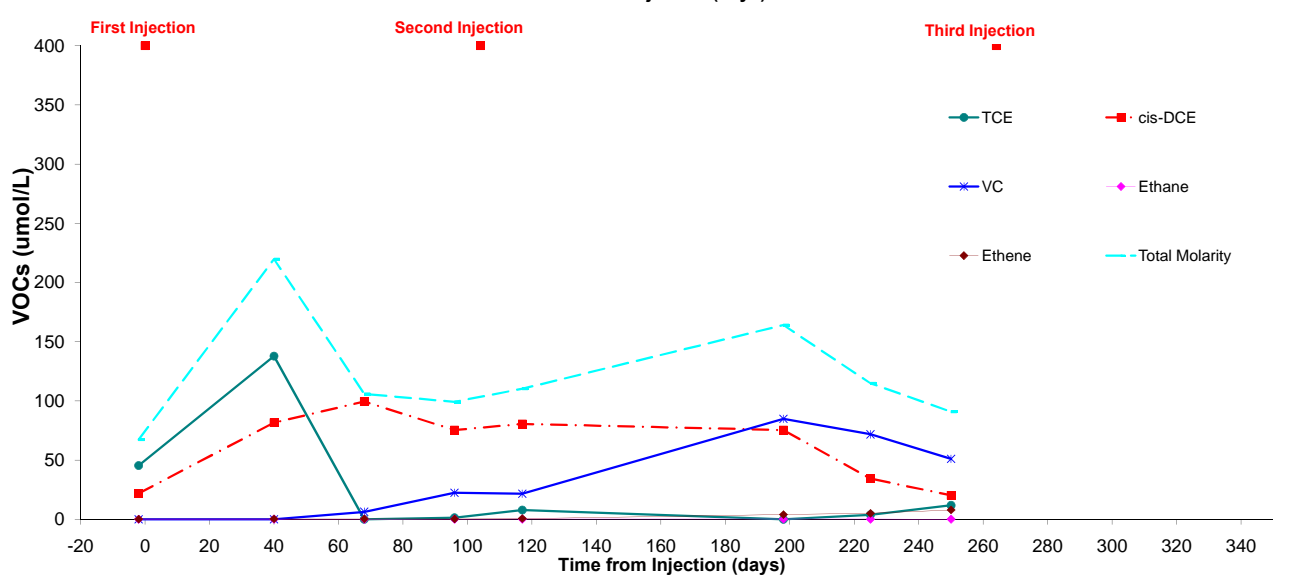
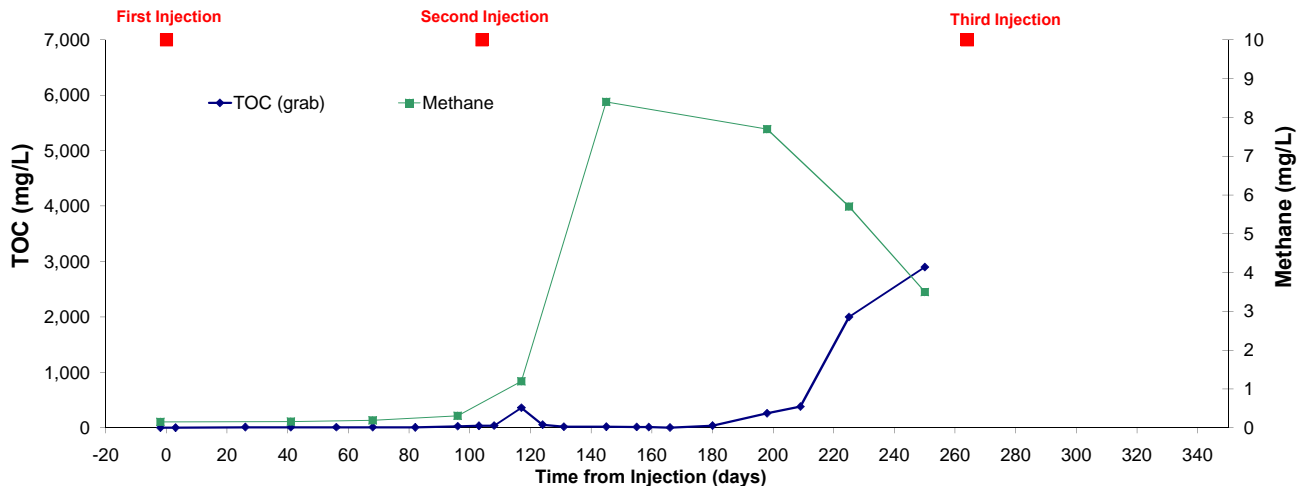
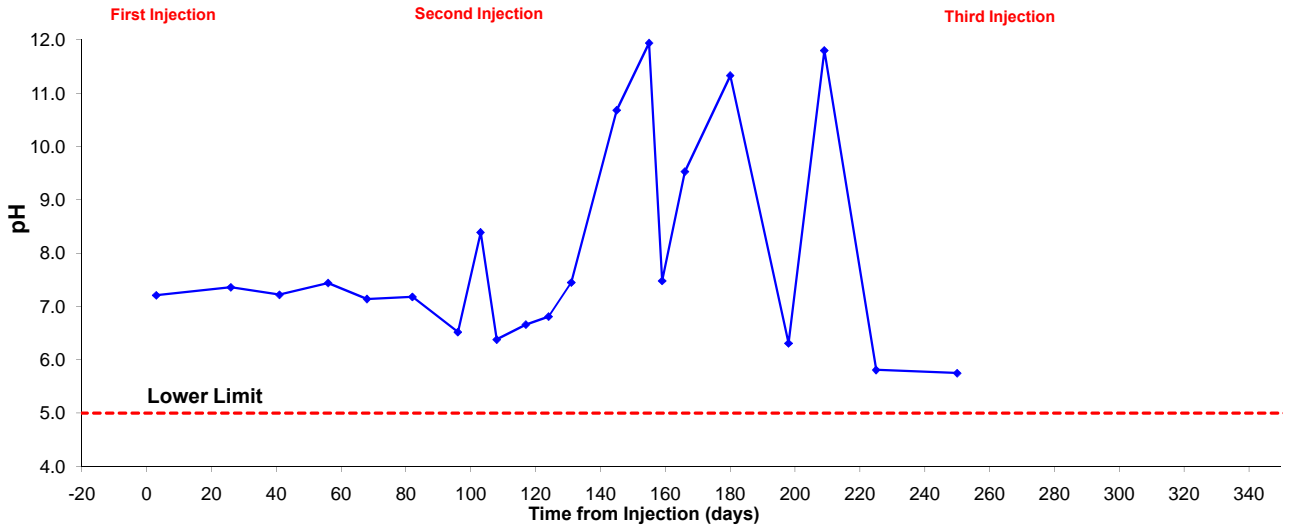


Figure 9: OW-9D Performance Monitoring Results

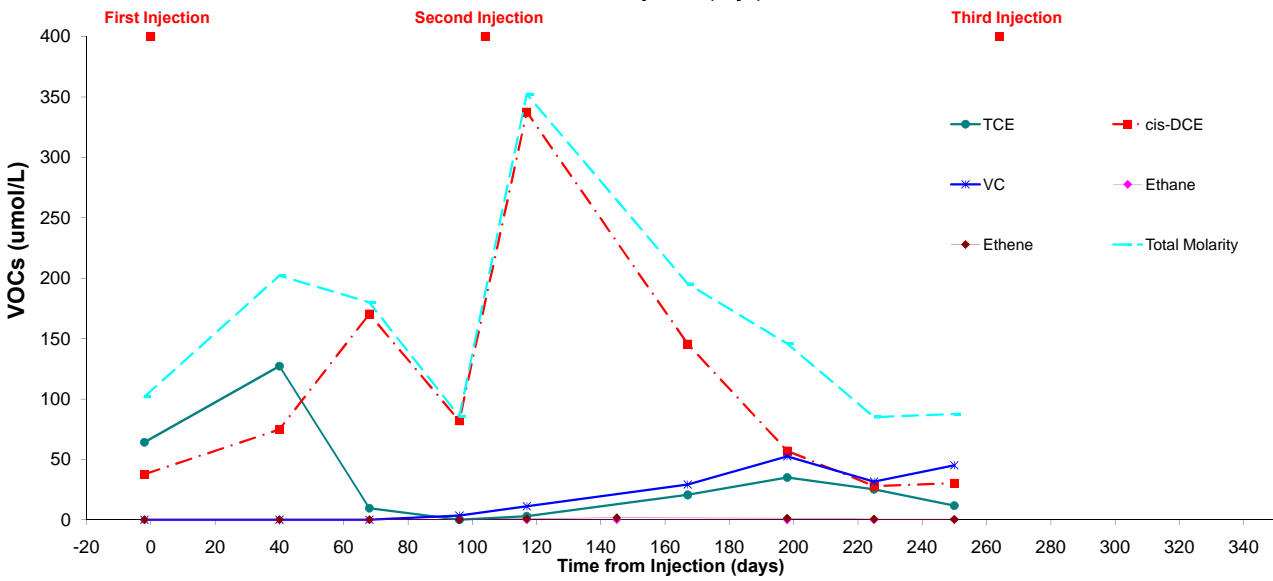
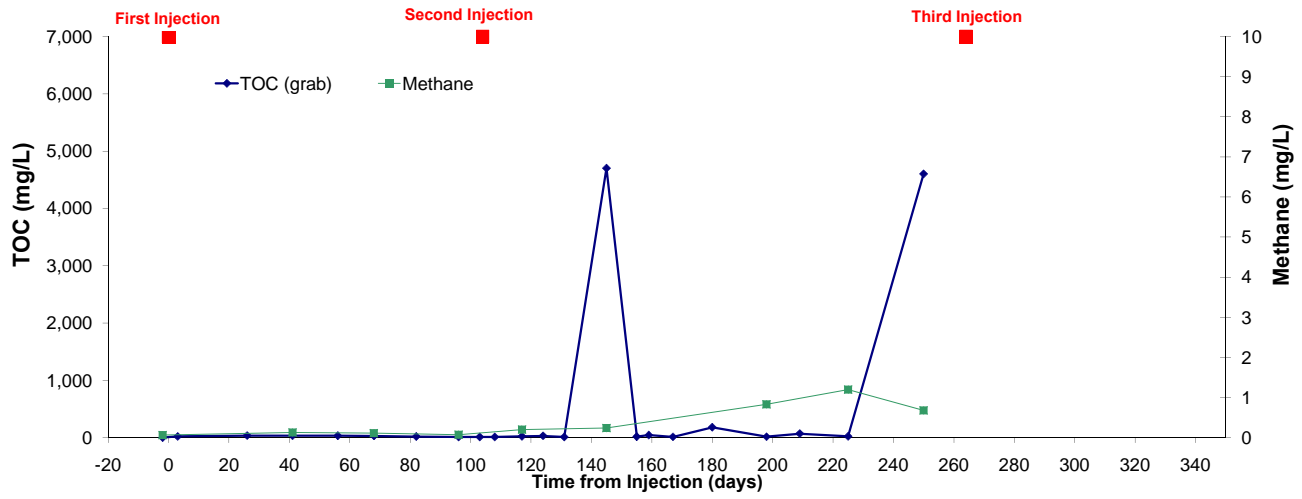
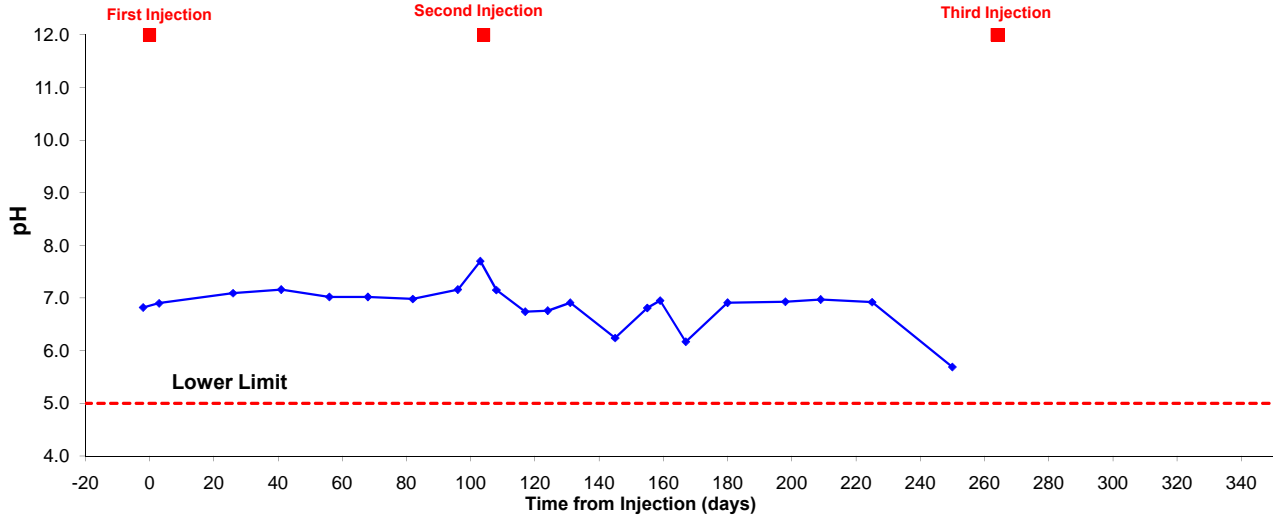


Figure 10: OW-10D Performance Monitoring Results

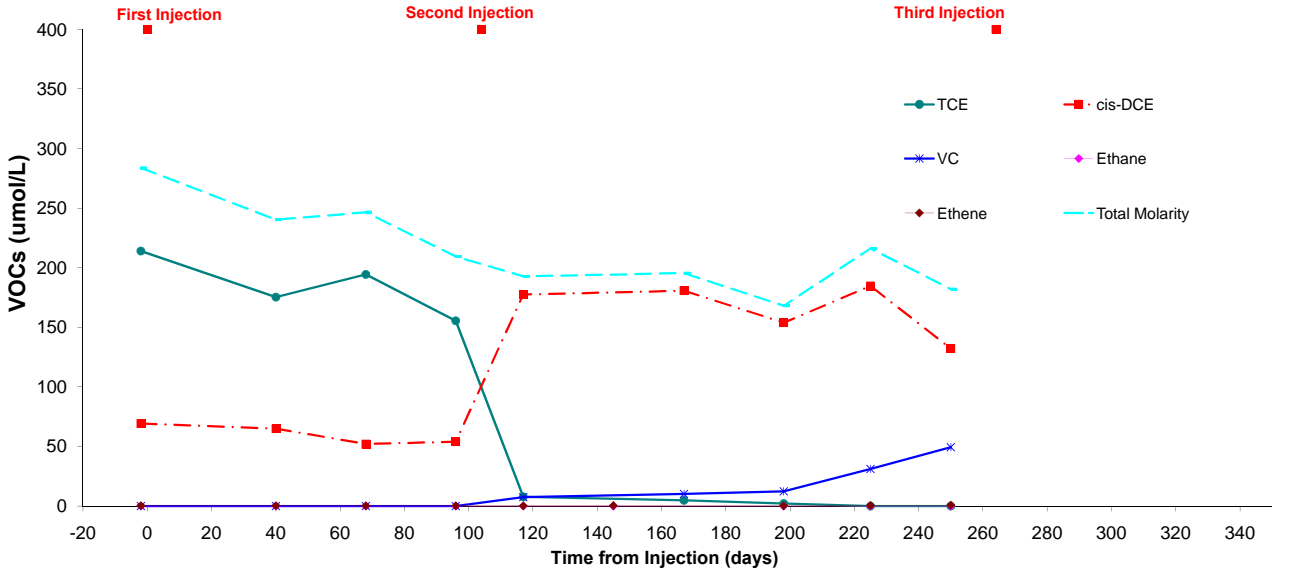
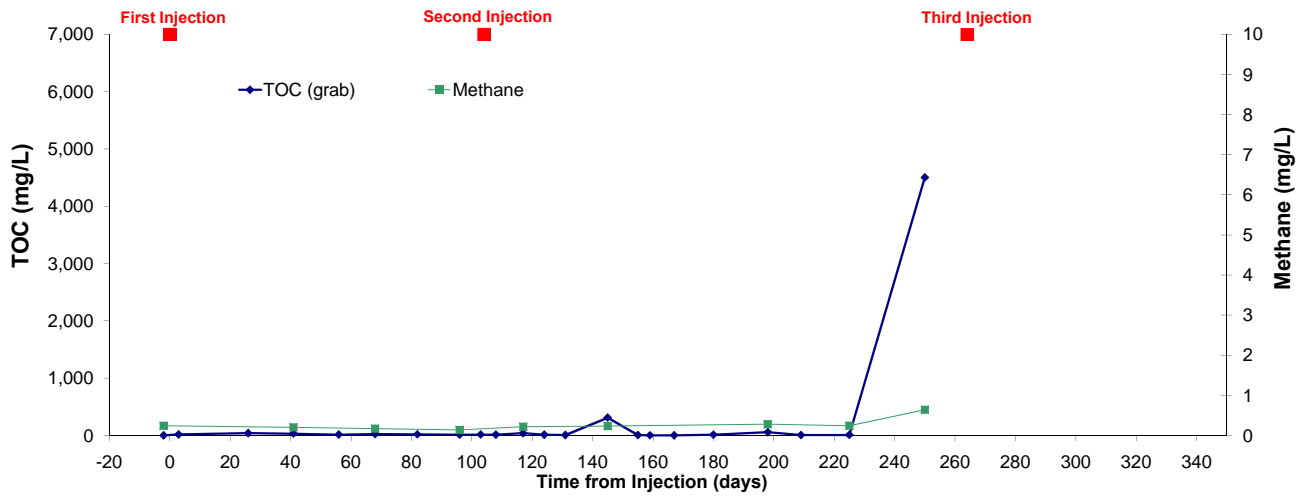
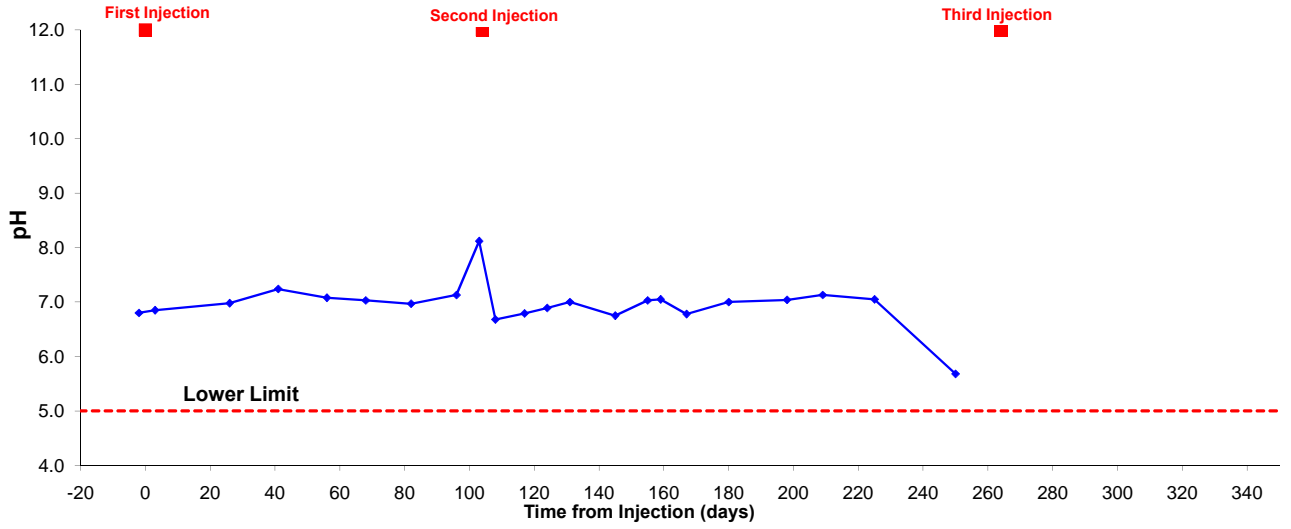


Figure 11: OW-7D Performance Monitoring Results

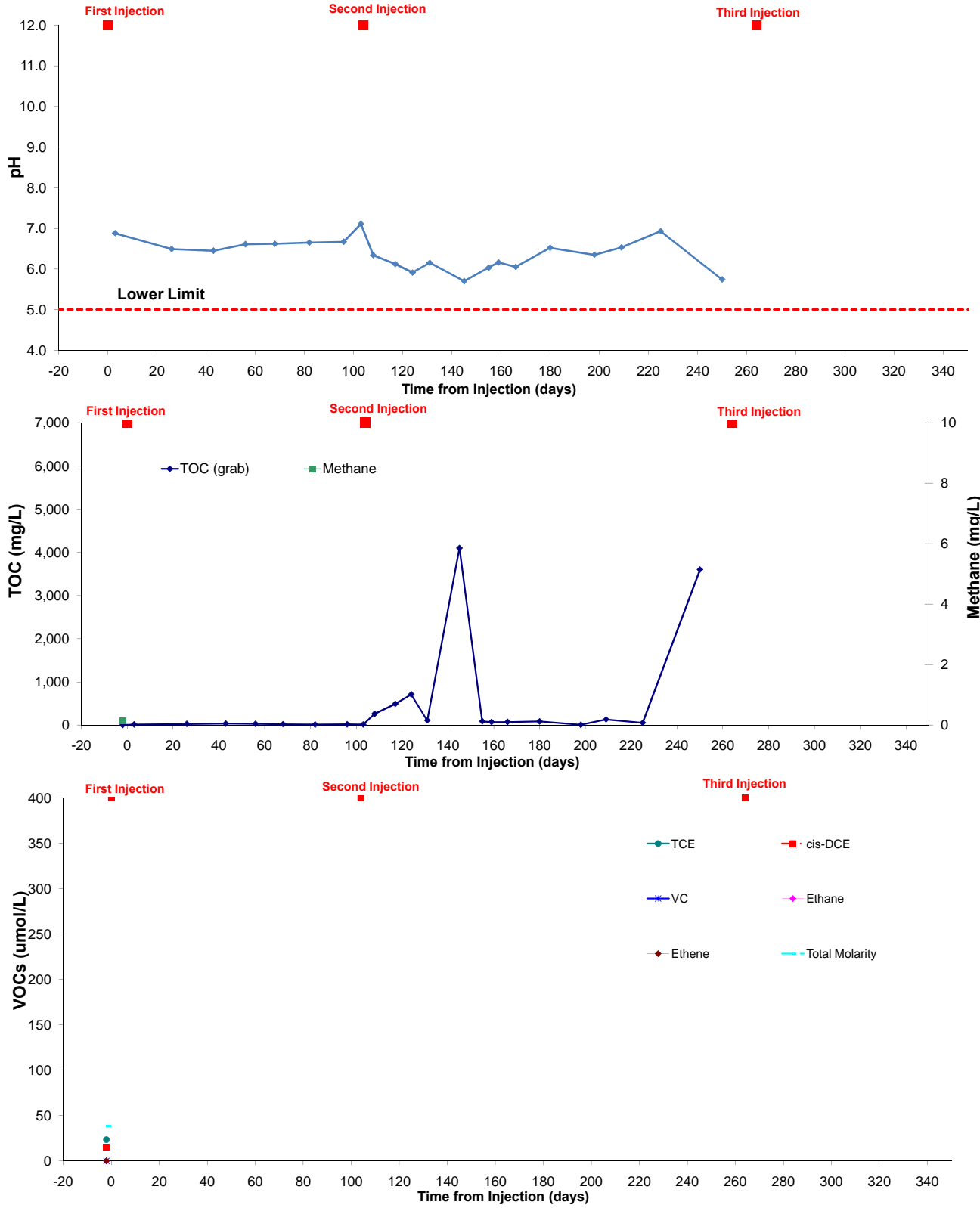
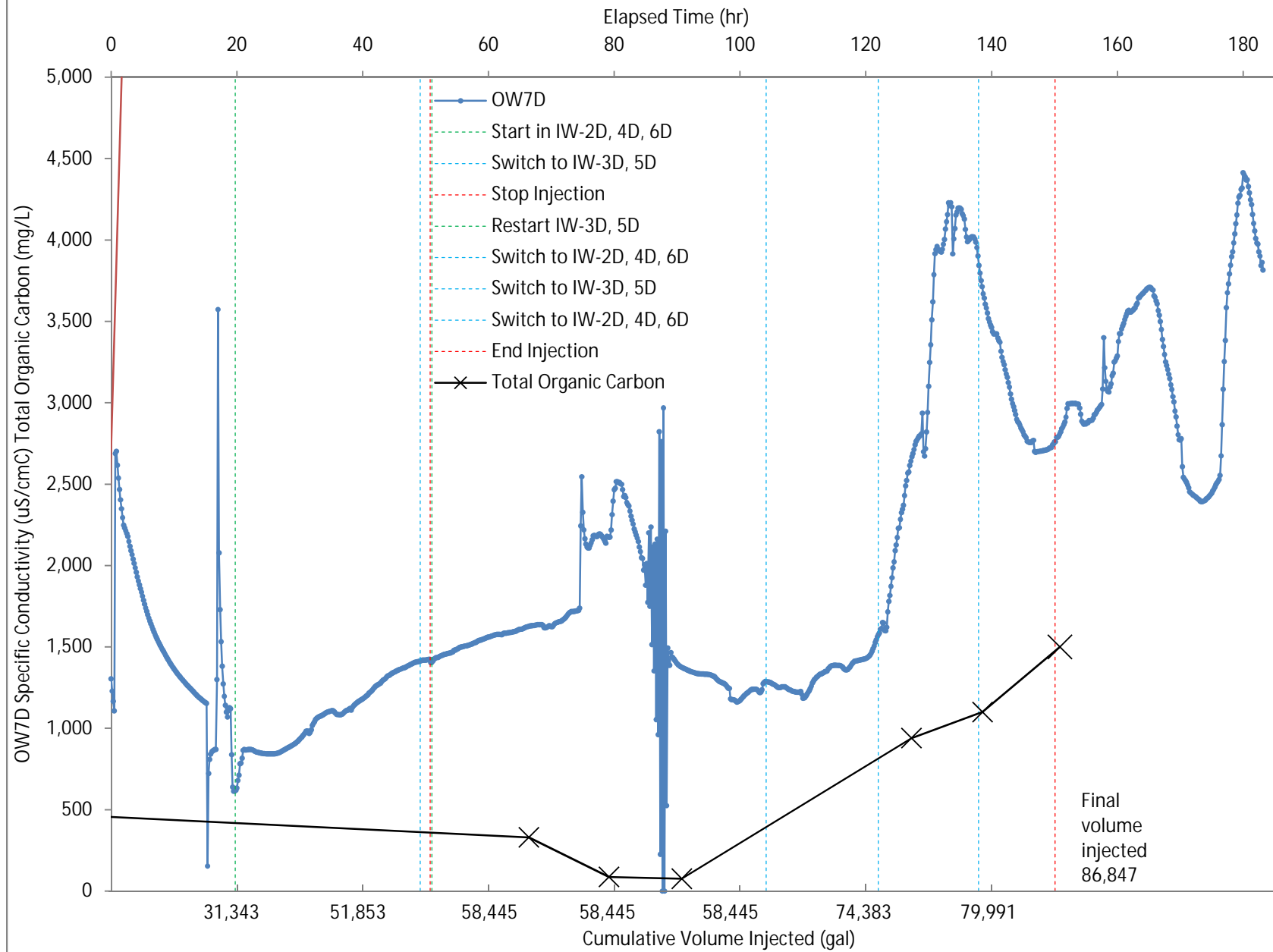


Figure 12: OW-7D Total Organic Carbon and Specific Conductivity Data



ARCADIS

Appendix A

Well Completion Logs

Date Start/Finish: June 4, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Hollow Stem Auger Cuttings

Northing: 677619.91
Easting: 2636576.76
Casing Elevation: 19.45

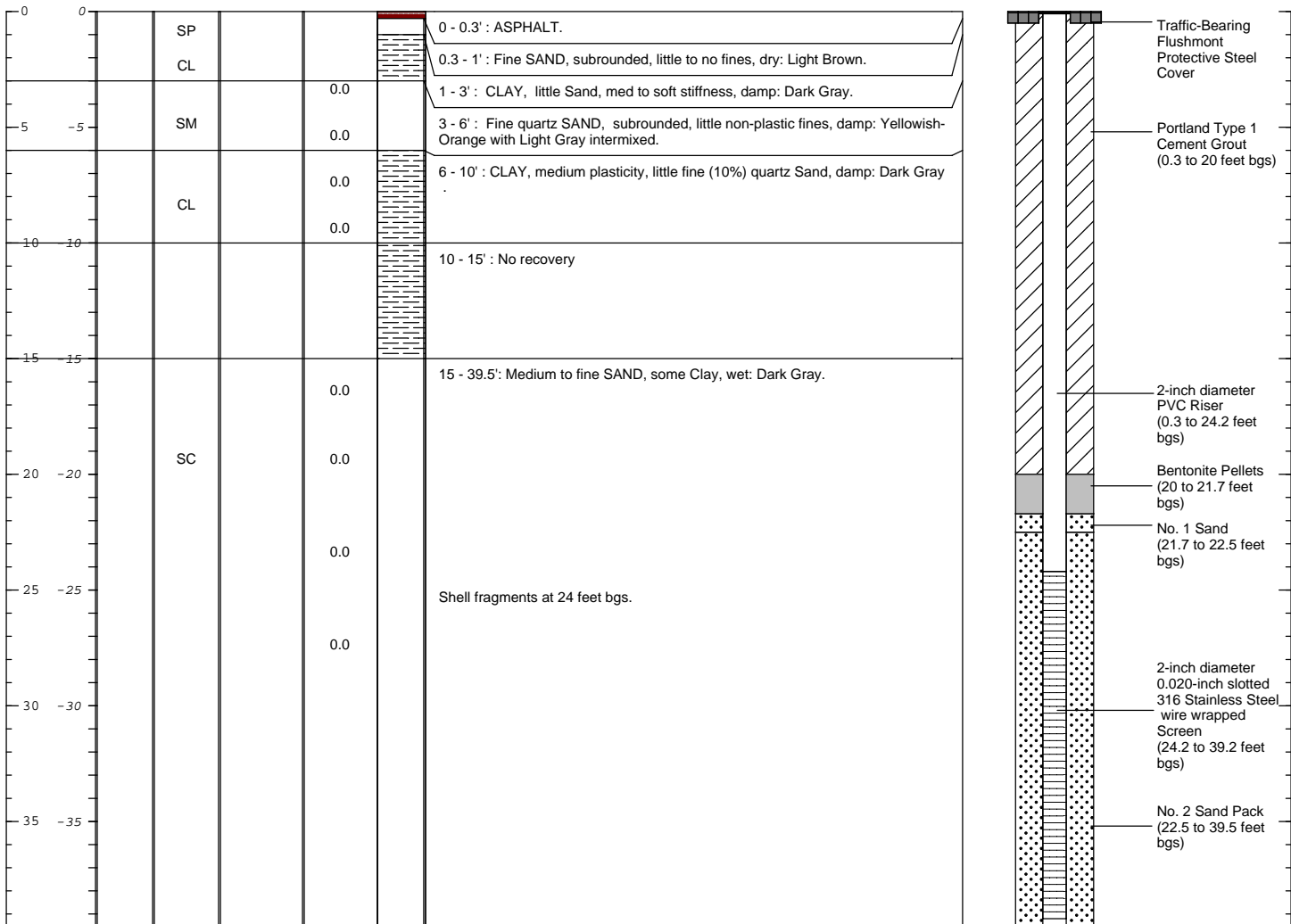
Borehole Depth: 39.5 feet bgs
Surface Elevation: 19.65

Descriptions By: Thomas Darby

Well/Boring ID: IW2D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings. The drilling location was near power lines which prevented safe use of the derrick necessary to collect macrocore samples from the screened interval depth.
 bgs - below ground surface
 NA - not available or not applicable

Date Start/Finish: June 4, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Cuttings and DP Macrocores

Northing: 677574.61
Easting: 2636598.47
Casing Elevation: 19.65

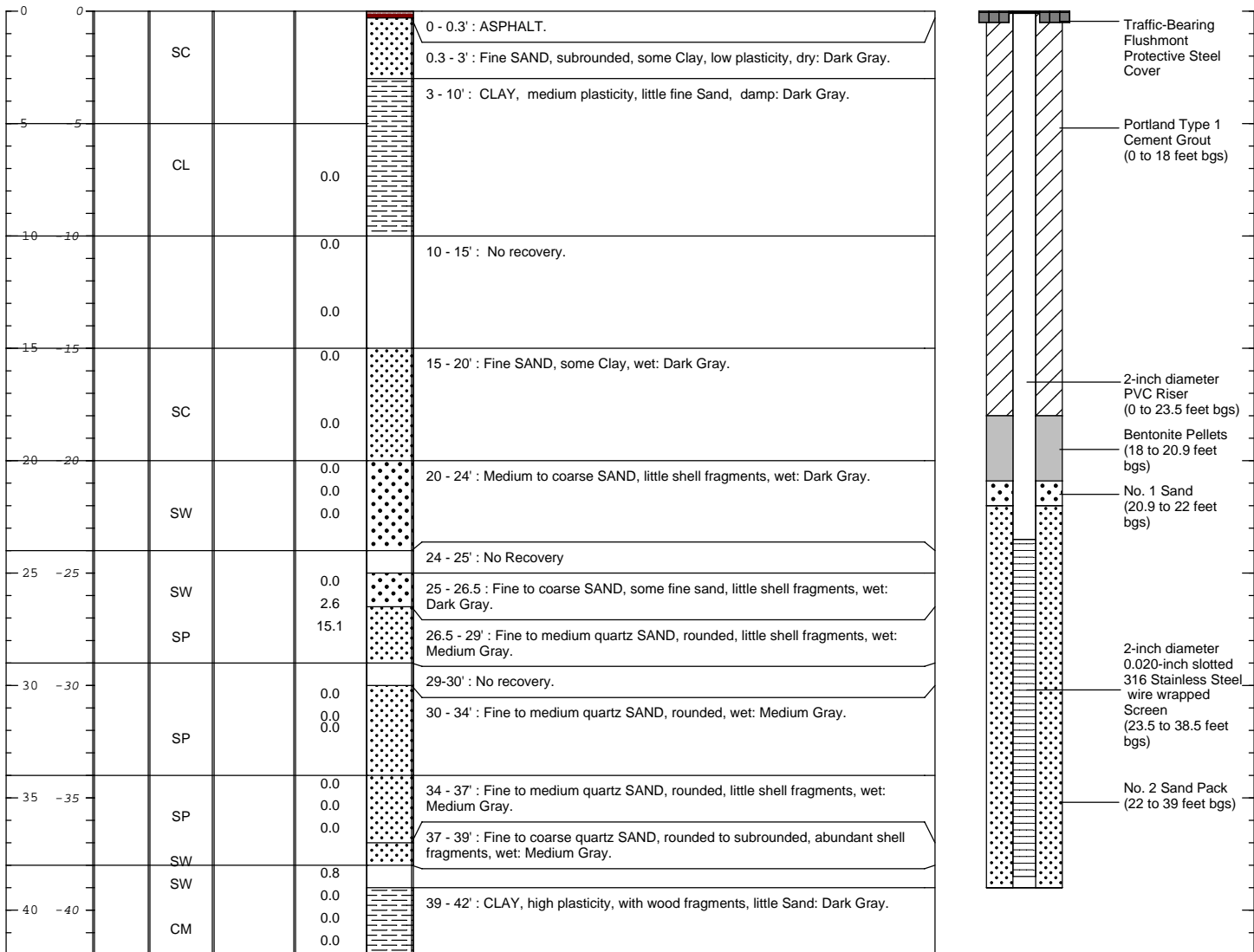
Borehole Depth: 42 feet bgs
Surface Elevation: 19.90

Descriptions By: Thomas Darby

Well/Boring ID: IW3D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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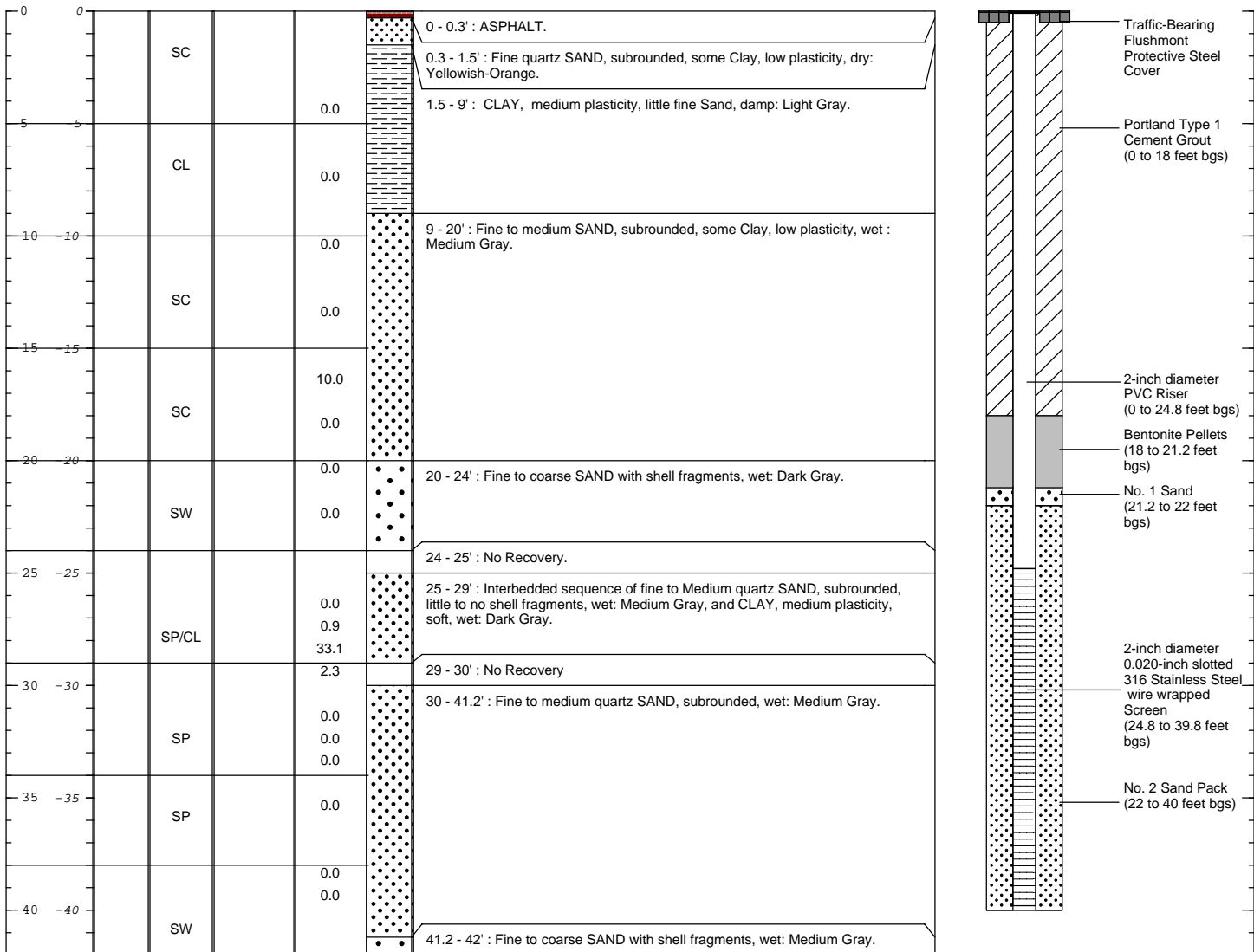
Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable

Date Start/Finish: June 4 to 5, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Cuttings and DP Macrocores

Northing: 677536.35
Easting: 2636631.82
Casing Elevation: 19.90
Borehole Depth: 42 feet bgs
Surface Elevation: 20.20
Descriptions By: Thomas Darby

Well/Boring ID: IW4D
Client: AVX Corporation
Location: Myrtle Beach, South Carolina

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable

Date Start/Finish: June 3, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Cuttings and DP Macrocores

Northing: 677498.47
Easting: 2636664.53
Casing Elevation: 20.19

Borehole Depth: 42 feet bgs
Surface Elevation: 20.54

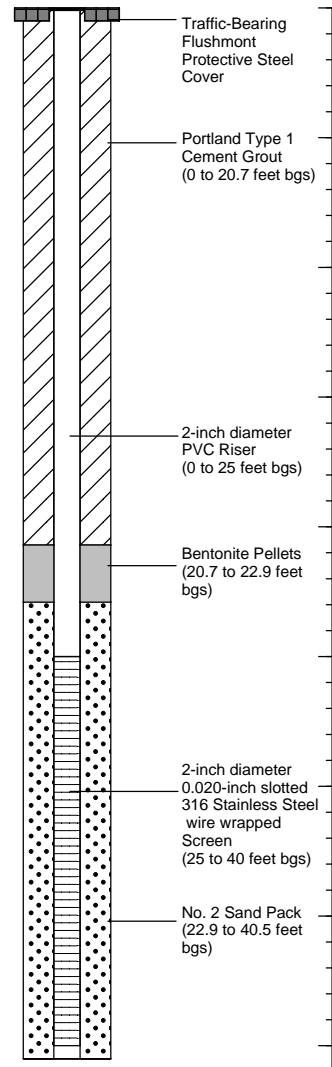
Descriptions By: Thomas Darby

Well/Boring ID: IW5D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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0	0		SC				0 - 0.3' : ASPHALT.
							0.3 - 3' : Clayey fine (60%) quartz SAND, subrounded dry: Medium Brown.
			CL				3 - 6' : CLAY, little fine (20%) quartz Sand, medium plasticity, damp: Light Gray.
5	5				0.0		
			CL				6 - 8' : CLAY, low to medium plasticity, some fine Sand, subrounded, damp: Medium Gray.
					0.0		8 - 12' : Fine SAND with little non-plastic fines, subrounded, damp at 8', wet at 9': Yellowish-Orange.
10	10		SM				
					0.0		12 - 20' : Fine SAND, subrounded, little Silt and Clay, wet: Medium Gray.
15	15				0.0		
			SM/SC				
					0.0		
20	20				0.0		20 - 21.5' : CLAY, medium plasticity, little fine Sand, wet: Medium Gray.
			CL		0.0		
					0.0		21.5 - 24' : Fine to coarse quartz SAND with shell fragments, subangular to subrounded, wet: Dark Gray.
			SW		0.0		
					0.0		24 - 25' : No Recovery
25	25				0.0		25 - 26.5' : Fine to medium SAND, little to no fines, wet: Light Gray.
			SP		0.8		
					2.1		26.5 - 28.7' : Fine to coarse quartz SAND with shell fragments, subangular to subrounded, wet: Dark Gray.
			SW				
					15.9		28.7 - 29' : CLAY, medium plasticity, some fine quartz Sand, wet: Dark Gray.
30	30				0.0		
			SP				29 - 30' : No Recovery.
			CH		0.4		
					0.0		30 - 31.2' : Fine to medium quartz SAND, subrounded, wet: Medium Gray.
			SP		0.0		
					0.0		31.2 - 31.6' : CLAY, medium to high plasticity, little fine Sand, soft, wet: Dark Gray.
35	35		SW				
					0.0		31.6 - 34.6' : Fine to coarse quartz SAND, subrounded, little shell fragments.
			SP		0.0		
					0.0		34.6 - 38' : Fine to medium quartz SAND, subrounded, wet: Medium Gray.
40	40				0.0		
			SP		0.0		38 - 40.5' : Fine to coarse quartz SAND, subrounded, wet: Medium Gray.
					0.0		
			CH		0.0		40.5 - 42' : CLAY, medium to high plasticity, soft, little to no Sand, wet: Dark Gray.



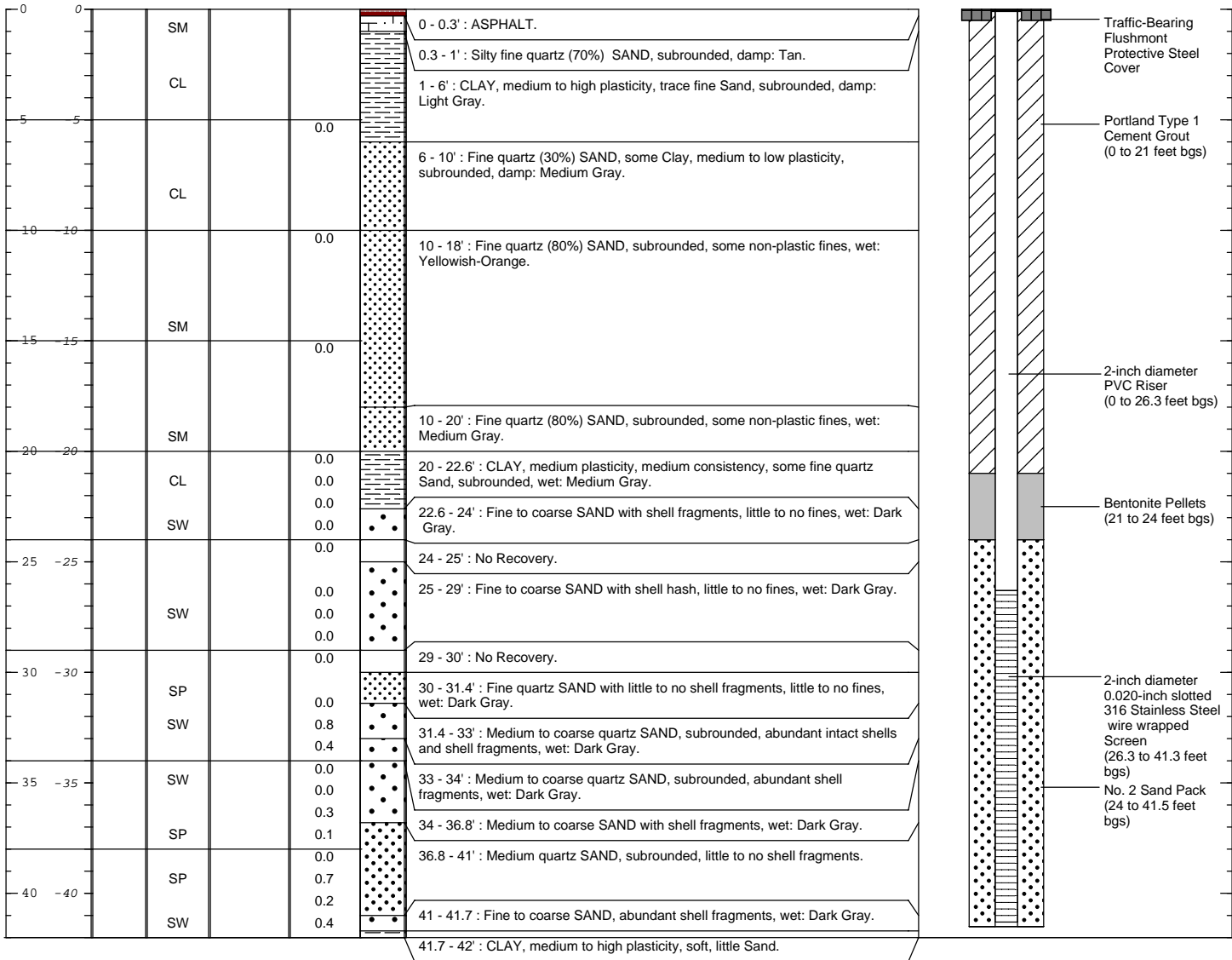
Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable

Date Start/Finish: June 3, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Cuttings and DP Macrocores

Northing: 677461.13
Easting: 2636697.42
Casing Elevation: 19.60
Borehole Depth: 42 feet bgs
Surface Elevation: 20.25
Descriptions By: Thomas Darby

Well/Boring ID: IW6D
Client: AVX Corporation
Location: Myrtle Beach, South Carolina

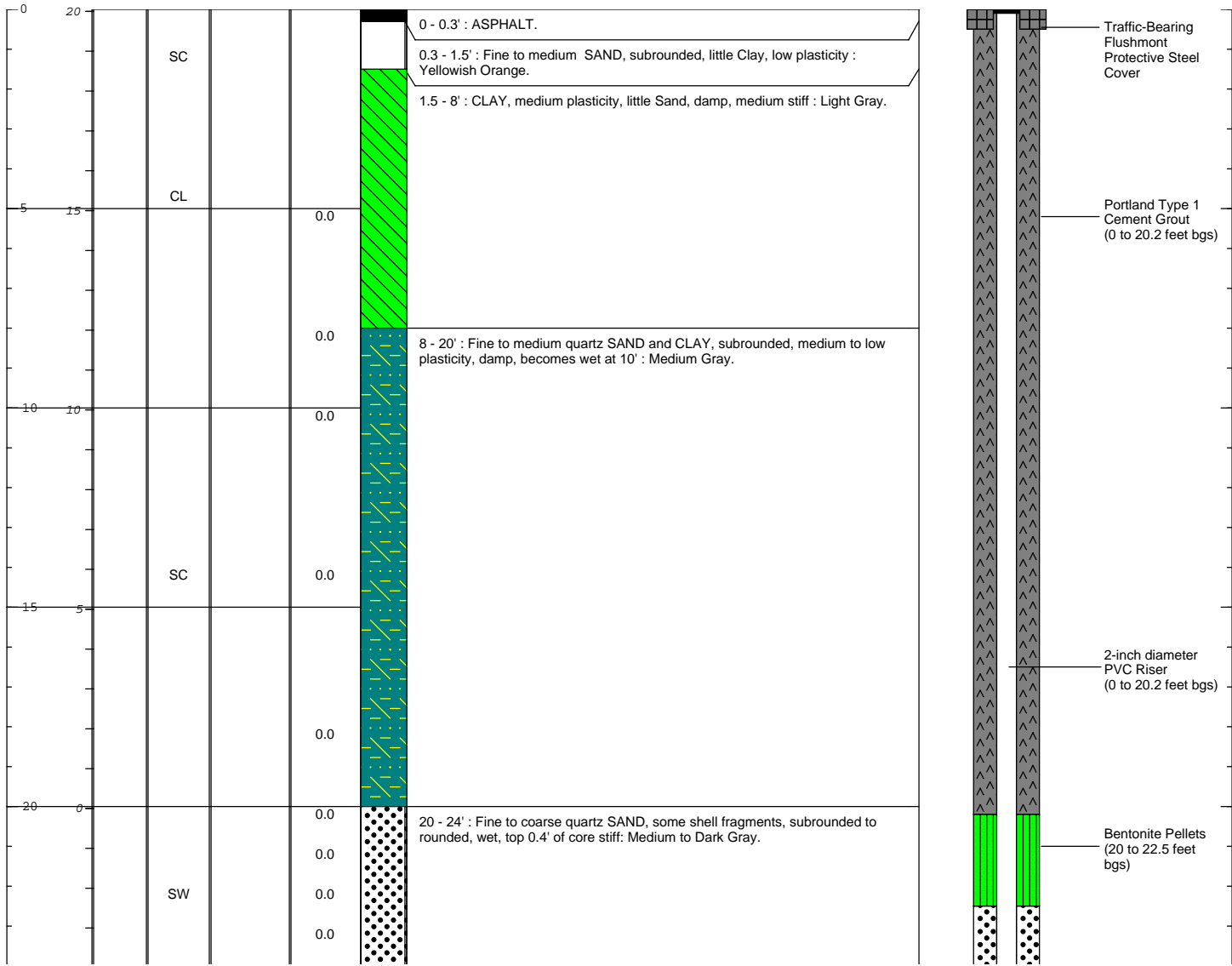
DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable

Date Start/Finish: June 8, 2009 Drilling Company: Parratt-Wolff, Inc. Driller's Name: Louis LeFever Drilling Method: Hollow-Stem Augers Auger/Tube Size: Rig Type: Ingersol Rand Sampling Method: Cuttings and DP Macrocores	Northing: 677555.35 Easting: 2636615.08 Casing Elevation: 19.71 ft amsl Borehole Depth: 42 feet bgs Surface Elevation: 20.05 ft amsl Descriptions By: Thomas Darby	Well/Boring ID: OW7D Client: AVX Corporation Location: Myrtle Beach, South Carolina
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DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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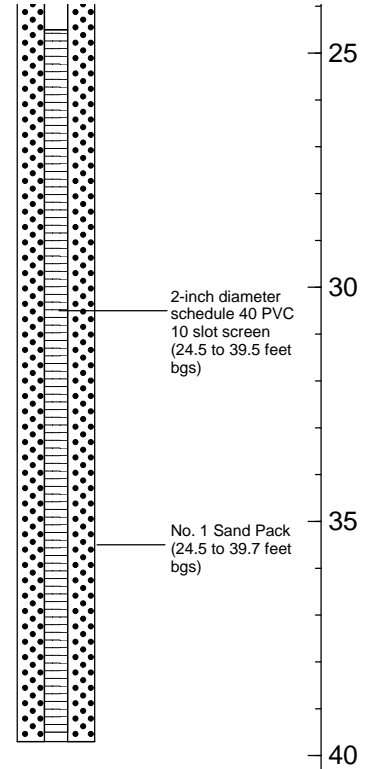



Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable
 amsl - above mean sea level

Date Start/Finish: June 8, 2009	Northing: 677555.35	Well/Boring ID: OW7D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636615.08	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.71 ft amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 42 feet bgs	
Auger/Tube Size:	Surface Elevation: 20.05 ft amsl	
Rig Type: Ingersol Rand	Descriptions By: Thomas Darby	
Sampling Method: Cuttings and DP Macrocores		

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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25	-5		CH	6.7		24 - 25' : No Recovery.		
			SP			25 - 26' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet : Medium Gray.		
					45	26 - 26.2' : CLAY, trace Sand, high plasticity, wet, soft : Dark Gray.		
					11.8	26.2 - 29' : Fine to medium SAND, little to no shell fragments, interbedded with, fine to coarse SAND, some shell fragments, wet : Medium Gray.		
30	-10		SW/SP	7.5		29 - 30' : No Recovery.		
				0.0	30 - 34' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet : Light to Medium Gray.			
			SP	0.0				
35	-15		SP	0.0		34 - 37' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet : Light to Medium Gray.		
				2.4				
			SP/SW	0.8	37 - 38' : Fine to coarse SAND, some shell fragments, wet : Medium Gray.			
40	-20			0.0		38 - 42' : No Recovery.		



	Remarks:
	<p>Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.</p> <p>bgs - below ground surface NA - not available or not applicable amsl - above mean sea level</p>

Date Start/Finish: June 9, 2009
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size:
Rig Type: Ingersol Rand
Sampling Method: Cuttings and DP Macrocores

Northing: 677527.23
Easting: 2636581.63
Casing Elevation: 19.66 ft amsl

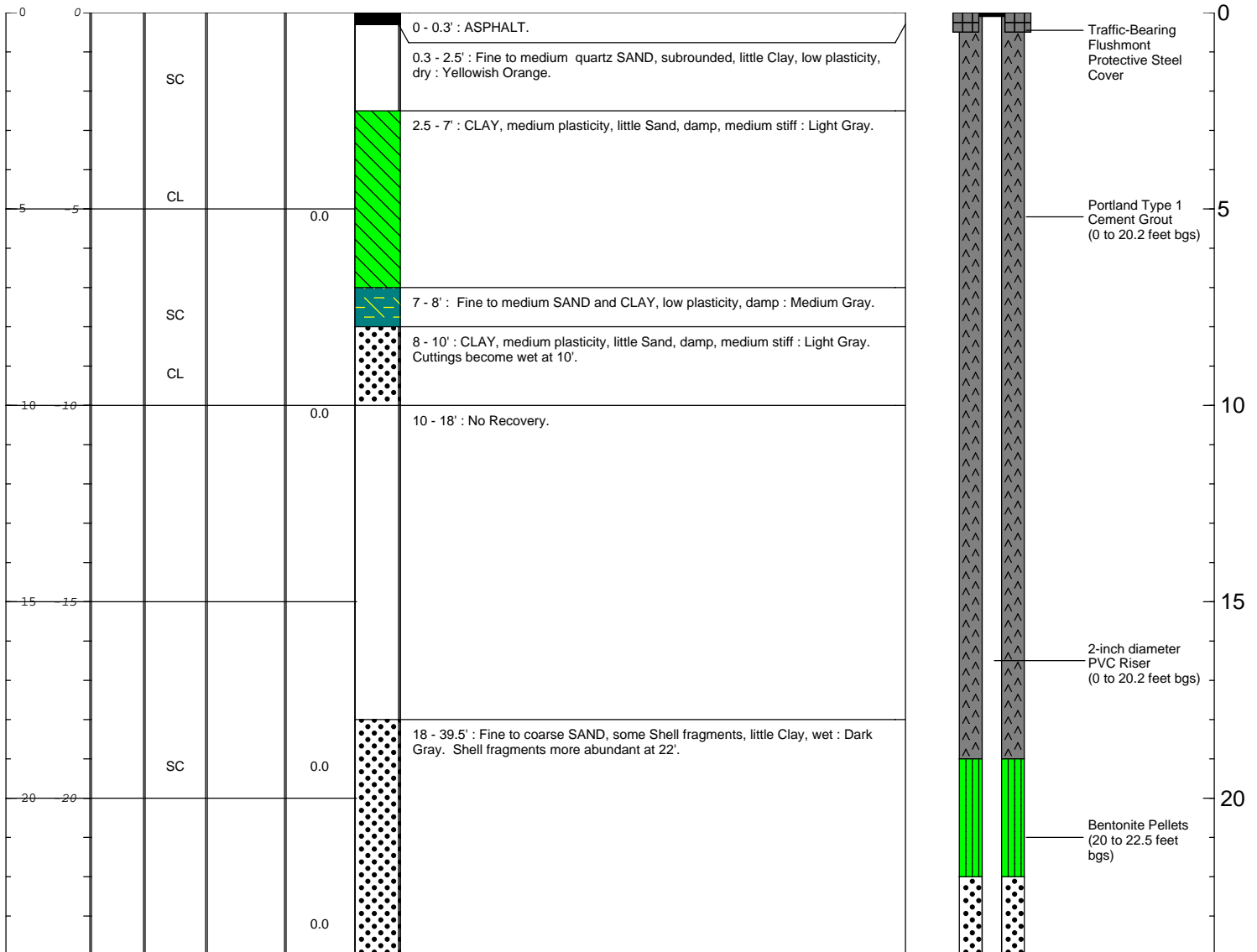
Borehole Depth: 39.5 feet bgs
Surface Elevation: 19.95 ft amsl

Descriptions By: Thomas Darby

Well/Boring ID: OW8D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

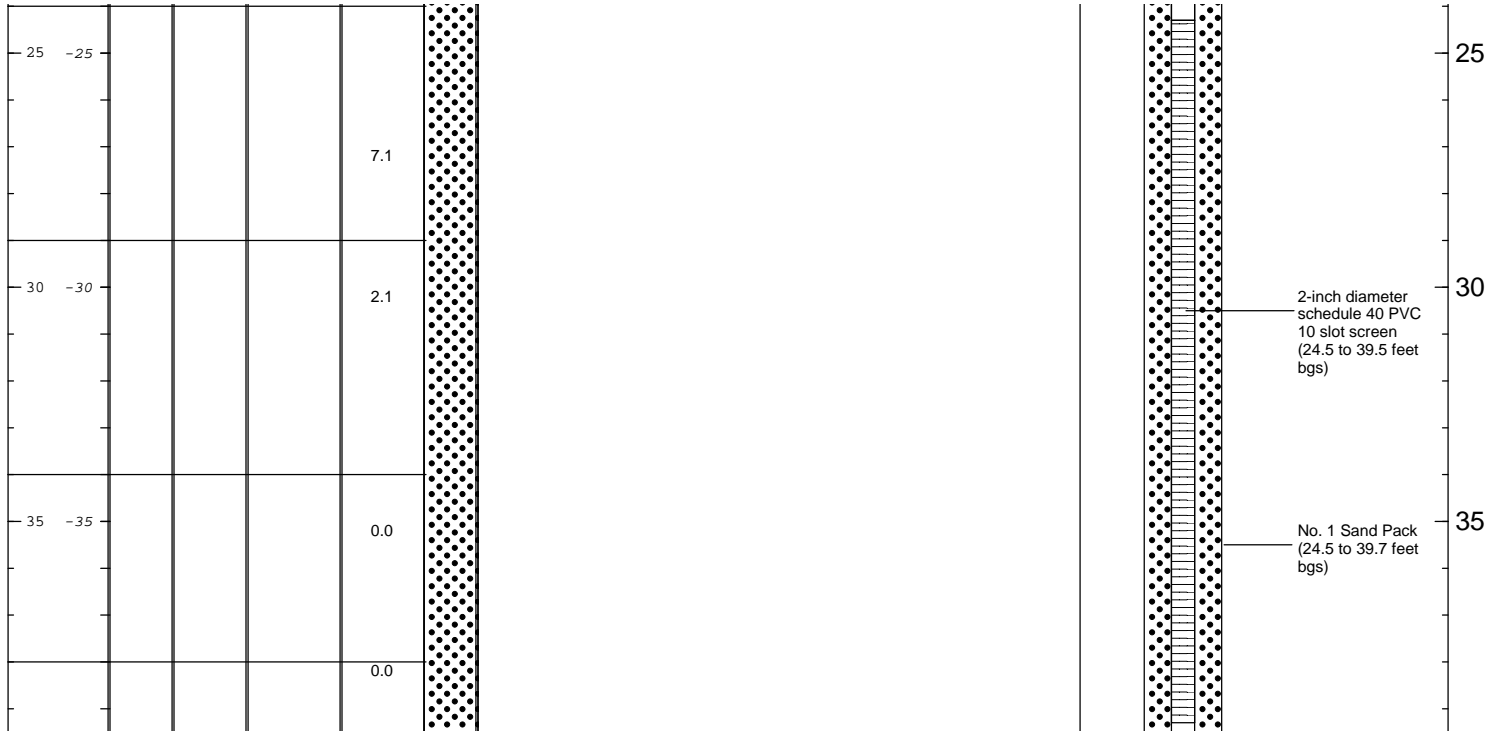
DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring.
 bgs - below ground surface
 NA - not available or not applicable
 amsl - above mean sea level

Date Start/Finish: June 9, 2009 Drilling Company: Parratt-Wolff, Inc. Driller's Name: Louis LeFever Drilling Method: Hollow-Stem Augers Auger/Tube Size: Rig Type: Ingersol Rand Sampling Method: Cuttings and DP Macrocores	Northing: 677527.23 Easting: 2636581.63 Casing Elevation: 19.66 ft amsl Borehole Depth: 39.5 feet bgs Surface Elevation: 19.95 ft amsl Descriptions By: Thomas Darby	Well/Boring ID: OW8D Client: AVX Corporation Location: Myrtle Beach, South Carolina
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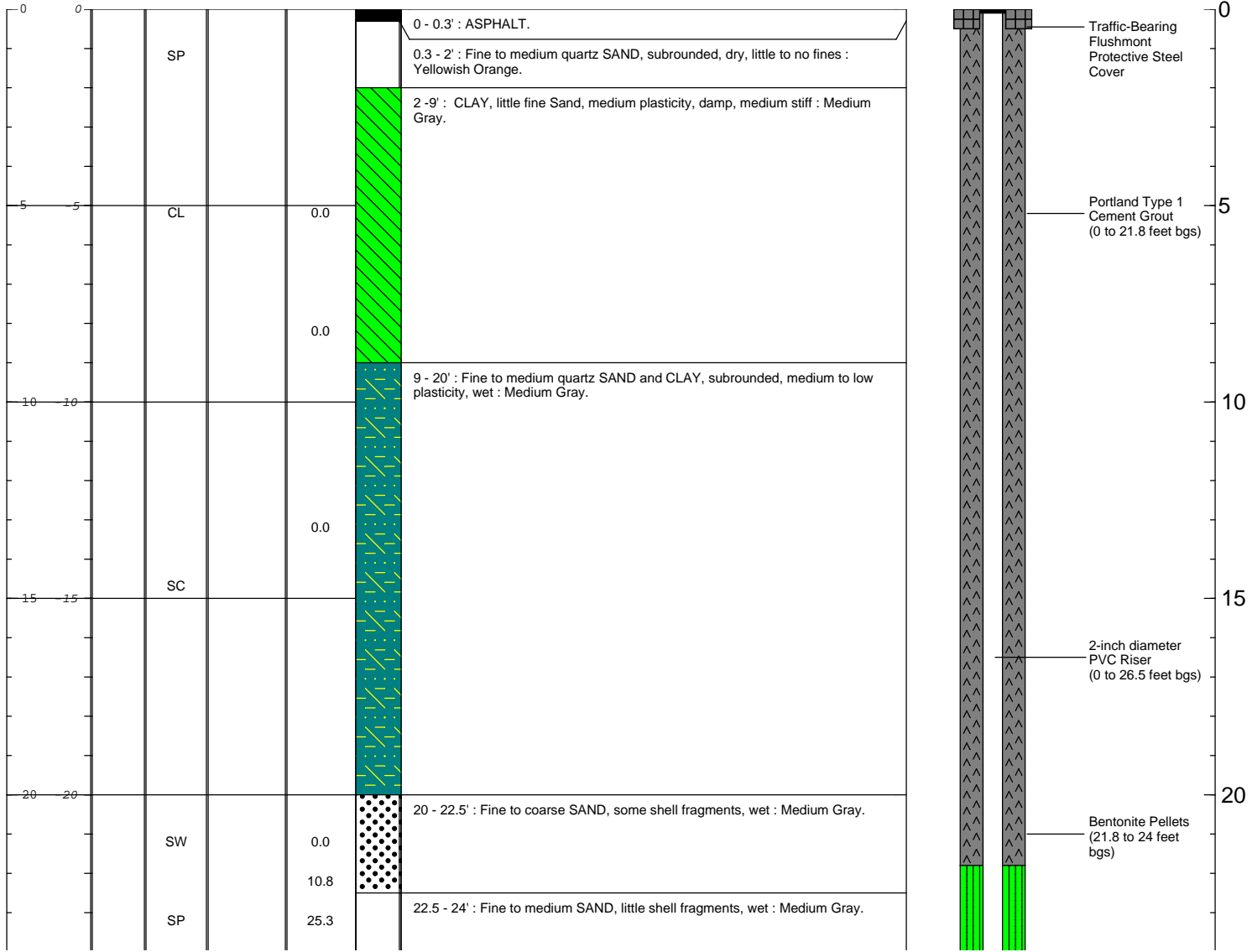
DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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	Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring. bgs - below ground surface NA - not available or not applicable amsl - above mean sea level
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Date Start/Finish: June 9, 2009 Drilling Company: Parratt-Wolff, Inc. Driller's Name: Louis LeFever Drilling Method: Hollow-Stem Augers Auger/Tube Size: Rig Type: Ingersol Rand Sampling Method: Cuttings and DP Macrocores	Northing: 677486.65 Easting: 2636608.19 Casing Elevation: 20.03 ft amsl Borehole Depth: 41.7 feet bgs Surface Elevation: 20.26 ft amsl Descriptions By: Thomas Darby	Well/Boring ID: OW9D Client: AVX Corporation Location: Myrtle Beach, South Carolina
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DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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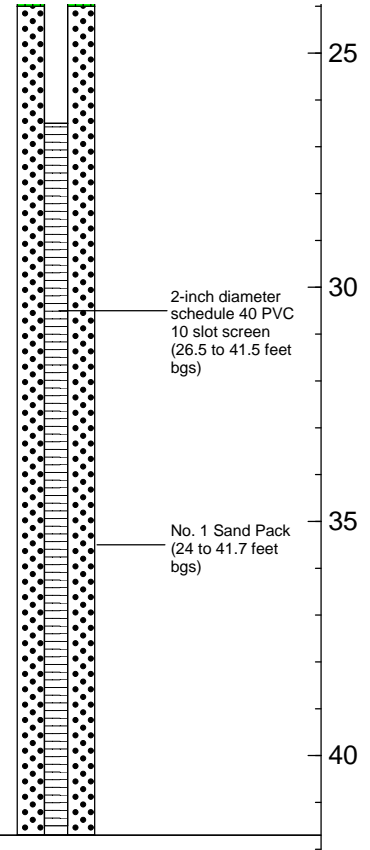



 <i>Infrastructure, environment, facilities</i>	Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring. bgs - below ground surface NA - not available or not applicable amsl - above mean sea level
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Date Start/Finish: June 9, 2009	Northing: 677486.65	Well/Boring ID: OW9D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636608.19	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 20.03 ft amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 41.7 feet bgs	
Auger/Tube Size:	Surface Elevation: 20.26 ft amsl	
Rig Type: Ingersol Rand	Descriptions By: Thomas Darby	
Sampling Method: Cuttings and DP Macrocores		

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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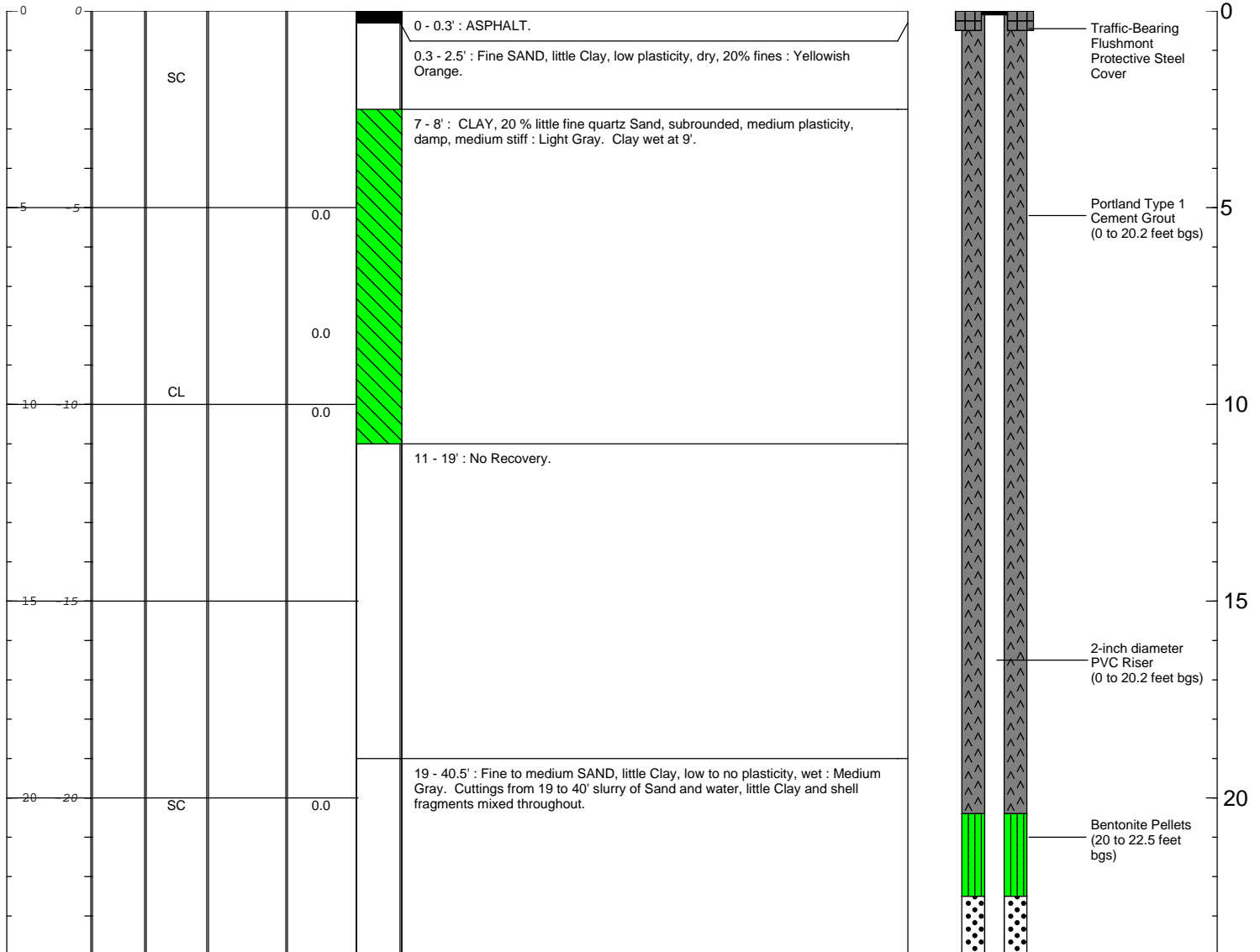
25	-25		SP CH	51.7 23.1 45.1 20.1		24 - 25' : No Recovery.	
						25 - 29' : Fine to medium SAND, little shell fragments, wet : Medium Gray.	
30	-30		SP	0.0 0.0 0.0 0.0		29 - 30' : No Recovery.	
						30 - 34' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet, top 0.4' stiff : Medium Gray.	
						34 - 38' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet, top 0.4' stiff : Medium Gray.	
						38 - 40' : Fine to medium quartz SAND, subrounded, little to no shell fragments, wet, top 0.4' stiff : Medium Gray.	
40	40		SW CH	0.0 0.9		40 - 41.5' : Fine to coarse SAND, some shell fragments. Fragments increase with depth.	
						41.5 - 42' : CLAY, high plasticity, wet, medium stiff : Dark Gray	



	<p>Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring. bgs - below ground surface NA - not available or not applicable amsl - above mean sea level</p>
--	--

Date Start/Finish: June 10, 2009	Northing: 677486.24	Well/Boring ID: OW10D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636564.91	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.69 ft amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 40.5 feet bgs	
Auger/Tube Size:	Surface Elevation: 20.00 ft amsl	
Rig Type: Ingersol Rand	Descriptions By: Thomas Darby	
Sampling Method: Cuttings and DP Macrocores		

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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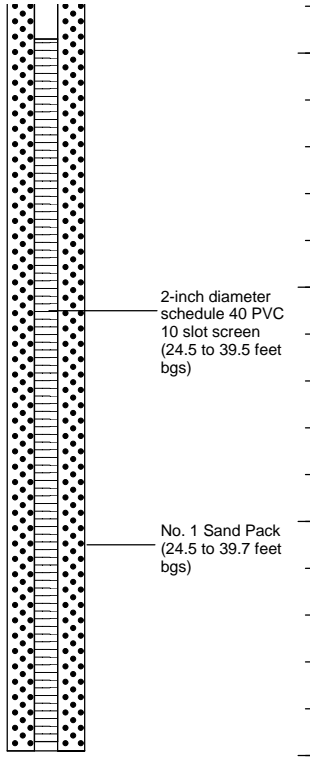


	Remarks:
	Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring. bgs - below ground surface NA - not available or not applicable amsl - above mean sea level


Date Start/Finish: June 10, 2009	Northing: 677486.24	Well/Boring ID: OW10D
Drilling Company: Parratt-Wolff, Inc.	Eastings: 2636564.91	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.69 ft amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 40.5 feet bgs	
Auger/Tube Size:	Surface Elevation: 20.00 ft amsl	
Rig Type: Ingersol Rand	Descriptions By: Thomas Darby	
Sampling Method: Cuttings and DP Macrocores		

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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25	-25				3.2			
					2.1			
30	-30				1.7			
35	-35				0.0			
					0.0			
40	-40							



The diagram shows a vertical cross-section of the well/boring. It features a central PVC screen section from 24.5 to 39.5 feet bgs, labeled as '2-inch diameter schedule 40 PVC 10 slot screen (24.5 to 39.5 feet bgs)'. Below this screen is a section labeled 'No. 1 Sand Pack (24.5 to 39.7 feet bgs)'. The depth scale on the right ranges from 25 to 40 feet bgs.

 <p>ARCADIS Infrastructure, environment, facilities</p>	<p>Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings from 0-20 feet bgs and on logging of 4-foot long, 2-inch diameter macrocore samples from 20 feet bgs to the bottom of the boring. bgs - below ground surface NA - not available or not applicable amsl - above mean sea level</p>
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Date Start/Finish: September 22, 2008
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size: 4.25-inches
Rig Type: Ingersol Rand
Sampling Method: Direct-Push Technology

Northing: 677408.539
Easting: 2636710.594
Casing Elevation: 19.65 feet amsl

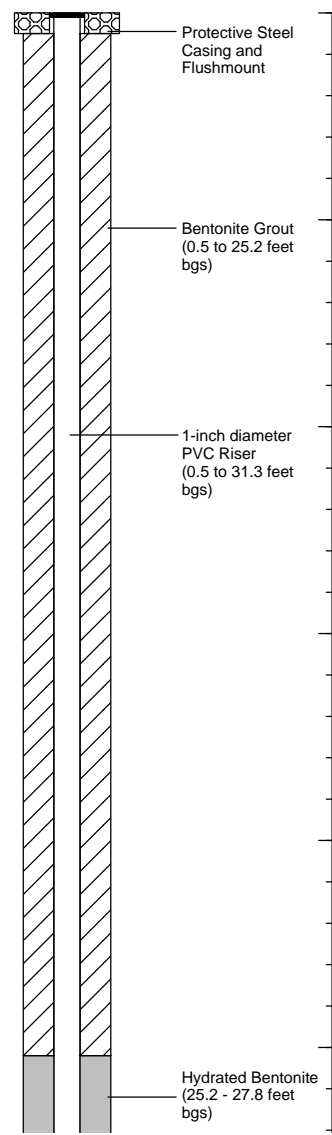
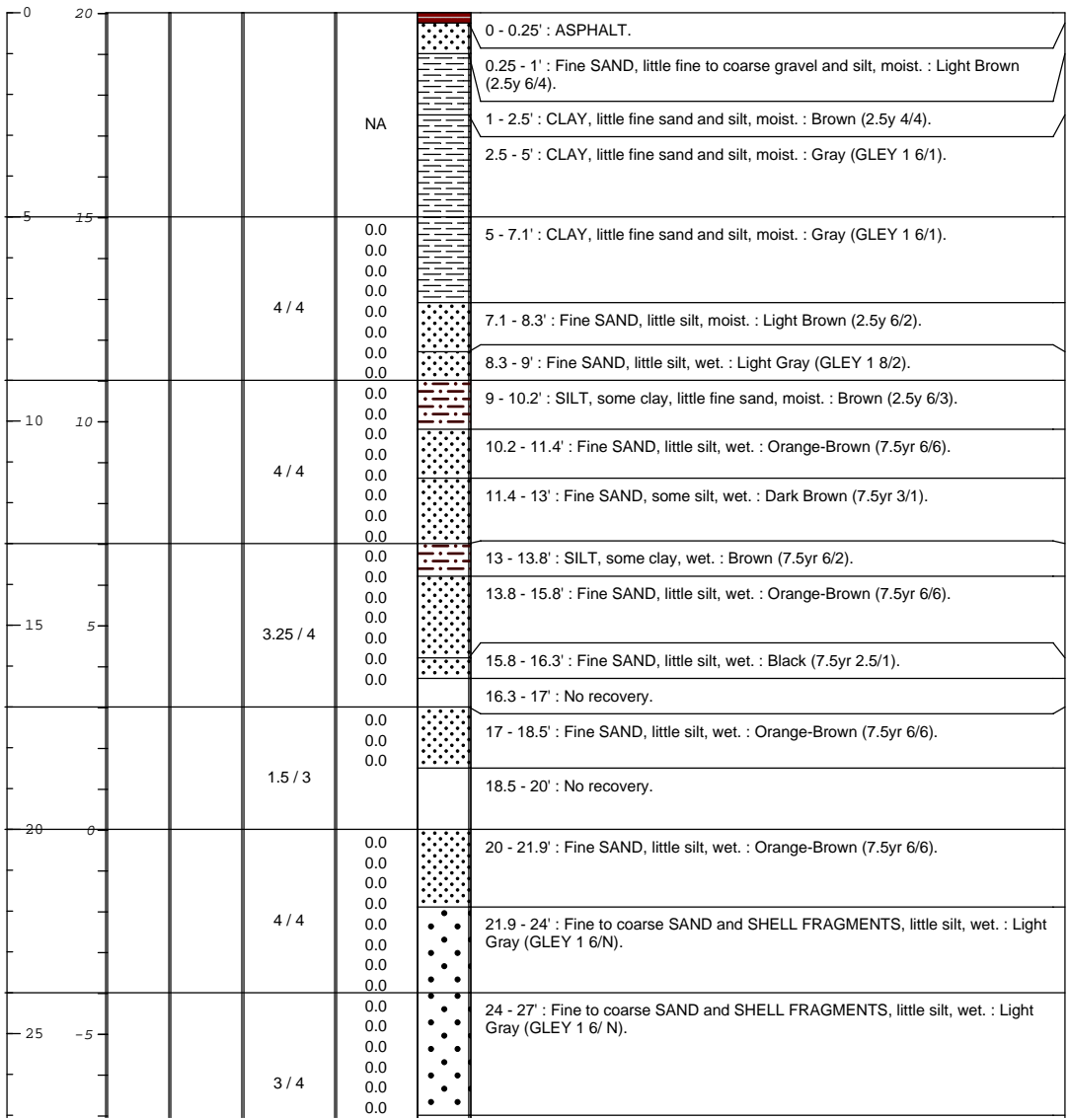
Borehole Depth: 51 feet bgs
Surface Elevation: 20.02 feet amsl

Descriptions By: David M. Mack

Well/Boring ID: P-1D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 All samples collected via direct-push technologies using a 2-inch diameter, 4-foot long macrocore sampler.
 bgs - below ground surface
 amsl - above mean sea level
 NA - not available or not applicable

Date Start/Finish: September 22, 2008	Northing: 677408.539	Well/Boring ID: P-1D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636710.594	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.65 feet amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 51 feet bgs	
Auger/Tube Size: 4.25-inches	Surface Elevation: 20.02 feet amsl	
Rig Type: Ingersol Rand	Descriptions By: David M. Mack	
Sampling Method: Direct-Push Technology		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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					0.0		27 - 28' : No recovery.	
30	-10			2 / 4	0.0 0.0 0.0 0.0		28 - 30' : Fine to coarse SAND and SHELL FRAGMENTS, little silt, wet. : Light Gray (GLEY 1 6/N).	
							30 - 32' : No recovery.	
				3 / 3	0.0 0.0 0.0 0.0		32 - 35' : Fine to coarse SAND and SHELL FRAGMENTS, little silt, wet. : Light Gray (GLEY 1 6/N).	
35	-15			4 / 4	0.0 0.0 0.0 0.0 0.0 0.0		35 - 39' : Fine to medium SAND, some coarse sand and shell fragments, little silt, wet. : Light Gray (GLEY 1 6/N).	
40	-20			4 / 4	0.0 0.0 0.0 0.0 0.0 0.0		39 - 40.25' : Fine to medium SAND, some coarse sand and shell fragments, little silt, wet. : Light Gray (GLEY 1 6/N).	
							40.25 - 43' : CLAY, some silt, trace fine sand, wet. : Dark Gray (GLEY 1 4/N).	
45	-25			3.25 / 4	0.0 0.0 0.0 0.0 0.0 0.0		43 - 46.25' : CLAY, some silt, trace fine sand, wet. : Dark Gray (GLEY 1 4/N).	
							46.25 - 47' : No recovery.	
50	-30			4 / 4	0.0 0.0 0.0 0.0 0.0		47 - 51' : CLAY, some silt, trace fine sand, wet. : Dark Gray (GLEY 1 4/N).	

1-inch diameter PVC Riser (0.5 to 40 feet bgs)

1-inch diameter 0.010-inch slotted PVC Screen (31.3 to 41.3 feet bgs)

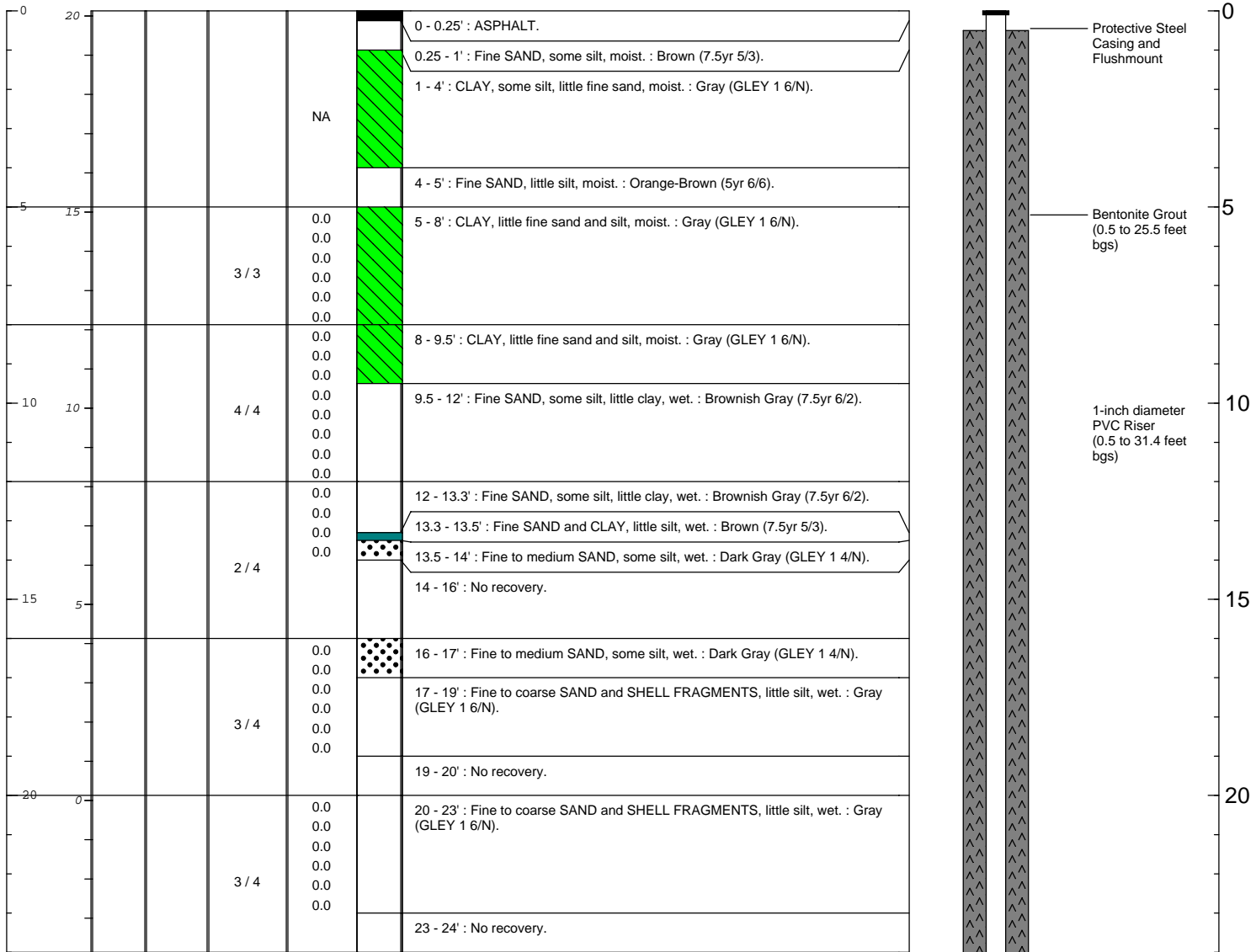
No. 1 Sand Pack (27.8 - 41.5 feet bgs)

Hydrated bentonite (41.5 - 51 feet bgs)

Remarks:
All samples collected via direct-push technologies using a 2-inch diameter, 4-foot long macrocore sampler.
bgs - below ground surface
amsl - above mean sea level
NA - not available or not applicable

Date Start/Finish: September 29 and 30, 2008	Northing: 677521.3547	Well/Boring ID: P-2D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636611.758	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.84 feet amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 46 feet bgs	
Auger/Tube Size: 4.25-inches	Surface Elevation: 20.13 feet amsl	
Rig Type: Ingersol Rand	Descriptions By: David M. Mack	
Sampling Method: Direct-Push Technology		

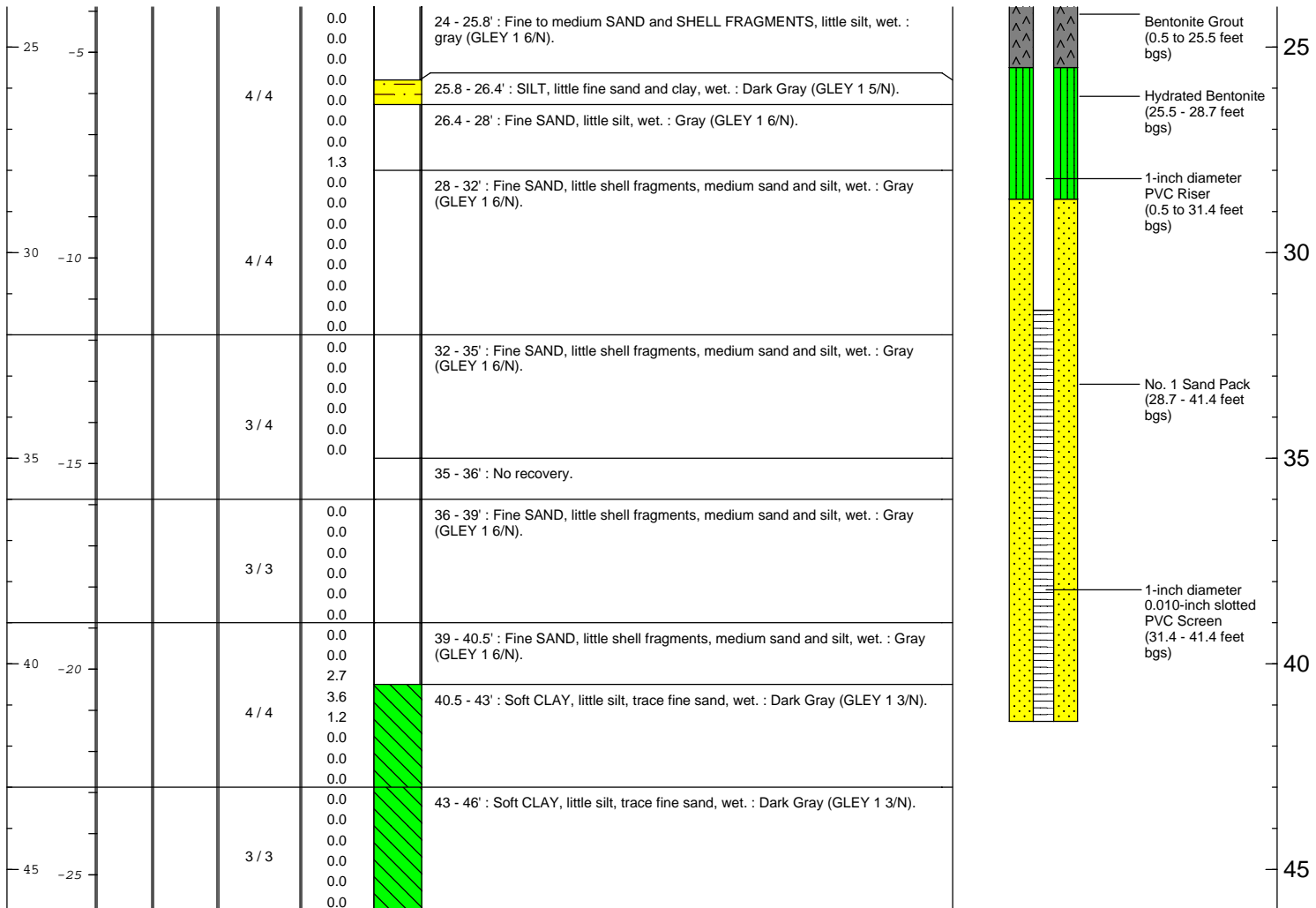
DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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	Remarks: All samples collected via direct-push technologies using a 2-inch diameter, 4-foot long macrocore sampler. bgs - below ground surface amsl - above mean sea level NA - not available or not applicable
--	--

Date Start/Finish: September 29 and 30, 2008	Northing: 677521.3547	Well/Boring ID: P-2D
Drilling Company: Parratt-Wolff, Inc.	Easting: 2636611.758	Client: AVX Corporation
Driller's Name: Louis LeFever	Casing Elevation: 19.84 feet amsl	Location: Myrtle Beach, South Carolina
Drilling Method: Hollow-Stem Augers	Borehole Depth: 46 feet bgs	
Auger/Tube Size: 4.25-inches	Surface Elevation: 20.13 feet amsl	
Rig Type: Ingersol Rand	Descriptions By: David M. Mack	
Sampling Method: Direct-Push Technology		

DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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	Remarks: All samples collected via direct-push technologies using a 2-inch diameter, 4-foot long macrocore sampler. bgs - below ground surface amsl - above mean sea level NA - not available or not applicable
--	--

Date Start/Finish: September 29, 2008
Drilling Company: Parratt-Wolff, Inc.
Driller's Name: Louis LeFever
Drilling Method: Hollow-Stem Augers
Auger/Tube Size: 2.25-inches
Rig Type: Ingersol Rand
Sampling Method: Direct-Push Technology

Northing: 677623.6569
Easting: 2636521.048
Casing Elevation: 18.95 feet amsl

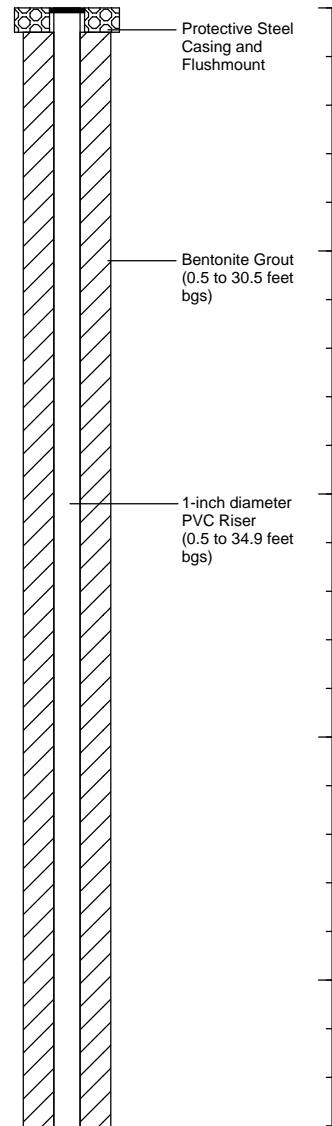
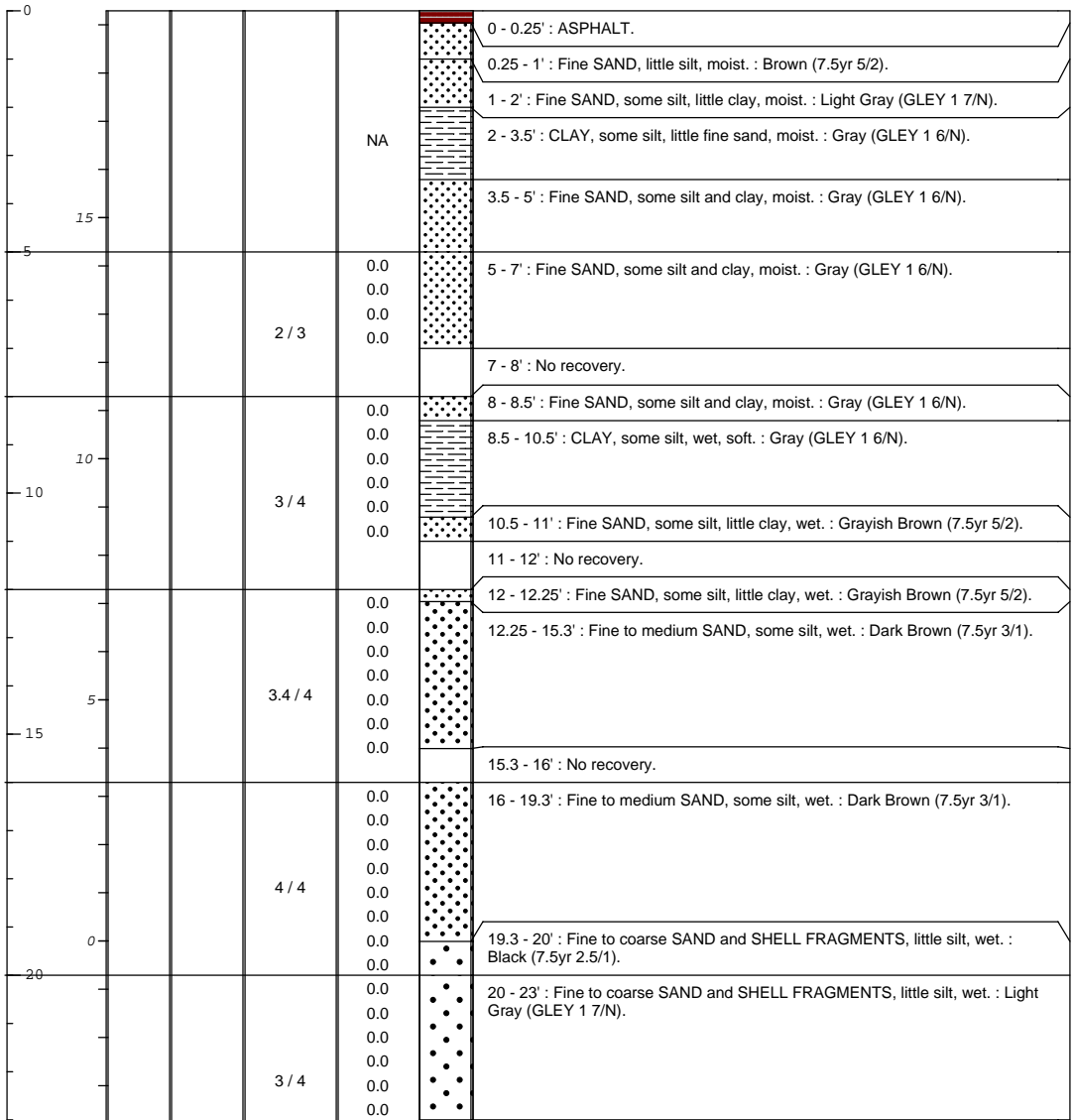
Borehole Depth: 45 feet bgs
Surface Elevation: 19.29 feet amsl

Descriptions By: David M. Mack

Well/Boring ID: P-3D
Client: AVX Corporation

Location: Myrtle Beach, South Carolina

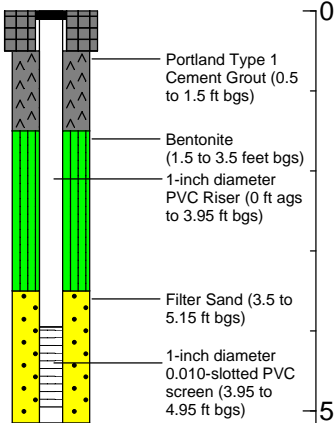
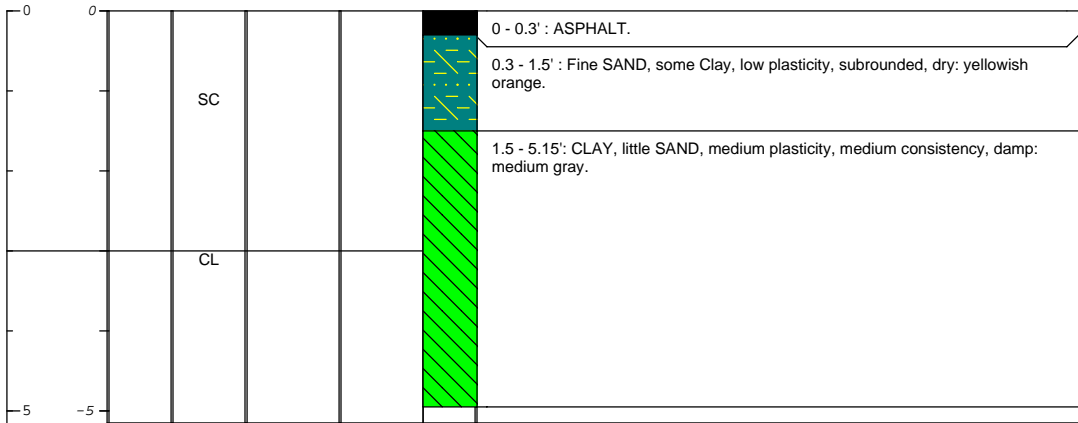
DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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Remarks:
 All samples collected via direct-push technologies using a 2-inch diameter, 4-foot long macrocore sampler.
 bgs - below ground surface
 amsl - above mean sea level
 NA - not available or not applicable

Date Start/Finish: June 5, 2009 Drilling Company: Parratt-Wolff, Inc. Driller's Name: Louis LeFever Drilling Method: Hollow-Stem Augers Auger/Tube Size: Rig Type: Ingersol Rand Sampling Method: Hollow Stem Auger Cuttings	Northing: 677542.72 Easting: 2636625.98 Casing Elevation: 19.9 feet bgs Borehole Depth: 5.15 feet bgs Surface Elevation: 20.13 feet bgs Descriptions By: Thomas Darby	Well/Boring ID: SG-101 Client: AVX Corporation Location: Myrtle Beach, South Carolina
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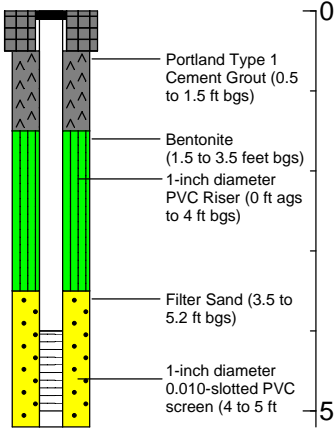
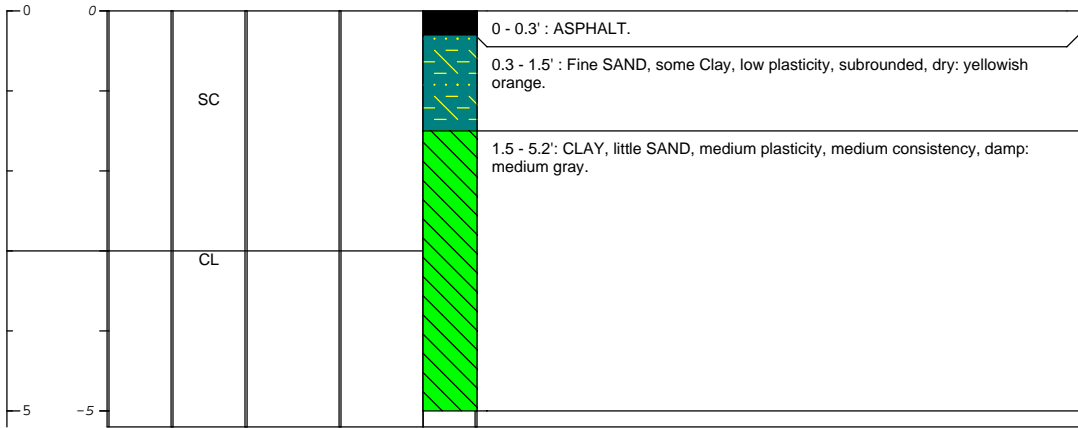
DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
-------	-----------	-------------------	-----------	-----------------	---------------------	-----------------	---------------------------	--------------------------



	Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings. The drilling location was near power lines which prevented safe use of the derrick necessary to collected macrocore samples from the screened interval depth. bgs - below ground surface NA - not available or not applicable
--	---

Date Start/Finish: June 5, 2009 Drilling Company: Parratt-Wolff, Inc. Driller's Name: Louis LeFever Drilling Method: Hollow-Stem Augers Auger/Tube Size: Rig Type: Ingersol Rand Sampling Method: Hollow Stem Auger Cuttings	Northing: 677540.99 Easting: 2636641.04 Casing Elevation: 19.93 feet bgs Borehole Depth: 5.2 feet bgs Surface Elevation: 20.23 feet bgs Descriptions By: Thomas Darby	Well/Boring ID: SG-102 Client: AVX Corporation Location: Myrtle Beach, South Carolina
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DEPTH	ELEVATION	Sample Run Number	USCS Code	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
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	Remarks: Lithologic descriptions based on inspection of hollow stem auger cuttings. The drilling location was near power lines which prevented safe use of the derrick necessary to collected macrocore samples from the screened interval depth. bgs - below ground surface NA - not available or not applicable
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ARCADIS

Appendix B

Photos

**Appendix B
Photolog**

**Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina**

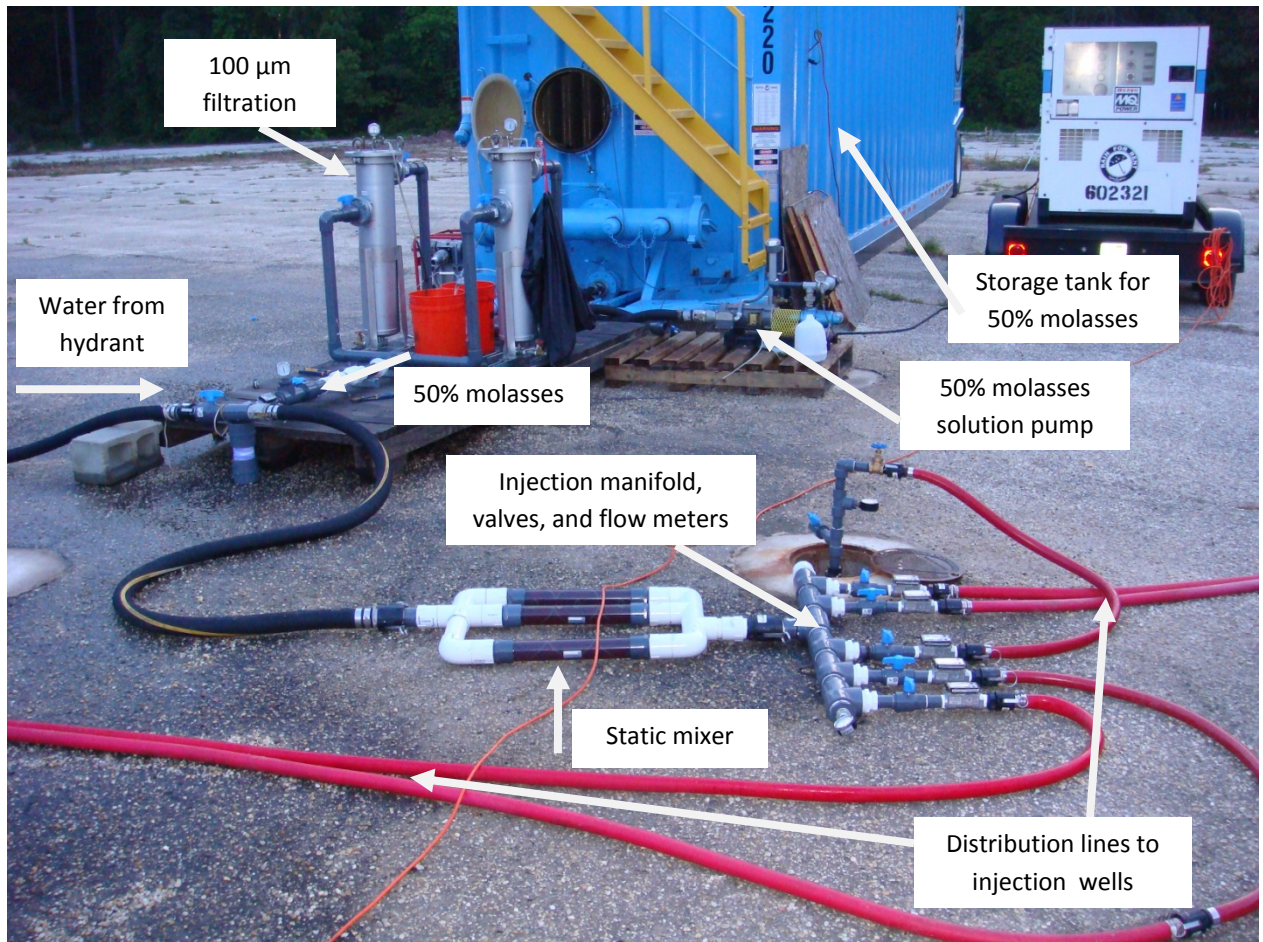


Photo #1: Mixing system for concentrated molasses solution.

**Appendix B
Photolog**

**Pilot Study Summary Report
AVX Corporation
Myrtle Beach, South Carolina**



Photo #2: Typical well head apparatus with pressure relief valve.

ARCADIS

Appendix C

Laboratory Analytical Data



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 13
Lab Proj #: P0907222
Report Date: 08/03/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 14

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0907222-01	OW-10D(072009)
P0907222-02	OW-9D(072009)
P0907222-03	PZ-1D(072009)
P0907222-04	IW-6D(072009)
P0907222-05	IW-5D(072009)
P0907222-06	IW-8D(072009)
P0907222-07	PZ-2D(072009)
P0907222-08	IW-4D(072009)
P0907222-09	IW-7D(072009)
P0907222-10	IW-3D(072009)
P0907222-11	IW-2D(072009)
P0907222-12	PZ-3D(072009)

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Heather Hauser **Date:** 8-3-09

Project Manager: Heather Hauser

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative: The phosphate and metals analyses were performed by Pace Analytical Services

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-10D(072009)	Water	P0907222-01	20 Jul. 09 8:50	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Alkalinity as CaCO3	290	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	290	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 16:40	md
N Chloride	46.00	1.00	mg/L	9056	7/21/09 16:40	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 16:40	md
N Nitrate	2.50	0.50	mg/L	9056	7/21/09 16:40	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 16:40	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 16:40	md
N Sulfate	26.00	1.00	mg/L	9056	7/21/09 16:40	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.92	0.09	mg/L	365.3	7/23/09	pas
<u>Metals</u>						
Iron	2.100	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.600	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.070	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.064	0.005	mg/L	6010B	7/23/09	pas
<u>RiskAnalysis</u>						
N Ethane	0.700	0.025	ug/L	AM20GAX	7/29/09	sl
N Ethene	6.400	0.025	ug/L	AM20GAX	7/29/09	sl
N Methane	240.000	0.100	ug/L	AM20GAX	7/29/09	sl



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 Seven Fields, PA 16046

Page: Page 3 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-9D(072009)	Water	P0907222-02	20 Jul. 09 10:03	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Alkalinity as CaCO3	250	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	250	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 17:46	md
N Chloride	41.00	1.00	mg/L	9056	7/21/09 17:46	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 17:46	md
N Nitrate	0.88	0.50	mg/L	9056	7/21/09 17:46	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 17:46	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 17:46	md
N Sulfate	18.00	1.00	mg/L	9056	7/21/09 17:46	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.86	0.09	mg/L	365.3	7/23/09	pas
<u>Metals</u>						
Iron	2.000	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.500	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.065	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.059	0.005	mg/L	6010B	7/23/09	pas
<u>RiskAnalysis</u>						
N Ethane	0.270	0.025	ug/L	AM20GAX	7/29/09	sl
N Ethene	3.900	0.025	ug/L	AM20GAX	7/29/09	sl
N Methane	64.000	0.100	ug/L	AM20GAX	7/29/09	sl



Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

Page: Page 4 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
PZ-1D(072009)	Water	P0907222-03	20 Jul. 09 11:20	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	290	4	mg/L	SM2320B	7/25/09	tid
N Alkalinity Bicarbonate as CaCO3	290	4	mg/L	SM2320B	7/25/09	tid
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 18:08	md
N Chloride	18.00	1.00	mg/L	9056	7/21/09 18:08	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 18:08	md
N Nitrate	<0.50	0.50	mg/L	9056	7/21/09 18:08	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 18:08	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 18:08	md
N Sulfate	20.00	1.00	mg/L	9056	7/21/09 18:08	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.95	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.700	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.500	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.078	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.072	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.094	0.025	ug/L	AM20GAX	7/29/09	sl
N Ethene	0.270	0.025	ug/L	AM20GAX	7/29/09	sl
N Methane	30.000	0.100	ug/L	AM20GAX	7/29/09	sl



Client Name: Arcadis U.S., Inc.
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 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-6D(072009)	Water	P0907222-04	20 Jul. 09 13:14	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	270	4	mg/L	SM2320B	7/25/09	tid
N Alkalinity Bicarbonate as CaCO3	270	4	mg/L	SM2320B	7/25/09	tid
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 18:30	md
N Chloride	35.00	1.00	mg/L	9056	7/21/09 18:30	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 18:30	md
N Nitrate	6.00	0.50	mg/L	9056	7/21/09 18:30	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 18:30	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 18:30	md
N Sulfate	17.00	1.00	mg/L	9056	7/21/09 18:30	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	1.10	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	4.200	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.600	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.068	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.052	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.110	0.025	ug/L	AM20GAX	7/29/09	sl
N Ethene	0.450	0.025	ug/L	AM20GAX	7/29/09	sl
N Methane	54.000	0.100	ug/L	AM20GAX	7/29/09	sl



Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-5D(072009)	Water	P0907222-05	20 Jul. 09 14:15	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	240	4	mg/L	SM2320B	7/25/09	tid
N Alkalinity Bicarbonate as CaCO3	240	4	mg/L	SM2320B	7/25/09	tid
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 18:52	md
N Chloride	38.00	1.00	mg/L	9056	7/21/09 18:52	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 18:52	md
N Nitrate	2.40	0.50	mg/L	9056	7/21/09 18:52	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 18:52	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 18:52	md
N Sulfate	15.00	1.00	mg/L	9056	7/21/09 18:52	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.86	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.800	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.400	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.057	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.051	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.140	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	1.300	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	48.000	0.100	ug/L	AM20GAX	7/30/09	rw



Client Name: Arcadis U.S., Inc.
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 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-8D(072009)	Water	P0907222-06	20 Jul. 09 15:40	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	230	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	230	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 20:20	md
N Chloride	37.00	1.00	mg/L	9056	7/21/09 20:20	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 20:20	md
N Nitrate	<0.50	0.50	mg/L	9056	7/21/09 20:20	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 20:20	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 20:20	md
N Sulfate	13.00	1.00	mg/L	9056	7/21/09 20:20	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.74	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.600	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.300	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.055	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.052	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.300	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	2.400	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	150.000	0.100	ug/L	AM20GAX	7/30/09	rw



Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
PZ-2D(072009)	Water	P0907222-07	20 Jul. 09 10:03	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	270	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	270	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 20:42	md
N Chloride	43.00	1.00	mg/L	9056	7/21/09 20:42	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 20:42	md
N Nitrate	2.70	0.50	mg/L	9056	7/21/09 20:42	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 20:42	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 20:42	md
N Sulfate	16.00	1.00	mg/L	9056	7/21/09 20:42	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.80	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.800	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.800	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.063	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.062	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.450	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	4.600	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	190.000	0.100	ug/L	AM20GAX	7/30/09	rw



Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

Page: Page 9 of 13
 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-4D(072009)	Water	P0907222-08	20 Jul. 09 11:12	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	260	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	260	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 21:04	md
N Chloride	41.00	1.00	mg/L	9056	7/21/09 21:04	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 21:04	md
N Nitrate	3.70	0.50	mg/L	9056	7/21/09 21:04	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 21:04	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 21:04	md
N Sulfate	19.00	1.00	mg/L	9056	7/21/09 21:04	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.80	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.900	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.600	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.065	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.060	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.510	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	3.600	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	160.000	0.100	ug/L	AM20GAX	7/30/09	rw



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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-7D(072009)	Water	P0907222-09	20 Jul. 09 13:04	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	240	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	240	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 21:26	md
N Chloride	35.00	1.00	mg/L	9056	7/21/09 21:26	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 21:26	md
N Nitrate	1.00	0.50	mg/L	9056	7/21/09 21:26	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 21:26	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 21:26	md
N Sulfate	14.00	1.00	mg/L	9056	7/21/09 21:26	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.67	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.900	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.500	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.059	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.055	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.430	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	1.600	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	140.000	0.100	ug/L	AM20GAX	7/30/09	rw



Client Name: Arcadis U.S., Inc.
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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-3D(072009)	Water	P0907222-10	20 Jul. 09 13:59	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	220	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	220	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 21:48	md
N Chloride	35.00	1.00	mg/L	9056	7/21/09 21:48	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 21:48	md
N Nitrate	<0.50	0.50	mg/L	9056	7/21/09 21:48	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 21:48	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 21:48	md
N Sulfate	10.00	1.00	mg/L	9056	7/21/09 21:48	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.46	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	2.000	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.400	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.064	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.053	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.260	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	2.100	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	150.000	0.100	ug/L	AM20GAX	7/30/09	rw

Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
IW-2D(072009)	Water	P0907222-11	20 Jul. 09 14:54	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	230	4	mg/L	SM2320B	7/25/09	tid
N Alkalinity Bicarbonate as CaCO3	230	4	mg/L	SM2320B	7/25/09	tid
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 22:54	md
N Chloride	35.00	1.00	mg/L	9056	7/21/09 22:54	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 22:54	md
N Nitrate	2.80	0.50	mg/L	9056	7/21/09 22:54	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 22:54	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 22:54	md
N Sulfate	9.20	1.00	mg/L	9056	7/21/09 22:54	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.52	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	1.400	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	1.200	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.064	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.060	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.240	0.025	ug/L	AM20GAX	7/30/09	rw
N Ethene	1.000	0.025	ug/L	AM20GAX	7/30/09	rw
N Methane	160.000	0.100	ug/L	AM20GAX	7/30/09	rw



Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0907222
 Report Date: 08/03/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
PZ-3D(072009)	Water	P0907222-12	20 Jul. 09 15:50	21 Jul. 09 11:42		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Alkalinity as CaCO3	260	4	mg/L	SM2320B	7/25/09	tld
N Alkalinity Bicarbonate as CaCO3	260	4	mg/L	SM2320B	7/25/09	tld
N Bromide	<1.00	1.00	mg/L	9056	7/21/09 23:16	md
N Chloride	110.00	1.00	mg/L	9056	7/21/09 23:16	md
N Fluoride	<0.50	0.50	mg/L	9056	7/21/09 23:16	md
N Nitrate	<0.50	0.50	mg/L	9056	7/21/09 23:16	md
N Nitrite	<0.50	0.50	mg/L	9056	7/21/09 23:16	md
N Phosphate	<1.00	1.00	mg/L	9056	7/21/09 23:16	md
N Sulfate	14.00	1.00	mg/L	9056	7/21/09 23:16	md
N Total Organic Carbon	<5.0	5.0	mg/L	9060	7/29/09	md
total Phosphate as PO4-P	0.52	0.09	mg/L	365.3	7/23/09	pas
Metals						
Iron	0.300	0.050	mg/L	6010B	7/22/09	pas
Iron-dissolved	0.240	0.050	mg/L	6010B	7/23/09	pas
Manganese	0.057	0.005	mg/L	6010B	7/22/09	pas
Manganese-dissolved	0.052	0.005	mg/L	6010B	7/23/09	pas
RiskAnalysis						
N Ethane	0.037	0.025	ug/L	AM20GAX	7/31/09	rw
N Ethene	0.500	0.025	ug/L	AM20GAX	7/31/09	rw
N Methane	33.000	0.100	ug/L	AM20GAX	7/31/09	rw





Microseeps
Lab. Proj. #

6907222

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

142

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: Arcadis
 Co. Address: 600 Waterfront Dr, Pittsburgh, PA 15222
 Phone #: 267-685-1900 Fax #: 267-685-1801
 Proj. Manager: Mark Hanish
 Proj. Name/Number: B007393.0000.0001
 Sampler's signature: AMC

Results to:
Cullen Flanders
600 Waterfront Dr.
Pittsburgh PA 15222
 Invoice to:
Sam

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Parameters Requested							Remarks		
		Water	Vapour Solid				MEF-(A)HDF	TOC-(1)-1.5ml HDF	Anions-(A)-HDF	Total Iron/mg/L	(1)-250ml HDF	Dissolved Iron/mg/L	(A)-250ml HDF		Alkalinity (tkl+bi) mg/L	(1)-850ml HDF
1	0W-10D(072009)	X		7/20/09	0850		2	1	2	1	1	1	1	1	1	Field Filmed Dissolved Fe/Mn
2	0W-9D(072009)	X		7/20/09	1003		2	1	2	1	1	1	1	1	1	"
3	PZ-1D(072009)	X		7/20/09	1120		2	1	2	1	1	1	1	1	1	"
4	IW-6D(072009)	X		7/20/09	1314		2	1	2	1	1	1	1	1	1	"
5	IW-5D(072009)	X		7/20/09	1415		2	1	2	1	1	1	1	1	1	"
6	IW-8D(072009)	X		7/20/09	1540		2	1	2	1	1	1	1	1	1	"
7	PZ-2D(072009)	X		7/20/09	1003		2	1	2	1	1	1	1	1	1	"
8	IW-4D(072009)	X		7/20/09	1112		2	1	2	1	1	1	1	1	1	"
9	IW-7D(072009)	X		7/20/09	1304		2	1	2	1	1	1	1	1	1	"
10	IW-3D(072009)	X		7/20/09	1359		2	1	2	1	1	1	1	1	1	"
11	IW-2D(072009)	Y		7/20/09	1454		2	1	2	1	1	1	1	1	1	"
12	PZ-3D(072009)	X		7/20/09	1550		2	1	2	1	1	1	1	1	1	"

Relinquished by: <u>Mark Hanish</u>	Company: <u>Arcadis</u>	Date: 7/20/09	Time: 1900	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 9
Lab Proj #: P0907317
Report Date: 08/06/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 10

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0907317-01	BATCH SAMPLE
P0907317-02	BATCH SAMPLE
P0907317-03	BATCH CONFIRMATION
P0907317-04	OW-7D
P0907317-05	OW-8D
P0907317-06	OW-9D
P0907317-07	OW-10D
P0907317-08	PZ-2D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Heather Hauser **Date:** 8.6.09

Project Manager: Heather Hauser

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
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Seven Fields, PA 16046

Page: Page 2 of 9
Lab Proj #: P0907317
Report Date: 08/06/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
BATCH SAMPLE	Water	P0907317-01	23 Jul. 09 11:45	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u> N Total Organic Carbon	7800.0	500.0	mg/L	9060	8/5/09	md



Client Name: Arcadis U.S., Inc.
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 Lab Proj #: P0907317
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 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
BATCH SAMPLE	Water	P0907317-02	24 Jul. 09 18:05	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Total Organic Carbon	7700.0	500.0	mg/L	9060	8/5/09	md



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 Lab Proj #: P0907317
 Report Date: 08/06/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
BATCH CONFIRMATION	Water	P0907317-03	25 Jul. 09 12:15	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Total Organic Carbon	7000.0	500.0	mg/L	9060	8/5/09	md

Client Name: Arcadis U.S., Inc.
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Lab Proj #: P0907317
Report Date: 08/06/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB -----

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-7D	Water	P0907317-04	25 Jul. 09 21:00	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u> N Total Organic Carbon	15.0	5.0	mg/L	9060	8/5/09	md



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 Lab Proj #: P0907317
 Report Date: 08/06/09 -----
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB -----

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-8D	Water	P0907317-05	25 Jul. 09 20:50	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem						
N Total Organic Carbon	<5.0	5.0	mg/L	9060	8/5/09	md

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 7 of 9
Lab Proj #: P0907317
Report Date: 08/06/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-9D	Water	P0907317-06	25 Jul. 09 20:10	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Total Organic Carbon	20.0	5.0	mg/L	9060	8/5/09	md



Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
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 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 9
 Lab Proj #: P0907317
 Report Date: 08/06/09
 Client Proj Name: B0007393.0000.00001
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
OW-10D	Water	P0907317-07	25 Jul. 09 20:40	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Total Organic Carbon	16.0	5.0	mg/L	9060	8/5/09	md



Client Name: Arcadis U.S., Inc.
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Seven Fields, PA 16046

Page: Page 9 of 9
Lab Proj #: P0907317
Report Date: 08/06/09
Client Proj Name: B0007393.0000.00001
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
PZ-2D	Water	P0907317-08	25 Jul. 09 20:25	29 Jul. 09 12:46		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>WetChem</u>						
N Total Organic Carbon	1300.0	50.0	mg/L	9060	8/5/09	md





Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0909336
Report Date: 10/07/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0909336-01	PZ-1D
P0909336-02	PZ-2D
P0909336-03	PZ-3D
P0909336-04	OW-10D
P0909336-05	OW-7D
P0909336-06	IW-3D
P0909336-07	OW-9D
P0909336-08	OW-8D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 10.7.09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-1D	Water	P0909336-01			28 Sep. 09 10:00	29 Sep. 09 11:46	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	U	< 5.0	5.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.130	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		0.330	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		43.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-2D	Water	P0909336-02	28 Sep. 09 10:15	29 Sep. 09 11:46			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		80.0	5.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.420	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		46.000	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		550.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-3D	Water	P0909336-03			28 Sep. 09 10:32	29 Sep. 09 11:46	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		8100.0	500.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.660	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		2.700	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		210.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P0909336-04			28 Sep. 09 11:05	29 Sep. 09 11:46	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		21.0	5.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.560	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		5.400	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		170.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P0909336-05			28 Sep. 09 11:20	29 Sep. 09 11:46	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		20.0	5.0	mg/L	9060	9/30/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-3D	Water	P0909336-06	28 Sep. 09 10:50	29 Sep. 09 11:46			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		6.1	5.0	mg/L	9060	9/30/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P0909336-07			28 Sep. 09 11:30	29 Sep. 09 11:46	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		30.0	5.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.360	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		5.000	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		110.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D	Water	P0909336-08	28 Sep. 09 11:45	29 Sep. 09 11:46			
Analyte(s)	Flag	Result	PQL	Units	Method #	Analysis Date	By
WetChem							
N Total Organic Carbon		10.0	5.0	mg/L	9060	9/30/09	md
RiskAnalysis							
N Ethane		0.590	0.025	ug/L	AM20GAX	10/6/09	rw
N Ethene		4.700	0.025	ug/L	AM20GAX	10/6/09	rw
N Methane		190.000	0.100	ug/L	AM20GAX	10/6/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091002047-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091002047-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0 mg/L	36.00	103.00	70 - 130

P0909319-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	2.5 mg/L			- NA	0.00	0 - 20

P0909336-04A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	20.0 mg/L			- NA	4.88	0 - 20

P0909319-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	61.0 mg/L	50.00	102.00	70 - 130

P0909336-05A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	70.0 mg/L	50.00	100.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 11
 Lab Proj #: P0909336
 Report Date: 10/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation

Analysis Method: Light Hydrocarbons (C1-C4) in Water

M091006001-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M091006001-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	48.000 ug/L	45.00	107.00	75 - 125
Ethene	43.000 ug/L	40.80	105.00	75 - 125
Methane	900.000 ug/L	825.00	109.00	75 - 125

M091006001-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	48.000 ug/L	45.00	107.00	75 - 125	0.00	0 - 20
Ethene	43.000 ug/L	40.80	105.00	75 - 125	0.00	0 - 20
Methane	890.000 ug/L	825.00	108.00	75 - 125	1.12	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

29109336

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company: **ARCADIS**

Co. Address: One Adams Place, 310 Seven Fields Blvd Suite 210

Phone #: 724-742-9180 Fax #: 724-742-9189

Proj. Manager: Mark Hanish

Proj. Name/Number: AVX / B0007393.0000.00006

Sampler's signature: Robby Shady

Results to: Mark Hanish

Invoice to: Mark Hanish

Parameters Requested	
Methane, Ethane, Ethene, TOC	

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Remarks
		Water	Vapor/Solid				
PZ-1D	Grab	X		9/28/04	1000		
PZ-2D	Grab	X		9/28/04	1015		
PZ-3D	Grab.	X		9/28/04	1032		
OW-10D	Grab	X		9/28/04	1105		
OW-7D	Grab	X		9/28/04	1120		
IW-3D	Grab	X		9/28/04	1050		
OW-9D	Grab	X		9/28/04	1130		
OW-8D	Grab	X		9/28/04	1145		

Relinquished by: <u>Robby Shady</u>	Company: ARCADIS	Received by: <u>[Signature]</u>	Company: <u>[Signature]</u>
Relinquished by:	Company:	Received by:	Company:
Relinquished by:	Company:	Received by:	Company:



Mark Hanish
Arcadis
600 Waterfront Dr.
Pittsburgh, PA 15222

Report Number: G582-493

Client Project: AVX

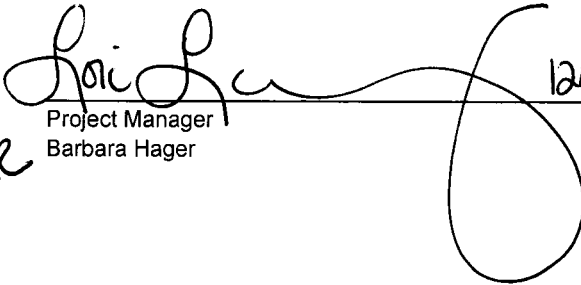
Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

 12 October 2009
Project Manager Date
Barbara Hager

BR

Case Narrative

Arcadis

SGS Project: **G582-493**

Project Name: **AVX**


SGS North America; Inc.

October 12th, 2009

- Seven water samples were accepted into the laboratory on September 29th, 2009 at 1030 for analyses as indicated on the chain of custody. The samples were received in good condition, with a temperature of 4.2°C.
- All extractions and analyses were completed within holding time limits, with the following quality control exceptions.

8260 Analysis

- The client submitted **Trip Blank** has reported concentrations Bromoform, Dibromochloromethane and Methylene Chloride of 0.42µg/L, 0.34µg/L and 0.29µg/L; respectively. These analytes have been 'J' flagged.



Craig R. Tronzo
Data Validation/QC

Date 10/12/09

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

Results for Volatiles
by GCMS 8260B

Client Sample ID: PZ-1D
Client Project ID: AVX
Lab Sample ID: G582-493-1A
Lab Project ID: G582-493

Analyzed By: CLP
Date Collected: 9/28/2009 10:00
Date Received: 9/29/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	250	21.8	10	10/6/2009	
Benzene	BQL	10.0	0.650	10	10/6/2009	
Bromobenzene	BQL	10.0	0.560	10	10/6/2009	
Bromochloromethane	BQL	10.0	1.01	10	10/6/2009	
Bromodichloromethane	BQL	10.0	0.760	10	10/6/2009	
Bromoform	BQL	10.0	1.20	10	10/6/2009	
Bromomethane	BQL	10.0	1.33	10	10/6/2009	
2-Butanone	BQL	250	5.44	10	10/6/2009	
n-Butylbenzene	BQL	10.0	1.09	10	10/6/2009	
sec-Butylbenzene	BQL	10.0	0.840	10	10/6/2009	
tert-Butylbenzene	BQL	10.0	0.500	10	10/6/2009	
Carbon disulfide	BQL	10.0	0.690	10	10/6/2009	
Carbon tetrachloride	BQL	10.0	0.870	10	10/6/2009	
Chlorobenzene	BQL	10.0	0.820	10	10/6/2009	
Chloroethane	BQL	10.0	1.06	10	10/6/2009	
Chloroform	BQL	10.0	0.790	10	10/6/2009	
Chloromethane	BQL	10.0	1.46	10	10/6/2009	
2-Chlorotoluene	BQL	10.0	0.990	10	10/6/2009	
4-Chlorotoluene	BQL	10.0	0.800	10	10/6/2009	
Dibromochloromethane	BQL	10.0	0.900	10	10/6/2009	
1,2-Dibromo-3-chloropropane	BQL	50.0	12.1	10	10/6/2009	
Dibromomethane	BQL	10.0	1.13	10	10/6/2009	
1,2-Dibromoethane (EDB)	BQL	10.0	1.24	10	10/6/2009	
1,2-Dichlorobenzene	BQL	10.0	1.27	10	10/6/2009	
1,3-Dichlorobenzene	BQL	10.0	0.810	10	10/6/2009	
1,4-Dichlorobenzene	BQL	10.0	0.790	10	10/6/2009	
trans-1,4-Dichloro-2-butene	BQL	50.0	6.30	10	10/6/2009	
1,1-Dichloroethane	BQL	10.0	0.740	10	10/6/2009	
1,1-Dichloroethene	BQL	10.0	0.890	10	10/6/2009	
1,2-Dichloroethane	BQL	10.0	0.790	10	10/6/2009	
cis-1,2-Dichloroethene	172	10.0	0.650	10	10/6/2009	
trans-1,2-dichloroethene	BQL	10.0	0.890	10	10/6/2009	
1,2-Dichloropropane	BQL	10.0	0.940	10	10/6/2009	
1,3-Dichloropropane	BQL	10.0	1.27	10	10/6/2009	
2,2-Dichloropropane	BQL	10.0	0.590	10	10/6/2009	
1,1-Dichloropropene	BQL	10.0	0.720	10	10/6/2009	
cis-1,3-Dichloropropene	BQL	10.0	0.760	10	10/6/2009	
trans-1,3-Dichloropropene	BQL	10.0	0.760	10	10/6/2009	
Dichlorodifluoromethane	BQL	50.0	0.940	10	10/6/2009	
Diisopropyl ether (DIPE)	BQL	10.0	0.730	10	10/6/2009	
Ethylbenzene	BQL	10.0	0.770	10	10/6/2009	
Hexachlorobutadiene	BQL	10.0	2.28	10	10/6/2009	
2-Hexanone	BQL	50.0	7.20	10	10/6/2009	
Iodomethane	BQL	10.0	0.420	10	10/6/2009	
Isopropylbenzene	BQL	10.0	0.710	10	10/6/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-1D
 Client Project ID: AVX
 Lab Sample ID: G582-493-1A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 10:00
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	10.0	0.480	10	10/6/2009	
Methylene chloride	BQL	50.0	0.980	10	10/6/2009	
4-Methyl-2-pentanone	BQL	50.0	5.50	10	10/6/2009	
Methyl-tert-butyl ether (MTBE)	BQL	10.0	0.670	10	10/6/2009	
Naphthalene	BQL	10.0	1.33	10	10/6/2009	
n-Propyl benzene	BQL	10.0	0.800	10	10/6/2009	
Styrene	BQL	10.0	0.850	10	10/6/2009	
1,1,1,2-Tetrachloroethane	BQL	10.0	0.900	10	10/6/2009	
1,1,2,2-Tetrachloroethane	BQL	10.0	1.15	10	10/6/2009	
Tetrachloroethene	BQL	10.0	0.690	10	10/6/2009	
Toluene	BQL	10.0	0.760	10	10/6/2009	
1,2,3-Trichlorobenzene	BQL	10.0	1.90	10	10/6/2009	
1,2,4-Trichlorobenzene	BQL	10.0	1.19	10	10/6/2009	
Trichloroethene	34.4	10.0	0.540	10	10/6/2009	
1,1,1-Trichloroethane	BQL	10.0	0.540	10	10/6/2009	
1,1,2-Trichloroethane	BQL	10.0	1.82	10	10/6/2009	
Trichlorofluoromethane	BQL	10.0	1.11	10	10/6/2009	
1,2,3-Trichloropropane	BQL	10.0	1.20	10	10/6/2009	
1,2,4-Trimethylbenzene	BQL	10.0	0.650	10	10/6/2009	
1,3,5-Trimethylbenzene	BQL	10.0	0.740	10	10/6/2009	
Vinyl chloride	BQL	10.0	1.49	10	10/6/2009	
m-,p-Xylene	BQL	20.0	0.980	10	10/6/2009	
o-Xylene	BQL	10.0	0.650	10	10/6/2009	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	8.86	89
Toluene-d8	10	10.8	108
4-Bromofluorobenzene	10	9.86	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: 

Reviewed By: 

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-2D
 Client Project ID: AVX
 Lab Sample ID: G582-493-2A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 10:15
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	6250	545	250	10/6/2009	
Benzene	BQL	250	16.3	250	10/6/2009	
Bromobenzene	BQL	250	14.0	250	10/6/2009	
Bromochloromethane	BQL	250	25.2	250	10/6/2009	
Bromodichloromethane	BQL	250	19.0	250	10/6/2009	
Bromoform	BQL	250	30.0	250	10/6/2009	
Bromomethane	BQL	250	33.2	250	10/6/2009	
2-Butanone	BQL	6250	136	250	10/6/2009	
n-Butylbenzene	BQL	250	27.3	250	10/6/2009	
sec-Butylbenzene	BQL	250	21.0	250	10/6/2009	
tert-Butylbenzene	BQL	250	12.5	250	10/6/2009	
Carbon disulfide	BQL	250	17.3	250	10/6/2009	
Carbon tetrachloride	BQL	250	21.8	250	10/6/2009	
Chlorobenzene	BQL	250	20.5	250	10/6/2009	
Chloroethane	BQL	250	26.5	250	10/6/2009	
Chloroform	BQL	250	19.8	250	10/6/2009	
Chloromethane	BQL	250	36.5	250	10/6/2009	
2-Chlorotoluene	BQL	250	24.8	250	10/6/2009	
4-Chlorotoluene	BQL	250	20.0	250	10/6/2009	
Dibromochloromethane	BQL	250	22.5	250	10/6/2009	
1,2-Dibromo-3-chloropropane	BQL	1250	303	250	10/6/2009	
Dibromomethane	BQL	250	28.3	250	10/6/2009	
1,2-Dibromoethane (EDB)	BQL	250	31.0	250	10/6/2009	
1,2-Dichlorobenzene	BQL	250	31.8	250	10/6/2009	
1,3-Dichlorobenzene	BQL	250	20.3	250	10/6/2009	
1,4-Dichlorobenzene	BQL	250	19.8	250	10/6/2009	
trans-1,4-Dichloro-2-butene	BQL	1250	157	250	10/6/2009	
1,1-Dichloroethane	BQL	250	18.5	250	10/6/2009	
1,1-Dichloroethene	BQL	250	22.2	250	10/6/2009	
1,2-Dichloroethane	BQL	250	19.8	250	10/6/2009	
cis-1,2-Dichloroethene	570	250	16.3	250	10/6/2009	
trans-1,2-dichloroethene	42.5	250	22.2	250	10/6/2009	J
1,2-Dichloropropane	BQL	250	23.5	250	10/6/2009	
1,3-Dichloropropane	BQL	250	31.8	250	10/6/2009	
2,2-Dichloropropane	BQL	250	14.7	250	10/6/2009	
1,1-Dichloropropene	BQL	250	18.0	250	10/6/2009	
cis-1,3-Dichloropropene	BQL	250	19.0	250	10/6/2009	
trans-1,3-Dichloropropene	BQL	250	19.0	250	10/6/2009	
Dichlorodifluoromethane	BQL	1250	23.5	250	10/6/2009	
Diisopropyl ether (DIPE)	BQL	250	18.2	250	10/6/2009	
Ethylbenzene	BQL	250	19.3	250	10/6/2009	
Hexachlorobutadiene	BQL	250	57.0	250	10/6/2009	
2-Hexanone	BQL	1250	180	250	10/6/2009	
Iodomethane	BQL	250	10.5	250	10/6/2009	
Isopropylbenzene	BQL	250	17.8	250	10/6/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-2D
 Client Project ID: AVX
 Lab Sample ID: G582-493-2A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 10:15
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	250	12.0	250	10/6/2009	
Methylene chloride	37.5	1250	24.5	250	10/6/2009	J
4-Methyl-2-pentanone	BQL	1250	138	250	10/6/2009	
Methyl-tert-butyl ether (MTBE)	BQL	250	16.7	250	10/6/2009	
Naphthalene	BQL	250	33.2	250	10/6/2009	
n-Propyl benzene	BQL	250	20.0	250	10/6/2009	
Styrene	BQL	250	21.3	250	10/6/2009	
1,1,1,2-Tetrachloroethane	BQL	250	22.5	250	10/6/2009	
1,1,2,2-Tetrachloroethane	BQL	250	28.8	250	10/6/2009	
Tetrachloroethene	BQL	250	17.3	250	10/6/2009	
Toluene	BQL	250	19.0	250	10/6/2009	
1,2,3-Trichlorobenzene	BQL	250	47.5	250	10/6/2009	
1,2,4-Trichlorobenzene	BQL	250	29.8	250	10/6/2009	
Trichloroethene	610	250	13.5	250	10/6/2009	
1,1,1-Trichloroethane	BQL	250	13.5	250	10/6/2009	
1,1,2-Trichloroethane	BQL	250	45.5	250	10/6/2009	
Trichlorofluoromethane	BQL	250	27.8	250	10/6/2009	
1,2,3-Trichloropropane	BQL	250	30.0	250	10/6/2009	
1,2,4-Trimethylbenzene	BQL	250	16.3	250	10/6/2009	
1,3,5-Trimethylbenzene	BQL	250	18.5	250	10/6/2009	
Vinyl chloride	765	250	37.2	250	10/6/2009	
m-,p-Xylene	BQL	500	24.5	250	10/6/2009	
o-Xylene	BQL	250	16.3	250	10/6/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.7	107		
Toluene-d8		10	10.4	104		
4-Bromofluorobenzene		10	9.15	92		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

SGS North America, Inc.

Results for Volatiles
by GCMS 8260B

Client Sample ID: PZ-3D
Client Project ID: AVX
Lab Sample ID: G582-493-3A
Lab Project ID: G582-493

Analyzed By: CLP
Date Collected: 9/28/2009 10:32
Date Received: 9/29/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	4000	349	160	10/7/2009	
Benzene	BQL	160	10.4	160	10/7/2009	
Bromobenzene	BQL	160	8.96	160	10/7/2009	
Bromochloromethane	BQL	160	16.2	160	10/7/2009	
Bromodichloromethane	BQL	160	12.2	160	10/7/2009	
Bromoform	BQL	160	19.2	160	10/7/2009	
Bromomethane	BQL	160	21.3	160	10/7/2009	
2-Butanone	BQL	4000	87.0	160	10/7/2009	
n-Butylbenzene	BQL	160	17.4	160	10/7/2009	
sec-Butylbenzene	BQL	160	13.4	160	10/7/2009	
tert-Butylbenzene	BQL	160	8.00	160	10/7/2009	
Carbon disulfide	BQL	160	11.0	160	10/7/2009	
Carbon tetrachloride	BQL	160	13.9	160	10/7/2009	
Chlorobenzene	BQL	160	13.1	160	10/7/2009	
Chloroethane	BQL	160	17.0	160	10/7/2009	
Chloroform	BQL	160	12.6	160	10/7/2009	
Chloromethane	BQL	160	23.4	160	10/7/2009	
2-Chlorotoluene	BQL	160	15.8	160	10/7/2009	
4-Chlorotoluene	BQL	160	12.8	160	10/7/2009	
Dibromochloromethane	BQL	160	14.4	160	10/7/2009	
1,2-Dibromo-3-chloropropane	BQL	800	194	160	10/7/2009	
Dibromomethane	BQL	160	18.1	160	10/7/2009	
1,2-Dibromoethane (EDB)	BQL	160	19.8	160	10/7/2009	
1,2-Dichlorobenzene	BQL	160	20.3	160	10/7/2009	
1,3-Dichlorobenzene	BQL	160	13.0	160	10/7/2009	
1,4-Dichlorobenzene	BQL	160	12.6	160	10/7/2009	
trans-1,4-Dichloro-2-butene	BQL	800	101	160	10/7/2009	
1,1-Dichloroethane	BQL	160	11.8	160	10/7/2009	
1,1-Dichloroethene	BQL	160	14.2	160	10/7/2009	
1,2-Dichloroethane	BQL	160	12.6	160	10/7/2009	
cis-1,2-Dichloroethene	1580	160	10.4	160	10/7/2009	
trans-1,2-dichloroethene	38.4	160	14.2	160	10/7/2009	J
1,2-Dichloropropane	BQL	160	15.0	160	10/7/2009	
1,3-Dichloropropane	BQL	160	20.3	160	10/7/2009	
2,2-Dichloropropane	BQL	160	9.44	160	10/7/2009	
1,1-Dichloropropene	BQL	160	11.5	160	10/7/2009	
cis-1,3-Dichloropropene	BQL	160	12.2	160	10/7/2009	
trans-1,3-Dichloropropene	BQL	160	12.2	160	10/7/2009	
Dichlorodifluoromethane	BQL	800	15.0	160	10/7/2009	
Diisopropyl ether (DIPE)	BQL	160	11.7	160	10/7/2009	
Ethylbenzene	BQL	160	12.3	160	10/7/2009	
Hexachlorobutadiene	BQL	160	36.5	160	10/7/2009	
2-Hexanone	BQL	800	115	160	10/7/2009	
Iodomethane	BQL	160	6.72	160	10/7/2009	
Isopropylbenzene	BQL	160	11.4	160	10/7/2009	

SGS North America, Inc.

Results for Volatiles
by GCMS 8260B

Client Sample ID: OW-10D
Client Project ID: AVX
Lab Sample ID: G582-493-4A
Lab Project ID: G582-493

Analyzed By: CLP
Date Collected: 9/28/2009 11:05
Date Received: 9/29/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	10/6/2009	
Benzene	BQL	1000	65.0	1000	10/6/2009	
Bromobenzene	BQL	1000	56.0	1000	10/6/2009	
Bromochloromethane	BQL	1000	101	1000	10/6/2009	
Bromodichloromethane	BQL	1000	76.0	1000	10/6/2009	
Bromoform	BQL	1000	120	1000	10/6/2009	
Bromomethane	BQL	1000	133	1000	10/6/2009	
2-Butanone	BQL	25000	544	1000	10/6/2009	
n-Butylbenzene	BQL	1000	109	1000	10/6/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	10/6/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	10/6/2009	
Carbon disulfide	BQL	1000	69.0	1000	10/6/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	10/6/2009	
Chlorobenzene	BQL	1000	82.0	1000	10/6/2009	
Chloroethane	BQL	1000	106	1000	10/6/2009	
Chloroform	BQL	1000	79.0	1000	10/6/2009	
Chloromethane	BQL	1000	146	1000	10/6/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	10/6/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	10/6/2009	
Dibromochloromethane	BQL	1000	90.0	1000	10/6/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	10/6/2009	
Dibromomethane	BQL	1000	113	1000	10/6/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	10/6/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	10/6/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	10/6/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	10/6/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	10/6/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	10/6/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	10/6/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	10/6/2009	
cis-1,2-Dichloroethene	5050	1000	65.0	1000	10/6/2009	
trans-1,2-dichloroethene	410	1000	89.0	1000	10/6/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	10/6/2009	
1,3-Dichloropropane	BQL	1000	127	1000	10/6/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	10/6/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	10/6/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	10/6/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	10/6/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	10/6/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	10/6/2009	
Ethylbenzene	BQL	1000	77.0	1000	10/6/2009	
Hexachlorobutadiene	BQL	1000	228	1000	10/6/2009	
2-Hexanone	BQL	5000	720	1000	10/6/2009	
Iodomethane	BQL	1000	42.0	1000	10/6/2009	
Isopropylbenzene	BQL	1000	71.0	1000	10/6/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-10D
 Client Project ID: AVX
 Lab Sample ID: G582-493-4A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 11:05
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	10/6/2009	
Methylene chloride	120	5000	98.0	1000	10/6/2009	J
4-Methyl-2-pentanone	BQL	5000	550	1000	10/6/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	10/6/2009	
Naphthalene	BQL	1000	133	1000	10/6/2009	
n-Propyl benzene	BQL	1000	80.0	1000	10/6/2009	
Styrene	BQL	1000	85.0	1000	10/6/2009	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	10/6/2009	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	10/6/2009	
Tetrachloroethene	BQL	1000	69.0	1000	10/6/2009	
Toluene	BQL	1000	76.0	1000	10/6/2009	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	10/6/2009	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	10/6/2009	
Trichloroethene	25500	1000	54.0	1000	10/6/2009	
1,1,1-Trichloroethane	BQL	1000	54.0	1000	10/6/2009	
1,1,2-Trichloroethane	BQL	1000	182	1000	10/6/2009	
Trichlorofluoromethane	BQL	1000	111	1000	10/6/2009	
1,2,3-Trichloropropane	BQL	1000	120	1000	10/6/2009	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	10/6/2009	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	10/6/2009	
Vinyl chloride	BQL	1000	149	1000	10/6/2009	
m-,p-Xylene	BQL	2000	98.0	1000	10/6/2009	
o-Xylene	BQL	1000	65.0	1000	10/6/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	9.82	98		
Toluene-d8		10	10.7	107		
4-Bromofluorobenzene		10	9.34	93		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

SGS North America, Inc.

Results for Volatiles
by GCMS 8260B

Client Sample ID: OW-9D
Client Project ID: AVX
Lab Sample ID: G582-493-5A
Lab Project ID: G582-493

Analyzed By: CLP
Date Collected: 9/28/2009 11:30
Date Received: 9/29/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	10/6/2009	
Benzene	BQL	800	52.0	800	10/6/2009	
Bromobenzene	BQL	800	44.8	800	10/6/2009	
Bromochloromethane	BQL	800	80.8	800	10/6/2009	
Bromodichloromethane	BQL	800	60.8	800	10/6/2009	
Bromoform	BQL	800	96.0	800	10/6/2009	
Bromomethane	BQL	800	106	800	10/6/2009	
2-Butanone	BQL	20000	435	800	10/6/2009	
n-Butylbenzene	BQL	800	87.2	800	10/6/2009	
sec-Butylbenzene	BQL	800	67.2	800	10/6/2009	
tert-Butylbenzene	BQL	800	40.0	800	10/6/2009	
Carbon disulfide	BQL	800	55.2	800	10/6/2009	
Carbon tetrachloride	BQL	800	69.6	800	10/6/2009	
Chlorobenzene	BQL	800	65.6	800	10/6/2009	
Chloroethane	BQL	800	84.8	800	10/6/2009	
Chloroform	BQL	800	63.2	800	10/6/2009	
Chloromethane	BQL	800	117	800	10/6/2009	
2-Chlorotoluene	BQL	800	79.2	800	10/6/2009	
4-Chlorotoluene	BQL	800	64.0	800	10/6/2009	
Dibromochloromethane	BQL	800	72.0	800	10/6/2009	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	10/6/2009	
Dibromomethane	BQL	800	90.4	800	10/6/2009	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	10/6/2009	
1,2-Dichlorobenzene	BQL	800	102	800	10/6/2009	
1,3-Dichlorobenzene	BQL	800	64.8	800	10/6/2009	
1,4-Dichlorobenzene	BQL	800	63.2	800	10/6/2009	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	10/6/2009	
1,1-Dichloroethane	BQL	800	59.2	800	10/6/2009	
1,1-Dichloroethene	BQL	800	71.2	800	10/6/2009	
1,2-Dichloroethane	BQL	800	63.2	800	10/6/2009	
cis-1,2-Dichloroethene	16500	800	52.0	800	10/6/2009	
trans-1,2-dichloroethene	352	800	71.2	800	10/6/2009	J
1,2-Dichloropropane	BQL	800	75.2	800	10/6/2009	
1,3-Dichloropropane	BQL	800	102	800	10/6/2009	
2,2-Dichloropropane	BQL	800	47.2	800	10/6/2009	
1,1-Dichloropropene	BQL	800	57.6	800	10/6/2009	
cis-1,3-Dichloropropene	BQL	800	60.8	800	10/6/2009	
trans-1,3-Dichloropropene	BQL	800	60.8	800	10/6/2009	
Dichlorodifluoromethane	BQL	4000	75.2	800	10/6/2009	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	10/6/2009	
Ethylbenzene	BQL	800	61.6	800	10/6/2009	
Hexachlorobutadiene	BQL	800	182	800	10/6/2009	
2-Hexanone	BQL	4000	576	800	10/6/2009	
Iodomethane	BQL	800	33.6	800	10/6/2009	
Isopropylbenzene	BQL	800	56.8	800	10/6/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-9D
 Client Project ID: AVX
 Lab Sample ID: G582-493-5A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 11:30
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	10/6/2009	
Methylene chloride	96.0	4000	78.4	800	10/6/2009	J
4-Methyl-2-pentanone	BQL	4000	440	800	10/6/2009	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	10/6/2009	
Naphthalene	BQL	800	106	800	10/6/2009	
n-Propyl benzene	BQL	800	64.0	800	10/6/2009	
Styrene	BQL	800	68.0	800	10/6/2009	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	10/6/2009	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	10/6/2009	
Tetrachloroethene	BQL	800	55.2	800	10/6/2009	
Toluene	BQL	800	60.8	800	10/6/2009	
1,2,3-Trichlorobenzene	BQL	800	152	800	10/6/2009	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	10/6/2009	
Trichloroethene	1250	800	43.2	800	10/6/2009	
1,1,1-Trichloroethane	BQL	800	43.2	800	10/6/2009	
1,1,2-Trichloroethane	BQL	800	146	800	10/6/2009	
Trichlorofluoromethane	BQL	800	88.8	800	10/6/2009	
1,2,3-Trichloropropane	BQL	800	96.0	800	10/6/2009	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	10/6/2009	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	10/6/2009	
Vinyl chloride	BQL	800	119	800	10/6/2009	
m-,p-Xylene	BQL	1600	78.4	800	10/6/2009	
o-Xylene	BQL	800	52.0	800	10/6/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.99	100
Toluene-d8	10	10.4	104
4-Bromofluorobenzene	10	9.08	91

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-8D
 Client Project ID: AVX
 Lab Sample ID: G582-493-6A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 11:45
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	10/7/2009	
Benzene	BQL	1000	65.0	1000	10/7/2009	
Bromobenzene	BQL	1000	56.0	1000	10/7/2009	
Bromochloromethane	BQL	1000	101	1000	10/7/2009	
Bromodichloromethane	BQL	1000	76.0	1000	10/7/2009	
Bromoform	BQL	1000	120	1000	10/7/2009	
Bromomethane	BQL	1000	133	1000	10/7/2009	
2-Butanone	BQL	25000	544	1000	10/7/2009	
n-Butylbenzene	BQL	1000	109	1000	10/7/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	10/7/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	10/7/2009	
Carbon disulfide	BQL	1000	69.0	1000	10/7/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	10/7/2009	
Chlorobenzene	BQL	1000	82.0	1000	10/7/2009	
Chloroethane	BQL	1000	106	1000	10/7/2009	
Chloroform	BQL	1000	79.0	1000	10/7/2009	
Chloromethane	BQL	1000	146	1000	10/7/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	10/7/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	10/7/2009	
Dibromochloromethane	BQL	1000	90.0	1000	10/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	10/7/2009	
Dibromomethane	BQL	1000	113	1000	10/7/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	10/7/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	10/7/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	10/7/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	10/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	10/7/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	10/7/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	10/7/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	10/7/2009	
cis-1,2-Dichloroethene	9640	1000	65.0	1000	10/7/2009	
trans-1,2-dichloroethene	230	1000	89.0	1000	10/7/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	10/7/2009	
1,3-Dichloropropane	BQL	1000	127	1000	10/7/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	10/7/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	10/7/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	10/7/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	10/7/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	10/7/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	10/7/2009	
Ethylbenzene	BQL	1000	77.0	1000	10/7/2009	
Hexachlorobutadiene	BQL	1000	228	1000	10/7/2009	
2-Hexanone	BQL	5000	720	1000	10/7/2009	
Iodomethane	BQL	1000	42.0	1000	10/7/2009	
Isopropylbenzene	BQL	1000	71.0	1000	10/7/2009	

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: AVX
 Lab Sample ID: G582-493-7A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 0:00
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	10/7/2009	
Benzene	BQL	1.00	0.0650	1	10/7/2009	
Bromobenzene	BQL	1.00	0.0560	1	10/7/2009	
Bromochloromethane	BQL	1.00	0.101	1	10/7/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	10/7/2009	
Bromoform	0.420	1.00	0.120	1	10/7/2009	J
Bromomethane	BQL	1.00	0.133	1	10/7/2009	
2-Butanone	BQL	25.0	0.544	1	10/7/2009	
n-Butylbenzene	BQL	1.00	0.109	1	10/7/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	10/7/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	10/7/2009	
Carbon disulfide	BQL	1.00	0.0690	1	10/7/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	10/7/2009	
Chlorobenzene	BQL	1.00	0.0820	1	10/7/2009	
Chloroethane	BQL	1.00	0.106	1	10/7/2009	
Chloroform	BQL	1.00	0.0790	1	10/7/2009	
Chloromethane	BQL	1.00	0.146	1	10/7/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	10/7/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	10/7/2009	
Dibromochloromethane	0.340	1.00	0.0900	1	10/7/2009	J
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	10/7/2009	
Dibromomethane	BQL	1.00	0.113	1	10/7/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	10/7/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	10/7/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	10/7/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	10/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	10/7/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	10/7/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	10/7/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	10/7/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	10/7/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	10/7/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	10/7/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	10/7/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	10/7/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	10/7/2009	
Ethylbenzene	BQL	1.00	0.0770	1	10/7/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	10/7/2009	
2-Hexanone	BQL	5.00	0.720	1	10/7/2009	
Iodomethane	BQL	1.00	0.0420	1	10/7/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	10/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: AVX
 Lab Sample ID: G582-493-7A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected: 9/28/2009 0:00
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL


Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	10/7/2009	
Methylene chloride	0.290	5.00	0.0980	1	10/7/2009	J
4-Methyl-2-pentanone	BQL	5.00	0.550	1	10/7/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	10/7/2009	
Naphthalene	BQL	1.00	0.133	1	10/7/2009	
n-Propyl benzene	BQL	1.00	0.0800	1	10/7/2009	
Styrene	BQL	1.00	0.0850	1	10/7/2009	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	10/7/2009	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	10/7/2009	
Tetrachloroethene	BQL	1.00	0.0690	1	10/7/2009	
Toluene	BQL	1.00	0.0760	1	10/7/2009	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	10/7/2009	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	10/7/2009	
Trichloroethene	BQL	1.00	0.0540	1	10/7/2009	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	10/7/2009	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	10/7/2009	
Trichlorofluoromethane	BQL	1.00	0.111	1	10/7/2009	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	10/7/2009	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	10/7/2009	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	10/7/2009	
Vinyl chloride	BQL	1.00	0.149	1	10/7/2009	
m-,p-Xylene	BQL	2.00	0.0980	1	10/7/2009	
o-Xylene	BQL	1.00	0.0650	1	10/7/2009	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.4	104
Toluene-d8	10	10.6	106
4-Bromofluorobenzene	10	9.35	94

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: 

Reviewed By: 

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK1100609B
Lab Project ID:

Analyzed By: CLP
Date Collected:
Date Received:
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	10/6/2009	
Benzene	BQL	1.00	0.0650	1	10/6/2009	
Bromobenzene	BQL	1.00	0.0560	1	10/6/2009	
Bromochloromethane	BQL	1.00	0.101	1	10/6/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	10/6/2009	
Bromoform	BQL	1.00	0.120	1	10/6/2009	
Bromomethane	BQL	1.00	0.133	1	10/6/2009	
2-Butanone	BQL	25.0	0.544	1	10/6/2009	
n-Butylbenzene	BQL	1.00	0.109	1	10/6/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	10/6/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	10/6/2009	
Carbon disulfide	BQL	1.00	0.0690	1	10/6/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	10/6/2009	
Chlorobenzene	BQL	1.00	0.0820	1	10/6/2009	
Chloroethane	BQL	1.00	0.106	1	10/6/2009	
Chloroform	BQL	1.00	0.0790	1	10/6/2009	
Chloromethane	BQL	1.00	0.146	1	10/6/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	10/6/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	10/6/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	10/6/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	10/6/2009	
Dibromomethane	BQL	1.00	0.113	1	10/6/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	10/6/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	10/6/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	10/6/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	10/6/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	10/6/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	10/6/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	10/6/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	10/6/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	10/6/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	10/6/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	10/6/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	10/6/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	10/6/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	10/6/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/6/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/6/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	10/6/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	10/6/2009	
Ethylbenzene	BQL	1.00	0.0770	1	10/6/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	10/6/2009	
2-Hexanone	BQL	5.00	0.720	1	10/6/2009	
Iodomethane	BQL	1.00	0.0420	1	10/6/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	10/6/2009	

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS1100609A

filename: 1006103.D

Date Analyzed: 10/06/09 11:31

LCSd: LCS1100609B

filename: 1006104.D

Date Analyzed: 10/06/09 12:03

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSd SPIKE	LCSd CONC	LCSd %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	18.8	75.2	25.0	17.7	70.8	6.08	30	23.5-141
acrolein	125	153	122	125	152	122	0.688	30	31.4-182
acrylonitrile	125	121	96.8	125	118	94.8	2.06	30	64.2-140
benzene	5.00	4.75	95.0	5.00	4.76	95.2	0.210	30	78.6-120
bromobenzene	5.00	4.68	93.6	5.00	4.77	95.4	1.90	30	75.0-122
bromochloromethane	5.00	4.45	89.0	5.00	4.88	97.6	9.22	30	74.8-127
bromodichloromethane	5.00	4.74	94.8	5.00	4.77	95.4	0.631	30	76.4-117
bromoform	5.00	4.50	90.0	5.00	4.77	95.4	5.82	30	62.4-127
bromomethane	5.00	6.04	121	5.00	5.40	108	11.2	30	34.2-166
2-butanone	25.0	21.8	87.1	25.0	21.5	85.9	1.43	30	44.9-126
n-butylbenzene	5.00	4.54	90.8	5.00	4.57	91.4	0.659	30	72.0-122
sec-butylbenzene	5.00	4.86	97.2	5.00	4.92	98.4	1.23	30	78.3-116
tert-butylbenzene	5.00	4.02	80.4	5.00	4.11	82.2	2.21	30	53.1-148
Carbon disulfide	5.00	4.95	99.0	5.00	5.02	100	1.40	30	69.0-118
carbon tetrachloride	5.00	4.74	94.8	5.00	4.88	97.6	2.91	30	71.7-124
chlorobenzene	5.00	4.63	92.6	5.00	4.81	96.2	3.81	30	75.5-116
chloroethane	5.00	5.56	111	5.00	5.45	109	2.00	30	78.2-138
2-chloroethyl vinyl ether	125	115	91.9	125	114	91.0	0.945	30	5.57-235
chloroform	5.00	4.64	92.8	5.00	4.69	93.8	1.07	30	80.6-117
chloromethane	5.00	4.59	91.8	5.00	4.54	90.8	1.10	30	72.6-127
2-chlorotoluene	5.00	4.64	92.8	5.00	4.68	93.6	0.858	30	81.4-117
4-chlorotoluene	5.00	4.53	90.6	5.00	4.63	92.6	2.18	30	82.1-116
dibromochloromethane	5.00	4.81	96.2	5.00	4.87	97.4	1.24	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	21.7	86.9	25.0	22.2	89.0	2.36	30	58.0-133
1,2-dibromoethane	5.00	4.63	92.6	5.00	4.89	97.8	5.46	30	75.5-118
dibromomethane	5.00	4.51	90.2	5.00	4.60	92.0	1.98	30	77.3-124
1,2-dichlorobenzene	5.00	4.59	91.8	5.00	4.61	92.2	0.435	30	76.3-115
1,3-dichlorobenzene	5.00	4.61	92.2	5.00	4.72	94.4	2.36	30	79.1-114
1,4-dichlorobenzene	5.00	4.50	90.0	5.00	4.60	92.0	2.20	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	23.5	94.1	25.0	23.4	93.6	0.554	30	52.3-130
dichlorodifluoromethane	5.00	5.03	101	5.00	4.92	98.4	2.21	30	69.8-134
1,1-dichloroethane	5.00	4.54	90.8	5.00	4.67	93.4	2.82	30	78.0-120
1,2-dichloroethane	5.00	4.78	95.6	5.00	4.86	97.2	1.66	30	72.8-126
1,1-dichloroethene	5.00	4.86	97.2	5.00	4.92	98.4	1.23	30	74.6-121
cis-1,2-dichloroethene	5.00	4.74	94.8	5.00	4.75	95.0	0.211	30	78.0-121
trans-1,2-dichloroethene	5.00	4.74	94.8	5.00	4.84	96.8	2.09	30	60.7-144
1,2-dichloropropane	5.00	4.72	94.4	5.00	4.95	99.0	4.76	30	75.8-119
1,3-dichloropropane	5.00	4.65	93.0	5.00	4.83	96.6	3.80	30	78.5-113
2,2-dichloropropane	5.00	4.80	96.0	5.00	4.85	97.0	1.04	30	75.6-130
1,1-dichloropropene	5.00	4.86	97.2	5.00	4.86	97.2	0.00	30	79.7-117
cis-1,3-dichloropropene	5.00	4.82	96.4	5.00	4.94	98.8	2.46	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

SGS North America, Inc.

SGS Environmental Services

Lab Name: SGS Environmental

Lab Code: NC00919

LCS: LCS1100609A

LCSID: LCS1100609B

filename: 1006103.D

filename: 1006104.D

Date Analyzed: 10/06/09 11:31

Date Analyzed: 10/06/09 12:03

Dilution: 1

Matrix: Water

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSID SPIKE (µg/L)	LCSID CONC (µg/L)	LCSID % REC #	% RPD	QC LIMITS	
								RPD	REC
trans-1,3-dichloropropene	5.00	4.80	96.0	5.00	4.99	99.8	3.88	30	79.0-113
Diisopropyl ether	5.00	4.76	95.2	5.00	4.85	97.0	1.87	30	71.8-115
ethylbenzene	5.00	4.84	96.8	5.00	4.89	97.8	1.03	30	80.5-115
hexachlorobutadiene	5.00	4.81	96.2	5.00	4.82	96.4	0.208	30	63.3-139
2-hexanone	25.0	20.8	83.1	25.0	21.0	84.1	1.15	30	46.8-123
Iodomethane	5.00	5.33	107	5.00	5.43	108	1.86	30	29.3-156
isopropylbenzene	5.00	4.92	98.4	5.00	4.96	99.2	0.810	30	81.6-114
4-isopropyltoluene	5.00	4.60	92.0	5.00	4.63	92.6	0.650	30	78.4-119
Methyl-tert-butyl ether	5.00	4.84	96.8	5.00	5.02	100	3.65	30	76.0-114
methylene chloride	5.00	4.47	89.4	5.00	4.70	94.0	5.02	30	72.9-120
4-methyl-2-pentanone	25.0	23.6	94.4	25.0	24.1	96.5	2.18	30	56.2-124
naphthalene	5.00	4.52	90.4	5.00	4.78	95.6	5.59	30	24.8-182
n-propyl benzene	5.00	4.80	96.0	5.00	4.90	98.0	2.06	30	79.0-116
styrene	5.00	4.45	89.0	5.00	4.56	91.2	2.44	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.69	93.8	5.00	4.81	96.2	2.53	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.61	92.2	5.00	4.71	94.2	2.14	30	69.7-119
tetrachloroethene	5.00	3.85	77.0	5.00	3.92	78.4	1.80	30	55.3-144
Toluene	5.00	4.79	95.8	5.00	4.94	98.8	3.08	30	78.4-117
1,2,3-trichlorobenzene	5.00	5.07	101	5.00	5.13	103	1.18	30	20.8-193
1,2,4-trichlorobenzene	5.00	4.99	99.8	5.00	4.95	99.0	0.805	30	47.9-150
1,1,1-trichloroethane	5.00	4.79	95.8	5.00	4.90	98.0	2.27	30	78.8-120
1,1,2-trichloroethane	5.00	4.66	93.2	5.00	4.76	95.2	2.12	30	73.6-117
trichloroethane	5.00	4.87	97.4	5.00	4.79	95.8	2.54	30	80.1-116
trichlorofluoromethane	5.00	4.95	99.0	5.00	4.86	97.2	1.83	30	80.5-130
1,2,3-trichloropropane	5.00	4.83	96.6	5.00	4.90	98.0	1.44	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.52	90.4	5.00	4.48	89.6	0.889	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.47	89.4	5.00	4.48	89.6	0.223	30	79.4-114
Vinyl acetate	12.5	12.2	97.4	12.5	12.4	99.4	2.03	30	60.7-127
vinyl chloride	5.00	4.99	99.8	5.00	4.95	99.0	0.805	30	77.5-126
m/p-xylene	10.0	9.52	95.2	10.0	9.63	96.3	1.15	30	82.9-112
o-xylene	5.00	4.66	93.2	5.00	4.74	94.8	1.70	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSID SPIKE (µg/L)	LCSID CONC (µg/L)	LCSID % REC #	QC LIMITS REC
460-00-4 4-Bromofluorobenzene	10	9.94	99.4	10	10.17	102	84.7-115
17060-07-0 1,2-Dichloroethane-d4	10	10.24	102	10	10.35	104	63.5-140
2037-26-5 Toluene-d8	10	10.34	103	10	10.38	104	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSID Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: cl

Reviewed by: DVO

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD1

EPA Sample No.: Amt. Filenames: Analysis Dates:
 Sample g582-493-4a 5 mL 100612C.D 2009-10-06 20:42:00
 MS g582-493-4a 5 mL 1006121.D 2009-10-06 21:13:00
 MSD g582-493-4a 5 mL 1006122.D 2009-10-06 21:44:00

Batch: 1100609
 Dilution: 1000
 Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	25000	12600	50.6	25000	12200	48.8	3.62	30	17.7-85.2
acrolein	BQL	125000	165000	132	125000	175000	140	6.33	30	0.00-424
acrylonitrile	BQL	125000	125000	100	125000	127000	101	1.14	30	85.0-175
benzene	BQL	5000	5640	113	5000	4680	93.6	18.6	30	61.6-135
bromobenzene	BQL	5000	4920	98.4	5000	4600	92.0	6.72	30	65.1-125
bromochloromethane	BQL	5000	5270	105	5000	4420	88.4	17.5	30	75.5-126
bromodichloromethane	BQL	5000	5590	112	5000	4680	93.6	17.7	30	74.3-123
bromoform	BQL	5000	4880	97.6	5000	4600	92.0	5.91	30	52.3-122
bromomethane	BQL	5000	5270	105	5000	5770	115	9.06	30	10.0-284
2-butanone	BQL	25000	21000	84.2	25000	17500	70.2	18.2	30	36.1-107
n-butylbenzene	BQL	5000	4450	89.0	5000	4280	85.6	3.89	30	70.2-124
sec-butylbenzene	BQL	5000	4900	98.0	5000	4670	93.4	4.81	30	62.0-133
tert-butylbenzene	BQL	5000	4150	83.0	5000	3900	78.0	6.21	30	73.5-121
Carbon disulfide	BQL	5000	6000	120	5000	4990	99.8	18.4	30	68.8-129
carbon tetrachloride	BQL	5000	5640	113	5000	4780	95.6	16.5	30	71.8-122
chlorobenzene	BQL	5000	4930	98.6	5000	4660	93.2	5.63	30	77.2-118
chloroethane	BQL	5000	5270	105	5000	5720	114	8.19	30	10.0-233
2-chloroethyl vinyl ether	BQL	12500	105000	838*	12500	104000	833*	0.622	30	16.7-283
chloroform	BQL	5000	5320	106	5000	4620	92.4	14.1	30	74.0-128
chloromethane	BQL	5000	5380	108	5000	5280	106	1.88	30	72.0-138
2-chlorotoluene	BQL	5000	4930	98.6	5000	4570	91.4	7.58	30	79.3-118
4-chlorotoluene	BQL	5000	4950	99.0	5000	4630	92.6	6.68	30	76.8-120
dibromochloromethane	BQL	5000	4890	97.8	5000	4720	94.4	3.54	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	25000	22300	89.2	25000	21000	83.8	6.15	30	20.2-171
1,2-dibromoethane	BQL	5000	4980	99.6	5000	4590	91.8	8.15	30	78.5-123
dibromomethane	BQL	5000	5290	106	5000	4570	91.4	14.6	30	71.3-137
1,2-dichlorobenzene	BQL	5000	4890	97.8	5000	4600	92.0	6.11	30	75.1-120
1,3-dichlorobenzene	BQL	5000	4880	97.6	5000	4560	91.2	6.78	30	73.1-121
1,4-dichlorobenzene	BQL	5000	4830	96.6	5000	3850	77.0	22.6	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	25000	22000	87.9	25000	20300	81.1	8.05	30	25.7-149
dichlorodifluoromethane	BQL	5000	5440	109	5000	5170	103	5.09	30	41.7-166
1,1-dichloroethane	BQL	5000	5250	105	5000	4560	91.2	14.1	30	75.6-128
1,2-dichloroethane	BQL	5000	5340	107	5000	4700	94.0	12.7	30	71.1-127
1,1-dichloroethene	BQL	5000	5320	106	5000	4780	95.6	10.7	30	64.4-130
cis-1,2-dichloroethene	5050	5000	11300	125	5000	10200	103	19.4	30	72.7-134
trans-1,2-dichloroethene	BQL	5000	5830	108	5000	5140	94.6	13.6	30	74.6-124
1,2-dichloropropane	BQL	5000	5570	111	5000	4700	94.0	16.9	30	76.5-129
1,3-dichloropropane	BQL	5000	4660	93.2	5000	4430	88.6	5.06	30	79.1-121
2,2-dichloropropane	BQL	5000	5050	101	5000	4340	86.8	15.1	30	31.5-157
1,1-dichloropropene	BQL	5000	5320	106	5000	4620	92.4	14.1	30	72.5-120
cis-1,3-dichloropropene	BQL	5000	5220	104	5000	4430	88.6	16.4	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental
Lab Code: NC00919

Inst: MSD1
Batch: 1100609
Dilution: 1000
Matrix: Water

EPA Sample No.: g582-493-4a, g582-493-4a, g582-493-4a

Filenames: 1006120.D, 1006121.D, 1006122.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	5000	5390	108	5000	4470	89.4	18.7	30	44.7-144
Diisopropyl ether	BQL	5000	5380	108	5000	4590	91.8	15.8	30	79.4-122
ethylbenzene	BQL	5000	5050	101	5000	4570	91.4	9.98	30	73.8-126
hexachlorobutadiene	BQL	5000	4710	94.2	5000	4520	90.4	4.12	30	51.8-134
2-hexanone	BQL	25000	18400	73.5	25000	16200	64.6	12.8	30	41.6-111
Iodomethane	BQL	5000	5560	111	5000	4680	93.6	17.2	30	40.6-126
isopropylbenzene	BQL	5000	5010	100	5000	4630	92.6	7.88	30	74.3-123
4-isopropyltoluene	BQL	5000	4640	92.8	5000	4480	89.6	3.51	30	74.6-122
Methyl-tert-butyl ether	BQL	5000	5140	103	5000	4600	92.0	11.1	30	66.5-136
methylene chloride	BQL	5000	5690	111	5000	4750	92.6	18.4	30	48.6-155
4-methyl-2-pentanone	BQL	25000	26900	108	25000	21800	87.4	20.8	30	6.88-166
naphthalene	BQL	5000	3660	73.2	5000	3870	77.4	5.58	30	55.1-140
n-propyl benzene	BQL	5000	5000	100	5000	4700	94.0	6.18	30	71.6-128
styrene	BQL	5000	4570	91.4	5000	4340	86.8	5.16	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	5000	5150	103	5000	4660	93.2	9.99	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	5000	4950	99.0	5000	4650	93.0	6.25	30	75.7-136
tetrachloroethene	BQL	5000	3930	78.6	5000	3750	75.0	4.69	30	45.8-153
toluene	BQL	5000	5810	116	5000	4800	96.0	19.0	30	66.4-128
1,2,3-trichlorobenzene	BQL	5000	4520	90.4	5000	4460	89.2	1.34	30	61.0-126
1,2,4-trichlorobenzene	BQL	5000	4390	87.8	5000	4360	87.2	0.686	30	60.6-125
1,1,1-trichloroethane	BQL	5000	5700	114	5000	4980	99.6	13.5	30	78.4-121
1,1,2-trichloroethane	BQL	5000	4930	98.6	5000	4640	92.8	6.06	30	64.8-128
trichloroethene	25500	5000	34600	182*	5000	30800	106	83.1*	30	84.9-136
trichlorofluoromethane	BQL	5000	5410	108	5000	5090	102	6.10	30	76.8-132
1,2,3-trichloropropane	BQL	5000	4670	93.4	5000	4320	86.4	7.79	30	10.0-218
1,2,4-trimethylbenzene	BQL	5000	4540	90.8	5000	4290	85.8	5.66	30	31.0-172
1,3,5-trimethylbenzene	BQL	5000	4530	90.6	5000	4340	86.8	4.28	30	67.7-132
Vinyl acetate	BQL	12500	13400	107	12500	11700	93.6	13.4	30	0.00-355
vinyl chloride	BQL	5000	5230	105	5000	5080	102	2.91	30	68.1-137
m/p-xylene	BQL	10000	9780	97.8	10000	9260	92.6	5.46	30	79.8-118
o-xylene	BQL	5000	4790	95.8	5000	4430	88.6	7.81	30	80.0-121

System Monitoring Compound Results

	MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	QC LIMITS REC	
460-00-4	4-Bromofluorobenzene	10	10.23	102	10	10.11	101	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.9	109	10	10.18	102	63.5-140
2037-26-5	Toluene-d8	10	12.01	120*	10	10.63	106	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 2 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 1 out of 72 outside of limits

COMMENTS:

Analyst: cl

Reviewed by: DVO

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1100709B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	10/7/2009	
Benzene	BQL	1.00	0.0650	1	10/7/2009	
Bromobenzene	BQL	1.00	0.0560	1	10/7/2009	
Bromochloromethane	BQL	1.00	0.101	1	10/7/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	10/7/2009	
Bromoform	BQL	1.00	0.120	1	10/7/2009	
Bromomethane	BQL	1.00	0.133	1	10/7/2009	
2-Butanone	BQL	25.0	0.544	1	10/7/2009	
n-Butylbenzene	BQL	1.00	0.109	1	10/7/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	10/7/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	10/7/2009	
Carbon disulfide	BQL	1.00	0.0690	1	10/7/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	10/7/2009	
Chlorobenzene	BQL	1.00	0.0820	1	10/7/2009	
Chloroethane	BQL	1.00	0.106	1	10/7/2009	
Chloroform	BQL	1.00	0.0790	1	10/7/2009	
Chloromethane	BQL	1.00	0.146	1	10/7/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	10/7/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	10/7/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	10/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	10/7/2009	
Dibromomethane	BQL	1.00	0.113	1	10/7/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	10/7/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	10/7/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	10/7/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	10/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	10/7/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	10/7/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	10/7/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	10/7/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	10/7/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	10/7/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	10/7/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	10/7/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	10/7/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	10/7/2009	
Ethylbenzene	BQL	1.00	0.0770	1	10/7/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	10/7/2009	
2-Hexanone	BQL	5.00	0.720	1	10/7/2009	
Iodomethane	BQL	1.00	0.0420	1	10/7/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	10/7/2009	

SGS North America, Inc.
SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS1100709A

filename: 1007103.D

Date Analyzed: 10/07/09 11:07

LCSD: LCS1100709B

filename: 1007104.D

Date Analyzed: 10/07/09 11:39

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	18.3	73.1	25.0	16.6	66.4	9.58	30	23.5-141
acrolein	125	151	121	125	167	134	10.1	30	31.4-182
acrylonitrile	125	113	90.1	125	115	92.2	2.32	30	64.2-140
benzene	5.00	4.59	91.8	5.00	4.78	95.6	4.06	30	76.6-120
bromobenzene	5.00	4.92	98.4	5.00	5.28	106	7.06	30	75.0-122
bromochloromethane	5.00	4.87	97.4	5.00	4.64	92.8	4.84	30	74.8-127
bromodichloromethane	5.00	4.52	90.4	5.00	4.52	90.4	0.00	30	76.4-117
bromoform	5.00	4.79	95.8	5.00	5.29	106	9.92	30	62.4-127
bromomethane	5.00	5.29	106	5.00	5.44	109	2.80	30	34.2-166
2-butanone	25.0	19.8	79.2	25.0	18.5	73.9	7.00	30	44.9-126
n-butylbenzene	5.00	4.45	89.0	5.00	4.49	89.8	0.895	30	72.0-122
sec-butylbenzene	5.00	4.72	94.4	5.00	4.94	98.8	4.55	30	78.3-116
tert-butylbenzene	5.00	3.89	77.8	5.00	4.18	83.6	7.19	30	53.1-148
Carbon disulfide	5.00	5.06	101	5.00	4.81	96.2	5.06	30	69.0-118
carbon tetrachloride	5.00	4.59	91.8	5.00	4.53	90.6	1.32	30	71.7-124
chlorobenzene	5.00	4.90	98.0	5.00	5.18	104	5.94	30	75.5-116
chloroethane	5.00	5.15	103	5.00	5.49	110	6.39	30	78.2-138
2-chloroethyl vinyl ether	125	108	86.9	125	114	91.4	5.04	30	5.57-235
chloroform	5.00	4.41	88.2	5.00	4.37	87.4	0.911	30	80.6-117
chloromethane	5.00	4.76	95.2	5.00	4.97	99.4	4.32	30	72.6-127
2-chlorotoluene	5.00	4.61	92.2	5.00	4.80	96.0	4.04	30	81.4-117
4-chlorotoluene	5.00	4.65	93.0	5.00	5.00	100	7.25	30	82.1-116
dibromochloromethane	5.00	4.78	95.6	5.00	4.79	95.8	0.209	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	21.4	85.8	25.0	23.3	93.3	8.40	30	58.0-133
1,2-dibromoethane	5.00	4.75	95.0	5.00	5.06	101	6.32	30	75.5-118
dibromomethane	5.00	4.39	87.8	5.00	4.46	89.2	1.58	30	77.3-124
1,2-dichlorobenzene	5.00	4.65	93.0	5.00	4.92	98.4	5.64	30	76.3-115
1,3-dichlorobenzene	5.00	4.59	91.8	5.00	4.79	95.8	4.26	30	79.1-114
1,4-dichlorobenzene	5.00	4.47	89.4	5.00	4.78	95.6	6.70	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	23.0	92.2	25.0	24.2	96.7	4.74	30	52.3-130
dichlorodifluoromethane	5.00	4.76	95.2	5.00	5.15	103	7.87	30	69.8-134
1,1-dichloroethane	5.00	4.43	88.6	5.00	4.51	90.2	1.79	30	78.0-120
1,2-dichloroethane	5.00	4.38	87.6	5.00	4.44	88.8	1.36	30	72.8-126
1,1-dichloroethene	5.00	4.91	98.2	5.00	4.43	88.6	10.3	30	74.6-121
cis-1,2-dichloroethene	5.00	4.58	91.6	5.00	4.21	84.2	8.42	30	78.0-121
trans-1,2-dichloroethene	5.00	4.53	90.6	5.00	4.49	89.8	0.887	30	60.7-144
1,2-dichloropropane	5.00	4.64	92.8	5.00	4.60	92.0	0.866	30	75.8-119
1,3-dichloropropane	5.00	4.53	90.6	5.00	4.74	94.8	4.53	30	78.5-113
2,2-dichloropropane	5.00	4.55	91.0	5.00	3.99	79.8	13.1	30	75.6-130
1,1-dichloropropene	5.00	4.57	91.4	5.00	4.61	92.2	0.871	30	79.7-117
cis-1,3-dichloropropene	5.00	4.62	92.4	5.00	4.76	95.2	2.98	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

SGS North America, Inc.
SGS Environmental Services

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS1100709A

filename: 1007103.D

Date Analyzed: 10/07/09 11:07

LCSID: LCS1100709B

filename: 1007104.D

Date Analyzed: 10/07/09 11:39

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSID SPIKE (µg/L)	LCSID CONC (µg/L)	LCSID % REC #	% RPD	QC LIMITS	
								RPD	REC
trans-1,3-dichloropropene	5.00	4.84	96.8	5.00	5.08	102	4.84	30	79.0-113
Diisopropyl ether	5.00	4.54	90.8	5.00	4.70	94.0	3.46	30	71.8-115
ethylbenzene	5.00	4.68	93.6	5.00	4.85	97.0	3.57	30	80.5-115
hexachlorobutadiene	5.00	5.00	100	5.00	4.82	96.4	3.66	30	63.3-139
2-hexanone	25.0	20.4	81.5	25.0	21.5	86.1	5.49	30	46.8-123
Iodomethane	5.00	5.59	112	5.00	4.58	91.6	19.9	30	29.3-156
isopropylbenzene	5.00	4.67	93.4	5.00	4.98	99.6	6.42	30	81.6-114
4-isopropyltoluene	5.00	4.59	91.8	5.00	4.69	93.8	2.16	30	78.4-119
Methyl-tert-butyl ether	5.00	4.35	87.0	5.00	4.48	89.6	2.94	30	76.0-114
methylene chloride	5.00	4.57	91.4	5.00	4.87	97.4	6.36	30	72.9-120
4-methyl-2-pentanone	25.0	23.5	93.9	25.0	27.0	108	14.0	30	56.2-124
naphthalene	5.00	4.52	90.4	5.00	4.49	89.8	0.666	30	24.8-182
n-propyl benzene	5.00	4.63	92.6	5.00	4.91	98.2	5.87	30	79.0-116
styrene	5.00	4.27	85.4	5.00	4.57	91.4	6.79	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.89	97.8	5.00	5.10	102	4.20	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.76	95.2	5.00	5.14	103	7.68	30	69.7-119
tetrachloroethene	5.00	3.96	79.2	5.00	4.11	82.2	3.72	30	55.3-144
toluene	5.00	4.93	98.6	5.00	5.34	107	8.17	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.02	100	5.00	5.13	103	2.17	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.01	100	5.00	4.97	99.4	0.802	30	47.9-150
1,1,1-trichloroethane	5.00	4.62	92.4	5.00	4.58	91.6	0.870	30	78.8-120
1,1,2-trichloroethane	5.00	4.71	94.2	5.00	4.67	93.4	0.853	30	73.6-117
trichloroethene	5.00	4.70	94.0	5.00	4.69	93.8	0.213	30	80.1-116
trichlorofluoromethane	5.00	5.17	103	5.00	4.35	87.0	17.2	30	80.5-130
1,2,3-trichloropropane	5.00	4.80	96.0	5.00	5.12	102	6.45	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.38	87.6	5.00	4.45	89.0	1.58	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.37	87.4	5.00	4.52	90.4	3.37	30	79.4-114
Vinyl acetate	12.5	11.4	91.6	12.5	11.6	93.2	1.73	30	60.7-127
vinyl chloride	5.00	4.88	97.6	5.00	4.97	99.4	1.83	30	77.5-126
m/p-xylene	10.0	9.07	90.7	10.0	9.64	96.4	6.09	30	82.9-112
o-xylene	5.00	4.41	88.2	5.00	4.84	96.8	9.30	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSID SPIKE (µg/L)	LCSID CONC (µg/L)	LCSID % REC #	QC LIMITS REC
460-00-4 4-Bromofluorobenzene	10	10.11	101	10	10.75	108	84.7-115
17060-07-0 1,2-Dichloroethane-d4	10	9.63	96.3	10	9.11	91.1	63.5-140
2037-26-5 Toluene-d8	10	10.69	107	10	11.14	111	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSID Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: *CL*

Reviewed by: *SD*

SGS North America, Inc.
SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental Lab Code: NC00919 Inst: MSD1
 EPA Sample No.: Amt. Filenames: Analysis Dates: Batch: 1100709
 Sample g582-493-6a 5 mL 1007120.D 2009-10-07 20:19:00 Dilution: 1000
 MS g582-493-6a 5 mL 1007121.D 2009-10-07 20:50:00 Matrix: Water
 MSD g582-493-6a 5 mL 1007122.D 2009-10-07 21:21:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	25000	12000	48.2	25000	13300	53.1	9.72	30	17.7-85.2
acrolein	BQL	125000	161000	129	125000	183000	146	12.7	30	0.00-424
acrylonitrile	BQL	125000	121000	97.1	125000	129000	103	6.09	30	85.0-175
benzene	BQL	5000	4730	94.6	5000	4880	97.6	3.12	30	61.6-135
bromobenzene	BQL	5000	4880	97.6	5000	5020	100	2.83	30	65.1-125
bromochloromethane	BQL	5000	5090	102	5000	5250	105	3.09	30	75.5-126
bromodichloromethane	BQL	5000	4800	96.0	5000	5080	102	5.67	30	74.3-123
bromoform	BQL	5000	4980	99.6	5000	5020	100	0.800	30	52.3-122
bromomethane	BQL	5000	4560	91.2	5000	5550	111	19.6	30	10.0-284
2-butanone	BQL	25000	18700	74.8	25000	19800	79.0	5.46	30	36.1-107
n-butylbenzene	BQL	5000	4220	84.4	5000	4390	87.8	3.95	30	70.2-124
sec-butylbenzene	BQL	5000	4680	93.6	5000	4760	95.2	1.69	30	62.0-133
tert-butylbenzene	BQL	5000	3920	78.4	5000	3990	79.8	1.77	30	73.5-121
Carbon disulfide	BQL	5000	5190	104	5000	5420	108	4.34	30	68.8-129
carbon tetrachloride	BQL	5000	4960	99.2	5000	5160	103	3.95	30	71.8-122
chlorobenzene	BQL	5000	4860	97.2	5000	4940	98.8	1.63	30	77.2-118
chloroethane	BQL	5000	5310	106	5000	5380	108	1.31	30	10.0-233
2-chloroethyl vinyl ether	BQL	12500	99200	794*	12500	101000	806*	1.55	30	16.7-283
chloroform	BQL	5000	4790	95.8	5000	5040	101	5.09	30	74.0-128
chloromethane	BQL	5000	4740	94.8	5000	4810	96.2	1.46	30	72.0-138
2-chlorotoluene	BQL	5000	4740	94.8	5000	4650	93.0	1.92	30	79.3-118
4-chlorotoluene	BQL	5000	4730	94.6	5000	4790	95.8	1.26	30	76.8-120
dibromochloromethane	BQL	5000	5010	100	5000	5150	103	2.76	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	25000	21100	84.2	25000	21200	84.8	0.662	30	20.2-171
1,2-dibromoethane	BQL	5000	4840	96.8	5000	4980	99.6	2.85	30	78.5-123
dibromomethane	BQL	5000	4120	82.4	5000	4910	98.2	17.5	30	71.3-137
1,2-dichlorobenzene	BQL	5000	4710	94.2	5000	4850	97.0	2.93	30	75.1-120
1,3-dichlorobenzene	BQL	5000	4650	93.0	5000	4720	94.4	1.49	30	73.1-121
1,4-dichlorobenzene	BQL	5000	4660	93.2	5000	4700	94.0	0.855	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	25000	20600	82.4	25000	21200	84.9	2.96	30	25.7-149
dichlorodifluoromethane	BQL	5000	4840	96.8	5000	4710	94.2	2.72	30	41.7-166
1,1-dichloroethane	BQL	5000	4610	92.2	5000	4850	97.0	5.07	30	75.6-128
1,2-dichloroethane	BQL	5000	4740	94.8	5000	4960	99.2	4.54	30	71.1-127
1,1-dichloroethene	BQL	5000	4980	99.6	5000	5300	106	6.22	30	64.4-130
cis-1,2-dichloroethene	9640	5000	15000	107	5000	15600	120	11.5	30	72.7-134
trans-1,2-dichloroethene	BQL	5000	5170	98.8	5000	5570	107	7.78	30	74.6-124
1,2-dichloropropane	BQL	5000	4580	91.6	5000	4860	97.2	5.93	30	76.5-129
1,3-dichloropropane	BQL	5000	4570	91.4	5000	4650	93.0	1.74	30	79.1-121
2,2-dichloropropane	BQL	5000	4370	87.4	5000	4520	90.4	3.37	30	31.5-157
1,1-dichloropropene	BQL	5000	4570	91.4	5000	4750	95.0	3.86	30	72.5-120
cis-1,3-dichloropropene	BQL	5000	4530	90.6	5000	4590	91.8	1.32	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.
SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD1

Batch: 1100709

EPA Sample No.: g582-493-6a, g582-493-6a, g582-493-6a

Dilution: 1000

Filenames: 1007120.D, 1007121.D, 1007122.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	5000	4480	89.6	5000	4510	90.2	0.667	30	44.7-144
Diisopropyl ether	BQL	5000	4690	93.8	5000	4810	96.2	2.53	30	79.4-122
ethylbenzene	BQL	5000	4590	91.8	5000	4710	94.2	2.58	30	73.8-126
hexachlorobutadiene	BQL	5000	4200	84.0	5000	4780	95.6	12.9	30	51.8-134
2-hexanone	BQL	25000	18100	72.3	25000	17900	71.6	0.889	30	41.6-111
Iodomethane	BQL	5000	4830	96.6	5000	5370	107	10.6	30	40.6-126
isopropylbenzene	BQL	5000	4650	93.0	5000	4770	95.4	2.55	30	74.3-123
4-isopropyltoluene	BQL	5000	4470	89.4	5000	4640	92.8	3.73	30	74.6-122
Methyl-tert-butyl ether	BQL	5000	4660	93.2	5000	4990	99.8	6.84	30	66.5-136
methylene chloride	BQL	5000	4740	92.2	5000	4940	96.2	4.25	30	48.6-155
4-methyl-2-pentanone	BQL	25000	22300	89.4	25000	21800	87.4	2.26	30	6.88-166
naphthalene	BQL	5000	3710	74.2	5000	4130	82.6	10.7	30	55.1-140
n-propyl benzene	BQL	5000	4710	94.2	5000	4720	94.4	0.212	30	71.6-128
styrene	BQL	5000	4390	87.8	5000	4380	87.6	0.228	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	5000	4960	99.2	5000	4980	99.6	0.402	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	5000	4910	98.2	5000	4800	96.0	2.26	30	75.7-136
tetrachloroethene	BQL	5000	3920	78.4	5000	3990	79.8	1.77	30	45.8-153
Toluene	BQL	5000	4790	95.8	5000	4870	97.4	1.66	30	66.4-128
1,2,3-trichlorobenzene	BQL	5000	4340	86.8	5000	4720	94.4	8.39	30	61.0-126
1,2,4-trichlorobenzene	BQL	5000	4300	86.0	5000	4680	93.6	8.46	30	60.6-125
1,1,1-trichloroethane	BQL	5000	4960	99.2	5000	5320	106	7.00	30	78.4-121
1,1,2-trichloroethane	BQL	5000	4980	99.6	5000	5010	100	0.601	30	64.8-128
trichloroethene	BQL	5000	4690	93.8	5000	4840	96.8	3.15	30	84.9-136
trichlorofluoromethane	BQL	5000	5330	107	5000	5550	111	4.04	30	76.8-132
1,2,3-trichloropropane	BQL	5000	4530	90.6	5000	4490	89.8	0.887	30	10.0-218
1,2,4-trimethylbenzene	BQL	5000	4380	87.6	5000	4470	89.4	2.03	30	31.0-172
1,3,5-trimethylbenzene	BQL	5000	4340	86.8	5000	4480	89.6	3.17	30	67.7-132
Vinyl acetate	BQL	12500	11800	94.6	12500	12600	101	6.30	30	0.00-355
vinyl chloride	BQL	5000	4990	92.0	5000	5270	97.6	5.91	30	68.1-137
m/p-xylene	BQL	10000	9230	92.3	10000	9340	93.4	1.18	30	79.8-118
o-xylene	BQL	5000	4590	91.8	5000	4560	91.2	0.656	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	10.37	104	10	10.2	102	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.17	102	10	10.66	107	63.5-140
2037-26-5	Toluene-d8	10	10.44	104	10	10.33	103	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 1 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: CP

Reviewed by: MD

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: AVX
 Lab Sample ID: G582-493-7A
 Lab Project ID: G582-493

Analyzed By: CLP
 Date Collected:
 Date Received: 9/29/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	10/7/2009	
Benzene	BQL	1.00	0.0650	1	10/7/2009	
Bromobenzene	BQL	1.00	0.0560	1	10/7/2009	
Bromochloromethane	BQL	1.00	0.101	1	10/7/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	10/7/2009	
Bromoform	0.420	1.00	0.120	1	10/7/2009	
Bromomethane	BQL	1.00	0.133	1	10/7/2009	J
2-Butanone	BQL	25.0	0.544	1	10/7/2009	
n-Butylbenzene	BQL	1.00	0.109	1	10/7/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	10/7/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	10/7/2009	
Carbon disulfide	BQL	1.00	0.0690	1	10/7/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	10/7/2009	
Chlorobenzene	BQL	1.00	0.0820	1	10/7/2009	
Chloroethane	BQL	1.00	0.106	1	10/7/2009	
Chloroform	BQL	1.00	0.0790	1	10/7/2009	
Chloromethane	BQL	1.00	0.146	1	10/7/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	10/7/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	10/7/2009	
Dibromochloromethane	0.340	1.00	0.0900	1	10/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	10/7/2009	J
Dibromomethane	BQL	1.00	0.113	1	10/7/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	10/7/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	10/7/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	10/7/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	10/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	10/7/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	10/7/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	10/7/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	10/7/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	10/7/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	10/7/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	10/7/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	10/7/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	10/7/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	10/7/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	10/7/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	10/7/2009	
Ethylbenzene	BQL	1.00	0.0770	1	10/7/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	10/7/2009	
2-Hexanone	BQL	5.00	0.720	1	10/7/2009	
Iodomethane	BQL	1.00	0.0420	1	10/7/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	10/7/2009	



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

- Locations Nationwide
- Alaska
 - Hawaii
 - Ohio
 - Maryland
 - New Jersey
 - North Carolina
 - West Virginia

www.us.sgs.com

079475

1 CLIENT: **ARCADIS**
 CONTACT: **Mark Hanish** PHONE NO.: **724 742-9180**
 PROJECT: **AVX** SITE/PWSID#: **B0007393.000.0000**
 REPORTS TO: **Mark Hanish** E-MAIL: **Mark.Hanish@arcadis-us.com**
 INVOICE TO: **Mark Hanish** FAX NO.: **724 742-9189**
 QUOTE # _____ P.O. NUMBER _____

SGS Reference: **6582-493** PAGE **1** OF **1**

SGS North America, Inc.

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS	Date	Time	Received By:	Date	Time	Received By:	Date	Time	Received By:	Date	Time	Received By:	Date	Time	Requested Turnaround Time:	
																									No
	PZ-1D	9/28/09	1000	GW	2	G		X																	
	PZ-2D	9/28/09	1015	GW	2	G		X																	
	PZ-3D	9/28/09	1032	GW	2	G		X																	
	OW-10D	9/28/09	1105	GW	3	G		X																	
	OW-9D	9/28/09	1130	GW	3	G		X																	
	OW-8D	9/28/09	1145	GW	3	G		X																	
	Trip Blank	106	106	W	2	G		X																	

Shipping Carrier: **Fed Ex** Samples Received Cold? (Circle) YES NO
 Shipping Ticket No: **8198 1036160** Temperature (C): **4.9**
 Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
 Special Instructions: Requested Turnaround Time: **STD**

2200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
 45500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761
 White - Retained by Lab
 Yellow - Returned with Report
 Pink - Retained by Sampler



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0910180
Report Date: 10/21/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0910180-01	PZ-2D
P0910180-02	PZ-1D
P0910180-03	PZ-3D
P0910180-04	IW-3D
P0910180-05	OW-8D
P0910180-06	OW-10D
P0910180-07	OW-9D
P0910180-08	OW-7D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 10-22-09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 2 of 11
Lab Proj #: P0910180
Report Date: 10/21/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-2D	Water	P0910180-01			12 Oct. 09 13:00	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		66.0	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 3 of 11
Lab Proj #: P0910180
Report Date: 10/21/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-1D	Water	P0910180-02	12 Oct. 09 13:09	13 Oct. 09 10:48			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	J	2.3	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-3D	Water	P0910180-03			12 Oct. 09 13:17	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	J	3.9	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-3D	Water	P0910180-04			12 Oct. 09 13:26	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6800.0	250.0	mg/L	9060	10/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-8D	Water	P0910180-05			12 Oct. 09 13:40	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6.1	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P0910180-06			12 Oct. 09 13:51	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		18.0	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P0910180-07			12 Oct. 09 14:02	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		19.0	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P0910180-08			12 Oct. 09 14:10	13 Oct. 09 10:48	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		11.0	5.0	mg/L	9060	10/16/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA-16046

Page: Page 10 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
 Analysis Method: Total Organic Carbon

M091019022-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091019022-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	38.0 mg/L	36.00	106.00	70 - 130

P0910180-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	2.0 mg/L			- NA	0.00	0 - 20

P0910208-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0.00	0 - 20

P0910180-03A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	57.0 mg/L	50.00	106.00	70 - 130

P0910208-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	54.0 mg/L	50.00	108.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 11
 Lab Proj #: P0910180
 Report Date: 10/21/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091021006-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091021006-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	38.0 mg/L	36.00	106.00	70 - 130

P0910210-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0.00	0 - 20

P0910210-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	52.0 mg/L	50.00	104.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Page 180

119

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Parameters Requested

Company: ARCADIS
 Co. Address: One Adams Place 310 Seven Farms Blvd Suite 210
 Phone #: 724-742-9180 Fax #: 724-742-9189
 Proj. Manager: Mark Hanisk
 Proj. Name/Number: AVX/B0007393.0000.00006
 Sampler's signature: R. M. [Signature]

Results to:
Mark Hanisk
 Invoice to:
Mark Hanisk

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	X	Remarks
		Water	Vapor/Solid					
PZ-2D	Grab	X		10/12/09	1300		X	
PZ-1D	Grab	X		10/12/09	1309		X	
PZ-3D	Grab	X		10/12/09	1317		X	
IW-3D	Grab	X		10/12/09	1326		X	
OW-8D	Grab	X		10/12/09	1340		X	
OW-10D	Grab	X		10/12/09	1357		X	
OW-9D	Grab	X		10/12/09	1402		X	
OW-7D	Grab	X		10/12/09	1410		X	

Relinquished by: <u>[Signature]</u>	Company: <u>ARCADIS</u>	Received by: <u>Fed Ex</u>	Company: _____
Relinquished by: _____	Company: _____	Received by: _____	Company: _____
Relinquished by: _____	Company: _____	Received by: _____	Company: _____



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0910436
Report Date: 11/06/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0910436-01	OW-10D
P0910436-02	OW-9D
P0910436-03	OW-8D
P0910436-04	OW-7D
P0910436-05	PZ-1D
P0910436-06	PZ-2D
P0910436-07	PZ-3D
P0910436-08	IW-3D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: _____

Debbie Hallo

Date: _____

11-6-09

Project Manager: _____

Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-10D	Water	P0910436-01	26 Oct. 09 13:50	27 Oct. 09 11:53			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		13.0	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.460	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		4.500	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		140.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd. -----
 Suite 210
 Seven Fields, PA 16046 -----

Page: Page 3 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09 -----
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB -----

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-9D	Water	P0910436-02	26 Oct. 09 14:07	27 Oct. 09 11:53			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		11.0	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.260	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		3.200	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		76.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D	Water	P0910436-03	26 Oct. 09 14:20	27 Oct. 09 11:53			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		27.0	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.670	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		5.500	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		310.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-7D	Water	P0910436-04	26 Oct. 09 14:30	27 Oct. 09 11:53

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		17.0	5	mg/L	9060	11/5/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-1D	Water	P0910436-05	26 Oct. 09 14:40	27 Oct. 09 11:53			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7.6	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.091	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		0.290	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		26.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-2D	Water	P0910436-06			26 Oct. 09 15:00	27 Oct. 09 11:53	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		49.0	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.310	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		77.000	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		1900.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-3D	Water	P0910436-07	26 Oct. 09 15:25	27 Oct. 09 11:53			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6.0	5	mg/L	9060	11/5/09	md
RiskAnalysis							
N Ethane		0.620	0.025	ug/L	AM20GAX	11/5/09	rw
N Ethene		2.300	0.025	ug/L	AM20GAX	11/5/09	rw
N Methane		180.000	0.100	ug/L	AM20GAX	11/5/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-3D	Water	P0910436-08			26 Oct. 09 15:45	27 Oct. 09 11:53	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5900.0	250	mg/L	9060	11/5/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M091105002-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M091105002-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	49.000 ug/L	45.00	109.00	75 - 125
Ethene	45.000 ug/L	40.80	110.00	75 - 125
Methane	910.000 ug/L	825.00	110.00	75 - 125

M091105002-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	49.000 ug/L	45.00	109.00	75 - 125	0.00	0 - 20
Ethene	44.000 ug/L	40.80	108.00	75 - 125	2.25	0 - 20
Methane	900.000 ug/L	825.00	109.00	75 - 125	1.10	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 11
 Lab Proj #: P0910436
 Report Date: 11/06/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091106005-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M091106005-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	39.0 mg/L	36.00	108.00	70 - 130

P0910436-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	12.0 mg/L			- NA	8.00	0 - 20

P0910436-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	47.0 mg/L	50.00	72.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

Pa101136

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company:

ARCADIS

Parameters Requested

Results to:

Co. Address:

One Adams Place, 310 Seven Falls Blvd Suite 210

Mark Hanist

Phone #:

724-742-9180 Fax #: 724-742-9189

Proj. Manager:

MARK HANIST

Invoice to:

Proj. Name/Number:

AVR / B0007393.0000.00006

Mark Hanist

Sampler's signature:

[Signature]

Cooler Temp.

Sample ID	Sample Description	Sample Type		Date	Time	Vials	Parameters Requested		Remarks
		Water	Vapor / Solid				Methane, Ethane, Ethene	TOC	
0U-10D	Grab	X		10/26/09	1350	3	X	X	
0U-9D	Grab	X		10/26/09	1407	3	X	X	
0U-8D	Grab	X		10/26/09	1420	3	X	X	
0U-7D	Grab	X		10/26/09	1430	1	X	X	
P2-1D	Grab	X		10/26/09	1440	3	X	X	
P2-2D	Grab	X		10/26/09	1500	3	X	X	
P2-3D	Grab	X		10/26/09	1525	3	X	X	
IW-3D	Grab	X		10/26/09	1545	1	X	X	

Relinquished by:

[Signature]

Company: ARCADIS

Date: 10/26/09

Time: 1700

Received by:

[Signature]

Company:

Date:

Time:

Relinquished by:

[Signature]

Company:

Date:

Time:

Received by:

[Signature]

Company:

Date:

Time:

Relinquished by:

[Signature]

Company:

Date:

Time:

Received by:

[Signature]

Company:

Date:

Time:



Hillary Evanko
Arcadis
600 Waterfront Drive
Pittsburgh, PA 15222

Report Number: G582-536

Client Project: AVX Myrtle Beach


Dear Hillary Evanko,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

 November 12, 2009
Project Manager Date
Barbara Hager

Case Narrative

Arcadis

SGS Project: **G582-536**

Project Name: **AVX Myrtle Beach**

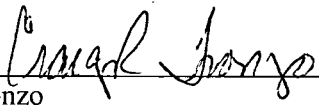
SGS North America; Inc.

November 11th, 2009

- Seven water samples were accepted into the laboratory on October 27th, 2009 at 1045 for analyses as indicated on the chain of custody. The samples were received in good condition, with a temperature of 5.0°C.
- All extractions and analyses were completed within holding time limits, with the following quality control exceptions.

8260B Analysis

- The submitted Trip Blank has reported concentrations for Methylene Chloride and Toluene, 0.88 and 0.21 µg/L, respectively. These values have been 'J' flagged to indicate that these concentrations are below the low calibration point, but above the MDL.

 _____ Date 11/11/09
Craig R Tronzo
Data Validation/QC

SGS North America, Inc.

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-10D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-1A
 Lab Project ID: G582-536

Analyzed By: CLP
 Date Collected: 10/26/2009 13:50
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	11/7/2009	
Benzene	BQL	1000	65.0	1000	11/7/2009	
Bromobenzene	BQL	1000	56.0	1000	11/7/2009	
Bromochloromethane	BQL	1000	101	1000	11/7/2009	
Bromodichloromethane	BQL	1000	76.0	1000	11/7/2009	
Bromoform	BQL	1000	120	1000	11/7/2009	
Bromomethane	BQL	1000	133	1000	11/7/2009	
2-Butanone	BQL	25000	544	1000	11/7/2009	
n-Butylbenzene	BQL	1000	109	1000	11/7/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	11/7/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	11/7/2009	
Carbon disulfide	BQL	1000	69.0	1000	11/7/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	11/7/2009	
Chlorobenzene	BQL	1000	82.0	1000	11/7/2009	
Chloroethane	BQL	1000	106	1000	11/7/2009	
Chloroform	BQL	1000	79.0	1000	11/7/2009	
Chloromethane	BQL	1000	146	1000	11/7/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	11/7/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	11/7/2009	
Dibromochloromethane	BQL	1000	90.0	1000	11/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	11/7/2009	
Dibromomethane	BQL	1000	113	1000	11/7/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	11/7/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	11/7/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	11/7/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	11/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	11/7/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	11/7/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	11/7/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	11/7/2009	
cis-1,2-Dichloroethene	5220	1000	65.0	1000	11/7/2009	
trans-1,2-dichloroethene	400	1000	89.0	1000	11/7/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	11/7/2009	
1,3-Dichloropropane	BQL	1000	127	1000	11/7/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	11/7/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	11/7/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	11/7/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	11/7/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	11/7/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	11/7/2009	
Ethylbenzene	BQL	1000	77.0	1000	11/7/2009	
Hexachlorobutadiene	BQL	1000	228	1000	11/7/2009	
2-Hexanone	BQL	5000	720	1000	11/7/2009	
Iodomethane	BQL	1000	42.0	1000	11/7/2009	
Isopropylbenzene	BQL	1000	71.0	1000	11/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-10D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-1A
 Lab Project ID: G582-536

Analyzed By: CLP
 Date Collected: 10/26/2009 13:50
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	11/7/2009	
Methylene chloride	BQL	5000	98.0	1000	11/7/2009	
4-Methyl-2-pentanone	BQL	5000	550	1000	11/7/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	11/7/2009	
Naphthalene	BQL	1000	133	1000	11/7/2009	
n-Propyl benzene	BQL	1000	80.0	1000	11/7/2009	
Styrene	BQL	1000	85.0	1000	11/7/2009	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	11/7/2009	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	11/7/2009	
Tetrachloroethene	BQL	1000	69.0	1000	11/7/2009	
Toluene	BQL	1000	76.0	1000	11/7/2009	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	11/7/2009	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	11/7/2009	
Trichloroethene	20400	1000	54.0	1000	11/7/2009	
1,1,1-Trichloroethane	BQL	1000	54.0	1000	11/7/2009	
1,1,2-Trichloroethane	BQL	1000	182	1000	11/7/2009	
Trichlorofluoromethane	BQL	1000	111	1000	11/7/2009	
1,2,3-Trichloropropane	BQL	1000	120	1000	11/7/2009	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	11/7/2009	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	11/7/2009	
Vinyl chloride	BQL	1000	149	1000	11/7/2009	
m-,p-Xylene	BQL	2000	98.0	1000	11/7/2009	
o-Xylene	BQL	1000	65.0	1000	11/7/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.8	108		
Toluene-d8		10	10	100		
4-Bromofluorobenzene		10	9.57	96		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-9D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-2A
 Lab Project ID: G582-536

Analyzed By: DVO
 Date Collected: 10/26/2009 14:07
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	11/8/2009	
Benzene	BQL	800	52.0	800	11/8/2009	
Bromobenzene	BQL	800	44.8	800	11/8/2009	
Bromochloromethane	BQL	800	80.8	800	11/8/2009	
Bromodichloromethane	BQL	800	60.8	800	11/8/2009	
Bromoform	BQL	800	96.0	800	11/8/2009	
Bromomethane	BQL	800	106	800	11/8/2009	
2-Butanone	BQL	20000	435	800	11/8/2009	
n-Butylbenzene	BQL	800	87.2	800	11/8/2009	
sec-Butylbenzene	BQL	800	67.2	800	11/8/2009	
tert-Butylbenzene	BQL	800	40.0	800	11/8/2009	
Carbon disulfide	BQL	800	55.2	800	11/8/2009	
Carbon tetrachloride	BQL	800	69.6	800	11/8/2009	
Chlorobenzene	BQL	800	65.6	800	11/8/2009	
Chloroethane	BQL	800	84.8	800	11/8/2009	
Chloroform	BQL	800	63.2	800	11/8/2009	
Chloromethane	BQL	800	117	800	11/8/2009	
2-Chlorotoluene	BQL	800	79.2	800	11/8/2009	
4-Chlorotoluene	BQL	800	64.0	800	11/8/2009	
Dibromochloromethane	BQL	800	72.0	800	11/8/2009	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	11/8/2009	
Dibromomethane	BQL	800	90.4	800	11/8/2009	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	11/8/2009	
1,2-Dichlorobenzene	BQL	800	102	800	11/8/2009	
1,3-Dichlorobenzene	BQL	800	64.8	800	11/8/2009	
1,4-Dichlorobenzene	BQL	800	63.2	800	11/8/2009	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	11/8/2009	
1,1-Dichloroethane	BQL	800	59.2	800	11/8/2009	
1,1-Dichloroethene	BQL	800	71.2	800	11/8/2009	
1,2-Dichloroethane	BQL	800	63.2	800	11/8/2009	
cis-1,2-Dichloroethene	7940	800	52.0	800	11/8/2009	
trans-1,2-dichloroethene	288	800	71.2	800	11/8/2009	J
1,2-Dichloropropane	BQL	800	75.2	800	11/8/2009	
1,3-Dichloropropane	BQL	800	102	800	11/8/2009	
2,2-Dichloropropane	BQL	800	47.2	800	11/8/2009	
1,1-Dichloropropene	BQL	800	57.6	800	11/8/2009	
cis-1,3-Dichloropropene	BQL	800	60.8	800	11/8/2009	
trans-1,3-Dichloropropene	BQL	800	60.8	800	11/8/2009	
Dichlorodifluoromethane	BQL	4000	75.2	800	11/8/2009	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	11/8/2009	
Ethylbenzene	BQL	800	61.6	800	11/8/2009	
Hexachlorobutadiene	BQL	800	182	800	11/8/2009	
2-Hexanone	BQL	4000	576	800	11/8/2009	
Iodomethane	BQL	800	33.6	800	11/8/2009	
Isopropylbenzene	BQL	800	56.8	800	11/8/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-9D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-2A
 Lab Project ID: G582-536

Analyzed By: DVO
 Date Collected: 10/26/2009 14:07
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	11/8/2009	
Methylene chloride	96.0	4000	78.4	800	11/8/2009	J
4-Methyl-2-pentanone	BQL	4000	440	800	11/8/2009	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	11/8/2009	
Naphthalene	BQL	800	106	800	11/8/2009	
n-Propyl benzene	BQL	800	64.0	800	11/8/2009	
Styrene	BQL	800	68.0	800	11/8/2009	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	11/8/2009	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	11/8/2009	
Tetrachloroethene	BQL	800	55.2	800	11/8/2009	
Toluene	BQL	800	60.8	800	11/8/2009	
1,2,3-Trichlorobenzene	BQL	800	152	800	11/8/2009	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	11/8/2009	
Trichloroethene	BQL	800	43.2	800	11/8/2009	
1,1,1-Trichloroethane	BQL	800	43.2	800	11/8/2009	
1,1,2-Trichloroethane	BQL	800	146	800	11/8/2009	
Trichlorofluoromethane	BQL	800	88.8	800	11/8/2009	
1,2,3-Trichloropropane	BQL	800	96.0	800	11/8/2009	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	11/8/2009	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	11/8/2009	
Vinyl chloride	216	800	119	800	11/8/2009	J
m-,p-Xylene	BQL	1600	78.4	800	11/8/2009	
o-Xylene	BQL	800	52.0	800	11/8/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.6	116
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.52	95

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: *ck*

Reviewed By: *DVO*

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-8D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-536-3A
Lab Project ID: G582-536

Analyzed By: CLP
Date Collected: 10/26/2009 14:20
Date Received: 10/27/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	11/7/2009	
Benzene	BQL	1000	65.0	1000	11/7/2009	
Bromobenzene	BQL	1000	56.0	1000	11/7/2009	
Bromochloromethane	BQL	1000	101	1000	11/7/2009	
Bromodichloromethane	BQL	1000	76.0	1000	11/7/2009	
Bromoform	BQL	1000	120	1000	11/7/2009	
Bromomethane	BQL	1000	133	1000	11/7/2009	
2-Butanone	BQL	25000	544	1000	11/7/2009	
n-Butylbenzene	BQL	1000	109	1000	11/7/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	11/7/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	11/7/2009	
Carbon disulfide	BQL	1000	69.0	1000	11/7/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	11/7/2009	
Chlorobenzene	BQL	1000	82.0	1000	11/7/2009	
Chloroethane	BQL	1000	106	1000	11/7/2009	
Chloroform	BQL	1000	79.0	1000	11/7/2009	
Chloromethane	BQL	1000	146	1000	11/7/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	11/7/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	11/7/2009	
Dibromochloromethane	BQL	1000	90.0	1000	11/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	11/7/2009	
Dibromomethane	BQL	1000	113	1000	11/7/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	11/7/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	11/7/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	11/7/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	11/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	11/7/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	11/7/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	11/7/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	11/7/2009	
cis-1,2-Dichloroethene	7300	1000	65.0	1000	11/7/2009	
trans-1,2-dichloroethene	250	1000	89.0	1000	11/7/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	11/7/2009	
1,3-Dichloropropane	BQL	1000	127	1000	11/7/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	11/7/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	11/7/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	11/7/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	11/7/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	11/7/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	11/7/2009	
Ethylbenzene	BQL	1000	77.0	1000	11/7/2009	
Hexachlorobutadiene	BQL	1000	228	1000	11/7/2009	
2-Hexanone	BQL	5000	720	1000	11/7/2009	
Iodomethane	BQL	1000	42.0	1000	11/7/2009	
Isopropylbenzene	BQL	1000	71.0	1000	11/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: OW-8D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-3A
 Lab Project ID: G582-536

Analyzed By: CLP
 Date Collected: 10/26/2009 14:20
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	11/7/2009	
Methylene chloride	BQL	5000	98.0	1000	11/7/2009	
4-Methyl-2-pentanone	BQL	5000	550	1000	11/7/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	11/7/2009	
Naphthalene	BQL	1000	133	1000	11/7/2009	
n-Propyl benzene	BQL	1000	80.0	1000	11/7/2009	
Styrene	BQL	1000	85.0	1000	11/7/2009	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	11/7/2009	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	11/7/2009	
Tetrachloroethene	BQL	1000	69.0	1000	11/7/2009	
Toluene	BQL	1000	76.0	1000	11/7/2009	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	11/7/2009	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	11/7/2009	
Trichloroethene	160	1000	54.0	1000	11/7/2009	J
1,1,1-Trichloroethane	BQL	1000	54.0	1000	11/7/2009	
1,1,2-Trichloroethane	BQL	1000	182	1000	11/7/2009	
Trichlorofluoromethane	BQL	1000	111	1000	11/7/2009	
1,2,3-Trichloropropane	BQL	1000	120	1000	11/7/2009	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	11/7/2009	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	11/7/2009	
Vinyl chloride	1400	1000	149	1000	11/7/2009	
m-,p-Xylene	BQL	2000	98.0	1000	11/7/2009	
o-Xylene	BQL	1000	65.0	1000	11/7/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.3	113
Toluene-d8	10	9.96	100
4-Bromofluorobenzene	10	9.46	95

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-1D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-536-4A
Lab Project ID: G582-536

Analyzed By: CLP
Date Collected: 10/26/2009 14:40
Date Received: 10/27/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	250	21.8	10	11/7/2009	
Benzene	BQL	10.0	0.650	10	11/7/2009	
Bromobenzene	BQL	10.0	0.560	10	11/7/2009	
Bromochloromethane	BQL	10.0	1.01	10	11/7/2009	
Bromodichloromethane	BQL	10.0	0.760	10	11/7/2009	
Bromoform	BQL	10.0	1.20	10	11/7/2009	
Bromomethane	BQL	10.0	1.33	10	11/7/2009	
2-Butanone	BQL	250	5.44	10	11/7/2009	
n-Butylbenzene	BQL	10.0	1.09	10	11/7/2009	
sec-Butylbenzene	BQL	10.0	0.840	10	11/7/2009	
tert-Butylbenzene	BQL	10.0	0.500	10	11/7/2009	
Carbon disulfide	BQL	10.0	0.690	10	11/7/2009	
Carbon tetrachloride	BQL	10.0	0.870	10	11/7/2009	
Chlorobenzene	BQL	10.0	0.820	10	11/7/2009	
Chloroethane	BQL	10.0	1.06	10	11/7/2009	
Chloroform	BQL	10.0	0.790	10	11/7/2009	
Chloromethane	BQL	10.0	1.46	10	11/7/2009	
2-Chlorotoluene	BQL	10.0	0.990	10	11/7/2009	
4-Chlorotoluene	BQL	10.0	0.800	10	11/7/2009	
Dibromochloromethane	BQL	10.0	0.900	10	11/7/2009	
1,2-Dibromo-3-chloropropane	BQL	50.0	12.1	10	11/7/2009	
Dibromomethane	BQL	10.0	1.13	10	11/7/2009	
1,2-Dibromoethane (EDB)	BQL	10.0	1.24	10	11/7/2009	
1,2-Dichlorobenzene	BQL	10.0	1.27	10	11/7/2009	
1,3-Dichlorobenzene	BQL	10.0	0.810	10	11/7/2009	
1,4-Dichlorobenzene	BQL	10.0	0.790	10	11/7/2009	
trans-1,4-Dichloro-2-butene	BQL	50.0	6.30	10	11/7/2009	
1,1-Dichloroethane	BQL	10.0	0.740	10	11/7/2009	
1,1-Dichloroethene	BQL	10.0	0.890	10	11/7/2009	
1,2-Dichloroethane	BQL	10.0	0.790	10	11/7/2009	
cis-1,2-Dichloroethene	181	10.0	0.650	10	11/7/2009	
trans-1,2-dichloroethene	BQL	10.0	0.890	10	11/7/2009	
1,2-Dichloropropane	BQL	10.0	0.940	10	11/7/2009	
1,3-Dichloropropane	BQL	10.0	1.27	10	11/7/2009	
2,2-Dichloropropane	BQL	10.0	0.590	10	11/7/2009	
1,1-Dichloropropene	BQL	10.0	0.720	10	11/7/2009	
cis-1,3-Dichloropropene	BQL	10.0	0.760	10	11/7/2009	
trans-1,3-Dichloropropene	BQL	10.0	0.760	10	11/7/2009	
Dichlorodifluoromethane	BQL	50.0	0.940	10	11/7/2009	
Diisopropyl ether (DIPE)	BQL	10.0	0.730	10	11/7/2009	
Ethylbenzene	BQL	10.0	0.770	10	11/7/2009	
Hexachlorobutadiene	BQL	10.0	2.28	10	11/7/2009	
2-Hexanone	BQL	50.0	7.20	10	11/7/2009	
Iodomethane	BQL	10.0	0.420	10	11/7/2009	
Isopropylbenzene	BQL	10.0	0.710	10	11/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-1D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-4A
 Lab Project ID: G582-536

Analyzed By: CLP
 Date Collected: 10/26/2009 14:40
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	10.0	0.480	10	11/7/2009	
Methylene chloride	1.60	50.0	0.980	10	11/7/2009	J
4-Methyl-2-pentanone	BQL	50.0	5.50	10	11/7/2009	
Methyl-tert-butyl ether (MTBE)	BQL	10.0	0.670	10	11/7/2009	
Naphthalene	BQL	10.0	1.33	10	11/7/2009	
n-Propyl benzene	BQL	10.0	0.800	10	11/7/2009	
Styrene	BQL	10.0	0.850	10	11/7/2009	
1,1,1,2-Tetrachloroethane	BQL	10.0	0.900	10	11/7/2009	
1,1,2,2-Tetrachloroethane	BQL	10.0	1.15	10	11/7/2009	
Tetrachloroethene	BQL	10.0	0.690	10	11/7/2009	
Toluene	BQL	10.0	0.760	10	11/7/2009	
1,2,3-Trichlorobenzene	BQL	10.0	1.90	10	11/7/2009	
1,2,4-Trichlorobenzene	BQL	10.0	1.19	10	11/7/2009	
Trichloroethene	39.6	10.0	0.540	10	11/7/2009	
1,1,1-Trichloroethane	BQL	10.0	0.540	10	11/7/2009	
1,1,2-Trichloroethane	BQL	10.0	1.82	10	11/7/2009	
Trichlorofluoromethane	BQL	10.0	1.11	10	11/7/2009	
1,2,3-Trichloropropane	BQL	10.0	1.20	10	11/7/2009	
1,2,4-Trimethylbenzene	BQL	10.0	0.650	10	11/7/2009	
1,3,5-Trimethylbenzene	BQL	10.0	0.740	10	11/7/2009	
Vinyl chloride	BQL	10.0	1.49	10	11/7/2009	
m-,p-Xylene	BQL	20.0	0.980	10	11/7/2009	
o-Xylene	BQL	10.0	0.650	10	11/7/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.1	111
Toluene-d8	10	9.91	99
4-Bromofluorobenzene	10	9.66	97

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst:

Reviewed By:

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-2D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-536-5A
Lab Project ID: G582-536

Analyzed By: DVO
Date Collected: 10/26/2009 15:00
Date Received: 10/27/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	6250	545	250	11/8/2009	
Benzene	BQL	250	16.3	250	11/8/2009	
Bromobenzene	BQL	250	14.0	250	11/8/2009	
Bromochloromethane	BQL	250	25.2	250	11/8/2009	
Bromodichloromethane	BQL	250	19.0	250	11/8/2009	
Bromoform	BQL	250	30.0	250	11/8/2009	
Bromomethane	BQL	250	33.2	250	11/8/2009	
2-Butanone	820	6250	136	250	11/8/2009	J
n-Butylbenzene	BQL	250	27.3	250	11/8/2009	
sec-Butylbenzene	BQL	250	21.0	250	11/8/2009	
tert-Butylbenzene	BQL	250	12.5	250	11/8/2009	
Carbon disulfide	BQL	250	17.3	250	11/8/2009	
Carbon tetrachloride	BQL	250	21.8	250	11/8/2009	
Chlorobenzene	BQL	250	20.5	250	11/8/2009	
Chloroethane	BQL	250	26.5	250	11/8/2009	
Chloroform	BQL	250	19.8	250	11/8/2009	
Chloromethane	BQL	250	36.5	250	11/8/2009	
2-Chlorotoluene	BQL	250	24.8	250	11/8/2009	
4-Chlorotoluene	BQL	250	20.0	250	11/8/2009	
Dibromochloromethane	BQL	250	22.5	250	11/8/2009	
1,2-Dibromo-3-chloropropane	BQL	1250	303	250	11/8/2009	
Dibromomethane	BQL	250	28.3	250	11/8/2009	
1,2-Dibromoethane (EDB)	BQL	250	31.0	250	11/8/2009	
1,2-Dichlorobenzene	BQL	250	31.8	250	11/8/2009	
1,3-Dichlorobenzene	BQL	250	20.3	250	11/8/2009	
1,4-Dichlorobenzene	BQL	250	19.8	250	11/8/2009	
trans-1,4-Dichloro-2-butene	BQL	1250	157	250	11/8/2009	
1,1-Dichloroethane	BQL	250	18.5	250	11/8/2009	
1,1-Dichloroethene	BQL	250	22.2	250	11/8/2009	
1,2-Dichloroethane	BQL	250	19.8	250	11/8/2009	
cis-1,2-Dichloroethene	445	250	16.3	250	11/8/2009	
trans-1,2-dichloroethene	120	250	22.2	250	11/8/2009	J
1,2-Dichloropropane	BQL	250	23.5	250	11/8/2009	
1,3-Dichloropropane	BQL	250	31.8	250	11/8/2009	
2,2-Dichloropropane	BQL	250	14.7	250	11/8/2009	
1,1-Dichloropropene	BQL	250	18.0	250	11/8/2009	
cis-1,3-Dichloropropene	BQL	250	19.0	250	11/8/2009	
trans-1,3-Dichloropropene	BQL	250	19.0	250	11/8/2009	
Dichlorodifluoromethane	BQL	1250	23.5	250	11/8/2009	
Diisopropyl ether (DIPE)	BQL	250	18.2	250	11/8/2009	
Ethylbenzene	BQL	250	19.3	250	11/8/2009	
Hexachlorobutadiene	BQL	250	57.0	250	11/8/2009	
2-Hexanone	BQL	1250	180	250	11/8/2009	
Iodomethane	BQL	250	10.5	250	11/8/2009	
Isopropylbenzene	BQL	250	17.8	250	11/8/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-2D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-5A
 Lab Project ID: G582-536

Analyzed By: DVO
 Date Collected: 10/26/2009 15:00
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	250	12.0	250	11/8/2009	
Methylene chloride	35.0	1250	24.5	250	11/8/2009	J
4-Methyl-2-pentanone	BQL	1250	138	250	11/8/2009	
Methyl-tert-butyl ether (MTBE)	BQL	250	16.7	250	11/8/2009	
Naphthalene	BQL	250	33.2	250	11/8/2009	
n-Propyl benzene	BQL	250	20.0	250	11/8/2009	
Styrene	BQL	250	21.3	250	11/8/2009	
1,1,1,2-Tetrachloroethane	BQL	250	22.5	250	11/8/2009	
1,1,2,2-Tetrachloroethane	BQL	250	28.8	250	11/8/2009	
Tetrachloroethene	BQL	250	17.3	250	11/8/2009	
Toluene	BQL	250	19.0	250	11/8/2009	
1,2,3-Trichlorobenzene	BQL	250	47.5	250	11/8/2009	
1,2,4-Trichlorobenzene	BQL	250	29.8	250	11/8/2009	
Trichloroethene	390	250	13.5	250	11/8/2009	
1,1,1-Trichloroethane	BQL	250	13.5	250	11/8/2009	
1,1,2-Trichloroethane	BQL	250	45.5	250	11/8/2009	
Trichlorofluoromethane	BQL	250	27.8	250	11/8/2009	
1,2,3-Trichloropropane	BQL	250	30.0	250	11/8/2009	
1,2,4-Trimethylbenzene	BQL	250	16.3	250	11/8/2009	
1,3,5-Trimethylbenzene	BQL	250	18.5	250	11/8/2009	
Vinyl chloride	4790	250	37.2	250	11/8/2009	
m-,p-Xylene	BQL	500	24.5	250	11/8/2009	
o-Xylene	BQL	250	16.3	250	11/8/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.9	109
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.57	96

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: *cl*

Reviewed By: *cl*

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-3D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-536-6A
Lab Project ID: G582-536

Analyzed By: DVO
Date Collected: 10/26/2009 15:25
Date Received: 10/27/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	5000	436	200	11/8/2009	
Benzene	BQL	200	13.0	200	11/8/2009	
Bromobenzene	BQL	200	11.2	200	11/8/2009	
Bromochloromethane	BQL	200	20.2	200	11/8/2009	
Bromodichloromethane	BQL	200	15.2	200	11/8/2009	
Bromoform	BQL	200	24.0	200	11/8/2009	
Bromomethane	BQL	200	26.6	200	11/8/2009	
2-Butanone	BQL	5000	109	200	11/8/2009	
n-Butylbenzene	BQL	200	21.8	200	11/8/2009	
sec-Butylbenzene	BQL	200	16.8	200	11/8/2009	
tert-Butylbenzene	BQL	200	10.0	200	11/8/2009	
Carbon disulfide	BQL	200	13.8	200	11/8/2009	
Carbon tetrachloride	BQL	200	17.4	200	11/8/2009	
Chlorobenzene	BQL	200	16.4	200	11/8/2009	
Chloroethane	BQL	200	21.2	200	11/8/2009	
Chloroform	BQL	200	15.8	200	11/8/2009	
Chloromethane	BQL	200	29.2	200	11/8/2009	
2-Chlorotoluene	BQL	200	19.8	200	11/8/2009	
4-Chlorotoluene	BQL	200	16.0	200	11/8/2009	
Dibromochloromethane	BQL	200	18.0	200	11/8/2009	
1,2-Dibromo-3-chloropropane	BQL	1000	242	200	11/8/2009	
Dibromomethane	BQL	200	22.6	200	11/8/2009	
1,2-Dibromoethane (EDB)	BQL	200	24.8	200	11/8/2009	
1,2-Dichlorobenzene	BQL	200	25.4	200	11/8/2009	
1,3-Dichlorobenzene	BQL	200	16.2	200	11/8/2009	
1,4-Dichlorobenzene	BQL	200	15.8	200	11/8/2009	
trans-1,4-Dichloro-2-butene	BQL	1000	126	200	11/8/2009	
1,1-Dichloroethane	BQL	200	14.8	200	11/8/2009	
1,1-Dichloroethene	BQL	200	17.8	200	11/8/2009	
1,2-Dichloroethane	BQL	200	15.8	200	11/8/2009	
cis-1,2-Dichloroethene	1800	200	13.0	200	11/8/2009	
trans-1,2-dichloroethene	46.0	200	17.8	200	11/8/2009	J
1,2-Dichloropropane	BQL	200	18.8	200	11/8/2009	
1,3-Dichloropropane	BQL	200	25.4	200	11/8/2009	
2,2-Dichloropropane	BQL	200	11.8	200	11/8/2009	
1,1-Dichloropropene	BQL	200	14.4	200	11/8/2009	
cis-1,3-Dichloropropene	BQL	200	15.2	200	11/8/2009	
trans-1,3-Dichloropropene	BQL	200	15.2	200	11/8/2009	
Dichlorodifluoromethane	BQL	1000	18.8	200	11/8/2009	
Diisopropyl ether (DIPE)	BQL	200	14.6	200	11/8/2009	
Ethylbenzene	BQL	200	15.4	200	11/8/2009	
Hexachlorobutadiene	BQL	200	45.6	200	11/8/2009	
2-Hexanone	BQL	1000	144	200	11/8/2009	
Iodomethane	BQL	200	8.40	200	11/8/2009	
Isopropylbenzene	BQL	200	14.2	200	11/8/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: PZ-3D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-6A
 Lab Project ID: G582-536

Analyzed By: DVO
 Date Collected: 10/26/2009 15:25
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	200	9.60	200	11/8/2009	
Methylene chloride	28.0	1000	19.6	200	11/8/2009	J
4-Methyl-2-pentanone	BQL	1000	110	200	11/8/2009	
Methyl-tert-butyl ether (MTBE)	BQL	200	13.4	200	11/8/2009	
Naphthalene	BQL	200	26.6	200	11/8/2009	
n-Propyl benzene	BQL	200	16.0	200	11/8/2009	
Styrene	BQL	200	17.0	200	11/8/2009	
1,1,1,2-Tetrachloroethane	BQL	200	18.0	200	11/8/2009	
1,1,2,2-Tetrachloroethane	BQL	200	23.0	200	11/8/2009	
Tetrachloroethene	BQL	200	13.8	200	11/8/2009	
Toluene	BQL	200	15.2	200	11/8/2009	
1,2,3-Trichlorobenzene	BQL	200	38.0	200	11/8/2009	
1,2,4-Trichlorobenzene	BQL	200	23.8	200	11/8/2009	
Trichloroethene	3370	200	10.8	200	11/8/2009	
1,1,1-Trichloroethane	BQL	200	10.8	200	11/8/2009	
1,1,2-Trichloroethane	BQL	200	36.4	200	11/8/2009	
Trichlorofluoromethane	BQL	200	22.2	200	11/8/2009	
1,2,3-Trichloropropane	BQL	200	24.0	200	11/8/2009	
1,2,4-Trimethylbenzene	BQL	200	13.0	200	11/8/2009	
1,3,5-Trimethylbenzene	BQL	200	14.8	200	11/8/2009	
Vinyl chloride	BQL	200	29.8	200	11/8/2009	
m-,p-Xylene	BQL	400	19.6	200	11/8/2009	
o-Xylene	BQL	200	13.0	200	11/8/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.7	117
Toluene-d8	10	9.99	100
4-Bromofluorobenzene	10	9.55	96

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: CL

Reviewed By: MD

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Trip Blank
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-536-7A
 Lab Project ID: G582-536

Analyzed By: CLP
 Date Collected: 10/26/2009 0:00
 Date Received: 10/27/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	11/7/2009	
Benzene	BQL	1.00	0.0650	1	11/7/2009	
Bromobenzene	BQL	1.00	0.0560	1	11/7/2009	
Bromochloromethane	BQL	1.00	0.101	1	11/7/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	11/7/2009	
Bromoform	BQL	1.00	0.120	1	11/7/2009	
Bromomethane	BQL	1.00	0.133	1	11/7/2009	
2-Butanone	BQL	25.0	0.544	1	11/7/2009	
n-Butylbenzene	BQL	1.00	0.109	1	11/7/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	11/7/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	11/7/2009	
Carbon disulfide	BQL	1.00	0.0690	1	11/7/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	11/7/2009	
Chlorobenzene	BQL	1.00	0.0820	1	11/7/2009	
Chloroethane	BQL	1.00	0.106	1	11/7/2009	
Chloroform	BQL	1.00	0.0790	1	11/7/2009	
Chloromethane	BQL	1.00	0.146	1	11/7/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	11/7/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	11/7/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	11/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	11/7/2009	
Dibromomethane	BQL	1.00	0.113	1	11/7/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	11/7/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	11/7/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	11/7/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	11/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	11/7/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	11/7/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	11/7/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	11/7/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	11/7/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	11/7/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	11/7/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	11/7/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	11/7/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	11/7/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/7/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/7/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	11/7/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	11/7/2009	
Ethylbenzene	BQL	1.00	0.0770	1	11/7/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	11/7/2009	
2-Hexanone	BQL	5.00	0.720	1	11/7/2009	
Iodomethane	BQL	1.00	0.0420	1	11/7/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	11/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1110709B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	11/7/2009	
Benzene	BQL	1.00	0.0650	1	11/7/2009	
Bromobenzene	BQL	1.00	0.0560	1	11/7/2009	
Bromochloromethane	BQL	1.00	0.101	1	11/7/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	11/7/2009	
Bromoform	BQL	1.00	0.120	1	11/7/2009	
Bromomethane	BQL	1.00	0.133	1	11/7/2009	
2-Butanone	BQL	25.0	0.544	1	11/7/2009	
n-Butylbenzene	BQL	1.00	0.109	1	11/7/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	11/7/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	11/7/2009	
Carbon disulfide	BQL	1.00	0.0690	1	11/7/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	11/7/2009	
Chlorobenzene	BQL	1.00	0.0820	1	11/7/2009	
Chloroethane	BQL	1.00	0.106	1	11/7/2009	
Chloroform	BQL	1.00	0.0790	1	11/7/2009	
Chloromethane	BQL	1.00	0.146	1	11/7/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	11/7/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	11/7/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	11/7/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	11/7/2009	
Dibromomethane	BQL	1.00	0.113	1	11/7/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	11/7/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	11/7/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	11/7/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	11/7/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	11/7/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	11/7/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	11/7/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	11/7/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	11/7/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	11/7/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	11/7/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	11/7/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	11/7/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	11/7/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/7/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/7/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	11/7/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	11/7/2009	
Ethylbenzene	BQL	1.00	0.0770	1	11/7/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	11/7/2009	
2-Hexanone	BQL	5.00	0.720	1	11/7/2009	
Iodomethane	BQL	1.00	0.0420	1	11/7/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	11/7/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1110709B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	11/7/2009	
Methylene chloride	BQL	5.00	0.0980	1	11/7/2009	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	11/7/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	11/7/2009	
Naphthalene	BQL	1.00	0.133	1	11/7/2009	
n-Propyl benzene	BQL	1.00	0.0800	1	11/7/2009	
Styrene	BQL	1.00	0.0850	1	11/7/2009	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	11/7/2009	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	11/7/2009	
Tetrachloroethene	BQL	1.00	0.0690	1	11/7/2009	
Toluene	BQL	1.00	0.0760	1	11/7/2009	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	11/7/2009	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	11/7/2009	
Trichloroethene	BQL	1.00	0.0540	1	11/7/2009	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	11/7/2009	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	11/7/2009	
Trichlorofluoromethane	BQL	1.00	0.111	1	11/7/2009	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	11/7/2009	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	11/7/2009	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	11/7/2009	
Vinyl chloride	BQL	1.00	0.149	1	11/7/2009	
m-,p-Xylene	BQL	2.00	0.0980	1	11/7/2009	
o-Xylene	BQL	1.00	0.0650	1	11/7/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.8	108
Toluene-d8	10	9.99	100
4-Bromofluorobenzene	10	9.5	95

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: CL

Reviewed By: DVO

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS1110709a

Sample wt/vol: 5.00 (mL)

Lab File ID: 1107103.D

Level: (low/med) NA

Date Analyzed: 2009-11-07 10:27

% Moisture: not dec. NA

Dilution Factor: 1

GC Column: DB-624 ID: 0.2 (mm)

Soil Aliquot Volume: NA

Soil Extract Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
67-64-1	acetone	25.0	31.5	126	23.5-141
107-02-8	acrolein	125	156	125	31.4-182
107-13-1	acrylonitrile	125	140	112	64.2-140
71-43-2	benzene	5.00	5.21	104	76.6-120
108-86-1	bromobenzene	5.00	4.86	97.2	75.0-122
74-97-5	bromochloromethane	5.00	5.04	101	74.8-127
75-27-4	bromodichloromethane	5.00	5.16	103	76.4-117
75-25-2	bromoform	5.00	5.10	102	62.4-127
74-83-9	bromomethane	5.00	5.16	103	34.2-166
78-93-3	2-butanone	25.0	26.9	108	44.9-126
104-51-8	n-butylbenzene	5.00	5.20	104	72.0-122
135-98-8	sec-butylbenzene	5.00	5.21	104	78.3-116
98-06-6	tert-butylbenzene	5.00	4.37	87.4	53.1-148
75-15-0	Carbon disulfide	5.00	5.16	103	69.0-118
56-23-5	carbon tetrachloride	5.00	5.14	103	71.7-124
100-90-7	chlorobenzene	5.00	5.00	100	75.5-116
75-00-3	chloroethane	5.00	5.10	102	78.2-138
110-75-8	2-chloroethyl vinyl ether	125	120	95.6	5.57-235
67-66-3	chloroform	5.00	5.22	104	80.6-117
74-87-3	chloromethane	5.00	4.74	94.8	72.6-127
95-49-8	2-chlorotoluene	5.00	4.95	99.0	81.4-117
106-43-4	4-chlorotoluene	5.00	4.95	99.0	82.1-116
124-48-1	dibromochloromethane	5.00	5.01	100	73.1-117
96-12-8	1,2-dibromo-3-chloropropane	25.0	27.1	108	58.0-133
106-93-4	1,2-dibromoethane	5.00	5.13	103	75.5-118
74-95-3	dibromomethane	5.00	5.27	105	77.3-124
95-50-1	1,2-dichlorobenzene	5.00	5.04	101	76.3-115
541-73-1	1,3-dichlorobenzene	5.00	4.94	98.8	79.1-114
106-46-7	1,4-dichlorobenzene	5.00	4.96	99.2	76.8-115
110-57-6	trans-1,4-Dichloro-2-butene	25.0	28.6	114	52.3-130
75-71-8	dichlorodifluoromethane	5.00	4.98	99.6	69.8-134
75-34-3	1,1-dichloroethane	5.00	5.20	104	78.0-120
107-06-2	1,2-dichloroethane	5.00	5.27	105	72.8-126
75-35-4	1,1-dichloroethene	5.00	5.02	100	74.6-121
156-59-2	cis-1,2-dichloroethene	5.00	5.16	103	78.0-121
156-60-5	trans-1,2-dichloroethene	5.00	5.01	100	60.7-144
78-87-5	1,2-dichloropropane	5.00	5.22	104	75.8-119
142-28-9	1,3-dichloropropane	5.00	4.90	98.0	78.5-113
594-20-7	2,2-dichloropropane	5.00	5.09	102	75.6-130
563-58-6	1,1-dichloropropene	5.00	5.06	101	79.7-117
10061-01-5	cis-1,3-dichloropropene	5.00	5.17	103	79.8-113

✓

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

SGS North America, Inc.

SGS Environmental Services

Lab Name: SGS Environmental

Lab Code: NC00919 Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS1110709a

Sample wt/vol: 5.00 (mL)

Lab File ID: 1107103.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2009-11-07 10:27

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
10061-02-6	trans-1,3-dichloropropene	5.00	5.16	103	79.0-113
108-20-3	Diisopropyl ether	5.00	5.22	104	71.8-115
100-41-4	ethylbenzene	5.00	4.83	96.6	80.5-115
87-68-3	hexachlorobutadiene	5.00	5.11	102	63.3-139
591-78-6	2-hexanone	25.0	26.0	104	46.8-123
74-88-4	Iodomethane	5.00	5.10	102	29.3-156
98-82-8	isopropylbenzene	5.00	4.99	99.8	81.6-114
99-87-6	4-isopropyltoluene	5.00	5.17	103	78.4-119
1634-04-4	Methyl-tert-butyl ether	5.00	5.26	105	76.0-114
75-09-2	methylene chloride	5.00	4.78	95.6	72.9-120
108-10-1	4-methyl-2-pentanone	25.0	27.0	108	56.2-124
91-20-3	naphthalene	5.00	5.31	106	24.8-182
103-65-1	n-propyl benzene	5.00	4.97	99.4	79.0-116
100-42-5	styrene	5.00	5.07	101	64.8-132
630-20-6	1,1,1,2-tetrachloroethane	5.00	4.86	97.2	78.8-118
79-34-5	1,1,2,2-tetrachloroethane	5.00	5.22	104	69.7-119
127-18-4	tetrachloroethene	5.00	4.14	82.8	55.3-144
108-88-3	Toluene	5.00	5.03	101	78.6-117
87-61-6	1,2,3-trichlorobenzene	5.00	5.34	107	20.8-193
120-82-1	1,2,4-trichlorobenzene	5.00	5.17	103	47.9-150
71-55-6	1,1,1-trichloroethane	5.00	4.99	99.8	78.8-120
79-00-5	1,1,2-trichloroethane	5.00	4.91	98.2	73.6-117
79-01-6	trichloroethene	5.00	5.00	100	80.1-116
75-69-4	trichlorofluoromethane	5.00	5.03	101	80.5-130
96-18-4	1,2,3-trichloropropane	5.00	5.27	105	35.6-152
95-63-3	1,2,4-trimethylbenzene	5.00	5.18	104	77.0-116
108-67-8	1,3,5-trimethylbenzene	5.00	5.25	105	79.4-114
108-05-4	Vinyl acetate	12.5	13.8	110	60.7-127
75-01-4	vinyl chloride	5.00	4.98	99.6	77.5-126
108-38-3	m/p-xylene	10.0	10.2	102	82.9-112
95-47-6	o-xylene	5.00	4.85	97.0	81.3-113

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	10.0	103	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.0	112	63.5-140
2037-26-5	Toluene-d8	10	10.0	102	81.8-117

LCS Spike Recovery: 0 failure(s) out of 72.

Analyst: DVO

Reviewed by: DB

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD1

EPA Sample No.: Amt. Filenames:

Analysis Dates:

Batch: 1110709

Sample g582-536-5a 5 mL 1107115.D 2009-11-07 16:44:00

Dilution: 250

MS g582-536-5a 5 mL 1107116.D 2009-11-07 17:15:00

Matrix: Water

MSD g582-536-5a 5 mL 1107117.D 2009-11-07 17:46:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD REC #	%	%	QC LIMITS	
										RPD	REC
acetone	BQL	6250	4700	75.3	6250	4960	79.3	5.23	30	17.7-85.2	
acrolein	BQL	31200	62200	199	31200	61600	197	1.05	30	0.00-424	
acrylonitrile	BQL	31200	35200	113	31200	35200	113	0.163	30	85.0-175	
benzene	BQL	1250	1210	97.0	1250	1240	99.4	2.44	30	61.6-135	
bromobenzene	BQL	1250	1110	88.6	1250	1170	94.0	5.91	30	65.1-125	
bromochloromethane	BQL	1250	1230	98.6	1250	1260	101	2.40	30	75.5-126	
bromodichloromethane	BQL	1250	1300	104	1250	1340	107	2.83	30	74.3-123	
bromoform	BQL	1250	1210	96.8	1250	1230	98.6	1.84	30	52.3-122	
bromomethane	BQL	1250	1280	103	1250	1260	101	1.77	30	10.0-284	
2-butanone	BQL	6250	6370	102	6250	6620	106	3.77	30	36.1-107	
n-butylbenzene	BQL	1250	1160	92.4	1250	1220	97.4	5.27	30	70.2-124	
sec-butylbenzene	BQL	1250	1180	94.8	1250	1250	100	5.34	30	62.0-133	
tert-butylbenzene	BQL	1250	1050	84.4	1250	1040	83.4	1.19	30	73.5-121	
Carbon disulfide	BQL	1250	1200	95.8	1250	1240	99.6	3.89	30	68.8-129	
carbon tetrachloride	BQL	1250	1240	99.6	1250	1280	103	2.97	30	71.8-122	
chlorobenzene	BQL	1250	1190	95.0	1250	1230	98.2	3.31	30	77.2-118	
chloroethane	BQL	1250	1340	107	1250	1360	109	1.67	30	10.0-233	
2-chloroethyl vinyl ether	BQL	3120	14200	453*	3120	13300	426*	6.06	30	16.7-283	
chloroform	BQL	1250	1320	105	1250	1340	108	2.06	30	74.0-128	
chloromethane	BQL	1250	1260	101	1250	1290	103	1.76	30	72.0-138	
2-chlorotoluene	BQL	1250	1140	91.4	1250	1170	93.6	2.38	30	79.3-118	
4-chlorotoluene	BQL	1250	1140	91.4	1250	1170	93.6	2.38	30	76.8-120	
dibromochloromethane	BQL	1250	1270	102	1250	1300	104	1.95	30	69.0-117	
1,2-dibromo-3-chloropropane	BQL	6250	6480	104	6250	6790	108	4.64	30	20.2-171	
1,2-dibromoethane	BQL	1250	1180	94.4	1250	1190	95.4	1.05	30	78.5-123	
dibromomethane	BQL	1250	1300	104	1250	1400	112	7.61	30	71.3-137	
1,2-dichlorobenzene	BQL	1250	1210	97.2	1250	1270	102	4.43	30	75.1-120	
1,3-dichlorobenzene	BQL	1250	1190	95.4	1250	1250	100	4.91	30	73.1-121	
1,4-dichlorobenzene	BQL	1250	1210	97.0	1250	1240	99.4	2.44	30	74.8-118	
trans-1,4-Dichloro-2-butene	BQL	6250	6460	103	6250	6610	106	2.22	30	25.7-149	
dichlorodifluoromethane	BQL	1250	1440	116	1250	1470	118	1.88	30	41.7-166	
1,1-dichloroethane	BQL	1250	1280	102	1250	1330	106	3.64	30	75.6-128	
1,2-dichloroethane	BQL	1250	1320	106	1250	1360	109	2.80	30	71.1-127	
1,1-dichloroethene	BQL	1250	1210	97.2	1250	1260	101	3.83	30	64.4-130	
cis-1,2-dichloroethene	475	1250	1690	97.6	1250	1720	99.8	2.23	30	72.7-134	
trans-1,2-dichloroethene	BQL	1250	1420	104	1250	1410	103	0.578	30	74.6-124	
1,2-dichloropropane	BQL	1250	1240	99.6	1250	1320	106	6.04	30	76.5-129	
1,3-dichloropropane	BQL	1250	1190	95.0	1250	1220	97.8	2.90	30	79.1-121	
2,2-dichloropropane	BQL	1250	1080	86.2	1250	1100	88.0	2.07	30	31.5-157	
1,1-dichloropropene	BQL	1250	1140	91.2	1250	1210	96.8	5.96	30	72.5-120	
cis-1,3-dichloropropene	BQL	1250	1230	98.6	1250	1270	101	2.80	30	66.6-132	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental
Lab Code: NC00919

Inst: MSD1
Batch: 1110709
Dilution: 250
Matrix: Water

EPA Sample No.: g582-536-5a, g582-536-5a, g582-536-5a
FileNames: 1107115.D, 1107116.D, 1107117.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	1250	1200	95.8	1250	1240	99.6	3.89	30	44.7-144
Diisopropyl ether	BQL	1250	1290	103	1250	1290	103	0.00	30	79.4-122
ethylbenzene	BQL	1250	1140	90.8	1250	1170	94.0	3.46	30	73.8-126
hexachlorobutadiene	BQL	1250	1140	91.4	1250	1170	93.6	2.38	30	51.8-134
2-hexanone	BQL	6250	5480	87.8	6250	5560	89.0	1.40	30	41.6-111
Iodomethane	BQL	1250	1300	104	1250	1370	109	5.06	30	40.6-126
isopropylbenzene	BQL	1250	1140	90.8	1250	1180	94.2	3.68	30	74.3-123
4-isopropyltoluene	BQL	1250	1160	92.6	1250	1210	97.0	4.64	30	74.6-122
Methyl-tert-butyl ether	BQL	1250	1320	105	1250	1340	107	1.32	30	66.5-136
methylene chloride	BQL	1250	1170	91.2	1250	1220	95.2	4.29	30	48.6-155
4-methyl-2-pentanone	BQL	6250	6460	103	6250	6510	104	0.771	30	6.88-166
naphthalene	BQL	1250	1140	91.0	1250	1230	98.2	7.61	30	55.1-140
n-propyl benzene	BQL	1250	1150	91.8	1250	1180	94.8	3.22	30	71.6-128
styrene	BQL	1250	1160	93.0	1250	1190	95.0	2.13	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	1250	1160	92.8	1250	1210	97.2	4.63	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	1250	1290	103	1250	1300	104	0.966	30	75.7-136
tetrachloroethene	BQL	1250	952	76.2	1250	1000	80.2	5.12	30	45.8-153
toluene	BQL	1250	1160	93.0	1250	1180	94.6	1.70	30	66.4-128
1,2,3-trichlorobenzene	BQL	1250	1140	91.2	1250	1210	96.8	5.96	30	61.0-126
1,2,4-trichlorobenzene	BQL	1250	1150	91.8	1250	1200	96.4	4.89	30	60.6-125
1,1,1-trichloroethane	BQL	1250	1190	95.6	1250	1230	98.2	2.68	30	78.4-121
1,1,2-trichloroethane	BQL	1250	1260	101	1250	1270	101	0.593	30	64.8-128
trichloroethene	410	1250	1580	93.6	1250	1630	99.0	5.61	30	84.9-136
trichlorofluoromethane	BQL	1250	1340	107	1250	1340	108	0.746	30	76.8-132
1,2,3-trichloropropane	BQL	1250	1220	97.6	1250	1240	99.4	1.83	30	10.0-218
1,2,4-trimethylbenzene	BQL	1250	1240	99.2	1250	1290	103	3.95	30	31.0-172
1,3,5-trimethylbenzene	BQL	1250	1180	94.6	1250	1240	99.2	4.75	30	67.7-132
Vinyl acetate	BQL	3120	3310	106	3120	3440	110	3.63	30	0.00-355
vinyl chloride	4890	1250	6200	105	1250	6250	109	3.74	30	68.1-137
m/p-xylene	BQL	2500	2320	92.8	2500	2430	97.1	4.53	30	79.8-118
o-xylene	BQL	1250	1130	90.2	1250	1160	92.4	2.41	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	9.75	97.5	10	9.91	99.1	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.43	114	10	11.44	114	63.5-140
2037-26-5	Toluene-d8	10	10	100	10	10.14	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 1 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVD

Reviewed by: 

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1110809B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	11/8/2009	
Benzene	BQL	1.00	0.0650	1	11/8/2009	
Bromobenzene	BQL	1.00	0.0560	1	11/8/2009	
Bromochloromethane	BQL	1.00	0.101	1	11/8/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	11/8/2009	
Bromoform	BQL	1.00	0.120	1	11/8/2009	
Bromomethane	BQL	1.00	0.133	1	11/8/2009	
2-Butanone	BQL	25.0	0.544	1	11/8/2009	
n-Butylbenzene	BQL	1.00	0.109	1	11/8/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	11/8/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	11/8/2009	
Carbon disulfide	BQL	1.00	0.0690	1	11/8/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	11/8/2009	
Chlorobenzene	BQL	1.00	0.0820	1	11/8/2009	
Chloroethane	BQL	1.00	0.106	1	11/8/2009	
Chloroform	BQL	1.00	0.0790	1	11/8/2009	
Chloromethane	BQL	1.00	0.146	1	11/8/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	11/8/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	11/8/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	11/8/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	11/8/2009	
Dibromomethane	BQL	1.00	0.113	1	11/8/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	11/8/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	11/8/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	11/8/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	11/8/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	11/8/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	11/8/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	11/8/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	11/8/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	11/8/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	11/8/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	11/8/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	11/8/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	11/8/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	11/8/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/8/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/8/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	11/8/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	11/8/2009	
Ethylbenzene	BQL	1.00	0.0770	1	11/8/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	11/8/2009	
2-Hexanone	BQL	5.00	0.720	1	11/8/2009	
Iodomethane	BQL	1.00	0.0420	1	11/8/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	11/8/2009	

**Results for Volatiles
by GCMS 8260B**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1110809B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	11/8/2009	
Methylene chloride	0.120	5.00	0.0980	1	11/8/2009	J
4-Methyl-2-pentanone	BQL	5.00	0.550	1	11/8/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	11/8/2009	
Naphthalene	BQL	1.00	0.133	1	11/8/2009	
n-Propyl benzene	BQL	1.00	0.0800	1	11/8/2009	
Styrene	BQL	1.00	0.0850	1	11/8/2009	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	11/8/2009	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	11/8/2009	
Tetrachloroethene	BQL	1.00	0.0690	1	11/8/2009	
Toluene	BQL	1.00	0.0760	1	11/8/2009	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	11/8/2009	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	11/8/2009	
Trichloroethene	BQL	1.00	0.0540	1	11/8/2009	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	11/8/2009	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	11/8/2009	
Trichlorofluoromethane	BQL	1.00	0.111	1	11/8/2009	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	11/8/2009	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	11/8/2009	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	11/8/2009	
Vinyl chloride	BQL	1.00	0.149	1	11/8/2009	
m-,p-Xylene	BQL	2.00	0.0980	1	11/8/2009	
o-Xylene	BQL	1.00	0.0650	1	11/8/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.4	114
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.78	98

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst:

Reviewed By: DVO

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: SGS Environmental

Lab Code: NC00919 Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS1110809a

Sample wt/vol: 5.00 (mL)

Lab File ID: 1108103.D

Level: (low/med) NA

Date Analyzed: 2009-11-08 10:27

% Moisture: not dec. NA

Dilution Factor: 1

GC Column: DB-624 ID: 0.2 (mm)

Soil Aliquot Volume: NA

Soil Extract Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
67-64-1	acetone	25.0	25.8	103	23.5-141
107-02-8	acrolein	125	204	164	31.4-182
107-13-1	acrylonitrile	125	139	111	64.2-140
71-43-2	benzene	5.00	4.94	98.8	76.6-120
108-86-1	bromobenzene	5.00	4.44	88.8	75.0-122
74-97-5	bromochloromethane	5.00	4.76	95.2	74.8-127
75-27-4	bromodichloromethane	5.00	5.19	104	76.4-117
75-25-2	bromoform	5.00	4.83	96.6	62.4-127
74-83-9	bromomethane	5.00	5.55	111	34.2-166
78-93-3	2-butanone	25.0	24.7	99.0	44.9-126
104-51-8	n-butylbenzene	5.00	4.89	97.8	72.0-122
135-98-8	sec-butylbenzene	5.00	4.92	98.4	78.3-116
98-06-6	tert-butylbenzene	5.00	4.84	96.8	53.1-148
75-15-0	Carbon disulfide	5.00	4.63	92.6	69.0-118
56-23-5	carbon tetrachloride	5.00	4.91	98.2	71.7-124
108-90-7	chlorobenzene	5.00	4.77	95.4	75.5-116
75-00-3	chloroethane	5.00	5.43	108	78.2-138
110-75-8	2-chloroethyl vinyl ether	125	118	94.4	5.57-235
67-66-3	chloroform	5.00	5.20	104	80.6-117
74-87-3	chloromethane	5.00	5.17	103	72.6-127
95-49-8	2-chlorotoluene	5.00	4.63	92.6	81.4-117
106-43-4	4-chlorotoluene	5.00	4.63	92.6	82.1-116
124-48-1	dibromochloromethane	5.00	5.01	100	73.1-117
96-12-8	1,2-dibromo-3-chloropropane	25.0	26.7	107	58.0-133
106-93-4	1,2-dibromoethane	5.00	4.61	92.2	75.5-118
74-95-3	dibromomethane	5.00	5.26	105	77.3-124
95-50-1	1,2-dichlorobenzene	5.00	4.87	97.4	76.3-115
541-73-1	1,3-dichlorobenzene	5.00	4.88	97.6	79.1-114
106-46-7	1,4-dichlorobenzene	5.00	4.87	97.4	76.8-115
110-57-6	trans-1,4-Dichloro-2-butene	25.0	27.3	109	52.3-130
75-71-8	dichlorodifluoromethane	5.00	5.70	114	69.8-134
75-34-3	1,1-dichloroethane	5.00	5.11	102	78.0-120
107-06-2	1,2-dichloroethane	5.00	5.18	104	72.8-126
75-35-4	1,1-dichloroethene	5.00	4.81	96.2	74.6-121
156-59-2	cis-1,2-dichloroethene	5.00	4.76	95.2	78.0-121
156-60-5	trans-1,2-dichloroethene	5.00	5.12	102	60.7-144
78-87-5	1,2-dichloropropane	5.00	5.04	101	75.8-119
142-28-9	1,3-dichloropropane	5.00	4.65	93.0	78.5-113
594-20-7	2,2-dichloropropane	5.00	4.89	97.8	75.6-130
563-58-6	1,1-dichloropropene	5.00	4.62	92.4	79.7-117
10061-01-5	cis-1,3-dichloropropene	5.00	5.02	100	79.8-113

LABORATORY CONTROL SAMPLE VOLATILE ORGANICS ANALYSIS DATA SHEET

SGS North America, Inc.

SGS Environmental Services

Lab Name: SGS Environmental

Lab Code: NC00919

Case No.:

SAS No.:

SDG No:

Matrix: (soil/water) Water

Lab Sample ID: LCS1110809a

Sample wt/vol: 5.00 (mL)

Lab File ID: 1108103.D

Level: (low/med) NA

% Moisture: not dec. NA

Date Analyzed: 2009-11-08 10:27

GC Column: DB-624 ID: 0.2 (mm)

Dilution Factor: 1

Soil Extract Volume: NA

Soil Aliquot Volume: NA

CAS NO.	COMPOUND	SPIKE AMT (µg/L)	SAMP CONC (µg/L)	% REC #	QC LIMITS
10061-02-6	trans-1,3-dichloropropene	5.00	4.95	99.0	79.0-113
108-20-3	Diisopropyl ether	5.00	5.07	101	71.8-115
100-41-4	ethylbenzene	5.00	4.56	91.2	80.5-115
87-68-3	hexachlorobutadiene	5.00	5.03	101	63.3-139
591-78-6	2-hexanone	25.0	24.8	99.4	46.8-123
74-88-4	Iodomethane	5.00	4.68	93.6	29.3-156
98-82-8	isopropylbenzene	5.00	4.67	93.4	81.6-114
99-87-6	4-isopropyltoluene	5.00	4.83	96.6	78.4-119
1634-04-4	Methyl-tert-butyl ether	5.00	5.19	104	76.0-114
75-09-2	methylene chloride	5.00	4.53	90.6	72.9-120
108-10-1	4-methyl-2-pentanone	25.0	25.8	103	56.2-124
91-20-3	naphthalene	5.00	5.00	100	24.8-182
103-65-1	n-propyl benzene	5.00	4.66	93.2	79.0-116
100-42-5	styrene	5.00	4.64	92.8	64.8-132
630-20-6	1,1,1,2-tetrachloroethane	5.00	4.63	92.6	78.8-118
79-34-5	1,1,2,2-tetrachloroethane	5.00	4.96	99.2	69.7-119
127-18-4	tetrachloroethene	5.00	4.46	89.2	55.3-144
108-88-3	toluene	5.00	4.57	91.4	78.6-117
87-61-6	1,2,3-trichlorobenzene	5.00	5.05	101	20.8-193
120-82-1	1,2,4-trichlorobenzene	5.00	4.85	97.0	47.9-150
71-55-6	1,1,1-trichloroethane	5.00	4.84	96.8	78.8-120
79-00-5	1,1,2-trichloroethane	5.00	4.87	97.4	73.6-117
79-01-6	trichloroethene	5.00	4.85	97.0	80.1-116
75-69-4	trichlorofluoromethane	5.00	5.40	108	80.5-130
96-18-4	1,2,3-trichloropropane	5.00	5.07	101	35.6-152
95-63-3	1,2,4-trimethylbenzene	5.00	5.05	101	77.0-116
108-67-8	1,3,5-trimethylbenzene	5.00	4.85	97.0	79.4-114
108-05-4	Vinyl acetate	12.5	13.4	107	60.7-127
75-01-4	vinyl chloride	5.00	5.12	102	77.5-126
108-38-3	m/p-xylene	10.0	9.44	94.4	82.9-112
95-47-6	o-xylene	5.00	4.61	92.2	81.3-113

System Monitoring Compound Results

		Spike Added (µg/L)	Spike Result (µg/L)	Percent Rec. (%)	Percent Recovery (%)
460-00-4	4-Bromofluorobenzene	10	10.0	100	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.0	112	63.5-140
2037-26-5	Toluene-d8	10	10.0	101	81.8-117

LCS Spike Recovery: 0 failure(s) out of 72.

Analyst: DVO

Reviewed by: *[Signature]*

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD1

EPA Sample No.:

Amt.

FileNames:

Analysis Dates:

Batch: 1110809

Sample g582-536-2a

5 mL

1108116.D

2009-11-08 17:13:00

Dilution: 800

MS g582-536-2a

5 mL

1108117.D

2009-11-08 17:44:00

Matrix: Water

MSD g582-536-2a

5 mL

1108118.D

2009-11-08 18:16:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	18100	90.5*	20000	16000	80.0	12.3	30	17.7-85.2
acrolein	BQL	100000	190000	190	100000	201000	201	5.50	30	0.00-424
acrylonitrile	BQL	100000	113000	113	100000	117000	117	3.66	30	85.0-175
benzene	BQL	4000	3980	99.4	4000	3990	99.8	0.402	30	61.6-135
bromobenzene	BQL	4000	3660	91.6	4000	3660	91.6	0.00	30	65.1-125
bromochloromethane	BQL	4000	4100	102	4000	3950	98.8	3.58	30	75.5-126
bromodichloromethane	BQL	4000	4390	110	4000	4230	106	3.71	30	74.3-123
bromoform	BQL	4000	3940	98.4	4000	4080	102	3.59	30	52.3-122
bromomethane	BQL	4000	3800	95.0	4000	4230	106	10.8	30	10.0-284
2-butanone	BQL	20000	19700	98.7	20000	18700	93.5	5.37	30	36.1-107
n-butylbenzene	BQL	4000	3860	96.6	4000	3860	96.4	0.207	30	70.2-124
sec-butylbenzene	BQL	4000	3970	99.2	4000	3920	98.0	1.22	30	62.0-133
tert-butylbenzene	BQL	4000	3340	83.6	4000	3300	82.4	1.44	30	73.5-121
Carbon disulfide	BQL	4000	3950	98.8	4000	3820	95.6	3.29	30	68.8-129
carbon tetrachloride	BQL	4000	4140	104	4000	3970	99.2	4.34	30	71.8-122
chlorobenzene	BQL	4000	3770	94.2	4000	3850	96.2	2.10	30	77.2-118
chloroethane	BQL	4000	4170	104	4000	4310	108	3.40	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	78900	789*	10000	82500	825*	4.39	30	16.7-283
chloroform	BQL	4000	4420	110	4000	4210	105	4.82	30	74.0-128
chloromethane	BQL	4000	3880	97.0	4000	4100	103	5.61	30	72.0-138
2-chlorotoluene	BQL	4000	3780	94.4	4000	3780	94.4	0.00	30	79.3-118
4-chlorotoluene	BQL	4000	3780	94.4	4000	3770	94.2	0.212	30	76.8-120
dibromochloromethane	BQL	4000	4100	103	4000	4140	104	0.970	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	21900	110	20000	22300	111	1.74	30	20.2-171
1,2-dibromoethane	BQL	4000	3770	94.2	4000	3740	93.4	0.853	30	78.5-123
dibromomethane	BQL	4000	4350	109	4000	4200	105	3.55	30	71.3-137
1,2-dichlorobenzene	BQL	4000	4120	103	4000	4100	102	0.584	30	75.1-120
1,3-dichlorobenzene	BQL	4000	4030	101	4000	3980	99.4	1.40	30	73.1-121
1,4-dichlorobenzene	BQL	4000	4020	101	4000	4020	101	0.00	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	22200	111	20000	21700	109	2.26	30	25.7-149
dichlorodifluoromethane	BQL	4000	4580	114	4000	4720	118	2.92	30	41.7-166
1,1-dichloroethane	BQL	4000	4290	107	4000	4060	102	5.36	30	75.6-128
1,2-dichloroethane	BQL	4000	4390	110	4000	4250	106	3.33	30	71.1-127
1,1-dichloroethene	BQL	4000	3850	96.2	4000	3810	95.2	1.04	30	64.4-130
cis-1,2-dichloroethene	7940	4000	12000	103	4000	11600	92.6	10.2	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	4420	103	4000	4260	99.4	3.94	30	74.6-124
1,2-dichloropropane	BQL	4000	4210	105	4000	4180	105	0.572	30	76.5-129
1,3-dichloropropane	BQL	4000	3860	96.4	4000	3890	97.2	0.826	30	79.1-121
2,2-dichloropropane	BQL	4000	3700	92.4	4000	3540	88.6	4.20	30	31.5-157
1,1-dichloropropene	BQL	4000	3790	94.8	4000	3730	93.2	1.70	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	4120	103	4000	4060	102	1.37	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental
Lab Code: NC00919

Inst: MSD1
Batch: 1110809
Dilution: 800
Matrix: Water

EPA Sample No.: g582-536-2a, g582-536-2a, g582-536-2a

FileNames: 1108116.D, 1108117.D, 1108118.D

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	4100	102	4000	4060	102	0.784	30	44.7-144
Diisopropyl ether	BQL	4000	4190	105	4000	4140	104	1.15	30	79.4-122
ethylbenzene	BQL	4000	3740	93.4	4000	3720	93.0	0.429	30	73.8-126
hexachlorobutadiene	BQL	4000	3840	96.0	4000	3870	96.8	0.830	30	51.8-134
2-hexanone	BQL	20000	18000	89.9	20000	18500	92.7	3.07	30	41.6-111
Iodomethane	BQL	4000	3900	97.6	4000	3860	96.4	1.24	30	40.6-126
isopropylbenzene	BQL	4000	3740	93.6	4000	3750	93.8	0.213	30	74.3-123
4-isopropyltoluene	BQL	4000	3810	95.2	4000	3860	96.6	1.46	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	4300	108	4000	4110	103	4.56	30	66.5-136
methylene chloride	BQL	4000	3790	92.4	4000	3690	89.8	2.85	30	48.6-155
4-methyl-2-pentanone	BQL	20000	21700	109	20000	21900	110	0.916	30	6.88-166
naphthalene	BQL	4000	3620	90.6	4000	3820	95.4	5.16	30	55.1-140
n-propyl benzene	BQL	4000	3860	96.6	4000	3790	94.8	1.88	30	71.6-128
styrene	BQL	4000	3810	95.2	4000	3780	94.4	0.844	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	3730	93.2	4000	3740	93.6	0.428	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	4110	103	4000	4240	106	3.06	30	75.7-136
tetrachloroethene	BQL	4000	3060	76.4	4000	3100	77.4	1.30	30	45.8-153
toluene	BQL	4000	3770	94.2	4000	3750	93.8	0.426	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3730	93.2	4000	3950	98.8	5.83	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3820	95.4	4000	3890	97.2	1.87	30	60.6-125
1,1,1-trichloroethane	BQL	4000	4020	101	4000	3900	97.6	3.03	30	78.4-121
1,1,2-trichloroethane	BQL	4000	4030	101	4000	4060	101	0.593	30	64.8-128
trichloroethene	BQL	4000	3980	99.6	4000	3980	99.6	0.00	30	81.9-136
trichlorofluoromethane	BQL	4000	4370	109	4000	4440	111	1.63	30	76.8-132
1,2,3-trichloropropane	BQL	4000	4070	102	4000	4100	103	0.783	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	4180	104	4000	4140	103	0.962	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	3940	98.6	4000	3900	97.6	1.02	30	67.7-132
Vinyl acetate	BQL	10000	11000	110	10000	10800	108	1.83	30	0.00-355
vinyl chloride	BQL	4000	4170	98.8	4000	4380	104	5.32	30	68.1-137
m/p-xylene	BQL	8000	7750	96.9	8000	7660	95.7	1.25	30	79.8-118
o-xylene	BQL	4000	3770	94.2	4000	3750	93.8	0.426	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	9.86	98.6	10	9.89	98.9	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.71	117	10	11.26	113	63.5-140
2037-26-5	Toluene-d8	10	10.17	102	10	10.17	102	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 2 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst:

Reviewed by:



CHAIN OF CUSTODY RECORD
SGS North America Inc.

- Locations Nationwide
- Alaska
- Maryland
- New Jersey
- North Carolina
- Ohio

www.us.sgs.com

096627

1 CLIENT: **ARCADIS**
 CONTACT: **Mark Hanisk** PHONE NO.: **724 742-9180**
 PROJECT: **AUX Myrtle Beach** SITE/PWSID#:
 REPORTS TO:
Mark Hanisk FAX NO.: **724 742-9189**
 INVOICE TO:
Mark Hanisk QUOTE #:
Mark Hanisk P.O. NUMBER: **8007393 0000.00016**

SGS Reference: **0582-536** PAGE **1** OF **1**

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	REMARKS
	OW-10D	10/26/09	1350	Water	3	G	HCl	(3)	
	OW-9D	10/26/09	1407	Water	3	G			
	OW-8D	10/26/09	1420	Water	3	G			
	PZ-1D	10/26/09	1440	Water	2	G			
	PZ-2D	10/26/09	1500	Water	2	G			
	PZ-3D	10/26/09	1525	Water	2	G			
	trip Blank	grab	Lab	Water	2	G			

4 Shipping Carrier: **Fed Ex** Samples Received Cold? (Circle) YES NO
 Shipping Ticket No: **87098867344** Temperature °C: **5.0**
 Special Deliverable Requirements: Chain of Custody Seal: (Circle) **INTACT** BROKEN ABSENT
 Special Instructions:
 Requested Turnaround Time: RUSH STD Date Needed

5 Collected/Relinquished By: (1) **Roddy Shuf** Date **10/26/09** Time **1700** Received By:
 Relinquished By: (2) Date Time Received By:
 Relinquished By: (3) Date Time Received By:
 Relinquished By: (4) **10/27/09** **10:45** Received By: **[Signature]**



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 22
Lab Proj #: P0911154
Report Date: 11/23/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 24

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0911154-01	IW-3D
P0911154-02	P-1D
P0911154-03	P-3D
P0911154-04	P-2D
P0911154-05	OW-7D
P0911154-06	OW-8D
P0911154-07	OW-9D
P0911154-08	OW-10D
P0911154-09	TANKER CONFIRM
P0911154-10	INJECTATE CONFIRM
P0911154-11	OW-7D
P0911154-12	OW-8D
P0911154-13	OW-9D
P0911154-14	OW-10D
P0911154-15	P-2D
P0911154-16	P-1D
P0911154-17	INJECTATE(110709)
P0911154-18	P-3D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HH) **Date:** 11.23.09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-3D	Water	P0911154-01			02 Nov. 09 15:45	10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		5300.0	500.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-1D	Water	P0911154-02	02 Nov. 09 17:45	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		12.0	5.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-3D	Water	P0911154-03	02 Nov. 09 18:00	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		11.0	5.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-2D	Water	P0911154-04	02 Nov. 09 18:15	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		90.0	25.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-7D	Water	P0911154-05	02 Nov. 09 18:30	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		13.0	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P0911154-06	02 Nov. 09	18:30	10 Nov. 09	11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		34.0	5.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>	
OW-9D	Water	P0911154-07			02 Nov. 09 18:45		10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>	
WetChem								
N Total Organic Carbon		11.0	5.0	mg/L	9060	11/19/09	md	



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>	
OW-10D	Water	P0911154-08			02 Nov. 09 18:50		10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>	
WetChem								
N Total Organic Carbon		15.0	5.0	mg/L	9060	11/19/09	md	



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
TANKER CONFIRM	Water	P0911154-09			04 Nov. 09 15:35	10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		220000.0	12000	mg/L	9060	11/20/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
INJECTATE CONFIRM	Water	P0911154-10	04 Nov. 09 15:35	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		7000.0	1000.0	mg/L	9060	11/18/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-7D	Water	P0911154-11	07 Nov. 09 9:25	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		260.0	25.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 13 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P0911154-12	07 Nov. 09	9:34	10 Nov. 09	11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		38.0	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-9D	Water	P0911154-13	07 Nov. 09 9:44	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		9.9	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-10D	Water	P0911154-14	07 Nov. 09 9:56	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		13.0	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-2D	Water	P0911154-15			07 Nov. 09 10:07	10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		830.0	50.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 17 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-1D	Water	P0911154-16	07 Nov. 09 10:20	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		16.0	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

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Lab Proj #: P0911154
Report Date: 11/23/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
INJECTATE(110709)	Water	P0911154-17			07 Nov. 09 11:00	10 Nov. 09 11:29	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		7500.0	500	mg/L	9060	11/20/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 19 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-3D	Water	P0911154-18	07 Nov. 09 11:10	10 Nov. 09 11:29			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		23.0	5.0	mg/L	9060	11/19/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091119005-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091119005-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0911154-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	12.0 mg/L			- NA	0.00	0 - 20

P0911154-03A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	61.0 mg/L	50.00	100.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 21 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091120019-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0	mg/L	5.0		- NA

M091120019-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	35.0	mg/L	36.00	97.00 70 - 130

P0911154-05A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	11.0	mg/L		- NA	16.67	0 - 20

P0911154-12A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	37.0	mg/L		- NA	2.67	0 - 20

P0911154-07A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	59.0	mg/L	50.00	96.00 70 - 130

P0911154-13A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	60.0	mg/L	50.00	100.00 70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 22 of 22
 Lab Proj #: P0911154
 Report Date: 11/23/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091123004-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M091123004-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	35.0 mg/L	36.00	97.00	70 - 130

P0911167-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0.00	0 - 20

P0911186-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0.00	0 - 20

P0911167-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	50.0 mg/L	50.00	100.00	70 - 130

P0911186-03A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	50.0 mg/L	50.00	100.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Laboratory Task Order No./P.O. No.

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 2

Project Number/Name B0007393.0000.00006/AUX

Project Location Myrtle Bend, SC

Laboratory Microseps

Project Manager Mark Hanish

Preserve Bottle 125 mL

ANALYSIS / METHOD / SIZE

TOP

Sample ID / Location	Matrix	Sampled Date	Sampled Time	Lab ID	Remarks	Total
1 IW-3D	GW	11/2/09	1545		X	1
2 P-1D	GW	11/2/09	1745		X	1
3 P-3D	GW	11/2/09	1800		X	1
4 P-2D	GW	11/2/09	1815		X	1
5 OW-7D	GW	11/2/09	1830		X	1
6 OW-8D	GW	11/2/09	1830		X	1
7 OW-9D	GW	11/2/09	1845		X	1
8 OW-10D	GW	11/2/09	1850		X	1
9 Tanker Confirm	GW	11/4/09	1535		X	1
10 Injrate Confirm	GW	11/4/09	1535		X	1
11 OW-7D	GW	11/7/09	0925		X	1
12 OW-8D	GW	11/7/09	0934		X	1
13 OW-9D	GW	11/7/09	0944		X	1
14 OW-10D	GW	11/7/09	0956		X	1
15 P-2D	GW	11/7/09	1007		X	1
Sample Matrix: L = Liquid; S = Solid; A = Air; GW = Groundwater						Total No. Bottles/Containers
						18

Relinquished by: R. Hanish Organization: ARCADIS Date: 11/9/09 Time: 1830 Seal Intact? Yes No N/A

Received by: Fed Ex Organization: () Date: 11/10/09 Time: () Seal Intact? Yes No N/A

Relinquished by: () Organization: () Date: 11/10/09 Time: () Seal Intact? Yes No N/A

Received by: () Organization: () Date: 11/10/09 Time: () Seal Intact? Yes No N/A

Special Instructions/Remarks:

Delivery Method: In Person Common Carrier Fed Ex Lab Courier Other Specify



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 13
Lab Proj #: P0911256
Report Date: 11/30/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 14

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0911256-01	OW-7D
P0911256-02	OW-8D
P0911256-03	OW-9D
P0911256-04	OW-10D
P0911256-05	PZ-1D
P0911256-06	PZ-2D
P0911256-07	PZ-3D
P0911256-08	IW-4D
P0911256-09	IW-2D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: _____

Debbie Hallo

Date: _____

11-30-09

Project Manager: _____

Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 13
 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-7D	Water	P0911256-01	16 Nov. 09 13:30	17 Nov. 09 10:49			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		490.0	50	mg/L	9060	11/25/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 13
 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D	Water	P0911256-02	16 Nov. 09 15:10	17 Nov. 09 10:49			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		360.0	50	mg/L	9060	11/25/09	md
RiskAnalysis							
N Ethane		0.840	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		14.000	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		1200.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 4 of 13
 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P0911256-03			16 Nov. 09 14:00	17 Nov. 09 10:49	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		22.0	5.0	mg/L	9060	11/24/09	md
RiskAnalysis							
N Ethane		1.200	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		27.000	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		200.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-10D	Water	P0911256-04	16 Nov. 09 14:40	17 Nov. 09 10:49			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		38.0	5.0	mg/L	9060	11/24/09	md
RiskAnalysis							
N Ethane		0.480	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		5.200	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		220.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
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 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
PZ-1D	Water	P0911256-05	16 Nov. 09 17:00		17 Nov. 09 10:49		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	J	2.5	5.0	mg/L	9060	11/24/09	md
RiskAnalysis							
N Ethane		0.140	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		0.640	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		44.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
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 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
PZ-2D	Water	P0911256-06			16 Nov. 09 15:40	17 Nov. 09 10:49	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4600.0	250.0	mg/L	9060	11/24/09	md
RiskAnalysis							
N Ethane		0.045	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		4.300	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		280.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
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 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
PZ-3D	Water	P0911256-07	16 Nov. 09 16:10		17 Nov. 09 10:49		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7.4	5.0	mg/L	9060	11/24/09	md
RiskAnalysis							
N Ethane		0.670	0.025	ug/L	AM20GAX	11/27/09	rw
N Ethene		5.500	0.025	ug/L	AM20GAX	11/27/09	rw
N Methane		360.000	0.100	ug/L	AM20GAX	11/27/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-4D	Water	P0911256-08	16 Nov. 09 17:30	17 Nov. 09 10:49			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		4900.0	250.0	mg/L	9060	11/24/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
IW-2D	Water	P0911256-09	16 Nov. 09	17:50	17 Nov. 09	10:49	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		4600.0	250.0	mg/L	9060	11/24/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
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 Seven Fields, PA 16046

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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091125008-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091125008-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	35.0 mg/L	36.00	97.00	70 - 130

P0911254-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0.00	0 - 20

P0911256-03A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	23.0 mg/L			- NA	4.44	0 - 20

P0911254-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	48.0 mg/L	50.00	96.00	70 - 130

P0911256-05A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	53.0 mg/L	50.00	101.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M091127001-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M091127001-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	49.000 ug/L	45.00	109.00	75 - 125
Ethene	45.000 ug/L	40.80	110.00	75 - 125
Methane	930.000 ug/L	825.00	113.00	75 - 125

M091127001-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	50.000 ug/L	45.00	111.00	75 - 125	2.02	0 - 20
Ethene	45.000 ug/L	40.80	110.00	75 - 125	0.00	0 - 20
Methane	880.000 ug/L	825.00	107.00	75 - 125	5.52	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 13 of 13
 Lab Proj #: P0911256
 Report Date: 11/30/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091130017-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M091130017-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	34.0 mg/L	36.00	94.00	70 - 130

P0911384-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	15.0 mg/L			- NA	0.00	0 - 20

P0911384-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	63.0 mg/L	50.00	96.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-8D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-1A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 15:10
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	11/24/2009	
Benzene	BQL	1000	65.0	1000	11/24/2009	
Bromobenzene	BQL	1000	56.0	1000	11/24/2009	
Bromochloromethane	BQL	1000	101	1000	11/24/2009	
Bromodichloromethane	BQL	1000	76.0	1000	11/24/2009	
Bromoform	BQL	1000	120	1000	11/24/2009	
Bromomethane	BQL	1000	133	1000	11/24/2009	
2-Butanone	BQL	25000	544	1000	11/24/2009	
n-Butylbenzene	BQL	1000	109	1000	11/24/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	11/24/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	11/24/2009	
Carbon disulfide	BQL	1000	69.0	1000	11/24/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	11/24/2009	
Chlorobenzene	BQL	1000	82.0	1000	11/24/2009	
Chloroethane	BQL	1000	106	1000	11/24/2009	
Chloroform	BQL	1000	79.0	1000	11/24/2009	
Chloromethane	BQL	1000	146	1000	11/24/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	11/24/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	11/24/2009	
Dibromochloromethane	BQL	1000	90.0	1000	11/24/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	11/24/2009	
Dibromomethane	BQL	1000	113	1000	11/24/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	11/24/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	11/24/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	11/24/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	11/24/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	11/24/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	11/24/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	11/24/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	11/24/2009	
cis-1,2-Dichloroethene	7800	1000	65.0	1000	11/24/2009	
trans-1,2-dichloroethene	160	1000	89.0	1000	11/24/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	11/24/2009	
1,3-Dichloropropane	BQL	1000	127	1000	11/24/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	11/24/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	11/24/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	11/24/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	11/24/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	11/24/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	11/24/2009	
Ethylbenzene	BQL	1000	77.0	1000	11/24/2009	
Hexachlorobutadiene	BQL	1000	228	1000	11/24/2009	
2-Hexanone	BQL	5000	720	1000	11/24/2009	
Iodomethane	BQL	1000	42.0	1000	11/24/2009	
Isopropylbenzene	BQL	1000	71.0	1000	11/24/2009	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-8D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-1A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 15:10
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	11/24/2009	
Methylene chloride	BQL	5000	98.0	1000	11/24/2009	
4-Methyl-2-pentanone	BQL	5000	550	1000	11/24/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	11/24/2009	
Naphthalene	BQL	1000	133	1000	11/24/2009	
n-Propyl benzene	BQL	1000	80.0	1000	11/24/2009	
Styrene	BQL	1000	85.0	1000	11/24/2009	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	11/24/2009	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	11/24/2009	
Tetrachloroethene	BQL	1000	69.0	1000	11/24/2009	
Toluene	BQL	1000	76.0	1000	11/24/2009	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	11/24/2009	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	11/24/2009	
Trichloroethene	1010	1000	54.0	1000	11/24/2009	
1,1,1-Trichloroethane	BQL	1000	54.0	1000	11/24/2009	
1,1,2-Trichloroethane	BQL	1000	182	1000	11/24/2009	
Trichlorofluoromethane	BQL	1000	111	1000	11/24/2009	
1,2,3-Trichloropropane	BQL	1000	120	1000	11/24/2009	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	11/24/2009	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	11/24/2009	
Vinyl chloride	1350	1000	149	1000	11/24/2009	
m-,p-Xylene	BQL	2000	98.0	1000	11/24/2009	
o-Xylene	BQL	1000	65.0	1000	11/24/2009	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.6	106
Toluene-d8	10	9.84	98
4-Bromofluorobenzene	10	9.11	91

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-9D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-2A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 14:00
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	11/24/2009	
Benzene	BQL	800	52.0	800	11/24/2009	
Bromobenzene	BQL	800	44.8	800	11/24/2009	
Bromochloromethane	BQL	800	80.8	800	11/24/2009	
Bromodichloromethane	BQL	800	60.8	800	11/24/2009	
Bromoform	BQL	800	96.0	800	11/24/2009	
Bromomethane	BQL	800	106	800	11/24/2009	
2-Butanone	BQL	20000	435	800	11/24/2009	
n-Butylbenzene	BQL	800	87.2	800	11/24/2009	
sec-Butylbenzene	BQL	800	67.2	800	11/24/2009	
tert-Butylbenzene	BQL	800	40.0	800	11/24/2009	
Carbon disulfide	BQL	800	55.2	800	11/24/2009	
Carbon tetrachloride	BQL	800	69.6	800	11/24/2009	
Chlorobenzene	BQL	800	65.6	800	11/24/2009	
Chloroethane	BQL	800	84.8	800	11/24/2009	
Chloroform	BQL	800	63.2	800	11/24/2009	
Chloromethane	BQL	800	117	800	11/24/2009	
2-Chlorotoluene	BQL	800	79.2	800	11/24/2009	
4-Chlorotoluene	BQL	800	64.0	800	11/24/2009	
Dibromochloromethane	BQL	800	72.0	800	11/24/2009	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	11/24/2009	
Dibromomethane	BQL	800	90.4	800	11/24/2009	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	11/24/2009	
1,2-Dichlorobenzene	BQL	800	102	800	11/24/2009	
1,3-Dichlorobenzene	BQL	800	64.8	800	11/24/2009	
1,4-Dichlorobenzene	BQL	800	63.2	800	11/24/2009	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	11/24/2009	
1,1-Dichloroethane	BQL	800	59.2	800	11/24/2009	
1,1-Dichloroethene	BQL	800	71.2	800	11/24/2009	
1,2-Dichloroethane	BQL	800	63.2	800	11/24/2009	
cis-1,2-Dichloroethene	32700	800	52.0	800	11/24/2009	
trans-1,2-dichloroethene	488	800	71.2	800	11/24/2009	J
1,2-Dichloropropane	BQL	800	75.2	800	11/24/2009	
1,3-Dichloropropane	BQL	800	102	800	11/24/2009	
2,2-Dichloropropane	BQL	800	47.2	800	11/24/2009	
1,1-Dichloropropene	BQL	800	57.6	800	11/24/2009	
cis-1,3-Dichloropropene	BQL	800	60.8	800	11/24/2009	
trans-1,3-Dichloropropene	BQL	800	60.8	800	11/24/2009	
Dichlorodifluoromethane	BQL	4000	75.2	800	11/24/2009	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	11/24/2009	
Ethylbenzene	BQL	800	61.6	800	11/24/2009	
Hexachlorobutadiene	BQL	800	182	800	11/24/2009	
2-Hexanone	BQL	4000	576	800	11/24/2009	
Iodomethane	BQL	800	33.6	800	11/24/2009	
Isopropylbenzene	BQL	800	56.8	800	11/24/2009	

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-10D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-3A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 14:40
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	11/24/2009	
Benzene	BQL	1000	65.0	1000	11/24/2009	
Bromobenzene	BQL	1000	56.0	1000	11/24/2009	
Bromochloromethane	BQL	1000	101	1000	11/24/2009	
Bromodichloromethane	BQL	1000	76.0	1000	11/24/2009	
Bromoform	BQL	1000	120	1000	11/24/2009	
Bromomethane	BQL	1000	133	1000	11/24/2009	
2-Butanone	BQL	25000	544	1000	11/24/2009	
n-Butylbenzene	BQL	1000	109	1000	11/24/2009	
sec-Butylbenzene	BQL	1000	84.0	1000	11/24/2009	
tert-Butylbenzene	BQL	1000	50.0	1000	11/24/2009	
Carbon disulfide	BQL	1000	69.0	1000	11/24/2009	
Carbon tetrachloride	BQL	1000	87.0	1000	11/24/2009	
Chlorobenzene	BQL	1000	82.0	1000	11/24/2009	
Chloroethane	BQL	1000	106	1000	11/24/2009	
Chloroform	BQL	1000	79.0	1000	11/24/2009	
Chloromethane	BQL	1000	146	1000	11/24/2009	
2-Chlorotoluene	BQL	1000	99.0	1000	11/24/2009	
4-Chlorotoluene	BQL	1000	80.0	1000	11/24/2009	
Dibromochloromethane	BQL	1000	90.0	1000	11/24/2009	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	11/24/2009	
Dibromomethane	BQL	1000	113	1000	11/24/2009	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	11/24/2009	
1,2-Dichlorobenzene	BQL	1000	127	1000	11/24/2009	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	11/24/2009	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	11/24/2009	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	11/24/2009	
1,1-Dichloroethane	BQL	1000	74.0	1000	11/24/2009	
1,1-Dichloroethene	BQL	1000	89.0	1000	11/24/2009	
1,2-Dichloroethane	BQL	1000	79.0	1000	11/24/2009	
cis-1,2-Dichloroethene	17200	1000	65.0	1000	11/24/2009	
trans-1,2-dichloroethene	330	1000	89.0	1000	11/24/2009	J
1,2-Dichloropropane	BQL	1000	94.0	1000	11/24/2009	
1,3-Dichloropropane	BQL	1000	127	1000	11/24/2009	
2,2-Dichloropropane	BQL	1000	59.0	1000	11/24/2009	
1,1-Dichloropropene	BQL	1000	72.0	1000	11/24/2009	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	11/24/2009	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	11/24/2009	
Dichlorodifluoromethane	BQL	5000	94.0	1000	11/24/2009	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	11/24/2009	
Ethylbenzene	BQL	1000	77.0	1000	11/24/2009	
Hexachlorobutadiene	BQL	1000	228	1000	11/24/2009	
2-Hexanone	BQL	5000	720	1000	11/24/2009	
Iodomethane	BQL	1000	42.0	1000	11/24/2009	
Isopropylbenzene	BQL	1000	71.0	1000	11/24/2009	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-3A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 14:40
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	11/24/2009	
Methylene chloride	BQL	5000	98.0	1000	11/24/2009	
4-Methyl-2-pentanone	BQL	5000	550	1000	11/24/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	11/24/2009	
Naphthalene	BQL	1000	133	1000	11/24/2009	
n-Propyl benzene	BQL	1000	80.0	1000	11/24/2009	
Styrene	BQL	1000	85.0	1000	11/24/2009	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	11/24/2009	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	11/24/2009	
Tetrachloroethene	BQL	1000	69.0	1000	11/24/2009	
Toluene	BQL	1000	76.0	1000	11/24/2009	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	11/24/2009	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	11/24/2009	
Trichloroethene	1020	1000	54.0	1000	11/24/2009	
1,1,1-Trichloroethane	BQL	1000	54.0	1000	11/24/2009	
1,1,2-Trichloroethane	BQL	1000	182	1000	11/24/2009	
Trichlorofluoromethane	BQL	1000	111	1000	11/24/2009	
1,2,3-Trichloropropane	BQL	1000	120	1000	11/24/2009	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	11/24/2009	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	11/24/2009	
Vinyl chloride	460	1000	149	1000	11/24/2009	J
m-,p-Xylene	BQL	2000	98.0	1000	11/24/2009	
o-Xylene	BQL	1000	65.0	1000	11/24/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	9.81	98		
Toluene-d8		10	10.1	101		
4-Bromofluorobenzene		10	9.23	92		

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: CLP

**Results for Volatiles
by GCMS 8260**

Client Sample ID: PZ-1D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-4A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 13:30
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	250	21.8	10	11/23/2009	
Benzene	BQL	10.0	0.650	10	11/23/2009	
Bromobenzene	BQL	10.0	0.560	10	11/23/2009	
Bromochloromethane	BQL	10.0	1.01	10	11/23/2009	
Bromodichloromethane	BQL	10.0	0.760	10	11/23/2009	
Bromoform	BQL	10.0	1.20	10	11/23/2009	
Bromomethane	BQL	10.0	1.33	10	11/23/2009	
2-Butanone	BQL	250	5.44	10	11/23/2009	
n-Butylbenzene	BQL	10.0	1.09	10	11/23/2009	
sec-Butylbenzene	BQL	10.0	0.840	10	11/23/2009	
tert-Butylbenzene	BQL	10.0	0.500	10	11/23/2009	
Carbon disulfide	BQL	10.0	0.690	10	11/23/2009	
Carbon tetrachloride	BQL	10.0	0.870	10	11/23/2009	
Chlorobenzene	BQL	10.0	0.820	10	11/23/2009	
Chloroethane	BQL	10.0	1.06	10	11/23/2009	
Chloroform	BQL	10.0	0.790	10	11/23/2009	
Chloromethane	BQL	10.0	1.46	10	11/23/2009	
2-Chlorotoluene	BQL	10.0	0.990	10	11/23/2009	
4-Chlorotoluene	BQL	10.0	0.800	10	11/23/2009	
Dibromochloromethane	BQL	10.0	0.900	10	11/23/2009	
1,2-Dibromo-3-chloropropane	BQL	50.0	12.1	10	11/23/2009	
Dibromomethane	BQL	10.0	1.13	10	11/23/2009	
1,2-Dibromoethane (EDB)	BQL	10.0	1.24	10	11/23/2009	
1,2-Dichlorobenzene	BQL	10.0	1.27	10	11/23/2009	
1,3-Dichlorobenzene	BQL	10.0	0.810	10	11/23/2009	
1,4-Dichlorobenzene	BQL	10.0	0.790	10	11/23/2009	
trans-1,4-Dichloro-2-butene	BQL	50.0	6.30	10	11/23/2009	
1,1-Dichloroethane	BQL	10.0	0.740	10	11/23/2009	
1,1-Dichloroethene	1.20	10.0	0.890	10	11/23/2009	J
1,2-Dichloroethane	BQL	10.0	0.790	10	11/23/2009	
cis-1,2-Dichloroethene	355	10.0	0.650	10	11/23/2009	
trans-1,2-dichloroethene	BQL	10.0	0.890	10	11/23/2009	
1,2-Dichloropropane	BQL	10.0	0.940	10	11/23/2009	
1,3-Dichloropropane	BQL	10.0	1.27	10	11/23/2009	
2,2-Dichloropropane	BQL	10.0	0.590	10	11/23/2009	
1,1-Dichloropropene	BQL	10.0	0.720	10	11/23/2009	
cis-1,3-Dichloropropene	BQL	10.0	0.760	10	11/23/2009	
trans-1,3-Dichloropropene	BQL	10.0	0.760	10	11/23/2009	
Dichlorodifluoromethane	BQL	50.0	0.940	10	11/23/2009	
Diisopropyl ether (DIPE)	BQL	10.0	0.730	10	11/23/2009	
Ethylbenzene	BQL	10.0	0.770	10	11/23/2009	
Hexachlorobutadiene	BQL	10.0	2.28	10	11/23/2009	
2-Hexanone	BQL	50.0	7.20	10	11/23/2009	
Iodomethane	BQL	10.0	0.420	10	11/23/2009	
Isopropylbenzene	BQL	10.0	0.710	10	11/23/2009	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: PZ-1D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-4A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 13:30
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	10.0	0.480	10	11/23/2009	
Methylene chloride	BQL	50.0	0.980	10	11/23/2009	
4-Methyl-2-pentanone	BQL	50.0	5.50	10	11/23/2009	
Methyl-tert-butyl ether (MTBE)	BQL	10.0	0.670	10	11/23/2009	
Naphthalene	BQL	10.0	1.33	10	11/23/2009	
n-Propyl benzene	BQL	10.0	0.800	10	11/23/2009	
Styrene	BQL	10.0	0.850	10	11/23/2009	
1,1,1,2-Tetrachloroethane	BQL	10.0	0.900	10	11/23/2009	
1,1,2,2-Tetrachloroethane	BQL	10.0	1.15	10	11/23/2009	
Tetrachloroethene	BQL	10.0	0.690	10	11/23/2009	
Toluene	BQL	10.0	0.760	10	11/23/2009	
1,2,3-Trichlorobenzene	BQL	10.0	1.90	10	11/23/2009	
1,2,4-Trichlorobenzene	BQL	10.0	1.19	10	11/23/2009	
Trichloroethene	6.00	10.0	0.540	10	11/23/2009	J
1,1,1-Trichloroethane	BQL	10.0	0.540	10	11/23/2009	
1,1,2-Trichloroethane	BQL	10.0	1.82	10	11/23/2009	
Trichlorofluoromethane	BQL	10.0	1.11	10	11/23/2009	
1,2,3-Trichloropropane	BQL	10.0	1.20	10	11/23/2009	
1,2,4-Trimethylbenzene	BQL	10.0	0.650	10	11/23/2009	
1,3,5-Trimethylbenzene	BQL	10.0	0.740	10	11/23/2009	
Vinyl chloride	BQL	10.0	1.49	10	11/23/2009	
m-,p-Xylene	BQL	20.0	0.980	10	11/23/2009	
o-Xylene	BQL	10.0	0.650	10	11/23/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.5	105
Toluene-d8	10	9.93	99
4-Bromofluorobenzene	10	9.3	93

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst:

Reviewed By:

**Results for Volatiles
by GCMS 8260**

Client Sample ID: PZ-2D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-5A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 15:40
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	5000	436	200	11/23/2009	
Benzene	BQL	200	13.0	200	11/23/2009	
Bromobenzene	BQL	200	11.2	200	11/23/2009	
Bromochloromethane	BQL	200	20.2	200	11/23/2009	
Bromodichloromethane	BQL	200	15.2	200	11/23/2009	
Bromoform	BQL	200	24.0	200	11/23/2009	
Bromomethane	BQL	200	26.6	200	11/23/2009	
2-Butanone	BQL	5000	109	200	11/23/2009	
n-Butylbenzene	BQL	200	21.8	200	11/23/2009	
sec-Butylbenzene	BQL	200	16.8	200	11/23/2009	
tert-Butylbenzene	BQL	200	10.0	200	11/23/2009	
Carbon disulfide	BQL	200	13.8	200	11/23/2009	
Carbon tetrachloride	BQL	200	17.4	200	11/23/2009	
Chlorobenzene	BQL	200	16.4	200	11/23/2009	
Chloroethane	BQL	200	21.2	200	11/23/2009	
Chloroform	BQL	200	15.8	200	11/23/2009	
Chloromethane	BQL	200	29.2	200	11/23/2009	
2-Chlorotoluene	BQL	200	19.8	200	11/23/2009	
4-Chlorotoluene	BQL	200	16.0	200	11/23/2009	
Dibromochloromethane	BQL	200	18.0	200	11/23/2009	
1,2-Dibromo-3-chloropropane	BQL	1000	242	200	11/23/2009	
Dibromomethane	BQL	200	22.6	200	11/23/2009	
1,2-Dibromoethane (EDB)	BQL	200	24.8	200	11/23/2009	
1,2-Dichlorobenzene	BQL	200	25.4	200	11/23/2009	
1,3-Dichlorobenzene	BQL	200	16.2	200	11/23/2009	
1,4-Dichlorobenzene	BQL	200	15.8	200	11/23/2009	
trans-1,4-Dichloro-2-butene	BQL	1000	126	200	11/23/2009	
1,1-Dichloroethane	BQL	200	14.8	200	11/23/2009	
1,1-Dichloroethene	BQL	200	17.8	200	11/23/2009	
1,2-Dichloroethane	BQL	200	15.8	200	11/23/2009	
cis-1,2-Dichloroethene	208	200	13.0	200	11/23/2009	
trans-1,2-dichloroethene	BQL	200	17.8	200	11/23/2009	
1,2-Dichloropropane	BQL	200	18.8	200	11/23/2009	
1,3-Dichloropropane	BQL	200	25.4	200	11/23/2009	
2,2-Dichloropropane	BQL	200	11.8	200	11/23/2009	
1,1-Dichloropropene	BQL	200	14.4	200	11/23/2009	
cis-1,3-Dichloropropene	BQL	200	15.2	200	11/23/2009	
trans-1,3-Dichloropropene	BQL	200	15.2	200	11/23/2009	
Dichlorodifluoromethane	BQL	1000	18.8	200	11/23/2009	
Diisopropyl ether (DIPE)	BQL	200	14.6	200	11/23/2009	
Ethylbenzene	BQL	200	15.4	200	11/23/2009	
Hexachlorobutadiene	BQL	200	45.6	200	11/23/2009	
2-Hexanone	BQL	1000	144	200	11/23/2009	
Iodomethane	BQL	200	8.40	200	11/23/2009	
Isopropylbenzene	BQL	200	14.2	200	11/23/2009	

Results for Volatiles
by GCMS 8260

Client Sample ID: PZ-2D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-5A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 15:40
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	200	9.60	200	11/23/2009	
Methylene chloride	BQL	1000	19.6	200	11/23/2009	
4-Methyl-2-pentanone	BQL	1000	110	200	11/23/2009	
Methyl-tert-butyl ether (MTBE)	BQL	200	13.4	200	11/23/2009	
Naphthalene	BQL	200	26.6	200	11/23/2009	
n-Propyl benzene	BQL	200	16.0	200	11/23/2009	
Styrene	BQL	200	17.0	200	11/23/2009	
1,1,1,2-Tetrachloroethane	BQL	200	18.0	200	11/23/2009	
1,1,2,2-Tetrachloroethane	BQL	200	23.0	200	11/23/2009	
Tetrachloroethene	BQL	200	13.8	200	11/23/2009	
Toluene	BQL	200	15.2	200	11/23/2009	
1,2,3-Trichlorobenzene	BQL	200	38.0	200	11/23/2009	
1,2,4-Trichlorobenzene	BQL	200	23.8	200	11/23/2009	
Trichloroethene	526	200	10.8	200	11/23/2009	
1,1,1-Trichloroethane	BQL	200	10.8	200	11/23/2009	
1,1,2-Trichloroethane	BQL	200	36.4	200	11/23/2009	
Trichlorofluoromethane	BQL	200	22.2	200	11/23/2009	
1,2,3-Trichloropropane	BQL	200	24.0	200	11/23/2009	
1,2,4-Trimethylbenzene	BQL	200	13.0	200	11/23/2009	
1,3,5-Trimethylbenzene	BQL	200	14.8	200	11/23/2009	
Vinyl chloride	166	200	29.8	200	11/23/2009	J
m-,p-Xylene	BQL	400	19.6	200	11/23/2009	
o-Xylene	BQL	200	13.0	200	11/23/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.3	103
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.31	93

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: CP

Reviewed By: CLP

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: PZ-3D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-6A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 16:10
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	6250	545	250	11/24/2009	
Benzene	BQL	250	16.3	250	11/24/2009	
Bromobenzene	BQL	250	14.0	250	11/24/2009	
Bromochloromethane	BQL	250	25.2	250	11/24/2009	
Bromodichloromethane	BQL	250	19.0	250	11/24/2009	
Bromoform	BQL	250	30.0	250	11/24/2009	
Bromomethane	BQL	250	33.2	250	11/24/2009	
2-Butanone	BQL	6250	136	250	11/24/2009	
n-Butylbenzene	BQL	250	27.3	250	11/24/2009	
sec-Butylbenzene	BQL	250	21.0	250	11/24/2009	
tert-Butylbenzene	BQL	250	12.5	250	11/24/2009	
Carbon disulfide	BQL	250	17.3	250	11/24/2009	
Carbon tetrachloride	BQL	250	21.8	250	11/24/2009	
Chlorobenzene	BQL	250	20.5	250	11/24/2009	
Chloroethane	BQL	250	26.5	250	11/24/2009	
Chloroform	BQL	250	19.8	250	11/24/2009	
Chloromethane	BQL	250	36.5	250	11/24/2009	
2-Chlorotoluene	BQL	250	24.8	250	11/24/2009	
4-Chlorotoluene	BQL	250	20.0	250	11/24/2009	
Dibromochloromethane	BQL	250	22.5	250	11/24/2009	
1,2-Dibromo-3-chloropropane	BQL	1250	303	250	11/24/2009	
Dibromomethane	BQL	250	28.3	250	11/24/2009	
1,2-Dibromoethane (EDB)	BQL	250	31.0	250	11/24/2009	
1,2-Dichlorobenzene	BQL	250	31.8	250	11/24/2009	
1,3-Dichlorobenzene	BQL	250	20.3	250	11/24/2009	
1,4-Dichlorobenzene	BQL	250	19.8	250	11/24/2009	
trans-1,4-Dichloro-2-butene	BQL	1250	157	250	11/24/2009	
1,1-Dichloroethane	BQL	250	18.5	250	11/24/2009	
1,1-Dichloroethene	BQL	250	22.2	250	11/24/2009	
1,2-Dichloroethane	BQL	250	19.8	250	11/24/2009	
cis-1,2-Dichloroethene	11800	250	16.3	250	11/24/2009	
trans-1,2-dichloroethene	60.0	250	22.2	250	11/24/2009	J
1,2-Dichloropropane	BQL	250	23.5	250	11/24/2009	
1,3-Dichloropropane	BQL	250	31.8	250	11/24/2009	
2,2-Dichloropropane	BQL	250	14.7	250	11/24/2009	
1,1-Dichloropropene	BQL	250	18.0	250	11/24/2009	
cis-1,3-Dichloropropene	BQL	250	19.0	250	11/24/2009	
trans-1,3-Dichloropropene	BQL	250	19.0	250	11/24/2009	
Dichlorodifluoromethane	BQL	1250	23.5	250	11/24/2009	
Diisopropyl ether (DIPE)	BQL	250	18.2	250	11/24/2009	
Ethylbenzene	BQL	250	19.3	250	11/24/2009	
Hexachlorobutadiene	BQL	250	57.0	250	11/24/2009	
2-Hexanone	BQL	1250	180	250	11/24/2009	
Iodomethane	BQL	250	10.5	250	11/24/2009	
Isopropylbenzene	BQL	250	17.8	250	11/24/2009	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: PZ-3D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-6A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 16:10
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	250	12.0	250	11/24/2009	
Methylene chloride	BQL	1250	24.5	250	11/24/2009	
4-Methyl-2-pentanone	BQL	1250	138	250	11/24/2009	
Methyl-tert-butyl ether (MTBE)	BQL	250	16.7	250	11/24/2009	
Naphthalene	BQL	250	33.2	250	11/24/2009	
n-Propyl benzene	BQL	250	20.0	250	11/24/2009	
Styrene	BQL	250	21.3	250	11/24/2009	
1,1,1,2-Tetrachloroethane	BQL	250	22.5	250	11/24/2009	
1,1,2,2-Tetrachloroethane	BQL	250	28.8	250	11/24/2009	
Tetrachloroethene	BQL	250	17.3	250	11/24/2009	
Toluene	BQL	250	19.0	250	11/24/2009	
1,2,3-Trichlorobenzene	BQL	250	47.5	250	11/24/2009	
1,2,4-Trichlorobenzene	BQL	250	29.8	250	11/24/2009	
Trichloroethene	BQL	250	13.5	250	11/24/2009	
1,1,1-Trichloroethane	BQL	250	13.5	250	11/24/2009	
1,1,2-Trichloroethane	BQL	250	45.5	250	11/24/2009	
Trichlorofluoromethane	BQL	250	27.8	250	11/24/2009	
1,2,3-Trichloropropane	BQL	250	30.0	250	11/24/2009	
1,2,4-Trimethylbenzene	BQL	250	16.3	250	11/24/2009	
1,3,5-Trimethylbenzene	BQL	250	18.5	250	11/24/2009	
Vinyl chloride	303	250	37.2	250	11/24/2009	
m-,p-Xylene	BQL	500	24.5	250	11/24/2009	
o-Xylene	BQL	250	16.3	250	11/24/2009	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.6	106		
Toluene-d8		10	9.86	99		
4-Bromofluorobenzene		10	9.1	91		

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: JVD

Reviewed By: [Signature]

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: Trip Blank
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-562-7A
Lab Project ID: G582-562

Analyzed By: CLP
Date Collected: 11/16/2009 0:00
Date Received: 11/17/2009
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	11/23/2009	
Benzene	BQL	1.00	0.0650	1	11/23/2009	
Bromobenzene	BQL	1.00	0.0560	1	11/23/2009	
Bromochloromethane	BQL	1.00	0.101	1	11/23/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	11/23/2009	
Bromoform	BQL	1.00	0.120	1	11/23/2009	
Bromomethane	BQL	1.00	0.133	1	11/23/2009	
2-Butanone	BQL	25.0	0.544	1	11/23/2009	
n-Butylbenzene	BQL	1.00	0.109	1	11/23/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	11/23/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	11/23/2009	
Carbon disulfide	BQL	1.00	0.0690	1	11/23/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	11/23/2009	
Chlorobenzene	BQL	1.00	0.0820	1	11/23/2009	
Chloroethane	BQL	1.00	0.106	1	11/23/2009	
Chloroform	BQL	1.00	0.0790	1	11/23/2009	
Chloromethane	BQL	1.00	0.146	1	11/23/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	11/23/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	11/23/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	11/23/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	11/23/2009	
Dibromomethane	BQL	1.00	0.113	1	11/23/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	11/23/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	11/23/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	11/23/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	11/23/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	11/23/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	11/23/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	11/23/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	11/23/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	11/23/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	11/23/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	11/23/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	11/23/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	11/23/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	11/23/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/23/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/23/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	11/23/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	11/23/2009	
Ethylbenzene	BQL	1.00	0.0770	1	11/23/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	11/23/2009	
2-Hexanone	BQL	5.00	0.720	1	11/23/2009	
Iodomethane	BQL	1.00	0.0420	1	11/23/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	11/23/2009	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-562-7A
 Lab Project ID: G582-562

Analyzed By: CLP
 Date Collected: 11/16/2009 0:00
 Date Received: 11/17/2009
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	11/23/2009	
Methylene chloride	0.550	5.00	0.0980	1	11/23/2009	J
4-Methyl-2-pentanone	BQL	5.00	0.550	1	11/23/2009	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	11/23/2009	
Naphthalene	BQL	1.00	0.133	1	11/23/2009	
n-Propyl benzene	BQL	1.00	0.0800	1	11/23/2009	
Styrene	BQL	1.00	0.0850	1	11/23/2009	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	11/23/2009	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	11/23/2009	
Tetrachloroethene	BQL	1.00	0.0690	1	11/23/2009	
Toluene	BQL	1.00	0.0760	1	11/23/2009	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	11/23/2009	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	11/23/2009	
Trichloroethene	BQL	1.00	0.0540	1	11/23/2009	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	11/23/2009	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	11/23/2009	
Trichlorofluoromethane	BQL	1.00	0.111	1	11/23/2009	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	11/23/2009	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	11/23/2009	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	11/23/2009	
Vinyl chloride	BQL	1.00	0.149	1	11/23/2009	
m-,p-Xylene	BQL	2.00	0.0980	1	11/23/2009	
o-Xylene	BQL	1.00	0.0650	1	11/23/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.3	103
Toluene-d8	10	9.86	99
4-Bromofluorobenzene	10	9.35	94

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: CLP

Reviewed By: CLP

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK1112309B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result	Quantitation	MDL	Dilution	Date	Flag
	UG/L	Limit UG/L	UG/L	Factor	Analyzed	
Acetone	BQL	25.0	2.18	1	11/23/2009	
Benzene	BQL	1.00	0.0650	1	11/23/2009	
Bromobenzene	BQL	1.00	0.0560	1	11/23/2009	
Bromochloromethane	BQL	1.00	0.101	1	11/23/2009	
Bromodichloromethane	BQL	1.00	0.0760	1	11/23/2009	
Bromoform	BQL	1.00	0.120	1	11/23/2009	
Bromomethane	BQL	1.00	0.133	1	11/23/2009	
2-Butanone	BQL	25.0	0.544	1	11/23/2009	
n-Butylbenzene	BQL	1.00	0.109	1	11/23/2009	
sec-Butylbenzene	BQL	1.00	0.0840	1	11/23/2009	
tert-Butylbenzene	BQL	1.00	0.0500	1	11/23/2009	
Carbon disulfide	BQL	1.00	0.0690	1	11/23/2009	
Carbon tetrachloride	BQL	1.00	0.0870	1	11/23/2009	
Chlorobenzene	BQL	1.00	0.0820	1	11/23/2009	
Chloroethane	BQL	1.00	0.106	1	11/23/2009	
Chloroform	BQL	1.00	0.0790	1	11/23/2009	
Chloromethane	BQL	1.00	0.146	1	11/23/2009	
2-Chlorotoluene	BQL	1.00	0.0990	1	11/23/2009	
4-Chlorotoluene	BQL	1.00	0.0800	1	11/23/2009	
Dibromochloromethane	BQL	1.00	0.0900	1	11/23/2009	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	11/23/2009	
Dibromomethane	BQL	1.00	0.113	1	11/23/2009	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	11/23/2009	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	11/23/2009	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	11/23/2009	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	11/23/2009	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	11/23/2009	
1,1-Dichloroethane	BQL	1.00	0.0740	1	11/23/2009	
1,1-Dichloroethene	BQL	1.00	0.0890	1	11/23/2009	
1,2-Dichloroethane	BQL	1.00	0.0790	1	11/23/2009	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	11/23/2009	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	11/23/2009	
1,2-Dichloropropane	BQL	1.00	0.0940	1	11/23/2009	
1,3-Dichloropropane	BQL	1.00	0.127	1	11/23/2009	
2,2-Dichloropropane	BQL	1.00	0.0590	1	11/23/2009	
1,1-Dichloropropene	BQL	1.00	0.0720	1	11/23/2009	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/23/2009	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	11/23/2009	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	11/23/2009	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	11/23/2009	
Ethylbenzene	BQL	1.00	0.0770	1	11/23/2009	
Hexachlorobutadiene	BQL	1.00	0.228	1	11/23/2009	
2-Hexanone	BQL	5.00	0.720	1	11/23/2009	
Iodomethane	BQL	1.00	0.0420	1	11/23/2009	
Isopropylbenzene	BQL	1.00	0.0710	1	11/23/2009	

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS1112309B

filename: 1123104.D

Date Analyzed: 11/23/09 10:18

LCSD: LCS1112309A

filename: 1123103.D

Date Analyzed: 11/23/09 09:46

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
acetone	25.0	20.8	83.1	25.0	20.7	82.7	0.531	30	23.5-141
acrolein	125	120	96.2	125	113	90.7	5.89	30	31.4-1#2
acrylonitrile	125	134	107	125	124	99.3	7.94	30	64.2-140
benzene	5.00	4.65	93.0	5.00	4.53	90.6	2.61	30	76.6-120
bromobenzene	5.00	4.76	95.2	5.00	4.72	94.4	0.844	30	75.0-122
bromochloromethane	5.00	4.75	95.0	5.00	4.58	91.6	3.64	30	74.8-127
bromodichloromethane	5.00	5.06	101	5.00	4.89	97.8	3.42	30	76.4-117
bromoform	5.00	5.13	103	5.00	4.95	99.0	3.57	30	62.4-127
bromomethane	5.00	4.33	86.6	5.00	4.34	86.8	0.231	30	34.2-166
2-butanone	25.0	23.8	95.1	25.0	23.0	91.9	3.46	30	44.9-126
n-butylbenzene	5.00	4.10	82.0	5.00	4.01	80.2	2.22	30	72.0-122
sec-butylbenzene	5.00	4.13	82.6	5.00	4.06	81.2	1.71	30	78.3-116
tert-butylbenzene	5.00	3.45	69.0	5.00	3.49	69.8	1.15	30	53.1-148
Carbon disulfide	5.00	4.73	94.6	5.00	4.63	92.6	2.14	30	69.0-118
carbon tetrachloride	5.00	4.90	98.0	5.00	4.63	92.6	5.67	30	71.7-124
chlorobenzene	5.00	4.79	95.8	5.00	4.66	93.2	2.75	30	75.5-116
chloroethane	5.00	5.06	101	5.00	5.04	101	0.396	30	78.2-138
2-chloroethyl vinyl ether	125	122	97.9	125	114	91.2	7.05	30	5.57-235
chloroform	5.00	5.01	100	5.00	4.80	96.0	4.28	30	80.6-117
chloromethane	5.00	5.08	102	5.00	5.04	101	0.790	30	72.6-127
2-chlorotoluene	5.00	4.64	92.8	5.00	4.66	93.2	0.430	30	81.4-117
4-chlorotoluene	5.00	4.54	90.8	5.00	4.25	85.0	6.60	30	82.1-116
dibromochloromethane	5.00	5.13	103	5.00	5.08	102	0.979	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	21.4	85.5	25.0	20.8	83.3	2.61	30	58.0-133
1,2-dibromoethane	5.00	4.88	97.6	5.00	4.53	90.6	7.44	30	75.5-118
dibromomethane	5.00	5.06	101	5.00	4.95	99.0	2.20	30	77.3-124
1,2-dichlorobenzene	5.00	5.04	101	5.00	4.88	97.6	3.22	30	76.3-115
1,3-dichlorobenzene	5.00	4.92	98.4	5.00	4.92	98.4	0.00	30	79.1-114
1,4-dichlorobenzene	5.00	4.95	99.0	5.00	4.88	97.6	1.42	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	23.1	92.4	25.0	22.4	89.5	3.17	30	52.3-130
dichlorodifluoromethane	5.00	4.69	93.8	5.00	4.68	93.6	0.213	30	69.8-134
1,1-dichloroethane	5.00	4.87	97.4	5.00	4.74	94.8	2.70	30	78.0-120
1,2-dichloroethane	5.00	4.91	98.2	5.00	4.75	95.0	3.31	30	72.8-126
1,1-dichloroethene	5.00	4.77	95.4	5.00	4.64	92.8	2.76	30	74.6-121
cis-1,2-dichloroethene	5.00	4.96	99.2	5.00	4.79	95.8	3.49	30	78.0-121
trans-1,2-dichloroethene	5.00	5.17	103	5.00	4.88	97.6	5.77	30	60.7-144
1,2-dichloropropane	5.00	4.98	99.6	5.00	4.80	96.0	3.68	30	75.8-119
1,3-dichloropropane	5.00	4.74	94.8	5.00	4.62	92.4	2.56	30	78.5-113
2,2-dichloropropane	5.00	4.80	96.0	5.00	4.73	94.6	1.47	30	75.6-130
1,1-dichloropropene	5.00	4.65	93.0	5.00	4.52	90.4	2.84	30	79.7-117
cis-1,3-dichloropropene	5.00	4.95	99.0	5.00	4.83	96.6	2.45	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

SGS North America, Inc.

SGS Environmental Services

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS1112309B

Itemname: 1123104.D

Date Analyzed: 11/23/09 10:18

LCSD: LCS1112309A

Itemname: 1123103.D

Date Analyzed: 11/23/09 09:46

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	RPD
trans-1,3-dichloropropene	5.00	4.84	96.8	5.00	4.70	94.0	2.94	30	79.0-113
Diisopropyl ether	5.00	4.80	96.0	5.00	4.60	92.0	4.26	30	71.8-115
ethylbenzene	5.00	4.57	91.4	5.00	4.47	89.4	2.21	30	80.5-115
hexachlorobutadiene	5.00	4.77	95.4	5.00	4.68	93.6	1.90	30	63.3-139
2-hexanone	25.0	20.6	82.6	25.0	19.8	79.3	4.05	30	46.8-123
Iodomethane	5.00	4.85	97.0	5.00	4.64	92.8	4.42	30	29.3-156
isopropylbenzene	5.00	4.31	86.2	5.00	4.17	83.4	3.30	30	81.6-114
4-isopropyltoluene	5.00	4.20	84.0	5.00	4.16	83.2	3.957	30	78.4-119
Methyl-tert-butyl ether	5.00	5.00	100	5.00	4.78	95.6	4.50	30	76.0-114
methylene chloride	5.00	4.67	93.4	5.00	4.49	89.8	3.93	30	72.9-120
4-methyl-2-pentanone	25.0	22.1	88.6	25.0	20.8	83.4	6.05	30	56.2-124
naphthalene	5.00	3.91	78.2	5.00	3.72	74.4	4.98	30	24.8-182
n-propyl benzene	5.00	4.20	84.0	5.00	4.14	82.8	1.44	30	79.0-116
styrene	5.00	4.16	83.2	5.00	4.03	80.6	3.17	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.82	96.4	5.00	4.70	94.0	2.52	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.09	102	5.00	4.79	95.8	6.07	30	69.7-119
tetrachloroethene	5.00	4.02	80.4	5.00	3.87	77.4	3.80	30	55.3-144
toluene	5.00	4.67	93.4	5.00	4.49	89.8	3.93	30	78.6-117
1,2,3-trichlorobenzene	5.00	4.39	87.8	5.00	4.40	88.0	0.228	30	20.8-193
1,2,4-trichlorobenzene	5.00	4.39	87.8	5.00	4.25	85.0	3.24	30	47.9-150
1,1,1-trichloroethane	5.00	4.82	96.4	5.00	4.76	95.2	1.25	30	78.8-120
1,1,2-trichloroethane	5.00	4.90	98.0	5.00	4.83	96.6	1.44	30	73.6-117
trichloroethene	5.00	4.81	96.2	5.00	4.63	92.6	3.81	30	80.1-116
trichlorofluoromethane	5.00	5.10	102	5.00	4.78	95.6	6.48	30	80.5-130
1,2,3-trichloropropane	5.00	4.67	93.4	5.00	4.44	88.8	5.05	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.37	87.4	5.00	4.21	84.2	3.73	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.20	84.0	5.00	4.08	81.6	2.90	30	79.4-114
Vinyl acetate	12.5	12.6	100	12.5	11.6	92.6	8.04	30	60.7-127
vinyl chloride	5.00	5.01	100	5.00	4.97	99.4	0.802	30	77.5-126
m/p-xylene	10.0	9.47	94.7	10.0	9.12	91.2	3.76	30	82.9-112
o-xylene	5.00	4.43	88.6	5.00	4.23	84.6	4.62	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC	
460-00-4	4-Bromofluorobenzene	10	10.52	105	10	10.47	105	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.23	102	10	10.22	102	63.5-140
2037-26-5	Toluene-d8	10	10.15	102	10	10.05	100	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: OVD

Reviewed by: 

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental	Lab Code: NC00919	Inst: MSD1
EPA Sample No.: Amt. Filenames:	Analysis Dates:	Batch: 1112309
Sample g145-1301-5b 5 mL 1123119.D	2009-11-23 18:19:00	Dilution: 800
MS g145-1301-5b 5 mL 1123120.D	2009-11-23 18:51:00	Matrix: Water
MSD g145-1301-5b 5 mL 1123121.D	2009-11-23 19:22:00	

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	14800	74.1	20000	16500	82.7	11.0	30	17.7-85.2
acrolein	BQL	100000	83300	83.3	100000	92300	92.3	10.3	30	0.00-424
acrylonitrile	BQL	100000	99600	99.6	100000	109000	109	9.05	30	85.0-175
benzene	1450	4000	5370	98.0	4000	5590	104	5.56	30	61.6-135
bromobenzene	BQL	4000	4010	100	4000	4460	111	10.6	30	65.1-125
bromochloromethane	BQL	4000	3910	97.8	4000	4070	102	4.01	30	75.5-126
bromodichloromethane	BQL	4000	4140	103	4000	4340	108	4.90	30	74.3-123
bromoform	BQL	4000	4180	105	4000	4830	121	14.4	30	52.3-122
bromomethane	BQL	4000	2820	70.4	4000	3270	81.8	15.0	30	10.0-284
2-butanone	BQL	20000	17300	86.4	20000	18900	94.7	9.14	30	36.1-107
n-butylbenzene	BQL	4000	3480	87.0	4000	3680	92.0	5.59	30	70.2-124
sec-butylbenzene	BQL	4000	3370	84.2	4000	3630	90.8	7.54	30	62.0-133
tert-butylbenzene	BQL	4000	2920	73.0*	4000	3020	75.4	3.23	30	73.5-121
Carbon disulfide	BQL	4000	3910	97.8	4000	4020	100	2.62	30	68.8-129
carbon tetrachloride	BQL	4000	3960	99.0	4000	4130	103	4.15	30	71.8-122
chlorobenzene	BQL	4000	3920	98.0	4000	4370	109	10.8	30	77.2-118
chloroethane	BQL	4000	3850	96.2	4000	4100	103	6.44	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	85400	854*	10000	90700	907*	6.07	30	16.7-283
chloroform	BQL	4000	3880	97.0	4000	4230	106	8.68	30	74.0-128
chloromethane	BQL	4000	3950	98.8	4000	4100	103	3.77	30	72.0-138
2-chlorotoluene	BQL	4000	4150	104	4000	4320	108	3.97	30	79.3-118
4-chlorotoluene	BQL	4000	3780	94.6	4000	3900	97.4	2.92	30	76.8-120
dibromochloromethane	BQL	4000	4200	105	4000	4740	119*	12.2	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	18400	92.1	20000	20500	102	10.5	30	20.2-171
1,2-dibromoethane	BQL	4000	3870	96.8	4000	4420	110	13.1	30	78.5-123
dibromomethane	BQL	4000	3780	94.4	4000	4330	108	13.6	30	71.3-137
1,2-dichlorobenzene	BQL	4000	4280	107	4000	4440	111	3.67	30	75.1-120
1,3-dichlorobenzene	BQL	4000	4160	104	4000	4350	109	4.51	30	73.1-121
1,4-dichlorobenzene	BQL	4000	4270	107	4000	4380	109	2.40	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	19200	95.9	20000	19800	99.1	3.28	30	25.7-149
dichlorodifluoromethane	BQL	4000	3300	82.6	4000	3700	92.4	11.2	30	41.7-166
1,1-dichloroethane	BQL	4000	3770	94.2	4000	4140	103	9.31	30	75.6-128
1,2-dichloroethane	BQL	4000	3990	99.8	4000	4220	105	5.46	30	71.1-127
1,1-dichloroethene	BQL	4000	3740	93.4	4000	3980	99.6	6.42	30	64.4-130
cis-1,2-dichloroethene	BQL	4000	3700	92.4	4000	4060	102	9.48	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	3980	99.4	4000	4310	108	8.11	30	74.6-124
1,2-dichloropropane	BQL	4000	4000	100	4000	4140	104	3.54	30	76.5-129
1,3-dichloropropane	BQL	4000	3820	95.4	4000	4320	108	12.4	30	79.1-121
2,2-dichloropropane	BQL	4000	3780	94.4	4000	3960	99.0	4.76	30	31.5-157
1,1-dichloropropene	BQL	4000	3460	86.6	4000	3760	94.0	8.19	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	3800	95.0	4000	4100	102	7.50	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD1

Lab Code: NC00919

Batch: 1112309

EPA Sample No.: g145-1301-5b, g145-1301-5b, g145-1301-5b

Dilution: 800

FileNames: 1123119.D, 1123120.D, 1123121.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	%	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	3900	97.4	4000	4240	106	8.46	30	44.7-144
Diisopropyl ether	BQL	4000	3910	97.8	4000	4200	105	7.10	30	79.4-122
ethylbenzene	1670	4000	6010	108	4000	6180	113	3.80	30	73.8-126
hexachlorobutadiene	BQL	4000	3570	89.2	4000	3920	98.0	9.40	30	51.8-134
2-hexanone	BQL	20000	15900	79.4	20000	18100	90.6	13.1	30	41.6-111
Iodomethane	BQL	4000	3540	88.6	4000	3900	97.4	9.46	30	40.6-126
isopropylbenzene	BQL	4000	3490	87.2	4000	3670	91.8	5.14	30	74.3-123
4-isopropyltoluene	BQL	4000	3510	87.8	4000	3610	90.2	2.70	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	3760	94.0	4000	4220	106	11.6	30	66.5-136
methylene chloride	BQL	4000	4000	100	4000	4120	103	2.96	30	48.6-155
4-methyl-2-pentanone	BQL	20000	17400	86.8	20000	18500	92.4	6.30	30	6.88-166
naphthalene	BQL	4000	3240	81.0	4000	3850	96.2	17.2	30	55.1-140
n-propyl benzene	BQL	4000	3730	82.4	4000	3860	85.6	3.81	30	71.6-128
styrene	BQL	4000	3680	92.0	4000	3780	94.4	2.58	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	3950	98.8	4000	4410	110	10.9	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	4270	107	4000	4780	119	11.1	30	75.7-136
tetrachloroethene	BQL	4000	3160	79.0	4000	3590	89.8	12.8	30	45.8-153
toluene	12500	4000	17400	122	4000	17400	121	1.32	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3290	82.2	4000	3690	92.2	11.5	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3190	79.8	4000	3690	92.2	14.4	30	60.6-125
1,1,1-trichloroethane	BQL	4000	3900	97.6	4000	4100	103	5.00	30	78.4-121
1,1,2-trichloroethane	BQL	4000	4160	104	4000	4530	113	8.47	30	64.8-128
trichloroethene	BQL	4000	3790	94.8	4000	4030	101	6.13	30	84.9-136
trichlorofluoromethane	BQL	4000	3940	98.6	4000	4050	101	2.60	30	76.8-132
1,2,3-trichloropropane	BQL	4000	3820	95.6	4000	4220	106	9.94	30	10.0-218
1,2,4-trimethylbenzene	1470	4000	6000	113	4000	6140	117	3.13	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	4180	94.0	4000	4290	96.8	2.94	30	67.7-132
Vinyl acetate	BQL	10000	9500	95.0	10000	10800	108	13.0	30	0.00-355
vinyl chloride	BQL	4000	3620	90.4	4000	3990	99.8	9.88	30	68.1-137
m/p-xylene	7650	8000	16600	113	8000	16900	115	2.28	30	79.8-118
o-xylene	3010	4000	7200	105	4000	7400	110	4.66	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	10.68	107	10	11.51	115*	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	9.73	97.3	10	10.2	102	63.5-140
2037-26-5	Toluene-d8	10	10.35	104	10	10.22	102	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 2 failure(s) out of 72. MSD Spike Recovery: 2 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by:



CHAIN OF CUSTODY RECORD
SGS North America Inc.

- Locations Nationwide
- Alaska
 - New Jersey
 - New York
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 - Ohio
 - Maryland

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097305

PAGE 1 OF 1

1 CLIENT: <u>ARCADIS</u> PHONE NO: <u>724 742-9180</u> CONTACT: <u>Mark Hanish</u> SITE/PWSID#: _____ PROJECT: <u>AVX Myrtle Beach</u> REPORTS TO: _____ Mark Hanish FAX NO: <u>724 742-9189</u> INVOICE TO: _____ QUOTE #: _____ Mark Hanish P.O. NUMBER: <u>B0007393.0000.00006</u>		SGS Reference: <u>G582-562</u> No CONTAINER ANALYSIS SAMPLE TYPE: _____ Analysis Required: <u>3</u> Preservatives Used: <u>HCl</u> G= GRAB						
2 LAB NO. SAMPLE IDENTIFICATION DATE DATE # Containers MATRIX		REMARKS						
	<u>OW-8D</u>	<u>11/16/09</u>	<u>3</u>	<u>Water</u>	<u>1510</u>	<u>G</u>	<u>X</u>	<u>VOCs</u>
	<u>OW-9D</u>	<u>11/16/09</u>	<u>3</u>	<u>Water</u>	<u>1400</u>	<u>G</u>	<u>X</u>	
	<u>OW-10D</u>	<u>11/16/09</u>	<u>3</u>	<u>Water</u>	<u>1440</u>	<u>G</u>	<u>X</u>	
	<u>PZ-1D</u>	<u>11/16/09</u>	<u>2</u>	<u>Water</u>	<u>1330</u>	<u>G</u>	<u>X</u>	
	<u>PZ-2D</u>	<u>11/16/09</u>	<u>2</u>	<u>Water</u>	<u>1540</u>	<u>G</u>	<u>X</u>	
	<u>PZ-3D</u>	<u>11/16/09</u>	<u>2</u>	<u>Water</u>	<u>1610</u>	<u>G</u>	<u>X</u>	
	<u>TRIP BLANK</u>	<u>11/16/09</u>	<u>2</u>	<u>Water</u>	<u>---</u>	<u>G</u>	<u>X</u>	
5 Collected/Relinquished By: (1) <u>Buddy Stork</u> Date: <u>11/16/09</u> Time: <u>1830</u> Received By: _____ Relinquished By: (2) _____ Date: <u>11/17/09</u> Time: <u>1015</u> Received By: <u>Patricia Dean</u>		4 Shipping Carrier: <u>FedEx</u> Samples Received Cold? (Circle) YES NO Shipping Ticket No: _____ Temperature C: <u>5.20C</u> Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT						
Relinquished By: (3) _____ Date: _____ Time: _____ Received By: _____ Relinquished By: (4) _____ Date: _____ Time: _____ Received By: _____		Special Instructions: _____ Requested Turnaround Time: <input type="checkbox"/> RUSH <input type="checkbox"/> STD Date Needed: _____						

SGS North America, Inc.

200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

White - Retained by Lab
 Pink - Retained by Client



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0911366
Report Date: 12/07/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0911366-01	OW-7D
P0911366-02	OW-8D
P0911366-03	OW-9D
P0911366-04	OW-10D
P0911366-05	PZ-1D
P0911366-06	PZ-2D
P0911366-07	PZ-3D
P0911366-08	IW-2D
P0911366-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: _____

Debbie Hallo

Date: _____

12-7-09

Project Manager: _____

Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.

Please call customer service at (412)826-5245 or email customerservice@microseeps.com.

Case Narrative:

Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 2 of 11
Lab Proj #: P0911366
Report Date: 12/07/09
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P0911366-01	23 Nov. 09 7:25		24 Nov. 09 10:50		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		710.0	50	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D	Water	P0911366-02	23 Nov. 09 7:15	24 Nov. 09 10:50			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		54.0	5	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-9D	Water	P0911366-03	23 Nov. 09 7:35	24 Nov. 09 10:50			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		31.0	5	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-10D	Water	P0911366-04	23 Nov. 09 7:05	24 Nov. 09 10:50

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		11.0	5	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-1D	Water	P0911366-05	23 Nov. 09 7:40	24 Nov. 09 10:50			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	J	1	5	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
PZ-2D	Water	P0911366-06	23 Nov. 09 7:58	24 Nov. 09 10:50

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		2500.0	250	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 8 of 11
 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
PZ-3D	Water	P0911366-07	23 Nov. 09 8:23	24 Nov. 09 10:50

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		30.0	5	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
IW-2D	Water	P0911366-08	23 Nov. 09 8:42	24 Nov. 09 10:50

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6000.0	250	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 10 of 11
 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-4D	Water	P0911366-09			23 Nov. 09 8:50	24 Nov. 09 10:50	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		11000.0	500	mg/L	9060	12/4/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0911366
 Report Date: 12/07/09
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091205007-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M091205007-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0911344-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	23.0 mg/L			- NA	4.26	0 - 20

P0911366-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	54.0 mg/L			- NA	0.00	0 - 20

P0911344-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	55.0 mg/L	50.00	102.00	70 - 130

P0911366-03A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	83.0 mg/L	50.00	104.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

10229

Phone: (412) 826-5246

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company: ARCADIS

Co. Address: 30 Paterson Drive Ste. 155
Greenville, SC 29615

Phone #: 724-742-9180 Fax #: (724) 742-9180

Proj. Manager: Mark Hanish

Proj. Name/Number: AVX - Myrtle Beach / 0007393.0000.00006

Sampler's signature: Burdgett State

Parameters Requested

Results to:

Mark Hanish

Invoice to:

Mark Hanish

Sample ID	Sample Description	Sample Type		Date	Time	Temp	Cooler Temp	Remarks
		Water	Solid					
OW-7D	Grab	X		11/23/09	0725			
OW-8D	Grab	X		11/23/09	0715			
OW-9D	Grab	X		11/23/09	0735			
OW-10D	Grab	X		11/23/09	0705			
PZ-1D	Grab	X		11/23/09	0740			
PZ-2D	Grab	X		11/23/09	0758			
PZ-3D	Grab	X		11/23/09	0823			
IW-2D	Grab	X		11/23/09	0842			
IW-4D	Grab	X		11/23/09	0850			

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
<u>Burdgett State</u>	<u>ARCADIS</u>	<u>11/23/09</u>	<u>0935</u>	<u>Fed Ex</u>			



Client Name: Arcadis U. S. Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0912005
Report Date: 12/14/09
Client Proj Name: AVX MB
Client Proj #: B007393.0000.00006

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0912005-01	OW-7D
P0912005-02	OW-8D
P0912005-03	OW-9D
P0912005-04	OW-10D
P0912005-05	P-1D
P0912005-06	P-2D
P0912005-07	P-3D
P0912005-08	IW-2D
P0912005-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HA) **Date:** 1.5.10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative: This report is being reissued 1/5/10 to correct the project name and number per the client's request.

Client Name: Arcadis U. S. Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 11
 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P0912005-01	30 Nov. 09 13:20		01 Dec. 09 12:02		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		110.0	25.0	mg/L	9060	12/11/09	tld



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P0912005-02	30 Nov. 09	13:35	01 Dec. 09	12:02	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		18.0	5.0	mg/L	9060	12/11/09	tid



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 4 of 11
 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-9D	Water	P0912005-03	30 Nov. 09 13:50	01 Dec. 09 12:02

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		10.0	5.0	mg/L	9060	12/11/09	tld



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-10D	Water	P0912005-04	30 Nov. 09 14:00		01 Dec. 09 12:02		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5.6	5.0	mg/L	9060	12/11/09	tid



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 6 of 11
 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-1D	Water	P0912005-05	30 Nov. 09 14:12	01 Dec. 09 12:02			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	U	< 5.0	5.0	mg/L	9060	12/11/09	tid



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-2D	Water	P0912005-06			30 Nov. 09 14:45	01 Dec. 09 12:02	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4400.0	250.0	mg/L	9060	12/11/09	tld



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-3D	Water	P0912005-07	30 Nov. 09 15:05		01 Dec. 09 12:02		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		25.0	5.0	mg/L	9060	12/11/09	tid



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>	
IW-2D	Water	P0912005-08			30 Nov. 09 15:22		01 Dec. 09 12:02	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>	
WetChem								
N Total Organic Carbon		7100.0	500.0	mg/L	9060	12/11/09	tld	



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-4D	Water	P0912005-09			30 Nov. 09 15:38	01 Dec. 09 12:02	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		13000.0	500.0	mg/L	9060	12/11/09	tld



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Seven Fields, PA 16046

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 Lab Proj #: P0912005
 Report Date: 12/14/09
 Client Proj Name: AVX MB
 Client Proj #: B007393.0000.00006

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091212005-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091212005-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0912005-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	110.0 mg/L			- NA	0.00	0 - 20

P0912005-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	73.0 mg/L	50.00	110.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. # 70912005

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: ARCADIS
 Co. Address: One Adams Place, 310 Seven Fields Blvd, Suite 210
Seven Fields, PA 16046
 Phone #: 727.742.9180 x.524 Fax #: 724.742.9189
 Proj. Manager: Mark Hanish
 Proj. Name/Number: AVX / B0007393.0000.00006
 Sampler's signature: Budgett Stoltz

Results to: Mark Hanish
 Invoice to: Mark Hanish

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Remarks
		Water	Vapor / Solid				
OW-7D	Grab	X		11/30/09	1320	20	
OW-8D	Grab	X		11/30/09	1335		
OW-9D	Grab	X		11/30/09	1350		
OW-10D	Grab	X		11/30/09	1400		
P-1D	Grab	X		11/30/09	1412		
P-2D	Grab	X		11/30/09	1445		
P-3D	Grab	X		11/30/09	1505		
IW-2D	Grab	X		11/30/09	1520		
IW-4D	Grab	X		11/30/09	1538		

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
<u>Budgett Stoltz</u>	ARCADIS	11/30/09	1625	<u>Fed EX</u>			
<u>Budgett Stoltz</u>				<u>Mark Hanish</u>	Microseeps	12/1/09	1630



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 13
Lab Proj #: P0912196
Report Date: 12/22/09
Client Proj Name: B0007393.0000
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 15

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0912196-01	IW-2D
P0912196-02	OW-7D
P0912196-03	P-2D
P0912196-04	OW-8D
P0912196-05	OW-9D
P0912196-06	OW-10D
P0912196-07	P-1D
P0912196-08	P-3D
P0912196-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (CHD) **Date:** 12-23-09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-2D	Water	P0912196-01	14 Dec. 09 9:50	15 Dec. 09 10:26			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6300.0	250.0	mg/L	9060	12/17/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-7D	Water	P0912196-02	14 Dec. 09 10:05	15 Dec. 09 10:26

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4100.0	250.0	mg/L	9060	12/17/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-2D	Water	P0912196-03	14 Dec. 09 10:35	15 Dec. 09 10:26			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		5200.0	250.0	mg/L	9060	12/18/09	md
RiskAnalysis							
N Ethane		0.100	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		4.400	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		580.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P0912196-04	14 Dec. 09	11:00	15 Dec. 09	10:26	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		17.0	5.0	mg/L	9060	12/17/09	md
RiskAnalysis							
N Ethane		0.730	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		18.000	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		8400.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P0912196-05			14 Dec. 09 11:20	15 Dec. 09 10:26	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4700.0	250.0	mg/L	9060	12/17/09	md
RiskAnalysis							
N Ethane		2.300	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		48.000	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		240.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P0912196-06			14 Dec. 09 11:35	15 Dec. 09 10:26	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		310.0	25.0	mg/L	9060	12/17/09	md
RiskAnalysis							
N Ethane		0.600	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		8.400	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		230.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-1D	Water	P0912196-07	14 Dec. 09 11:50		15 Dec. 09 10:26		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		1500.0	50.0	mg/L	9060	12/17/09	md
RiskAnalysis							
N Ethane		0.130	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		0.430	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		59.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-3D	Water	P0912196-08			14 Dec. 09 12:15	15 Dec. 09 10:26	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		27.0	5.0	mg/L	9060	12/17/09	md
RiskAnalysis							
N Ethane		0.110	0.025	ug/L	AM20GAX	12/21/09	rw
N Ethene		1.800	0.025	ug/L	AM20GAX	12/21/09	rw
N Methane		300.000	0.100	ug/L	AM20GAX	12/21/09	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
IW-4D	Water	P0912196-09	14 Dec. 09	10:15	15 Dec. 09	10:26	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		12000.0	500.0	mg/L	9060	12/17/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091218009-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091218009-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0912196-04A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	72.0 mg/L	50.00	110.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M091221003-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M091221003-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	51.000 ug/L	45.00	113.00	75 - 125
Ethene	46.000 ug/L	40.80	113.00	75 - 125
Methane	930.000 ug/L	825.00	113.00	75 - 125

M091221003-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	51.000 ug/L	45.00	113.00	75 - 125	0.00	0 - 20
Ethene	46.000 ug/L	40.80	113.00	75 - 125	0.00	0 - 20
Methane	920.000 ug/L	825.00	112.00	75 - 125	1.08	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 13 of 13
 Lab Proj #: P0912196
 Report Date: 12/22/09
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M091221005-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M091221005-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0912196-03A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	5300.0 mg/L			- NA	1.90	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Microseeps Project Number: PO912196

Date: 12/15

Time of Receipt: _____

Receiver: [Signature]

Client: AGM

REASON FOR NON-CONFORMANCE:

1 Tsp + 1 HeSoy for P-2D ~~12/14~~ 12/15

Re. IW-4D not on COC

ACTION TAKEN:

Client name: Mark Hamish

Date: 12/15

Time: 4:51

email to Mark Hamish + Rich Moter

add. IW4D to COC for TOC only

Customer Service Initials: _____

[Signature]

Date: _____

12/16



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 12
Lab Proj #: P0912351
Report Date: 01/04/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 13

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0912351-01	P-2D
P0912351-02	P-1D
P0912351-03	P-3D
P0912351-04	IW-2D
P0912351-05	IW-4D
P0912351-06	OW-7D
P0912351-07	OW-8D
P0912351-08	OW-9D
P0912351-09	OW-10D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HH) **Date:** 1/4/10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.

Please call customer service at (412)826-5245 or email customerservice@microseeps.com.

Case Narrative: The percent recovery for the MS analysis for TOC was outside of control limits.

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-2D	Water	P0912351-01	24 Dec. 09	13:30	29 Dec. 09	11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	M	4000.0	250	mg/L	9060	12/31/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-1D	Water	P0912351-02	24 Dec. 09	13:45	29 Dec. 09	11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	UM	< 5.0	5	mg/L	9060	12/31/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-3D	Water	P0912351-03	24 Dec. 09	13:55	29 Dec. 09	11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	M	120.0	5	mg/L	9060	12/31/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 5 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-2D	Water	P0912351-04			24 Dec. 09 14:10	29 Dec. 09 11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6100.0	500.0	mg/L	9060	1/2/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 6 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-4D	Water	P0912351-05			24 Dec. 09 14:20	29 Dec. 09 11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		11000.0	500.0	mg/L	9060	1/2/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

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 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P0912351-06	24 Dec. 09 14:25		29 Dec. 09 11:51		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	M	87.0	5	mg/L	9060	12/31/09	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Seven Fields, PA 16046

Page: Page 8 of 12
 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-8D	Water	P0912351-07			24 Dec. 09 14:30	29 Dec. 09 11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	M	13.0	5	mg/L	9060	1/1/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 9 of 12
 Lab.Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-9D	Water	P0912351-08	24 Dec. 09	14:35	29 Dec. 09	11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	M	17.0	5	mg/L	9060	1/1/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P0912351-09			24 Dec. 09 14:40	29 Dec. 09 11:51	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	M	5.7	5	mg/L	9060	1/1/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100102004-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M100102004-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	35.0 mg/L	36.00	97.00	70 - 130

P0912351-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L			- NA	0	0 - 20

P0912351-03A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	150 mg/L	50.00	60.00	70 - 130

 Outlined Results indicate results outside of Control limits


Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P0912351
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100104003-MB

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0	mg/L		5.0		- NA

M100104003-LCS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0	mg/L	36.00		100.00	70 - 130

P0912359-01A-DUP

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	71.0	mg/L				- NA	1.42	0 - 20

P0912359-02A-MS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	67.0	mg/L	50.00		112.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

20412351

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: **ARCADIS**

Co. Address: One Adams Place, 310 Sevin Fields Blvd Suite 210

Phone #: 724-742-9180 Fax #: 724-742-9189

Proj. Manager: Mark Hanisk

Proj. Name/Number: AVX / B0007393.0000.00006

Sampler's signature: *Robby Shy*

Results to: Mark Hanisk

Invoice to: Mark Hanisk

Sample ID	Sample Description	Sample Type Water Vapor Solid	Date	Time	Cooler Temp.	Parameters Requested										Remarks		
						1	2	3	4	5	6	7	8	9	10		11	12
P-2P	Grab	X	12/24/09	1330														X
P-1D	Grab	X	12/24/09	1345														X
P-3D	Grab	X	12/24/09	1355														X
IW-2D	Grab	X	12/24/09	1410														X
IW-4D	Grab	X	12/24/09	1420														X
OW-7D	Grab	X	12/24/09	1425														X
OW-8D	Grab	X	12/24/09	1430														X
OW-9D	Grab	X	12/24/09	1435														X
OW-10D	Grab	X	12/24/09	1440														X

Relinquished by: <u><i>Robby Shy</i></u>	Company: <u>ARCADIS</u>	Received by: <u><i>Fed Ex</i></u>	Company:
Relinquished by: <u><i>Robby Shy</i></u>	Company:	Received by: <u><i>[Signature]</i></u>	Company: <u>M</u>
Relinquished by:	Company:	Received by:	Company:



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 11
Lab Proj #: P0912359
Report Date: 01/04/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 12

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0912359-01	OW-7D
P0912359-02	OW-8D
P0912359-03	OW-9D
P0912359-04	OW-10D
P0912359-05	P-1D
P0912359-06	P-2D
P0912359-07	P-3D
P0912359-08	IW-2D
P0912359-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HHP) **Date:** 1/4/10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 11
 Lab Proj #: P0912359
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P0912359-01	28 Dec. 09	13:50	30 Dec. 09	10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		70.0	5.0	mg/L	9060	1/2/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 3 of 11
 Lab Proj #: P0912359
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P0912359-02	28 Dec. 09	13:15	30 Dec. 09	10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		11.0	5.0	mg/L	9060	1/2/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 4 of 11
 Lab Proj #: P0912359
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P0912359-03			28 Dec. 09 14:20	30 Dec. 09 10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		43.0	5.0	mg/L	9060	1/2/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 5 of 11
 Lab Proj #: P0912359
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 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P0912359-04			28 Dec. 09 14:45	30 Dec. 09 10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon	J	1.3	5.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 6 of 11
 Lab Proj #: P0912359
 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-1D	Water	P0912359-05	28 Dec. 09	16:22	30 Dec. 09	10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6.1	5.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P0912359
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 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-2D	Water	P0912359-06			28 Dec. 09 14:55	30 Dec. 09 10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4200.0	500.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-3D	Water	P0912359-07			28 Dec. 09 15:20	30 Dec. 09 10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		18.0	5.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
IW-2D	Water	P0912359-08	28 Dec. 09	15:35	30 Dec. 09	10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5500.0	500.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
IW-4D	Water	P0912359-09			28 Dec. 09 16:00	30 Dec. 09 10:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		11000.0	500.0	mg/L	9060	1/3/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Report Date: 01/04/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100104003-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M100104003-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P0912359-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	71.0 mg/L			- NA	1.42	0 - 20

P0912359-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	67.0 mg/L	50.00	112.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

Project Number/Name 80007393.0000.00006/AVX/Myrtle Beach

Project Location Myrtle Beach, SC

Laboratory Microseeds

Project Manager Mark Hanish

ANALYSIS / METHOD / SIZE

Preserve/
Bottle

TOP

Sample ID/ Location	Matrix	Sampled Date	Sampled Time	Lab ID	Remarks	Total
1 OW-7D	L	12/28/09	1350		Results and	1
2 OW-8D	L	12/28/09	1315		Invoice to	1
3 OW-9D	L	12/28/09	1420			1
4 OW-10D	L	12/28/09	1445		Mark Hanish	1
5 P-1D	L	12/28/09	1628			1
6 P-2D	L	12/28/09	1455			1
7 P-3D	L	12/28/09	1520			1
8 TW-2D	L	12/28/09	1535			1
9 TW-4D	L	12/28/09	1600			1
Sample Matrix: L = Liquid; S = Solid; A = Air; GW = Groundwater						Total No. Bottles/ Containers
						9

Relinquished by: Dwight Stahl Organization: ARCADIS Date: 12/28/09 Time: 1700 Seal Intact? Yes No N/A

Received by: _____ Organization: _____ Date: 12/28/09 Time: 1700 Seal Intact? Yes No N/A

Relinquished by: _____ Organization: _____ Date: _____ Time: _____ Seal Intact? Yes No N/A

Received by: _____ Organization: _____ Date: _____ Time: _____ Seal Intact? Yes No N/A

Special Instructions/Remarks:

Delivery Method: In Person Common Carrier Lab Courier Other _____

Specify _____



Mark Hanish
Arcadis
600 Waterfront Dr.
Pittsburgh, PA 15222

Report Number: G582-613

Client Project: AVX-Myrtle Beach

Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

Barbara Hager *Jan 12, 2012*
Project Manager Date
Barbara Hager

SGS North America, Inc.

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-10D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-1A
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:15
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	1/8/2010	
Benzene	BQL	1000	65.0	1000	1/8/2010	
Bromobenzene	BQL	1000	56.0	1000	1/8/2010	
Bromochloromethane	BQL	1000	101	1000	1/8/2010	
Bromodichloromethane	BQL	1000	76.0	1000	1/8/2010	
Bromoform	BQL	1000	120	1000	1/8/2010	
Bromomethane	BQL	1000	133	1000	1/8/2010	
2-Butanone	BQL	25000	544	1000	1/8/2010	
n-Butylbenzene	BQL	1000	109	1000	1/8/2010	
sec-Butylbenzene	BQL	1000	84.0	1000	1/8/2010	
tert-Butylbenzene	BQL	1000	50.0	1000	1/8/2010	
Carbon disulfide	BQL	1000	69.0	1000	1/8/2010	
Carbon tetrachloride	BQL	1000	87.0	1000	1/8/2010	
Chlorobenzene	BQL	1000	82.0	1000	1/8/2010	
Chloroethane	BQL	1000	106	1000	1/8/2010	
Chloroform	BQL	1000	79.0	1000	1/8/2010	
Chloromethane	BQL	1000	146	1000	1/8/2010	
2-Chlorotoluene	BQL	1000	99.0	1000	1/8/2010	
4-Chlorotoluene	BQL	1000	80.0	1000	1/8/2010	
Dibromochloromethane	BQL	1000	90.0	1000	1/8/2010	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	1/8/2010	
Dibromomethane	BQL	1000	113	1000	1/8/2010	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	1/8/2010	
1,2-Dichlorobenzene	BQL	1000	127	1000	1/8/2010	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	1/8/2010	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	1/8/2010	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	1/8/2010	
1,1-Dichloroethane	BQL	1000	74.0	1000	1/8/2010	
1,1-Dichloroethene	BQL	1000	89.0	1000	1/8/2010	
1,2-Dichloroethane	BQL	1000	79.0	1000	1/8/2010	
cis-1,2-Dichloroethene	17500	1000	65.0	1000	1/8/2010	
trans-1,2-dichloroethene	350	1000	89.0	1000	1/8/2010	J
1,2-Dichloropropane	BQL	1000	94.0	1000	1/8/2010	
1,3-Dichloropropane	BQL	1000	127	1000	1/8/2010	
2,2-Dichloropropane	BQL	1000	59.0	1000	1/8/2010	
1,1-Dichloropropene	BQL	1000	72.0	1000	1/8/2010	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	1/8/2010	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	1/8/2010	
Dichlorodifluoromethane	BQL	5000	94.0	1000	1/8/2010	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	1/8/2010	
Ethylbenzene	BQL	1000	77.0	1000	1/8/2010	
Hexachlorobutadiene	BQL	1000	228	1000	1/8/2010	
2-Hexanone	BQL	5000	720	1000	1/8/2010	
Iodomethane	BQL	1000	42.0	1000	1/8/2010	
Isopropylbenzene	BQL	1000	71.0	1000	1/8/2010	

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-10D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-1A
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:15
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	1/8/2010	
Methylene chloride	BQL	5000	98.0	1000	1/8/2010	
4-Methyl-2-pentanone	BQL	5000	550	1000	1/8/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	1/8/2010	
Naphthalene	BQL	1000	133	1000	1/8/2010	
n-Propyl benzene	BQL	1000	80.0	1000	1/8/2010	
Styrene	BQL	1000	85.0	1000	1/8/2010	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	1/8/2010	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	1/8/2010	
Tetrachloroethene	BQL	1000	69.0	1000	1/8/2010	
Toluene	BQL	1000	76.0	1000	1/8/2010	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	1/8/2010	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	1/8/2010	
Trichloroethene	640	1000	54.0	1000	1/8/2010	J
1,1,1-Trichloroethane	BQL	1000	54.0	1000	1/8/2010	
1,1,2-Trichloroethane	BQL	1000	182	1000	1/8/2010	
Trichlorofluoromethane	BQL	1000	111	1000	1/8/2010	
1,2,3-Trichloropropane	BQL	1000	120	1000	1/8/2010	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	1/8/2010	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	1/8/2010	
Vinyl chloride	630	1000	149	1000	1/8/2010	J
m-,p-Xylene	BQL	2000	98.0	1000	1/8/2010	
o-Xylene	BQL	1000	65.0	1000	1/8/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.1	111
Toluene-d8	10	10	100
4-Bromofluorobenzene	10	9.93	99

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-9D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-2A
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:00
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	1/8/2010	
Benzene	BQL	800	52.0	800	1/8/2010	
Bromobenzene	BQL	800	44.8	800	1/8/2010	
Bromochloromethane	BQL	800	80.8	800	1/8/2010	
Bromodichloromethane	BQL	800	60.8	800	1/8/2010	
Bromoform	BQL	800	96.0	800	1/8/2010	
Bromomethane	BQL	800	106	800	1/8/2010	
2-Butanone	BQL	20000	435	800	1/8/2010	
n-Butylbenzene	BQL	800	87.2	800	1/8/2010	
sec-Butylbenzene	BQL	800	67.2	800	1/8/2010	
tert-Butylbenzene	BQL	800	40.0	800	1/8/2010	
Carbon disulfide	BQL	800	55.2	800	1/8/2010	
Carbon tetrachloride	BQL	800	69.6	800	1/8/2010	
Chlorobenzene	BQL	800	65.6	800	1/8/2010	
Chloroethane	BQL	800	84.8	800	1/8/2010	
Chloroform	BQL	800	63.2	800	1/8/2010	
Chloromethane	BQL	800	117	800	1/8/2010	
2-Chlorotoluene	BQL	800	79.2	800	1/8/2010	
4-Chlorotoluene	BQL	800	64.0	800	1/8/2010	
Dibromochloromethane	BQL	800	72.0	800	1/8/2010	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	1/8/2010	
Dibromomethane	BQL	800	90.4	800	1/8/2010	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	1/8/2010	
1,2-Dichlorobenzene	BQL	800	102	800	1/8/2010	
1,3-Dichlorobenzene	BQL	800	64.8	800	1/8/2010	
1,4-Dichlorobenzene	BQL	800	63.2	800	1/8/2010	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	1/8/2010	
1,1-Dichloroethane	BQL	800	59.2	800	1/8/2010	
1,1-Dichloroethene	BQL	800	71.2	800	1/8/2010	
1,2-Dichloroethane	BQL	800	63.2	800	1/8/2010	
cis-1,2-Dichloroethene	14100	800	52.0	800	1/8/2010	
trans-1,2-dichloroethene	344	800	71.2	800	1/8/2010	J
1,2-Dichloropropane	BQL	800	75.2	800	1/8/2010	
1,3-Dichloropropane	BQL	800	102	800	1/8/2010	
2,2-Dichloropropane	BQL	800	47.2	800	1/8/2010	
1,1-Dichloropropene	BQL	800	57.6	800	1/8/2010	
cis-1,3-Dichloropropene	BQL	800	60.8	800	1/8/2010	
trans-1,3-Dichloropropene	BQL	800	60.8	800	1/8/2010	
Dichlorodifluoromethane	BQL	4000	75.2	800	1/8/2010	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	1/8/2010	
Ethylbenzene	BQL	800	61.6	800	1/8/2010	
Hexachlorobutadiene	BQL	800	182	800	1/8/2010	
2-Hexanone	BQL	4000	576	800	1/8/2010	
Iodomethane	BQL	800	33.6	800	1/8/2010	
Isopropylbenzene	BQL	800	56.8	800	1/8/2010	

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-9D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-2A
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:00
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	1/8/2010	
Methylene chloride	BQL	4000	78.4	800	1/8/2010	
4-Methyl-2-pentanone	BQL	4000	440	800	1/8/2010	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	1/8/2010	
Naphthalene	BQL	800	106	800	1/8/2010	
n-Propyl benzene	BQL	800	64.0	800	1/8/2010	
Styrene	BQL	800	68.0	800	1/8/2010	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	1/8/2010	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	1/8/2010	
Tetrachloroethene	BQL	800	55.2	800	1/8/2010	
Toluene	BQL	800	60.8	800	1/8/2010	
1,2,3-Trichlorobenzene	BQL	800	152	800	1/8/2010	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	1/8/2010	
Trichloroethene	2700	800	43.2	800	1/8/2010	
1,1,1-Trichloroethane	BQL	800	43.2	800	1/8/2010	
1,1,2-Trichloroethane	BQL	800	146	800	1/8/2010	
Trichlorofluoromethane	BQL	800	88.8	800	1/8/2010	
1,2,3-Trichloropropane	BQL	800	96.0	800	1/8/2010	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	1/8/2010	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	1/8/2010	
Vinyl chloride	1830	800	119	800	1/8/2010	
m-,p-Xylene	BQL	1600	78.4	800	1/8/2010	
o-Xylene	BQL	800	52.0	800	1/8/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.7	107
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.85	98

Comments:

Flags:

BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-2D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-3B
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 14:40
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	1000	87.2	40	1/11/2010	
Benzene	BQL	40.0	2.60	40	1/11/2010	
Bromobenzene	BQL	40.0	2.24	40	1/11/2010	
Bromochloromethane	BQL	40.0	4.04	40	1/11/2010	
Bromodichloromethane	BQL	40.0	3.04	40	1/11/2010	
Bromoform	BQL	40.0	4.80	40	1/11/2010	
Bromomethane	BQL	40.0	5.32	40	1/11/2010	
2-Butanone	190	1000	21.8	40	1/11/2010	J
n-Butylbenzene	BQL	40.0	4.36	40	1/11/2010	
sec-Butylbenzene	BQL	40.0	3.36	40	1/11/2010	
tert-Butylbenzene	BQL	40.0	2.00	40	1/11/2010	
Carbon disulfide	BQL	40.0	2.76	40	1/11/2010	
Carbon tetrachloride	BQL	40.0	3.48	40	1/11/2010	
Chlorobenzene	BQL	40.0	3.28	40	1/11/2010	
Chloroethane	BQL	40.0	4.24	40	1/11/2010	
Chloroform	BQL	40.0	3.16	40	1/11/2010	
Chloromethane	BQL	40.0	5.84	40	1/11/2010	
2-Chlorotoluene	BQL	40.0	3.96	40	1/11/2010	
4-Chlorotoluene	BQL	40.0	3.20	40	1/11/2010	
Dibromochloromethane	BQL	40.0	3.60	40	1/11/2010	
1,2-Dibromo-3-chloropropane	BQL	200	48.4	40	1/11/2010	
Dibromomethane	BQL	40.0	4.52	40	1/11/2010	
1,2-Dibromoethane (EDB)	BQL	40.0	4.96	40	1/11/2010	
1,2-Dichlorobenzene	BQL	40.0	5.08	40	1/11/2010	
1,3-Dichlorobenzene	BQL	40.0	3.24	40	1/11/2010	
1,4-Dichlorobenzene	BQL	40.0	3.16	40	1/11/2010	
trans-1,4-Dichloro-2-butene	BQL	200	25.2	40	1/11/2010	
1,1-Dichloroethane	BQL	40.0	2.96	40	1/11/2010	
1,1-Dichloroethene	BQL	40.0	3.56	40	1/11/2010	
1,2-Dichloroethane	BQL	40.0	3.16	40	1/11/2010	
cis-1,2-Dichloroethene	84.0	40.0	2.60	40	1/11/2010	
trans-1,2-dichloroethene	14.0	40.0	3.56	40	1/11/2010	J
1,2-Dichloropropane	BQL	40.0	3.76	40	1/11/2010	
1,3-Dichloropropane	BQL	40.0	5.08	40	1/11/2010	
2,2-Dichloropropane	BQL	40.0	2.36	40	1/11/2010	
1,1-Dichloropropene	BQL	40.0	2.88	40	1/11/2010	
cis-1,3-Dichloropropene	BQL	40.0	3.04	40	1/11/2010	
trans-1,3-Dichloropropene	BQL	40.0	3.04	40	1/11/2010	
Dichlorodifluoromethane	BQL	200	3.76	40	1/11/2010	
Diisopropyl ether (DIPE)	BQL	40.0	2.92	40	1/11/2010	
Ethylbenzene	BQL	40.0	3.08	40	1/11/2010	
Hexachlorobutadiene	BQL	40.0	9.12	40	1/11/2010	
2-Hexanone	BQL	200	28.8	40	1/11/2010	
Iodomethane	BQL	40.0	1.68	40	1/11/2010	
Isopropylbenzene	BQL	40.0	2.84	40	1/11/2010	

Results for Volatiles
by GCMS 8260

Client Sample ID: P-2D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-3B
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 14:40
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	40.0	1.92	40	1/11/2010	
Methylene chloride	BQL	200	3.92	40	1/11/2010	
4-Methyl-2-pentanone	BQL	200	22.0	40	1/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	40.0	2.68	40	1/11/2010	
Naphthalene	BQL	40.0	5.32	40	1/11/2010	
n-Propyl benzene	BQL	40.0	3.20	40	1/11/2010	
Styrene	BQL	40.0	3.40	40	1/11/2010	
1,1,1,2-Tetrachloroethane	BQL	40.0	3.60	40	1/11/2010	
1,1,2,2-Tetrachloroethane	BQL	40.0	4.60	40	1/11/2010	
Tetrachloroethene	BQL	40.0	2.76	40	1/11/2010	
Toluene	BQL	40.0	3.04	40	1/11/2010	
1,2,3-Trichlorobenzene	BQL	40.0	7.60	40	1/11/2010	
1,2,4-Trichlorobenzene	BQL	40.0	4.76	40	1/11/2010	
Trichloroethene	211	40.0	2.16	40	1/11/2010	
1,1,1-Trichloroethane	BQL	40.0	2.16	40	1/11/2010	
1,1,2-Trichloroethane	BQL	40.0	7.28	40	1/11/2010	
Trichlorofluoromethane	BQL	40.0	4.44	40	1/11/2010	
1,2,3-Trichloropropane	BQL	40.0	4.80	40	1/11/2010	
1,2,4-Trimethylbenzene	BQL	40.0	2.60	40	1/11/2010	
1,3,5-Trimethylbenzene	BQL	40.0	2.96	40	1/11/2010	
Vinyl chloride	263	40.0	5.96	40	1/11/2010	
m-,p-Xylene	BQL	80.0	3.92	40	1/11/2010	
o-Xylene	BQL	40.0	2.60	40	1/11/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.8	108
Toluene-d8	10	10.3	103
4-Bromofluorobenzene	10	9.99	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-3D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-4B
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:30
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	500	43.6	20	1/11/2010	
Benzene	BQL	20.0	1.30	20	1/11/2010	
Bromobenzene	BQL	20.0	1.12	20	1/11/2010	
Bromochloromethane	BQL	20.0	2.02	20	1/11/2010	
Bromodichloromethane	BQL	20.0	1.52	20	1/11/2010	
Bromoform	BQL	20.0	2.40	20	1/11/2010	
Bromomethane	BQL	20.0	2.66	20	1/11/2010	
2-Butanone	BQL	500	10.9	20	1/11/2010	
n-Butylbenzene	BQL	20.0	2.18	20	1/11/2010	
sec-Butylbenzene	BQL	20.0	1.68	20	1/11/2010	
tert-Butylbenzene	BQL	20.0	1.00	20	1/11/2010	
Carbon disulfide	BQL	20.0	1.38	20	1/11/2010	
Carbon tetrachloride	BQL	20.0	1.74	20	1/11/2010	
Chlorobenzene	BQL	20.0	1.64	20	1/11/2010	
Chloroethane	BQL	20.0	2.12	20	1/11/2010	
Chloroform	BQL	20.0	1.58	20	1/11/2010	
Chloromethane	BQL	20.0	2.92	20	1/11/2010	
2-Chlorotoluene	BQL	20.0	1.98	20	1/11/2010	
4-Chlorotoluene	BQL	20.0	1.60	20	1/11/2010	
Dibromochloromethane	BQL	20.0	1.80	20	1/11/2010	
1,2-Dibromo-3-chloropropane	BQL	100	24.2	20	1/11/2010	
Dibromomethane	BQL	20.0	2.26	20	1/11/2010	
1,2-Dibromoethane (EDB)	BQL	20.0	2.48	20	1/11/2010	
1,2-Dichlorobenzene	BQL	20.0	2.54	20	1/11/2010	
1,3-Dichlorobenzene	BQL	20.0	1.62	20	1/11/2010	
1,4-Dichlorobenzene	BQL	20.0	1.58	20	1/11/2010	
trans-1,4-Dichloro-2-butene	BQL	100	12.6	20	1/11/2010	
1,1-Dichloroethane	BQL	20.0	1.48	20	1/11/2010	
1,1-Dichloroethene	BQL	20.0	1.78	20	1/11/2010	
1,2-Dichloroethane	BQL	20.0	1.58	20	1/11/2010	
cis-1,2-Dichloroethene	81.8	20.0	1.30	20	1/11/2010	
trans-1,2-dichloroethene	BQL	20.0	1.78	20	1/11/2010	
1,2-Dichloropropane	BQL	20.0	1.88	20	1/11/2010	
1,3-Dichloropropane	BQL	20.0	2.54	20	1/11/2010	
2,2-Dichloropropane	BQL	20.0	1.18	20	1/11/2010	
1,1-Dichloropropene	BQL	20.0	1.44	20	1/11/2010	
cis-1,3-Dichloropropene	BQL	20.0	1.52	20	1/11/2010	
trans-1,3-Dichloropropene	BQL	20.0	1.52	20	1/11/2010	
Dichlorodifluoromethane	BQL	100	1.88	20	1/11/2010	
Diisopropyl ether (DIPE)	BQL	20.0	1.46	20	1/11/2010	
Ethylbenzene	BQL	20.0	1.54	20	1/11/2010	
Hexachlorobutadiene	BQL	20.0	4.56	20	1/11/2010	
2-Hexanone	BQL	100	14.4	20	1/11/2010	
Iodomethane	BQL	20.0	0.840	20	1/11/2010	
Isopropylbenzene	BQL	20.0	1.42	20	1/11/2010	

Results for Volatiles
by GCMS 8260

Client Sample ID: P-3D
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-4B
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 15:30
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	20.0	0.960	20	1/11/2010	
Methylene chloride	BQL	100	1.96	20	1/11/2010	
4-Methyl-2-pentanone	BQL	100	11.0	20	1/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	20.0	1.34	20	1/11/2010	
Naphthalene	BQL	20.0	2.66	20	1/11/2010	
n-Propyl benzene	BQL	20.0	1.60	20	1/11/2010	
Styrene	BQL	20.0	1.70	20	1/11/2010	
1,1,1,2-Tetrachloroethane	BQL	20.0	1.80	20	1/11/2010	
1,1,2,2-Tetrachloroethane	BQL	20.0	2.30	20	1/11/2010	
Tetrachloroethene	BQL	20.0	1.38	20	1/11/2010	
Toluene	BQL	20.0	1.52	20	1/11/2010	
1,2,3-Trichlorobenzene	BQL	20.0	3.80	20	1/11/2010	
1,2,4-Trichlorobenzene	BQL	20.0	2.38	20	1/11/2010	
Trichloroethene	BQL	20.0	1.08	20	1/11/2010	
1,1,1-Trichloroethane	BQL	20.0	1.08	20	1/11/2010	
1,1,2-Trichloroethane	BQL	20.0	3.64	20	1/11/2010	
Trichlorofluoromethane	BQL	20.0	2.22	20	1/11/2010	
1,2,3-Trichloropropane	BQL	20.0	2.40	20	1/11/2010	
1,2,4-Trimethylbenzene	BQL	20.0	1.30	20	1/11/2010	
1,3,5-Trimethylbenzene	BQL	20.0	1.48	20	1/11/2010	
Vinyl chloride	151	20.0	2.98	20	1/11/2010	
m-,p-Xylene	BQL	40.0	1.96	20	1/11/2010	
o-Xylene	BQL	20.0	1.30	20	1/11/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.5	105		
Toluene-d8		10	10.2	102		
4-Bromofluorobenzene		10	9.99	100		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: [Signature]

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: Trip Blank
Client Project ID: AVX-Myrtle Beach
Lab Sample ID: G582-613-5B
Lab Project ID: G582-613

Analyzed By: DVO
Date Collected: 1/5/2010 0:00
Date Received: 1/7/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	1/8/2010	
Benzene	BQL	1.00	0.0650	1	1/8/2010	
Bromobenzene	BQL	1.00	0.0560	1	1/8/2010	
Bromochloromethane	BQL	1.00	0.101	1	1/8/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	1/8/2010	
Bromoform	BQL	1.00	0.120	1	1/8/2010	
Bromomethane	BQL	1.00	0.133	1	1/8/2010	
2-Butanone	BQL	25.0	0.544	1	1/8/2010	
n-Butylbenzene	BQL	1.00	0.109	1	1/8/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	1/8/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	1/8/2010	
Carbon disulfide	BQL	1.00	0.0690	1	1/8/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	1/8/2010	
Chlorobenzene	BQL	1.00	0.0820	1	1/8/2010	
Chloroethane	BQL	1.00	0.106	1	1/8/2010	
Chloroform	BQL	1.00	0.0790	1	1/8/2010	
Chloromethane	BQL	1.00	0.146	1	1/8/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	1/8/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	1/8/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	1/8/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	1/8/2010	
Dibromomethane	BQL	1.00	0.113	1	1/8/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	1/8/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	1/8/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	1/8/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	1/8/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	1/8/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	1/8/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	1/8/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	1/8/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	1/8/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	1/8/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	1/8/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	1/8/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	1/8/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	1/8/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/8/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/8/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	1/8/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	1/8/2010	
Ethylbenzene	BQL	1.00	0.0770	1	1/8/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	1/8/2010	
2-Hexanone	BQL	5.00	0.720	1	1/8/2010	
Iodomethane	BQL	1.00	0.0420	1	1/8/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	1/8/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank
 Client Project ID: AVX-Myrtle Beach
 Lab Sample ID: G582-613-5B
 Lab Project ID: G582-613

Analyzed By: DVO
 Date Collected: 1/5/2010 0:00
 Date Received: 1/7/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	1/8/2010	
Methylene chloride	1.64	5.00	0.0980	1	1/8/2010	J
4-Methyl-2-pentanone	BQL	5.00	0.550	1	1/8/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	1/8/2010	
Naphthalene	BQL	1.00	0.133	1	1/8/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	1/8/2010	
Styrene	BQL	1.00	0.0850	1	1/8/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	1/8/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	1/8/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	1/8/2010	
Toluene	BQL	1.00	0.0760	1	1/8/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	1/8/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	1/8/2010	
Trichloroethene	BQL	1.00	0.0540	1	1/8/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	1/8/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	1/8/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	1/8/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	1/8/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	1/8/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	1/8/2010	
Vinyl chloride	BQL	1.00	0.149	1	1/8/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	1/8/2010	
o-Xylene	BQL	1.00	0.0650	1	1/8/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11	110
Toluene-d8	10	9.84	98
4-Bromofluorobenzene	10	9.94	99

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3010810B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	1/8/2010	
Benzene	BQL	1.00	0.0650	1	1/8/2010	
Bromobenzene	BQL	1.00	0.0560	1	1/8/2010	
Bromochloromethane	BQL	1.00	0.101	1	1/8/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	1/8/2010	
Bromoform	BQL	1.00	0.120	1	1/8/2010	
Bromomethane	BQL	1.00	0.133	1	1/8/2010	
2-Butanone	BQL	25.0	0.544	1	1/8/2010	
n-Butylbenzene	BQL	1.00	0.109	1	1/8/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	1/8/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	1/8/2010	
Carbon disulfide	BQL	1.00	0.0690	1	1/8/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	1/8/2010	
Chlorobenzene	BQL	1.00	0.0820	1	1/8/2010	
Chloroethane	BQL	1.00	0.106	1	1/8/2010	
Chloroform	BQL	1.00	0.0790	1	1/8/2010	
Chloromethane	BQL	1.00	0.146	1	1/8/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	1/8/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	1/8/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	1/8/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	1/8/2010	
Dibromomethane	BQL	1.00	0.113	1	1/8/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	1/8/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	1/8/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	1/8/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	1/8/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	1/8/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	1/8/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	1/8/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	1/8/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	1/8/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	1/8/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	1/8/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	1/8/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	1/8/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	1/8/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/8/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/8/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	1/8/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	1/8/2010	
Ethylbenzene	BQL	1.00	0.0770	1	1/8/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	1/8/2010	
2-Hexanone	BQL	5.00	0.720	1	1/8/2010	
Iodomethane	BQL	1.00	0.0420	1	1/8/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	1/8/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3010810B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	1/8/2010	
Methylene chloride	BQL	5.00	0.0980	1	1/8/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	1/8/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	1/8/2010	
Naphthalene	BQL	1.00	0.133	1	1/8/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	1/8/2010	
Styrene	BQL	1.00	0.0850	1	1/8/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	1/8/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	1/8/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	1/8/2010	
Toluene	BQL	1.00	0.0760	1	1/8/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	1/8/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	1/8/2010	
Trichloroethene	BQL	1.00	0.0540	1	1/8/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	1/8/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	1/8/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	1/8/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	1/8/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	1/8/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	1/8/2010	
Vinyl chloride	BQL	1.00	0.149	1	1/8/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	1/8/2010	
o-Xylene	BQL	1.00	0.0650	1	1/8/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.9	109		
Toluene-d8		10	10	100		
4-Bromofluorobenzene		10	9.72	97		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3010810A

Filename: 0108304.D

Date Analyzed: 01/08/10 10:16

LCSD: LCS3010810B

Filename: 0108305.D

Date Analyzed: 01/08/10 10:47

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	34.1	136	25.0	30.4	121	11.6	30	23.5-141
acrolein	125	68.1	54.5	125	61.0	48.8	11.0	30	31.4-182
acrylonitrile	125	138	111	125	122	97.5	12.8	30	64.2-140
benzene	5.00	5.09	102	5.00	4.75	95.0	7.11	30	76.6-120
bromobenzene	5.00	4.86	97.2	5.00	4.36	87.2	10.8	30	75.0-122
bromochloromethane	5.00	4.90	98.0	5.00	4.43	88.6	10.1	30	74.8-127
bromodichloromethane	5.00	5.23	105	5.00	4.73	94.6	10.0	30	76.4-117
bromoform	5.00	4.29	85.8	5.00	4.05	81.0	5.76	30	62.4-127
bromomethane	5.00	4.89	97.8	5.00	4.85	97.0	0.821	30	34.2-166
2-butanone	25.0	31.5	126	25.0	27.7	111	12.9	30	44.9-126
n-butylbenzene	5.00	5.16	103	5.00	4.65	93.0	10.4	30	72.0-122
sec-butylbenzene	5.00	5.04	101	5.00	4.49	89.8	11.5	30	78.3-116
tert-butylbenzene	5.00	4.90	98.0	5.00	4.56	91.2	7.19	30	53.1-148
Carbon disulfide	5.00	5.48	110	5.00	5.02	100	8.76	30	69.0-118
carbon tetrachloride	5.00	5.26	105	5.00	4.85	97.0	8.11	30	71.7-124
chlorobenzene	5.00	4.92	98.4	5.00	4.63	92.6	6.07	30	75.5-116
chloroethane	5.00	5.32	106	5.00	4.88	97.6	8.63	30	78.2-138
2-chloroethyl vinyl ether	125	130	104	125	116	92.4	11.6	30	5.57-235
chloroform	5.00	5.46	109	5.00	5.02	100	8.40	30	80.6-117
chloromethane	5.00	5.56	111	5.00	5.13	103	8.04	30	72.6-127
2-chlorotoluene	5.00	5.00	100	5.00	4.42	88.4	12.3	30	81.4-117
4-chlorotoluene	5.00	4.89	97.8	5.00	4.44	88.8	9.65	30	82.1-116
dibromochloromethane	5.00	4.71	94.2	5.00	4.34	86.8	8.18	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	19.9	79.5	25.0	21.8	87.3	9.30	30	58.0-133
1,2-dibromoethane	5.00	4.83	96.6	5.00	4.45	89.0	8.19	30	75.5-118
dibromomethane	5.00	5.44	109	5.00	4.84	96.8	11.7	30	77.3-124
1,2-dichlorobenzene	5.00	5.22	104	5.00	4.58	91.6	13.1	30	76.3-115
1,3-dichlorobenzene	5.00	5.02	100	5.00	4.52	90.4	10.5	30	79.1-114
1,4-dichlorobenzene	5.00	4.98	99.6	5.00	4.53	90.6	9.46	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	26.2	105	25.0	22.8	91.3	14.0	30	52.3-130
dichlorodifluoromethane	5.00	5.29	106	5.00	5.02	100	5.24	30	69.8-134
1,1-dichloroethane	5.00	5.53	111	5.00	5.06	101	8.88	30	78.0-120
1,2-dichloroethane	5.00	5.68	114	5.00	5.23	105	8.25	30	72.8-126
1,1-dichloroethene	5.00	5.16	103	5.00	4.78	95.6	7.45	30	74.6-121
cis-1,2-dichloroethene	5.00	5.03	101	5.00	4.72	94.4	6.36	30	78.0-121
trans-1,2-dichloroethene	5.00	5.28	106	5.00	4.91	98.2	7.26	30	60.7-144
1,2-dichloropropane	5.00	5.46	109	5.00	4.96	99.2	9.60	30	75.8-119
1,3-dichloropropane	5.00	5.03	101	5.00	4.70	94.0	6.78	30	78.5-113
2,2-dichloropropane	5.00	5.26	105	5.00	4.90	98.0	7.09	30	75.6-130
1,1-dichloropropene	5.00	5.30	106	5.00	4.79	95.8	10.1	30	79.7-117
cis-1,3-dichloropropene	5.00	5.34	107	5.00	4.91	98.2	8.39	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3010810A

Filename: 0108304.D

Date Analyzed: 01/08/10 10:16

LCSD: LCS3010810B

Filename: 0108305.D

Date Analyzed: 01/08/10 10:47

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	% RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
trans-1,3-dichloropropene	5.00	5.40	108	5.00	4.83	96.6	11.1	30	79.0-113
Diisopropyl ether	5.00	5.50	110	5.00	5.08	102	7.94	30	71.8-115
ethylbenzene	5.00	4.92	98.4	5.00	4.62	92.4	6.29	30	80.5-115
hexachlorobutadiene	5.00	5.33	107	5.00	4.82	96.4	10.0	30	63.3-139
2-hexanone	25.0	29.7	119	25.0	25.8	103	13.8	30	46.8-123
Iodomethane	5.00	5.90	118	5.00	5.59	112	5.40	30	29.3-156
isopropylbenzene	5.00	4.80	96.0	5.00	4.52	90.4	6.01	30	81.6-114
4-isopropyltoluene	5.00	4.88	97.6	5.00	4.44	88.8	9.44	30	78.4-119
Methyl-tert-butyl ether	5.00	5.50	110	5.00	4.87	97.4	12.2	30	76.0-114
methylene chloride	5.00	5.11	102	5.00	4.79	95.8	6.46	30	72.9-120
4-methyl-2-pentanone	25.0	26.7	107	25.0	23.3	93.2	13.7	30	56.2-124
naphthalene	5.00	5.18	104	5.00	4.31	86.2	18.3	30	24.8-182
n-propyl benzene	5.00	4.92	98.4	5.00	4.67	93.4	5.21	30	79.0-116
styrene	5.00	3.60	72.0	5.00	3.27	65.4	9.61	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.69	93.8	5.00	4.45	89.0	5.25	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.16	103	5.00	4.60	92.0	11.5	30	69.7-119
tetrachloroethene	5.00	4.92	98.4	5.00	4.62	92.4	6.29	30	55.3-144
toluene	5.00	5.17	103	5.00	4.78	95.6	7.45	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.21	104	5.00	4.51	90.2	14.4	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.02	100	5.00	4.42	88.4	12.7	30	47.9-150
1,1,1-trichloroethane	5.00	5.40	108	5.00	5.03	101	7.09	30	78.8-120
1,1,2-trichloroethane	5.00	5.03	101	5.00	4.57	91.4	9.58	30	73.6-117
trichloroethene	5.00	5.22	104	5.00	4.88	97.6	6.35	30	80.1-116
trichlorofluoromethane	5.00	5.48	110	5.00	5.05	101	8.17	30	80.5-130
1,2,3-trichloropropane	5.00	4.97	99.4	5.00	4.50	90.0	9.93	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.07	101	5.00	4.68	93.6	8.00	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.83	96.6	5.00	4.50	90.0	7.07	30	79.4-114
Vinyl acetate	12.5	13.8	110	12.5	12.3	98.7	11.2	30	60.7-127
vinyl chloride	5.00	5.28	106	5.00	4.95	99.0	6.45	30	77.5-126
m/p-xylene	10.0	9.98	99.8	10.0	9.07	90.7	9.55	30	82.9-112
o-xylene	5.00	4.95	99.0	5.00	4.62	92.4	6.90	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC
460-00-4 4-Bromofluorobenzene	10	9.64	96.4	10	9.96	99.6	84.7-115
17060-07-0 1,2-Dichloroethane-d4	10	11.08	111	10	10.77	108	63.5-140
2037-26-5 Toluene-d8	10	10.02	100	10	10.09	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 1 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by: d

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD3

EPA Sample No.: Amt.

FileNames:

Analysis Dates:

Batch: 3010810

Sample g121-434-9e

5 mL

0108312.D

2010-01-08 14:22:00

Dilution: 1000

MS g121-434-9e

5 mL

0108313.D

2010-01-08 14:52:00

Matrix: Water

MSD g121-434-9e

5 mL

0108314.D

2010-01-08 15:23:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	25000	25600	102*	25000	27600	110*	7.44	30	17.7-85.2
acrolein	BQL	125000	80400	64.4	125000	73500	58.8	8.99	30	0.00-424
acrylonitrile	BQL	125000	126000	101	125000	123000	98.3	2.52	30	85.0-175
benzene	BQL	5000	4840	96.8	5000	4660	93.2	3.79	30	61.6-135
bromobenzene	BQL	5000	4360	87.2	5000	4290	85.8	1.62	30	65.1-125
bromochloromethane	BQL	5000	4480	89.6	5000	4490	89.8	0.223	30	75.5-126
bromodichloromethane	BQL	5000	4860	97.2	5000	4710	94.2	3.13	30	74.3-123
bromoform	BQL	5000	4090	81.8	5000	3900	78.0	4.76	30	52.3-122
bromomethane	BQL	5000	4210	84.2	5000	4260	85.2	1.18	30	10.0-284
2-butanone	BQL	25000	26000	104	25000	26100	105	0.691	30	36.1-107
n-butylbenzene	BQL	5000	4680	93.6	5000	4730	94.6	1.06	30	70.2-124
sec-butylbenzene	BQL	5000	4570	91.4	5000	4620	92.4	1.09	30	62.0-133
tert-butylbenzene	BQL	5000	3810	76.2	5000	4050	81.0	6.11	30	73.5-121
Carbon disulfide	BQL	5000	5240	105	5000	5080	102	3.10	30	68.8-129
carbon tetrachloride	BQL	5000	5040	101	5000	4730	94.6	6.34	30	71.8-122
chlorobenzene	BQL	5000	4560	91.2	5000	4630	92.6	1.52	30	77.2-118
chloroethane	BQL	5000	4850	97.0	5000	4910	98.2	1.23	30	10.0-233
2-chloroethyl vinyl ether	BQL	12500	116000	931*	12500	115000	922*	0.967	30	16.7-283
chloroform	BQL	5000	5140	103	5000	5040	101	1.96	30	74.0-128
chloromethane	BQL	5000	5160	103	5000	5300	106	2.68	30	72.0-138
2-chlorotoluene	BQL	5000	4550	91.0	5000	4570	91.4	0.438	30	79.3-118
4-chlorotoluene	BQL	5000	4470	89.4	5000	4530	90.6	1.33	30	76.8-120
dibromochloromethane	BQL	5000	4440	88.8	5000	4320	86.4	2.74	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	25000	23400	93.8	25000	22500	90.0	4.13	30	20.2-171
1,2-dibromoethane	BQL	5000	4360	87.2	5000	4490	89.8	2.94	30	78.5-123
dibromomethane	BQL	5000	5130	103	5000	4890	97.8	4.79	30	71.3-137
1,2-dichlorobenzene	BQL	5000	4670	93.4	5000	4570	91.4	2.16	30	75.1-120
1,3-dichlorobenzene	BQL	5000	4630	92.6	5000	4550	91.0	1.74	30	73.1-121
1,4-dichlorobenzene	BQL	5000	4680	93.6	5000	4670	93.4	0.214	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	25000	23400	93.6	25000	22800	91.3	2.47	30	25.7-149
dichlorodifluoromethane	BQL	5000	4950	99.0	5000	5110	102	3.18	30	41.7-166
1,1-dichloroethane	BQL	5000	5120	102	5000	4970	99.4	2.97	30	75.6-128
1,2-dichloroethane	BQL	5000	5490	110	5000	5290	106	3.71	30	71.1-127
1,1-dichloroethene	BQL	5000	4840	96.8	5000	4930	98.6	1.84	30	64.4-130
cis-1,2-dichloroethene	14600	5000	19800	104	5000	19400	95.4	8.43	30	72.7-134
trans-1,2-dichloroethene	BQL	5000	4980	99.6	5000	4930	98.6	1.01	30	74.6-124
1,2-dichloropropane	BQL	5000	5110	102	5000	5100	102	0.196	30	76.5-129
1,3-dichloropropane	BQL	5000	4710	94.2	5000	4580	91.6	2.80	30	79.1-121
2,2-dichloropropane	BQL	5000	4920	98.4	5000	4690	93.8	4.79	30	31.5-157
1,1-dichloropropene	BQL	5000	4860	97.2	5000	4700	94.0	3.35	30	72.5-120
cis-1,3-dichloropropene	BQL	5000	4990	99.8	5000	4720	94.4	5.56	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD3

Lab Code: NC00919

Batch: 3010810

EPA Sample No.: g121-434-9e, g121-434-9e, g121-434-9e

Dilution: 1000

FileNames: 0108312.D, 0108313.D, 0108314.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	5000	5040	96.6	5000	4740	90.6	6.41	30	44.7-144
Diisopropyl ether	BQL	5000	5190	104	5000	5030	101	3.13	30	79.4-122
ethylbenzene	BQL	5000	4600	92.0	5000	4590	91.8	0.218	30	73.8-126
hexachlorobutadiene	BQL	5000	4490	89.8	5000	4980	99.6	10.3	30	51.8-134
2-hexanone	BQL	25000	23200	92.8	25000	23500	94.1	1.37	30	41.6-111
Iodomethane	BQL	5000	5460	109	5000	5230	105	4.30	30	40.6-126
isopropylbenzene	BQL	5000	4480	89.6	5000	4520	90.4	0.889	30	74.3-123
4-isopropyltoluene	BQL	5000	4490	89.8	5000	4580	91.6	1.98	30	74.6-122
Methyl-tert-butyl ether	BQL	5000	5100	102	5000	4960	99.2	2.78	30	66.5-136
methylene chloride	BQL	5000	4990	99.8	5000	4630	92.6	7.48	30	48.6-155
4-methyl-2-pentanone	BQL	25000	24600	98.6	25000	22900	91.8	7.19	30	6.88-166
naphthalene	BQL	5000	4200	84.0	5000	4110	82.2	2.17	30	55.1-140
n-propyl benzene	BQL	5000	4560	91.2	5000	4570	91.4	0.219	30	71.6-128
styrene	BQL	5000	3280	65.6*	5000	3340	66.8*	1.81	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	5000	4370	87.4	5000	4430	88.6	1.36	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	5000	4650	93.0	5000	4520	90.4	2.84	30	75.7-136
tetrachloroethene	11000	5000	15200	84.0	5000	15700	93.6	10.8	30	45.8-153
toluene	BQL	5000	4840	96.8	5000	4700	94.0	2.94	30	66.4-128
1,2,3-trichlorobenzene	BQL	5000	4250	85.0	5000	4540	90.8	6.60	30	61.0-126
1,2,4-trichlorobenzene	BQL	5000	4140	82.8	5000	4540	90.8	9.22	30	60.6-125
1,1,1-trichloroethane	BQL	5000	5060	101	5000	4920	98.4	2.80	30	78.4-121
1,1,2-trichloroethane	BQL	5000	4810	86.0	5000	4700	83.8	2.59	30	64.8-128
trichloroethene	3110	5000	8070	99.2	5000	7980	97.4	1.83	30	84.9-136
trichlorofluoromethane	BQL	5000	4750	95.0	5000	4980	99.6	4.73	30	76.8-132
1,2,3-trichloropropane	BQL	5000	4430	88.6	5000	4390	87.8	0.907	30	10.0-218
1,2,4-trimethylbenzene	BQL	5000	4670	93.4	5000	4610	92.2	1.29	30	31.0-172
1,3,5-trimethylbenzene	BQL	5000	4420	88.4	5000	4540	90.8	2.68	30	67.7-132
Vinyl acetate	BQL	12500	12800	102	12500	12200	97.4	4.73	30	0.00-355
vinyl chloride	BQL	5000	4790	95.8	5000	4930	98.6	2.88	30	68.1-137
m/p-xylene	BQL	10000	9120	91.2	10000	9280	92.8	1.74	30	79.8-118
o-xylene	BQL	5000	4670	93.4	5000	4660	93.2	0.214	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	9.62	96.2	10	9.88	98.8	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.13	111	10	11.02	110	63.5-140
2037-26-5	Toluene-d8	10	10.04	100	10	10.09	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 3 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DND

Reviewed by: [Signature]

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3011110B
Lab Project ID:

Analyzed By: DVO
Date Collected:
Date Received:
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	1/11/2010	
Benzene	BQL	1.00	0.0650	1	1/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	1/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	1/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	1/11/2010	
Bromoform	BQL	1.00	0.120	1	1/11/2010	
Bromomethane	BQL	1.00	0.133	1	1/11/2010	
2-Butanone	BQL	25.0	0.544	1	1/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	1/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	1/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	1/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	1/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	1/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	1/11/2010	
Chloroethane	BQL	1.00	0.106	1	1/11/2010	
Chloroform	BQL	1.00	0.0790	1	1/11/2010	
Chloromethane	BQL	1.00	0.146	1	1/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	1/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	1/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	1/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	1/11/2010	
Dibromomethane	BQL	1.00	0.113	1	1/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	1/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	1/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	1/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	1/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	1/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	1/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	1/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	1/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	1/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	1/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	1/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	1/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	1/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	1/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	1/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	1/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	1/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	1/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	1/11/2010	
2-Hexanone	BQL	5.00	0.720	1	1/11/2010	
Iodomethane	BQL	1.00	0.0420	1	1/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	1/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3011110B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	1/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	1/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	1/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	1/11/2010	
Naphthalene	BQL	1.00	0.133	1	1/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	1/11/2010	
Styrene	BQL	1.00	0.0850	1	1/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	1/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	1/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	1/11/2010	
Toluene	BQL	1.00	0.0760	1	1/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	1/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	1/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	1/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	1/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	1/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	1/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	1/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	1/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	1/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	1/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	1/11/2010	
o-Xylene	BQL	1.00	0.0650	1	1/11/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.4	104		
Toluene-d8		10	10.1	101		
4-Bromofluorobenzene		10	9.98	100		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3011110A

Filename: 0111304.D

Date Analyzed: 01/11/10 12:41

LCSD: LCS3011110B

Filename: 0111305.D

Date Analyzed: 01/11/10 13:12

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	28.9	116	25.0	28.9	116	0.0692	30	23.5-141
acrolein	125	68.0	54.4	125	80.3	64.2	16.6	30	31.4-182
acrylonitrile	125	121	96.8	125	143	114	16.7	30	64.2-140
benzene	5.00	5.27	105	5.00	5.05	101	3.88	30	76.6-120
bromobenzene	5.00	5.16	103	5.00	4.76	95.2	8.06	30	75.0-122
bromochloromethane	5.00	5.29	106	5.00	5.03	101	5.04	30	74.8-127
bromodichloromethane	5.00	5.52	110	5.00	5.35	107	3.13	30	76.4-117
bromoform	5.00	5.08	102	5.00	4.52	90.4	11.7	30	62.4-127
bromomethane	5.00	4.33	86.6	5.00	4.96	99.2	13.6	30	34.2-166
2-butanone	25.0	29.4	118	25.0	28.4	114	3.42	30	44.9-126
n-butylbenzene	5.00	5.18	104	5.00	5.01	100	3.34	30	72.0-122
sec-butylbenzene	5.00	5.03	101	5.00	4.97	99.4	1.20	30	78.3-116
tert-butylbenzene	5.00	5.12	102	5.00	4.96	99.2	3.17	30	53.1-148
Carbon disulfide	5.00	5.51	110	5.00	5.45	109	1.09	30	69.0-118
carbon tetrachloride	5.00	5.40	108	5.00	5.41	108	0.185	30	71.7-124
chlorobenzene	5.00	5.25	105	5.00	4.89	97.8	7.10	30	75.5-116
chloroethane	5.00	4.71	94.2	5.00	5.59	112	17.1	30	78.2-138
2-chloroethyl vinyl ether	125	122	97.9	125	140	112	13.8	30	5.57-235
chloroform	5.00	5.73	114	5.00	5.46	109	4.82	30	80.6-117
chloromethane	5.00	5.01	100	5.00	5.76	115	13.9	30	72.6-127
2-chlorotoluene	5.00	5.17	103	5.00	4.88	97.6	5.77	30	81.4-117
4-chlorotoluene	5.00	4.99	99.8	5.00	4.92	98.4	1.41	30	82.1-116
dibromochloromethane	5.00	5.09	102	5.00	4.89	97.8	4.01	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	25.2	101	25.0	24.6	98.3	2.33	30	58.0-133
1,2-dibromoethane	5.00	5.00	100	5.00	4.94	98.8	1.21	30	75.5-118
dibromomethane	5.00	5.71	114	5.00	5.39	108	5.76	30	77.3-124
1,2-dichlorobenzene	5.00	5.26	105	5.00	5.05	101	4.07	30	76.3-115
1,3-dichlorobenzene	5.00	5.27	105	5.00	5.01	100	5.06	30	79.1-114
1,4-dichlorobenzene	5.00	5.39	108	5.00	5.00	100	7.51	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	27.9	112	25.0	26.1	104	6.55	30	52.3-130
dichlorodifluoromethane	5.00	4.23	84.6	5.00	5.48	110	25.7	30	69.8-134
1,1-dichloroethane	5.00	5.59	112	5.00	5.32	106	4.95	30	78.0-120
1,2-dichloroethane	5.00	5.74	115	5.00	5.51	110	4.09	30	72.8-126
1,1-dichloroethene	5.00	5.32	106	5.00	5.22	104	1.90	30	74.6-121
cis-1,2-dichloroethene	5.00	5.34	107	5.00	5.13	103	4.01	30	78.0-121
trans-1,2-dichloroethene	5.00	5.49	110	5.00	5.32	106	3.14	30	60.7-144
1,2-dichloropropane	5.00	5.51	110	5.00	5.32	106	3.51	30	75.8-119
1,3-dichloropropane	5.00	5.18	104	5.00	4.88	97.6	5.96	30	78.5-113
2,2-dichloropropane	5.00	5.57	111	5.00	5.33	107	4.40	30	75.6-130
1,1-dichloropropene	5.00	5.27	105	5.00	5.08	102	3.67	30	79.7-117
cis-1,3-dichloropropene	5.00	5.71	114*	5.00	5.49	110	3.93	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3011110A

Filename: 0111304.D

Date Analyzed: 01/11/10 12:41

LCSD: LCS3011110B

Filename: 0111305.D

Date Analyzed: 01/11/10 13:12

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
trans-1,3-dichloropropene	5.00	5.49	110	5.00	5.44	109	0.915	30	79.0-113
Diisopropyl ether	5.00	5.61	112	5.00	5.50	110	1.98	30	71.8-115
ethylbenzene	5.00	5.08	102	5.00	4.85	97.0	4.63	30	80.5-115
hexachlorobutadiene	5.00	5.79	116	5.00	5.61	112	3.16	30	63.3-139
2-hexanone	25.0	26.8	107	25.0	26.2	105	2.04	30	46.8-123
Iodomethane	5.00	7.26	145	5.00	6.41	128	12.4	30	29.3-156
isopropylbenzene	5.00	5.03	101	5.00	4.79	95.8	4.89	30	81.6-114
4-isopropyltoluene	5.00	5.09	102	5.00	4.92	98.4	3.40	30	78.4-119
Methyl-tert-butyl ether	5.00	5.72	114*	5.00	5.62	112	1.76	30	76.0-114
methylene chloride	5.00	5.48	110	5.00	5.26	105	4.10	30	72.9-120
4-methyl-2-pentanone	25.0	26.2	105	25.0	26.1	104	0.535	30	56.2-124
naphthalene	5.00	5.18	104	5.00	5.01	100	3.34	30	24.8-182
n-propyl benzene	5.00	4.98	99.6	5.00	4.94	98.8	0.806	30	79.0-116
styrene	5.00	3.82	76.4	5.00	3.49	69.8	9.03	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.18	104	5.00	4.74	94.8	8.87	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.16	103	5.00	4.87	97.4	5.78	30	69.7-119
tetrachloroethene	5.00	5.30	106	5.00	5.09	102	4.04	30	55.3-144
toluene	5.00	5.37	107	5.00	5.14	103	3.81	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.18	104	5.00	5.16	103	0.387	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.27	105	5.00	4.96	99.2	6.06	30	47.9-150
1,1,1-trichloroethane	5.00	5.54	111	5.00	5.48	110	1.09	30	78.8-120
1,1,2-trichloroethane	5.00	5.32	106	5.00	5.00	100	6.20	30	73.6-117
trichloroethene	5.00	5.51	110	5.00	5.31	106	3.70	30	80.1-116
trichlorofluoromethane	5.00	4.53	90.6	5.00	5.82	116	24.9	30	80.5-130
1,2,3-trichloropropane	5.00	5.26	105	5.00	5.06	101	3.88	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.17	103	5.00	4.95	99.0	4.35	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.93	98.6	5.00	4.81	96.2	2.46	30	79.4-114
Vinyl acetate	12.5	13.8	110	12.5	13.4	107	3.02	30	60.7-127
vinyl chloride	5.00	4.61	92.2	5.00	5.56	111	18.7	30	77.5-126
m/p-xylene	10.0	10.2	102	10.0	9.82	98.2	4.09	30	82.9-112
o-xylene	5.00	5.22	104	5.00	4.84	96.8	7.55	30	81.3-113

System Monitoring Compound Results

		LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS
		(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC
460-00-4	4-Bromofluorobenzene	10	9.86	98.6	10	9.8	98.0	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.66	107	10	10.72	107	63.5-140
2037-26-5	Toluene-d8	10	10.09	101	10	10.13	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 2 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by: CR

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD3

EPA Sample No.:

Amt.

FileNames:

Analysis Dates:

Batch: 3011110

Sample

g121-434-11e

5 mL

0111308.D

2010-01-11 14:44:00

Dilution: 1000

MS

g121-434-11e

5 mL

0111314.D

2010-01-11 17:48:00

Matrix: Water

MSD

g121-434-11e

5 mL

0111315.D

2010-01-11 18:19:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	25000	24800	99.4*	25000	32200	129*	25.6	30	17.7-85.2
acrolein	BQL	125000	68700	55.0	125000	68900	55.1	0.291	30	0.00-424
acrylonitrile	BQL	125000	125000	100	125000	136000	109	8.66	30	85.0-175
benzene	BQL	5000	4730	94.6	5000	4620	92.4	2.35	30	61.6-135
bromobenzene	BQL	5000	4340	86.8	5000	4360	87.2	0.460	30	65.1-125
bromochloromethane	BQL	5000	4570	91.4	5000	4550	91.0	0.438	30	75.5-126
bromodichloromethane	BQL	5000	4890	97.8	5000	4810	96.2	1.65	30	74.3-123
bromoform	BQL	5000	4120	82.4	5000	3940	78.8	4.47	30	52.3-122
bromomethane	BQL	5000	4510	90.2	5000	4810	96.2	6.44	30	10.0-284
2-butanone	BQL	25000	25700	103	25000	27800	111*	7.77	30	36.1-107
n-butylbenzene	BQL	5000	4530	90.6	5000	4590	91.8	1.32	30	70.2-124
sec-butylbenzene	BQL	5000	4370	87.4	5000	4420	88.4	1.14	30	62.0-133
tert-butylbenzene	BQL	5000	4470	89.4	5000	4340	86.8	2.95	30	73.5-121
Carbon disulfide	BQL	5000	4820	96.4	5000	4790	95.8	0.624	30	68.8-129
carbon tetrachloride	BQL	5000	4700	94.0	5000	4630	92.6	1.50	30	71.8-122
chlorobenzene	BQL	5000	4590	91.8	5000	4480	89.6	2.42	30	77.2-118
chloroethane	BQL	5000	4840	96.8	5000	5040	101	4.05	30	10.0-233
2-chloroethyl vinyl ether	BQL	12500	118000	945*	12500	128000	1020*	8.09	30	16.7-283
chloroform	BQL	5000	5120	102	5000	5070	101	0.981	30	74.0-128
chloromethane	BQL	5000	5160	103	5000	5620	112	8.53	30	72.0-138
2-chlorotoluene	BQL	5000	4430	88.6	5000	4490	89.8	1.34	30	79.3-118
4-chlorotoluene	BQL	5000	4580	91.6	5000	4340	86.8	5.38	30	76.8-120
dibromochloromethane	BQL	5000	4450	89.0	5000	4350	87.0	2.27	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	25000	24100	96.4	25000	23300	93.1	3.46	30	20.2-171
1,2-dibromoethane	BQL	5000	4480	89.6	5000	4550	91.0	1.55	30	78.5-123
dibromomethane	BQL	5000	4840	96.8	5000	5040	101	4.05	30	71.3-137
1,2-dichlorobenzene	BQL	5000	4460	89.2	5000	4560	91.2	2.22	30	75.1-120
1,3-dichlorobenzene	BQL	5000	4520	90.4	5000	4570	91.4	1.10	30	73.1-121
1,4-dichlorobenzene	BQL	5000	4580	91.6	5000	4510	90.2	1.54	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	25000	23500	93.9	25000	23800	95.2	1.31	30	25.7-149
dichlorodifluoromethane	BQL	5000	4270	85.4	5000	4590	91.8	7.22	30	41.7-166
1,1-dichloroethane	BQL	5000	4890	97.8	5000	4910	98.2	0.408	30	75.6-128
1,2-dichloroethane	BQL	5000	5320	106	5000	5210	104	2.09	30	71.1-127
1,1-dichloroethene	BQL	5000	4620	92.4	5000	4630	92.6	0.216	30	64.4-130
cis-1,2-dichloroethene	6760	5000	11800	99.8	5000	11800	101	1.39	30	72.7-134
trans-1,2-dichloroethene	BQL	5000	4890	97.8	5000	4810	96.2	1.65	30	74.6-124
1,2-dichloropropane	BQL	5000	5090	102	5000	4980	99.6	2.18	30	76.5-129
1,3-dichloropropane	BQL	5000	4720	94.4	5000	4520	90.4	4.33	30	79.1-121
2,2-dichloropropane	BQL	5000	4760	95.2	5000	4540	90.8	4.73	30	31.5-157
1,1-dichloropropene	BQL	5000	4590	91.8	5000	4640	92.8	1.08	30	72.5-120
cis-1,3-dichloropropene	BQL	5000	4930	98.6	5000	4990	99.8	1.21	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD3

Lab Code: NC00919

Batch: 3011110

EPA Sample No.: g121-434-11e, g121-434-11e, g121-434-11e

Dilution: 1000

Filenames: 0111308.D, 0111314.D, 0111315.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	5000	4980	99.6	5000	4870	97.4	2.23	30	44.7-144
Diisopropyl ether	BQL	5000	5120	102	5000	5150	103	0.584	30	79.4-122
ethylbenzene	BQL	5000	4450	89.0	5000	4480	89.6	0.672	30	73.8-126
hexachlorobutadiene	BQL	5000	4430	88.6	5000	4620	92.4	4.20	30	51.8-134
2-hexanone	BQL	25000	23200	92.6	25000	25100	100	7.96	30	41.6-111
Iodomethane	BQL	5000	5520	110	5000	5340	107	3.31	30	40.6-126
isopropylbenzene	BQL	5000	4430	88.6	5000	4340	86.8	2.05	30	74.3-123
4-isopropyltoluene	BQL	5000	4430	88.6	5000	4360	87.2	1.59	30	74.6-122
Methyl-tert-butyl ether	BQL	5000	5030	101	5000	4990	99.8	0.798	30	66.5-136
methylene chloride	BQL	5000	4950	99.0	5000	4750	95.0	4.12	30	48.6-155
4-methyl-2-pentanone	BQL	25000	24700	98.6	25000	24300	97.3	1.39	30	6.88-166
naphthalene	BQL	5000	4100	82.0	5000	4440	88.8	7.96	30	55.1-140
n-propyl benzene	BQL	5000	4490	89.8	5000	4480	89.6	0.223	30	71.6-128
styrene	BQL	5000	3280	65.6*	5000	3250	65.0*	0.919	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	5000	4370	87.4	5000	4260	85.2	2.55	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	5000	4710	94.2	5000	4460	89.2	5.45	30	75.7-136
tetrachloroethene	14900	5000	18600	74.8	5000	18600	73.2	2.16	30	45.8-153
toluene	BQL	5000	4760	95.2	5000	4740	94.8	0.421	30	66.4-128
1,2,3-trichlorobenzene	BQL	5000	4200	84.0	5000	4250	85.0	1.18	30	61.0-126
1,2,4-trichlorobenzene	BQL	5000	4220	84.4	5000	4520	90.4	6.86	30	60.6-125
1,1,1-trichloroethane	BQL	5000	4830	96.6	5000	4790	95.8	0.832	30	78.4-121
1,1,2-trichloroethane	BQL	5000	4710	94.2	5000	4690	93.8	0.426	30	64.8-128
trichloroethene	1350	5000	6220	97.4	5000	6160	96.2	1.24	30	84.9-136
trichlorofluoromethane	BQL	5000	4500	90.0	5000	4870	97.4	7.90	30	76.8-132
1,2,3-trichloropropane	BQL	5000	4510	90.2	5000	4480	89.6	0.667	30	10.0-218
1,2,4-trimethylbenzene	BQL	5000	4560	91.2	5000	4560	91.2	0.00	30	31.0-172
1,3,5-trimethylbenzene	BQL	5000	4360	87.2	5000	4310	86.2	1.15	30	67.7-132
Vinyl acetate	BQL	12500	12700	102	12500	12600	101	0.552	30	0.00-355
vinyl chloride	BQL	5000	4670	93.4	5000	5070	101	8.21	30	68.1-137
m/p-xylene	BQL	10000	8980	89.8	10000	9000	90.0	0.222	30	79.8-118
o-xylene	BQL	5000	4670	93.4	5000	4430	88.6	5.27	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	9.97	99.7	10	9.86	98.6	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.05	110	10	11.01	110	63.5-140
2037-26-5	Toluene-d8	10	10.15	102	10	10.13	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 4 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVO

Reviewed by: 



CHAIN OF CUSTODY RECORD
SGS North America Inc.

- Locations Nationwide
- Alaska
 - Maryland
 - New Jersey
 - North Carolina
 - New York
 - Ohio

www.us.sgs.com 097888

1 CLIENT: **ARCADIS** PHONE NO: **724 742-9180**

CONTACT: **Mark Hanish** SITE/PSID#: _____

PROJECT: **AVX-Myrtle Beach**

REPORTS TO: _____

Mark Hanish FAX NO.: **724 742-9189**

INVOICE TO: _____

Mark Hanish QUOTE #: _____

P.O. NUMBER: **800739300000006**

SGS Reference: **GS82-613** PAGE **1** OF **1**

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	C= COMP G= GRAB	Preservatives Used Analysis Required	REMARKS
	OW-10D OW-10D	1/5/10	1515	WATER	3	G		HCl	
	OW-9D	1/5/10	1500	WATER	3	G			
	P-2D	1/5/10	1440	WATER	2	G			
	P-3D	1/5/10	1530	WATER	2	G			
	TRIP BLANK			WATER	2				

4 Shipping Carrier: **FedEx** Samples Received Cold? (Circle) **YES** **NO**

Shipping Ticket No: **81072091934** Temperature: **4.9**

Special Deliverable Requirements: Chain of Custody Seal: (Circle) **INTACT** **BROKEN** **ABSENT**

Special Instructions: _____

Requested Turnaround Time: **RUSH** _____ **STD** _____ Date Needed _____

5 Collected/Relinquished By: (1) **Budger Stahl** Date **1/5/10** Time **1840** Received By: _____

Relinquished By: (2) _____ Date **1/7/10** Time **10K** Received By: **Nathan Murrell**

Relinquished By: (3) _____ Date _____ Time _____ Received By: _____

Relinquished By: (4) _____ Date _____ Time _____ Received By: _____



Client Name: Arcadis U.S., Inc.
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 18
Lab Proj #: P1001198
Report Date: 02/02/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 19

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1001198-01	P-2D
P1001198-02	OW-10D
P1001198-03	OW-9D
P1001198-04	OW-8D
P1001198-05	OW-7D
P1001198-06	P-1D
P1001198-07	P-3D
P1001198-08	IW-2D
P1001198-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 2-2-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Client Name: Arcadis U.S., Inc.
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Lab Proj #: P1001198
Report Date: 02/02/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Case Narrative: The metals analyses were performed by Pace Analytical Services
The anion analyses were initially performed on 1/16/2010 and 1/20/2010. The sample required reanalyses because of failed QC
criteria



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-2D	Water	P1001198-01	18 Jan. 10 15:32	19 Jan. 10 11:09			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Alkalinity as CaCO3		3300	4	mg/L	SM2320B	1/21/10	tld
N Alkalinity Bicarbonate as CaCO3		3300	4	mg/L	SM2320B	1/21/10	tld
N Bromide		210.00	5.00	mg/L	9056	1/21/10 23:28	md
N Chloride		220.00	5.00	mg/L	9056	1/21/10 23:28	md
N Fluoride		85.00	2.50	mg/L	9056	1/21/10 23:28	md
N Nitrate	J	0.25	0.50	mg/L	9056	1/21/10 23:05	md
N Nitrite	U	< 2.50	2.50	mg/L	9056	1/21/10 23:28	md
N Phosphate		15.00	1.00	mg/L	9056	1/21/10 23:05	md
N Sulfate		1.20	1.00	mg/L	9056	1/21/10 23:05	md
N Total Organic Carbon		4400.0	250.0	mg/L	9060	2/1/10	md
Metals							
Iron	L	8.700	0.100	mg/L	6010B	1/25/10	pas
Iron-dissolved	L	9.600	0.100	mg/L	6010B	1/25/10	pas
Manganese	L	1.200	0.010	mg/L	6010B	1/25/10	pas
Manganese-dissolved	L	1.200	0.010	mg/L	6010B	1/25/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Seven Fields, PA 16046

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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-10D	Water	P1001198-02	18 Jan. 10 15:55	19 Jan. 10 11:09

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		12.0	5	mg/L	9060	1/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Lab Proj #: P1001198
Report Date: 02/02/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-9D	Water	P1001198-03	18 Jan. 10	16:03	19 Jan. 10	11:09	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		180.0	25.0	mg/L	9060	2/1/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-8D	Water	P1001198-04	18 Jan. 10 16:11	19 Jan. 10 11:09

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		38.0	5	mg/L	9060	1/30/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>
OW-7D	Water	P1001198-05			18 Jan. 10 16:18		19 Jan. 10 11:09
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		84.0	5	mg/L	9060	1/30/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-1D	Water	P1001198-06			18 Jan. 10 16:43	19 Jan. 10 11:09	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		7.5	5	mg/L	9060	1/30/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-3D	Water	P1001198-07	18 Jan. 10 16:55	19 Jan. 10 11:09			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		14.0	5	mg/L	9060	1/30/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-2D	Water	P1001198-08	18 Jan. 10 17:07	19 Jan. 10 11:09			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4100.0	250	mg/L	9060	1/30/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-4D	Water	P1001198-09	18 Jan. 10 17:16	19 Jan. 10 11:09			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		10000.0	500.0	mg/L	9060	2/1/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Alkalinity Titration
Analysis Method: Alkalinity Titration

M100121062-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Alkalinity as CaCO3	2.1 mg/L		4		- NA
Alkalinity Bicarbonate as CaCO3	2.1 mg/L		4		- NA

M100121062-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Alkalinity as CaCO3	70 mg/L	70.10	100.00	87 - 113

P1001183-06A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Alkalinity as CaCO3	37 mg/L			- NA	5.26	0 - 14
Alkalinity Bicarbonate as CaCO3	37 mg/L			- NA	5.26	0 - 20

P1001183-06A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Alkalinity as CaCO3	120 mg/L	100.00	81.00	69 - 121

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Anions by ion chromatography
Analysis Method: Anions by ion chromatography

M100125009-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Fluoride	< 0.50 mg/L		0.50		- NA
Chloride	< 1.00 mg/L		1.00		- NA
Nitrite	< 0.50 mg/L		0.50		- NA
Bromide	< 1.00 mg/L		1.00		- NA
Nitrate	< 0.50 mg/L		0.50		- NA
Sulfate	< 1.00 mg/L		1.00		- NA
Phosphate	< 1.00 mg/L		1.00		- NA

M100125009-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Fluoride	8.80 mg/L	10.00	88.00	80 - 120
Chloride	9.80 mg/L	10.00	98.00	80 - 120
Nitrite	9.90 mg/L	10.00	99.00	80 - 120
Bromide	10.00 mg/L	10.00	100.00	80 - 120
Nitrate	10.00 mg/L	10.00	100.00	80 - 120
Sulfate	9.20 mg/L	10.00	92.00	80 - 120
Phosphate	9.80 mg/L	10.00	98.00	80 - 120

P1001183-06A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Fluoride	1.20 mg/L			- NA	0	0 - 20
Chloride	1.60 mg/L			- NA	0	0 - 20
Nitrite	< 0.50 mg/L			- NA	0	0 - 20
Bromide	< 1.00 mg/L			- NA	0	0 - 20
Nitrate	< 0.50 mg/L			- NA	0	0 - 20
Sulfate	26.00 mg/L			- NA	0	0 - 20
Phosphate	< 1.00 mg/L			- NA	0	0 - 20

P1001256-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Fluoride	< 0.50 mg/L			- NA	0	0 - 20
Chloride	87.00 mg/L			- NA	1.16	0 - 20
Nitrite	< 0.50 mg/L			- NA	0	0 - 20
Bromide	< 1.00 mg/L			- NA	0	0 - 20
Nitrate	3.60 mg/L			- NA	0	0 - 20
Sulfate	87.00 mg/L			- NA	0	0 - 20



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
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 Address: 310 Seven Fields Blvd.
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 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

P1001256-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Phosphate	< 1.00 mg/L			- NA	0	0 - 20

P1001256-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Fluoride	9.00 mg/L	10.00	90.00	70 - 130
Chloride	130.00 mg/L	50.00	88.00	70 - 130
Nitrite	10.00 mg/L	10.00	100.00	70 - 130
Bromide	11.00 mg/L	10.00	110.00	70 - 130
Nitrate	14.00 mg/L	10.00	104.00	70 - 130
Sulfate	130.00 mg/L	50.00	86.00	70 - 130
Phosphate	9.00 mg/L	10.00	90.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Acid Digestions of Aqueous samples and extracts for tc
Analysis Method: Inductively Coupled Plasma-Atomic Emission Spectrom

M100129006-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Iron	< 0.050 mg/L		0.050		- NA
Manganese	< 0.005 mg/L		0.005		- NA

M100129006-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Iron	4.600 mg/L	5.00		92.00	80 - 120
Manganese	0.470 mg/L	0.50		94.00	80 - 120

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 16 of 18
 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Acid Digestions of Aqueous samples and extracts for tc
Analysis Method: Dissolved TAL Metals by Inductively Coupled Plasma-A

M100129007-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Iron-dissolved	< 0.050 mg/L		0.050		- NA
Manganese-dissolved	< 0.005 mg/L		0.005		- NA

M100129007-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Iron-dissolved	5.100 mg/L	5.00	102.00	80 - 120
Manganese-dissolved	0.490 mg/L	0.50	98.00	80 - 120

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100201012-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M100201012-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	38.0 mg/L	36.00	106.00	70 - 130

P1001198-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	12.0 mg/L			- NA	0.00	0 - 20

P1001198-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	63.0 mg/L	50.00	102.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis U.S., Inc.
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 18 of 18
 Lab Proj #: P1001198
 Report Date: 02/02/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100202013-MB

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0	mg/L		5.0		- NA

M100202013-LCS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0	mg/L	36.00		103.00	70 - 130

P1001198-03A-DUP

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	180.0	mg/L				- NA	0.00	0 - 20

P1001219-01A-DUP

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	96.0	mg/L				- NA	3.08	0 - 20

P1001219-01A-MS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	150.0	mg/L	50.00		102.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps Lab. Proj. #

P00119

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. #

414

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No. (412) 826-3433

Company :

ARCADIS

Parameters Requested

Results to :

Mark Hanisk

One Adams Place, 310 Sewa Fields Blvd Suite 210

Co. Address :

724-742-9180 Fax #: 724-742-9185

Phone # :

Mark Hanisk

Invoice to:

Mark Hanisk

Proj. Manager :

AUX / B0007393, 0000.00006

Proj. Name/Number :

Sample's signature : *Mark Hanisk*

Cooler Temp.

Sample ID	Sample Description	Sample Type		Date	Time	Notes	Parameters Requested				Remarks	
		Water	Vapor / Solid				TOC	Anions	Alk Bicarbonate / Total	Total Fe, Mg		Dissolved Fe, Mn
1	P-2D	X		1/8/10	1532	6	X	X	X	X	X	Field Filtered
2	OW-10D	X			1555	1	X	X	X	X		Dissolved Fe, Mn
3	OW-9D	X			1603	1	X	X	X	X		
4	OW-8D	X			1611	1	X	X	X	X		
5	OW-7D	X			1618	1	X	X	X	X		
6	P-1D	X			1643	1	X	X	X	X		
7	P-3D	X			1655	1	X	X	X	X		
8	IW-2D	X			707	1	X	X	X	X		
9	IW-4D	X			1716	1	X	X	X	X		

Relinquished by : Robert Blyskal

Company : ARCADIS

Date : 1/8/10 Time : 1820

Received by : *[Signature]*

Company : *[Signature]*

Date : 1/19 Time : 1000

Relinquished by :

Company :

Date : Time :

Received by :

Company :

Date : Time :

Relinquished by :

Company :

Date : Time :

Received by :

Company :

Date : Time :



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 14
Lab Proj #: P1002085
Report Date: 02/15/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 18

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1002085-01	P-3D(020510)
P1002085-02	OW-8D(020510)
P1002085-03	P-2D(020510)
P1002085-04	OW-10D(020510)
P1002085-05	P-1D(020510)
P1002085-06	OW-9D(020510)
P1002085-07	OW-7D
P1002085-08	IW-2D
P1002085-09	IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HH) **Date:** 2.15.10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-3D(020510)	Water	P1002085-01	05 Feb. 10 11:35	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		16.0	5.0	mg/L	9060	2/11/10	md
RiskAnalysis							
N Ethane		0.390	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		69.000	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		3700.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D(020510)	Water	P1002085-02	05 Feb. 10 12:30	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		260.0	50.0	mg/L	9060	2/12/10	md
RiskAnalysis							
N Ethane		2.000	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		110.000	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		7700.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-2D(020510)	Water	P1002085-03			05 Feb. 10 13:10	08 Feb. 10 12:57	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4200.0	500.0	mg/L	9060	2/12/10	md
RiskAnalysis							
N Ethane		0.092	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		2.000	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		650.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-10D(020510)	Water	P1002085-04	05 Feb. 10 13:25	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		56.0	10.0	mg/L	9060	2/12/10	md
RiskAnalysis							
N Ethane		0.430	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		5.800	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		280.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-1D(020510)	Water	P1002085-05	05 Feb. 10 14:30	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon	J	2.8	5.0	mg/L	9060	2/11/10	md
RiskAnalysis							
N Ethane		0.086	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		0.350	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		1800.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-9D(020510)	Water	P1002085-06	05 Feb. 10 15:10	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		15.0	5.0	mg/L	9060	2/11/10	md
RiskAnalysis							
N Ethane		1.200	0.025	ug/L	AM20GAX	2/11/10	rw
N Ethene		38.000	0.025	ug/L	AM20GAX	2/11/10	rw
N Methane		830.000	0.100	ug/L	AM20GAX	2/11/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-7D	Water	P1002085-07	05 Feb. 10 12:15	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6.4	5.0	mg/L	9060	2/11/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Seven Fields, PA 16046

Page: Page 9 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-2D	Water	P1002085-08	05 Feb. 10 9:55	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		3300.0	1000.0	mg/L	9060	2/11/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 10 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-4D	Water	P1002085-09	05 Feb. 10 10:10	08 Feb. 10 12:57			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		8400.0	1000.0	mg/L	9060	2/12/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 11 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M100211001-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M100211001-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	47.000 ug/L	45.00	104.00	75 - 125
Ethene	42.000 ug/L	40.80	103.00	75 - 125
Methane	860.000 ug/L	825.00	104.00	75 - 125

M100211001-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	47.000 ug/L	45.00	104.00	75 - 125	0.00	0 - 20
Ethene	42.000 ug/L	40.80	103.00	75 - 125	0.00	0 - 20
Methane	860.000 ug/L	825.00	104.00	75 - 125	0.00	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M100211002-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M100211002-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	49.000 ug/L	45.00	109.00	75 - 125
Ethene	44.000 ug/L	40.80	108.00	75 - 125
Methane	900.000 ug/L	825.00	109.00	75 - 125

M100211002-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	48.000 ug/L	45.00	107.00	75 - 125	2.06	0 - 20
Ethene	43.000 ug/L	40.80	105.00	75 - 125	2.30	0 - 20
Methane	880.000 ug/L	825.00	107.00	75 - 125	2.25	0 - 20

Outlined Results indicate results outside of Control limits

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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Page: Page 13 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100212002-MB

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0	mg/L		5.0		- NA

M100212002-LCS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0	mg/L	36.00		103.00	70 - 130

P1002085-01A-DUP

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	16.0	mg/L				- NA	0.00	0 - 20

P1002085-01A-MS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	65.0	mg/L	50.00		98.00	70 - 130

Outlined Results indicate results outside of Control limits

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 14 of 14
 Lab Proj #: P1002085
 Report Date: 02/15/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100215005-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	0.8 mg/L		5.0		- NA

M100215005-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P1002132-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	28.0 mg/L			- NA	3.51	0 - 20

P1002132-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	84.0 mg/L	50.00	110.00	70 - 130

Outlined Results indicate results outside of Control limits

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis





Microseeps Lab. Proj. #

Process

CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. #

904

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company: ARCADIS

Parameters Requested

Results to: Mark Hawish

Co. Address: One Adams Place, 310 Seven Fields Blvd., Suite 210, Seven Fields PA 16046

Phone #: (724) 742-9180 x 518 Fax #: (724) 742-9189

Proj. Manager: Mark Hawish

Proj. Name/Number: AVX Myrtle Beach, SC / B0007393.0000.00006

Sampler's signature: [Signature]

Cooler Temp.

Invoice to: Mark Hawish

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Remarks
		Water	Solid				
P-3D (020510)	GRAB Ground Water	X		2/5/10	1135		M/E, AM20GAX
OW-8D (020510)	GRAB	X		2/5/10	1230		
P-2D (020510)	GRAB	X		2/5/10	1310		
OW-10D (020510)	GRAB	X		2/5/10	1325		
P-1D (020510)	GRAB	X		2/5/10	1430		
OW-9D (020510)	GRAB	X		2/5/10	1510		

Relinquished by: <u>James E. Cooper</u>	Company: <u>ARCADIS</u>	Date: <u>2/5/10</u>	Time: <u>1700</u>	Received by: <u>[Signature]</u>	Company: <u>M</u>	Date: <u>2/5/10</u>	Time: <u>1000</u>
Relinquished by: <u>[Signature]</u>	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

Microseeps Project Number: _____

Date: 2/8/16 Time of Receipt: _____ Receiver: DD

Client: AGM

REASON FOR NON-CONFORMANCE:

No coc for TOC Bottles

ACTION TAKEN:

Client name: Rich Mator Date: 2/8 Time: _____

Please use attached COC per
rich mator

Customer Service Initials: HT

Date: 2/8

Heather Hauser

From: Mator, Richard [Richard.Mator@arcadis-us.com]
Sent: Monday, February 08, 2010 1:49 PM
To: Heather Hauser
Cc: Cooper, James
Subject: AVX-MB COC edits
Attachments: AVX-MB 2010.02.05 Microseeps COC.pdf

Hi Heather,

Attached are the necessary edits to the above COC. Let me know if this more accurately reflects what you received.


Thanks,

Rich

Rich Mator | Staff Environmental Scientist | Richard.Mator@arcadis-us.com

ARCADIS U.S., Inc. | One Adams Place, 310 Seven Fields Blvd., Suite 210 | Seven Fields, PA 16046
T. 724.742.9180 x524 | F. 724.742.9189
www.arcadis-us.com

ARCADIS, Imagine the result

 Please consider the environment before printing this email.

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Microseeps
Lab. Proj. #

P1002085

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

904

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company:

ARCADIS

Results to: Mark Hawish

Co. Address: One Adams Place, 310 Seven Fields Blvd., Suite 210 Seven Fields PA 16616

Phone #: (724) 742-9180 x 518 Fax #: (724) 742-9189

Proj. Manager: Mark Hawish

Proj. Name/Number: AVX Murtle Beach Jr / B0007393.0000.00006

Sampler's signature:

Cooler Temp:

Sample ID	Sample Description	Sample Type Water Vapor Solid	Date	Time	Temp
P-3D (020510)	GRAB Groundwater	X	2/5/10	1135	X ³
OW-8D (020510)	GRAB	X	2/5/10	1230	X ³
P-2D (020510)	GRAB	X	2/5/10	1310	X ³
OW-10D (020510)	GRAB	X	2/5/10	1325	X ³
P-1D (020510)	GRAB	X	2/5/10	1430	X ³
OW-9D (020510)	GRAB	X	2/5/10	1510	X ³
OW-7D	GRAB	X	2/5/10	1245	1
IW-2D	↓	X	↓	0955	1
IW-4D	↓	X	↓	1010	1

Parameters Requested	Results	Remarks
ME, AM20 GAX	2	<p>Exits to this * COC completed by Rich Madar of ARCADIS on 2/8/2010. P 724-742-9180 x 524</p>
TOC	2	
	2	
	2	
	2	
	2	
	2	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
	ARCADIS	2/5/10	1700				

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:



Mark Hanish
Arcadis
600 Waterfront Dr.
Pittsburgh, PA 15222

Report Number: G582-638

Client Project: AVX Myrtle Beach, SC

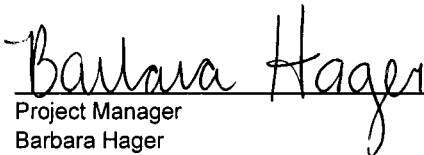
Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

 Feb 15, 2010
Project Manager Date
Barbara Hager

SGS North America, Inc.

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-3D (020510)
Client Project ID: AVX Myrtle Beach, SC
Lab Sample ID: G582-638-1A
Lab Project ID: G582-638

Analyzed By: DVO
Date Collected: 2/5/2010 11:35
Date Received: 2/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	2500	218	100	2/12/2010	
Benzene	BQL	100	6.50	100	2/12/2010	
Bromobenzene	BQL	100	5.60	100	2/12/2010	
Bromochloromethane	BQL	100	10.1	100	2/12/2010	
Bromodichloromethane	BQL	100	7.60	100	2/12/2010	
Bromoform	BQL	100	12.0	100	2/12/2010	
Bromomethane	BQL	100	13.3	100	2/12/2010	
2-Butanone	BQL	2500	54.4	100	2/12/2010	
n-Butylbenzene	BQL	100	10.9	100	2/12/2010	
sec-Butylbenzene	BQL	100	8.40	100	2/12/2010	
tert-Butylbenzene	BQL	100	5.00	100	2/12/2010	
Carbon disulfide	BQL	100	6.90	100	2/12/2010	
Carbon tetrachloride	BQL	100	8.70	100	2/12/2010	
Chlorobenzene	BQL	100	8.20	100	2/12/2010	
Chloroethane	BQL	100	10.6	100	2/12/2010	
Chloroform	BQL	100	7.90	100	2/12/2010	
Chloromethane	BQL	100	14.6	100	2/12/2010	
2-Chlorotoluene	BQL	100	9.90	100	2/12/2010	
4-Chlorotoluene	BQL	100	8.00	100	2/12/2010	
Dibromochloromethane	BQL	100	9.00	100	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	500	121	100	2/12/2010	
Dibromomethane	BQL	100	11.3	100	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	100	12.4	100	2/12/2010	
1,2-Dichlorobenzene	BQL	100	12.7	100	2/12/2010	
1,3-Dichlorobenzene	BQL	100	8.10	100	2/12/2010	
1,4-Dichlorobenzene	BQL	100	7.90	100	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	500	63.0	100	2/12/2010	
1,1-Dichloroethane	BQL	100	7.40	100	2/12/2010	
1,1-Dichloroethene	BQL	100	8.90	100	2/12/2010	
1,2-Dichloroethane	BQL	100	7.90	100	2/12/2010	
cis-1,2-Dichloroethene	1440	100	6.50	100	2/12/2010	
trans-1,2-dichloroethene	BQL	100	8.90	100	2/12/2010	
1,2-Dichloropropane	BQL	100	9.40	100	2/12/2010	
1,3-Dichloropropane	BQL	100	12.7	100	2/12/2010	
2,2-Dichloropropane	BQL	100	5.90	100	2/12/2010	
1,1-Dichloropropene	BQL	100	7.20	100	2/12/2010	
cis-1,3-Dichloropropene	BQL	100	7.60	100	2/12/2010	
trans-1,3-Dichloropropene	BQL	100	7.60	100	2/12/2010	
Dichlorodifluoromethane	BQL	500	9.40	100	2/12/2010	
Diisopropyl ether (DIPE)	BQL	100	7.30	100	2/12/2010	
Ethylbenzene	BQL	100	7.70	100	2/12/2010	
Hexachlorobutadiene	BQL	100	22.8	100	2/12/2010	
2-Hexanone	BQL	500	72.0	100	2/12/2010	
Iodomethane	BQL	100	4.20	100	2/12/2010	
Isopropylbenzene	BQL	100	7.10	100	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-3D (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-1A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 11:35
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	100	4.80	100	2/12/2010	
Methylene chloride	BQL	500	9.80	100	2/12/2010	
4-Methyl-2-pentanone	BQL	500	55.0	100	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	100	6.70	100	2/12/2010	
Naphthalene	BQL	100	13.3	100	2/12/2010	
n-Propyl benzene	BQL	100	8.00	100	2/12/2010	
Styrene	BQL	100	8.50	100	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	100	9.00	100	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	100	11.5	100	2/12/2010	
Tetrachloroethene	BQL	100	6.90	100	2/12/2010	
Toluene	BQL	100	7.60	100	2/12/2010	
1,2,3-Trichlorobenzene	BQL	100	19.0	100	2/12/2010	
1,2,4-Trichlorobenzene	BQL	100	11.9	100	2/12/2010	
Trichloroethene	BQL	100	5.40	100	2/12/2010	
1,1,1-Trichloroethane	BQL	100	5.40	100	2/12/2010	
1,1,2-Trichloroethane	BQL	100	18.2	100	2/12/2010	
Trichlorofluoromethane	BQL	100	11.1	100	2/12/2010	
1,2,3-Trichloropropane	BQL	100	12.0	100	2/12/2010	
1,2,4-Trimethylbenzene	BQL	100	6.50	100	2/12/2010	
1,3,5-Trimethylbenzene	BQL	100	7.40	100	2/12/2010	
Vinyl chloride	1680	100	14.9	100	2/12/2010	
m-,p-Xylene	BQL	200	9.80	100	2/12/2010	
o-Xylene	BQL	100	6.50	100	2/12/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		30	32.1	107		
Toluene-d8		30	29.5	98		
4-Bromofluorobenzene		30	28.9	96		

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-8D (020510)
Client Project ID: AVX Myrtle Beach, SC
Lab Sample ID: G582-638-2A
Lab Project ID: G582-638

Analyzed By: DVO
Date Collected: 2/5/2010 12:30
Date Received: 2/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	2/12/2010	
Benzene	BQL	1000	65.0	1000	2/12/2010	
Bromobenzene	BQL	1000	56.0	1000	2/12/2010	
Bromochloromethane	BQL	1000	101	1000	2/12/2010	
Bromodichloromethane	BQL	1000	76.0	1000	2/12/2010	
Bromoform	BQL	1000	120	1000	2/12/2010	
Bromomethane	BQL	1000	133	1000	2/12/2010	
2-Butanone	BQL	25000	544	1000	2/12/2010	
n-Butylbenzene	BQL	1000	109	1000	2/12/2010	
sec-Butylbenzene	BQL	1000	84.0	1000	2/12/2010	
tert-Butylbenzene	BQL	1000	50.0	1000	2/12/2010	
Carbon disulfide	BQL	1000	69.0	1000	2/12/2010	
Carbon tetrachloride	BQL	1000	87.0	1000	2/12/2010	
Chlorobenzene	BQL	1000	82.0	1000	2/12/2010	
Chloroethane	BQL	1000	106	1000	2/12/2010	
Chloroform	BQL	1000	79.0	1000	2/12/2010	
Chloromethane	BQL	1000	146	1000	2/12/2010	
2-Chlorotoluene	BQL	1000	99.0	1000	2/12/2010	
4-Chlorotoluene	BQL	1000	80.0	1000	2/12/2010	
Dibromochloromethane	BQL	1000	90.0	1000	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	2/12/2010	
Dibromomethane	BQL	1000	113	1000	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	2/12/2010	
1,2-Dichlorobenzene	BQL	1000	127	1000	2/12/2010	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	2/12/2010	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	2/12/2010	
1,1-Dichloroethane	BQL	1000	74.0	1000	2/12/2010	
1,1-Dichloroethene	BQL	1000	89.0	1000	2/12/2010	
1,2-Dichloroethane	BQL	1000	79.0	1000	2/12/2010	
cis-1,2-Dichloroethene	7290	1000	65.0	1000	2/12/2010	
trans-1,2-dichloroethene	160	1000	89.0	1000	2/12/2010	J
1,2-Dichloropropane	BQL	1000	94.0	1000	2/12/2010	
1,3-Dichloropropane	BQL	1000	127	1000	2/12/2010	
2,2-Dichloropropane	BQL	1000	59.0	1000	2/12/2010	
1,1-Dichloropropene	BQL	1000	72.0	1000	2/12/2010	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
Dichlorodifluoromethane	BQL	5000	94.0	1000	2/12/2010	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	2/12/2010	
Ethylbenzene	BQL	1000	77.0	1000	2/12/2010	
Hexachlorobutadiene	BQL	1000	228	1000	2/12/2010	
2-Hexanone	BQL	5000	720	1000	2/12/2010	
Iodomethane	BQL	1000	42.0	1000	2/12/2010	
Isopropylbenzene	BQL	1000	71.0	1000	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-8D (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-2A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 12:30
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	2/12/2010	
Methylene chloride	BQL	5000	98.0	1000	2/12/2010	
4-Methyl-2-pentanone	BQL	5000	550	1000	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	2/12/2010	
Naphthalene	BQL	1000	133	1000	2/12/2010	
n-Propyl benzene	BQL	1000	80.0	1000	2/12/2010	
Styrene	BQL	1000	85.0	1000	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	2/12/2010	
Tetrachloroethene	BQL	1000	69.0	1000	2/12/2010	
Toluene	BQL	1000	76.0	1000	2/12/2010	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	2/12/2010	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	2/12/2010	
Trichloroethene	BQL	1000	54.0	1000	2/12/2010	
1,1,1-Trichloroethane	BQL	1000	54.0	1000	2/12/2010	
1,1,2-Trichloroethane	BQL	1000	182	1000	2/12/2010	
Trichlorofluoromethane	BQL	1000	111	1000	2/12/2010	
1,2,3-Trichloropropane	BQL	1000	120	1000	2/12/2010	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	2/12/2010	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	2/12/2010	
Vinyl chloride	5300	1000	149	1000	2/12/2010	
m-,p-Xylene	BQL	2000	98.0	1000	2/12/2010	
o-Xylene	BQL	1000	65.0	1000	2/12/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	33.4	111
Toluene-d8	30	30.2	101
4-Bromofluorobenzene	30	28.7	96

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D (020510)
Client Project ID: AVX Myrtle Beach, SC
Lab Sample ID: G582-638-3A
Lab Project ID: G582-638

Analyzed By: DVO
Date Collected: 2/5/2010 13:10
Date Received: 2/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	439	1000	87.2	40	2/12/2010	J
Benzene	BQL	40.0	2.60	40	2/12/2010	
Bromobenzene	BQL	40.0	2.24	40	2/12/2010	
Bromochloromethane	BQL	40.0	4.04	40	2/12/2010	
Bromodichloromethane	BQL	40.0	3.04	40	2/12/2010	
Bromoform	BQL	40.0	4.80	40	2/12/2010	
Bromomethane	BQL	40.0	5.32	40	2/12/2010	
2-Butanone	442	1000	21.8	40	2/12/2010	J
n-Butylbenzene	BQL	40.0	4.36	40	2/12/2010	
sec-Butylbenzene	BQL	40.0	3.36	40	2/12/2010	
tert-Butylbenzene	BQL	40.0	2.00	40	2/12/2010	
Carbon disulfide	BQL	40.0	2.76	40	2/12/2010	
Carbon tetrachloride	BQL	40.0	3.48	40	2/12/2010	
Chlorobenzene	BQL	40.0	3.28	40	2/12/2010	
Chloroethane	BQL	40.0	4.24	40	2/12/2010	
Chloroform	BQL	40.0	3.16	40	2/12/2010	
Chloromethane	BQL	40.0	5.84	40	2/12/2010	
2-Chlorotoluene	BQL	40.0	3.96	40	2/12/2010	
4-Chlorotoluene	BQL	40.0	3.20	40	2/12/2010	
Dibromochloromethane	BQL	40.0	3.60	40	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	200	48.4	40	2/12/2010	
Dibromomethane	BQL	40.0	4.52	40	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	40.0	4.96	40	2/12/2010	
1,2-Dichlorobenzene	BQL	40.0	5.08	40	2/12/2010	
1,3-Dichlorobenzene	BQL	40.0	3.24	40	2/12/2010	
1,4-Dichlorobenzene	BQL	40.0	3.16	40	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	200	25.2	40	2/12/2010	
1,1-Dichloroethane	BQL	40.0	2.96	40	2/12/2010	
1,1-Dichloroethene	BQL	40.0	3.56	40	2/12/2010	
1,2-Dichloroethane	BQL	40.0	3.16	40	2/12/2010	
cis-1,2-Dichloroethene	309	40.0	2.60	40	2/12/2010	
trans-1,2-dichloroethene	11.6	40.0	3.56	40	2/12/2010	J
1,2-Dichloropropane	BQL	40.0	3.76	40	2/12/2010	
1,3-Dichloropropane	BQL	40.0	5.08	40	2/12/2010	
2,2-Dichloropropane	BQL	40.0	2.36	40	2/12/2010	
1,1-Dichloropropene	BQL	40.0	2.88	40	2/12/2010	
cis-1,3-Dichloropropene	BQL	40.0	3.04	40	2/12/2010	
trans-1,3-Dichloropropene	BQL	40.0	3.04	40	2/12/2010	
Dichlorodifluoromethane	BQL	200	3.76	40	2/12/2010	
Diisopropyl ether (DIPE)	BQL	40.0	2.92	40	2/12/2010	
Ethylbenzene	BQL	40.0	3.08	40	2/12/2010	
Hexachlorobutadiene	BQL	40.0	9.12	40	2/12/2010	
2-Hexanone	BQL	200	28.8	40	2/12/2010	
Iodomethane	BQL	40.0	1.68	40	2/12/2010	
Isopropylbenzene	BQL	40.0	2.84	40	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-3A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 13:10
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	40.0	1.92	40	2/12/2010	
Methylene chloride	BQL	200	3.92	40	2/12/2010	
4-Methyl-2-pentanone	BQL	200	22.0	40	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	40.0	2.68	40	2/12/2010	
Naphthalene	BQL	40.0	5.32	40	2/12/2010	
n-Propyl benzene	BQL	40.0	3.20	40	2/12/2010	
Styrene	BQL	40.0	3.40	40	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	40.0	3.60	40	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	40.0	4.60	40	2/12/2010	
Tetrachloroethene	BQL	40.0	2.76	40	2/12/2010	
Toluene	BQL	40.0	3.04	40	2/12/2010	
1,2,3-Trichlorobenzene	BQL	40.0	7.60	40	2/12/2010	
1,2,4-Trichlorobenzene	BQL	40.0	4.76	40	2/12/2010	
Trichloroethene	940	40.0	2.16	40	2/12/2010	
1,1,1-Trichloroethane	BQL	40.0	2.16	40	2/12/2010	
1,1,2-Trichloroethane	BQL	40.0	7.28	40	2/12/2010	
Trichlorofluoromethane	BQL	40.0	4.44	40	2/12/2010	
1,2,3-Trichloropropane	BQL	40.0	4.80	40	2/12/2010	
1,2,4-Trimethylbenzene	BQL	40.0	2.60	40	2/12/2010	
1,3,5-Trimethylbenzene	BQL	40.0	2.96	40	2/12/2010	
Vinyl chloride	134	40.0	5.96	40	2/12/2010	
m-,p-Xylene	BQL	80.0	3.92	40	2/12/2010	
o-Xylene	BQL	40.0	2.60	40	2/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	31.5	105
Toluene-d8	30	29.9	100
4-Bromofluorobenzene	30	28.9	96

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D(020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-4A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 13:25
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	2/12/2010	
Benzene	BQL	1000	65.0	1000	2/12/2010	
Bromobenzene	BQL	1000	56.0	1000	2/12/2010	
Bromochloromethane	BQL	1000	101	1000	2/12/2010	
Bromodichloromethane	BQL	1000	76.0	1000	2/12/2010	
Bromoform	BQL	1000	120	1000	2/12/2010	
Bromomethane	BQL	1000	133	1000	2/12/2010	
2-Butanone	BQL	25000	544	1000	2/12/2010	
n-Butylbenzene	BQL	1000	109	1000	2/12/2010	
sec-Butylbenzene	BQL	1000	84.0	1000	2/12/2010	
tert-Butylbenzene	BQL	1000	50.0	1000	2/12/2010	
Carbon disulfide	BQL	1000	69.0	1000	2/12/2010	
Carbon tetrachloride	BQL	1000	87.0	1000	2/12/2010	
Chlorobenzene	BQL	1000	82.0	1000	2/12/2010	
Chloroethane	BQL	1000	106	1000	2/12/2010	
Chloroform	BQL	1000	79.0	1000	2/12/2010	
Chloromethane	BQL	1000	146	1000	2/12/2010	
2-Chlorotoluene	BQL	1000	99.0	1000	2/12/2010	
4-Chlorotoluene	BQL	1000	80.0	1000	2/12/2010	
Dibromochloromethane	BQL	1000	90.0	1000	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	2/12/2010	
Dibromomethane	BQL	1000	113	1000	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	2/12/2010	
1,2-Dichlorobenzene	BQL	1000	127	1000	2/12/2010	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	2/12/2010	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	2/12/2010	
1,1-Dichloroethane	BQL	1000	74.0	1000	2/12/2010	
1,1-Dichloroethene	BQL	1000	89.0	1000	2/12/2010	
1,2-Dichloroethane	BQL	1000	79.0	1000	2/12/2010	
cis-1,2-Dichloroethene	14900	1000	65.0	1000	2/12/2010	
trans-1,2-dichloroethene	350	1000	89.0	1000	2/12/2010	J
1,2-Dichloropropane	BQL	1000	94.0	1000	2/12/2010	
1,3-Dichloropropane	BQL	1000	127	1000	2/12/2010	
2,2-Dichloropropane	BQL	1000	59.0	1000	2/12/2010	
1,1-Dichloropropene	BQL	1000	72.0	1000	2/12/2010	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
Dichlorodifluoromethane	BQL	5000	94.0	1000	2/12/2010	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	2/12/2010	
Ethylbenzene	BQL	1000	77.0	1000	2/12/2010	
Hexachlorobutadiene	BQL	1000	228	1000	2/12/2010	
2-Hexanone	BQL	5000	720	1000	2/12/2010	
Iodomethane	BQL	1000	42.0	1000	2/12/2010	
Isopropylbenzene	BQL	1000	71.0	1000	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D(020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-4A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 13:25
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	2/12/2010	
Methylene chloride	BQL	5000	98.0	1000	2/12/2010	
4-Methyl-2-pentanone	BQL	5000	550	1000	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	2/12/2010	
Naphthalene	BQL	1000	133	1000	2/12/2010	
n-Propyl benzene	BQL	1000	80.0	1000	2/12/2010	
Styrene	BQL	1000	85.0	1000	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	2/12/2010	
Tetrachloroethene	BQL	1000	69.0	1000	2/12/2010	
Toluene	BQL	1000	76.0	1000	2/12/2010	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	2/12/2010	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	2/12/2010	
Trichloroethene	260	1000	54.0	1000	2/12/2010	J
1,1,1-Trichloroethane	BQL	1000	54.0	1000	2/12/2010	
1,1,2-Trichloroethane	BQL	1000	182	1000	2/12/2010	
Trichlorofluoromethane	BQL	1000	111	1000	2/12/2010	
1,2,3-Trichloropropane	BQL	1000	120	1000	2/12/2010	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	2/12/2010	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	2/12/2010	
Vinyl chloride	760	1000	149	1000	2/12/2010	J
m-,p-Xylene	BQL	2000	98.0	1000	2/12/2010	
o-Xylene	BQL	1000	65.0	1000	2/12/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	32.6	109
Toluene-d8	30	29.1	97
4-Bromofluorobenzene	30	29.3	98

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-1D(020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-5A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 14:30
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	250	21.8	10	2/12/2010	
Benzene	BQL	10.0	0.650	10	2/12/2010	
Bromobenzene	BQL	10.0	0.560	10	2/12/2010	
Bromochloromethane	BQL	10.0	1.01	10	2/12/2010	
Bromodichloromethane	BQL	10.0	0.760	10	2/12/2010	
Bromoform	BQL	10.0	1.20	10	2/12/2010	
Bromomethane	BQL	10.0	1.33	10	2/12/2010	
2-Butanone	BQL	250	5.44	10	2/12/2010	
n-Butylbenzene	BQL	10.0	1.09	10	2/12/2010	
sec-Butylbenzene	BQL	10.0	0.840	10	2/12/2010	
tert-Butylbenzene	BQL	10.0	0.500	10	2/12/2010	
Carbon disulfide	BQL	10.0	0.690	10	2/12/2010	
Carbon tetrachloride	BQL	10.0	0.870	10	2/12/2010	
Chlorobenzene	BQL	10.0	0.820	10	2/12/2010	
Chloroethane	BQL	10.0	1.06	10	2/12/2010	
Chloroform	BQL	10.0	0.790	10	2/12/2010	
Chloromethane	BQL	10.0	1.46	10	2/12/2010	
2-Chlorotoluene	BQL	10.0	0.990	10	2/12/2010	
4-Chlorotoluene	BQL	10.0	0.800	10	2/12/2010	
Dibromochloromethane	BQL	10.0	0.900	10	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	50.0	12.1	10	2/12/2010	
Dibromomethane	BQL	10.0	1.13	10	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	10.0	1.24	10	2/12/2010	
1,2-Dichlorobenzene	BQL	10.0	1.27	10	2/12/2010	
1,3-Dichlorobenzene	BQL	10.0	0.810	10	2/12/2010	
1,4-Dichlorobenzene	BQL	10.0	0.790	10	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	50.0	6.30	10	2/12/2010	
1,1-Dichloroethane	BQL	10.0	0.740	10	2/12/2010	
1,1-Dichloroethene	BQL	10.0	0.890	10	2/12/2010	
1,2-Dichloroethane	BQL	10.0	0.790	10	2/12/2010	
cis-1,2-Dichloroethene	110	10.0	0.650	10	2/12/2010	
trans-1,2-dichloroethene	BQL	10.0	0.890	10	2/12/2010	
1,2-Dichloropropane	BQL	10.0	0.940	10	2/12/2010	
1,3-Dichloropropane	BQL	10.0	1.27	10	2/12/2010	
2,2-Dichloropropane	BQL	10.0	0.590	10	2/12/2010	
1,1-Dichloropropene	BQL	10.0	0.720	10	2/12/2010	
cis-1,3-Dichloropropene	BQL	10.0	0.760	10	2/12/2010	
trans-1,3-Dichloropropene	BQL	10.0	0.760	10	2/12/2010	
Dichlorodifluoromethane	BQL	50.0	0.940	10	2/12/2010	
Diisopropyl ether (DIPE)	BQL	10.0	0.730	10	2/12/2010	
Ethylbenzene	BQL	10.0	0.770	10	2/12/2010	
Hexachlorobutadiene	BQL	10.0	2.28	10	2/12/2010	
2-Hexanone	BQL	50.0	7.20	10	2/12/2010	
Iodomethane	BQL	10.0	0.420	10	2/12/2010	
Isopropylbenzene	BQL	10.0	0.710	10	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-1D(020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-5A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 14:30
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	10.0	0.480	10	2/12/2010	
Methylene chloride	14.4	50.0	0.980	10	2/12/2010	J
4-Methyl-2-pentanone	BQL	50.0	5.50	10	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	10.0	0.670	10	2/12/2010	
Naphthalene	BQL	10.0	1.33	10	2/12/2010	
n-Propyl benzene	BQL	10.0	0.800	10	2/12/2010	
Styrene	BQL	10.0	0.850	10	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	10.0	0.900	10	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	10.0	1.15	10	2/12/2010	
Tetrachloroethene	BQL	10.0	0.690	10	2/12/2010	
Toluene	BQL	10.0	0.760	10	2/12/2010	
1,2,3-Trichlorobenzene	BQL	10.0	1.90	10	2/12/2010	
1,2,4-Trichlorobenzene	BQL	10.0	1.19	10	2/12/2010	
Trichloroethene	BQL	10.0	0.540	10	2/12/2010	
1,1,1-Trichloroethane	BQL	10.0	0.540	10	2/12/2010	
1,1,2-Trichloroethane	BQL	10.0	1.82	10	2/12/2010	
Trichlorofluoromethane	BQL	10.0	1.11	10	2/12/2010	
1,2,3-Trichloropropane	BQL	10.0	1.20	10	2/12/2010	
1,2,4-Trimethylbenzene	BQL	10.0	0.650	10	2/12/2010	
1,3,5-Trimethylbenzene	BQL	10.0	0.740	10	2/12/2010	
Vinyl chloride	BQL	10.0	1.49	10	2/12/2010	
m-,p-Xylene	BQL	20.0	0.980	10	2/12/2010	
o-Xylene	BQL	10.0	0.650	10	2/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	32.2	107
Toluene-d8	30	29.5	98
4-Bromofluorobenzene	30	28.5	95

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-9D(020510)
Client Project ID: AVX Myrtle Beach, SC
Lab Sample ID: G582-638-6A
Lab Project ID: G582-638

Analyzed By: DVO
Date Collected: 2/5/2010 15:10
Date Received: 2/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	2/12/2010	
Benzene	BQL	800	52.0	800	2/12/2010	
Bromobenzene	BQL	800	44.8	800	2/12/2010	
Bromochloromethane	BQL	800	80.8	800	2/12/2010	
Bromodichloromethane	BQL	800	60.8	800	2/12/2010	
Bromoform	BQL	800	96.0	800	2/12/2010	
Bromomethane	BQL	800	106	800	2/12/2010	
2-Butanone	BQL	20000	435	800	2/12/2010	
n-Butylbenzene	BQL	800	87.2	800	2/12/2010	
sec-Butylbenzene	BQL	800	67.2	800	2/12/2010	
tert-Butylbenzene	BQL	800	40.0	800	2/12/2010	
Carbon disulfide	BQL	800	55.2	800	2/12/2010	
Carbon tetrachloride	BQL	800	69.6	800	2/12/2010	
Chlorobenzene	BQL	800	65.6	800	2/12/2010	
Chloroethane	BQL	800	84.8	800	2/12/2010	
Chloroform	BQL	800	63.2	800	2/12/2010	
Chloromethane	BQL	800	117	800	2/12/2010	
2-Chlorotoluene	BQL	800	79.2	800	2/12/2010	
4-Chlorotoluene	BQL	800	64.0	800	2/12/2010	
Dibromochloromethane	BQL	800	72.0	800	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	2/12/2010	
Dibromomethane	BQL	800	90.4	800	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	2/12/2010	
1,2-Dichlorobenzene	BQL	800	102	800	2/12/2010	
1,3-Dichlorobenzene	BQL	800	64.8	800	2/12/2010	
1,4-Dichlorobenzene	BQL	800	63.2	800	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	2/12/2010	
1,1-Dichloroethane	BQL	800	59.2	800	2/12/2010	
1,1-Dichloroethene	BQL	800	71.2	800	2/12/2010	
1,2-Dichloroethane	BQL	800	63.2	800	2/12/2010	
cis-1,2-Dichloroethene	5520	800	52.0	800	2/12/2010	
trans-1,2-dichloroethene	192	800	71.2	800	2/12/2010	J
1,2-Dichloropropane	BQL	800	75.2	800	2/12/2010	
1,3-Dichloropropane	BQL	800	102	800	2/12/2010	
2,2-Dichloropropane	BQL	800	47.2	800	2/12/2010	
1,1-Dichloropropene	BQL	800	57.6	800	2/12/2010	
cis-1,3-Dichloropropene	BQL	800	60.8	800	2/12/2010	
trans-1,3-Dichloropropene	BQL	800	60.8	800	2/12/2010	
Dichlorodifluoromethane	BQL	4000	75.2	800	2/12/2010	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	2/12/2010	
Ethylbenzene	BQL	800	61.6	800	2/12/2010	
Hexachlorobutadiene	BQL	800	182	800	2/12/2010	
2-Hexanone	BQL	4000	576	800	2/12/2010	
Iodomethane	BQL	800	33.6	800	2/12/2010	
Isopropylbenzene	BQL	800	56.8	800	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-9D(020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-6A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 15:10
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	2/12/2010	
Methylene chloride	BQL	4000	78.4	800	2/12/2010	
4-Methyl-2-pentanone	BQL	4000	440	800	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	2/12/2010	
Naphthalene	BQL	800	106	800	2/12/2010	
n-Propyl benzene	BQL	800	64.0	800	2/12/2010	
Styrene	BQL	800	68.0	800	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	2/12/2010	
Tetrachloroethene	BQL	800	55.2	800	2/12/2010	
Toluene	BQL	800	60.8	800	2/12/2010	
1,2,3-Trichlorobenzene	BQL	800	152	800	2/12/2010	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	2/12/2010	
Trichloroethene	4590	800	43.2	800	2/12/2010	
1,1,1-Trichloroethane	BQL	800	43.2	800	2/12/2010	
1,1,2-Trichloroethane	BQL	800	146	800	2/12/2010	
Trichlorofluoromethane	BQL	800	88.8	800	2/12/2010	
1,2,3-Trichloropropane	BQL	800	96.0	800	2/12/2010	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	2/12/2010	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	2/12/2010	
Vinyl chloride	3280	800	119	800	2/12/2010	
m-,p-Xylene	BQL	1600	78.4	800	2/12/2010	
o-Xylene	BQL	800	52.0	800	2/12/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	33.2	111
Toluene-d8	30	29.9	100
4-Bromofluorobenzene	30	28.2	94

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: DUP (020510)
Client Project ID: AVX Myrtle Beach, SC
Lab Sample ID: G582-638-9A
Lab Project ID: G582-638

Analyzed By: DVO
Date Collected: 2/5/2010 0:00
Date Received: 2/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	2/12/2010	
Benzene	BQL	1000	65.0	1000	2/12/2010	
Bromobenzene	BQL	1000	56.0	1000	2/12/2010	
Bromochloromethane	BQL	1000	101	1000	2/12/2010	
Bromodichloromethane	BQL	1000	76.0	1000	2/12/2010	
Bromoform	BQL	1000	120	1000	2/12/2010	
Bromomethane	BQL	1000	133	1000	2/12/2010	
2-Butanone	BQL	25000	544	1000	2/12/2010	
n-Butylbenzene	BQL	1000	109	1000	2/12/2010	
sec-Butylbenzene	BQL	1000	84.0	1000	2/12/2010	
tert-Butylbenzene	BQL	1000	50.0	1000	2/12/2010	
Carbon disulfide	BQL	1000	69.0	1000	2/12/2010	
Carbon tetrachloride	BQL	1000	87.0	1000	2/12/2010	
Chlorobenzene	BQL	1000	82.0	1000	2/12/2010	
Chloroethane	BQL	1000	106	1000	2/12/2010	
Chloroform	BQL	1000	79.0	1000	2/12/2010	
Chloromethane	BQL	1000	146	1000	2/12/2010	
2-Chlorotoluene	BQL	1000	99.0	1000	2/12/2010	
4-Chlorotoluene	BQL	1000	80.0	1000	2/12/2010	
Dibromochloromethane	BQL	1000	90.0	1000	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	2/12/2010	
Dibromomethane	BQL	1000	113	1000	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	2/12/2010	
1,2-Dichlorobenzene	BQL	1000	127	1000	2/12/2010	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	2/12/2010	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	2/12/2010	
1,1-Dichloroethane	BQL	1000	74.0	1000	2/12/2010	
1,1-Dichloroethene	BQL	1000	89.0	1000	2/12/2010	
1,2-Dichloroethane	BQL	1000	79.0	1000	2/12/2010	
cis-1,2-Dichloroethene	14400	1000	65.0	1000	2/12/2010	
trans-1,2-dichloroethene	320	1000	89.0	1000	2/12/2010	J
1,2-Dichloropropane	BQL	1000	94.0	1000	2/12/2010	
1,3-Dichloropropane	BQL	1000	127	1000	2/12/2010	
2,2-Dichloropropane	BQL	1000	59.0	1000	2/12/2010	
1,1-Dichloropropene	BQL	1000	72.0	1000	2/12/2010	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	2/12/2010	
Dichlorodifluoromethane	BQL	5000	94.0	1000	2/12/2010	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	2/12/2010	
Ethylbenzene	BQL	1000	77.0	1000	2/12/2010	
Hexachlorobutadiene	BQL	1000	228	1000	2/12/2010	
2-Hexanone	BQL	5000	720	1000	2/12/2010	
Iodomethane	BQL	1000	42.0	1000	2/12/2010	
Isopropylbenzene	BQL	1000	71.0	1000	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: DUP (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-9A
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010 0:00
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	2/12/2010	
Methylene chloride	BQL	5000	98.0	1000	2/12/2010	
4-Methyl-2-pentanone	BQL	5000	550	1000	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	2/12/2010	
Naphthalene	BQL	1000	133	1000	2/12/2010	
n-Propyl benzene	BQL	1000	80.0	1000	2/12/2010	
Styrene	BQL	1000	85.0	1000	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	2/12/2010	
Tetrachloroethene	BQL	1000	69.0	1000	2/12/2010	
Toluene	BQL	1000	76.0	1000	2/12/2010	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	2/12/2010	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	2/12/2010	
Trichloroethene	250	1000	54.0	1000	2/12/2010	J
1,1,1-Trichloroethane	BQL	1000	54.0	1000	2/12/2010	
1,1,2-Trichloroethane	BQL	1000	182	1000	2/12/2010	
Trichlorofluoromethane	BQL	1000	111	1000	2/12/2010	
1,2,3-Trichloropropane	BQL	1000	120	1000	2/12/2010	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	2/12/2010	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	2/12/2010	
Vinyl chloride	700	1000	149	1000	2/12/2010	J
m-,p-Xylene	BQL	2000	98.0	1000	2/12/2010	
o-Xylene	BQL	1000	65.0	1000	2/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	31.7	106
Toluene-d8	30	28.7	96
4-Bromofluorobenzene	30	28.3	94

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-10B
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	2/11/2010	
Benzene	BQL	1.00	0.0650	1	2/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	2/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	2/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	2/11/2010	
Bromoform	BQL	1.00	0.120	1	2/11/2010	
Bromomethane	BQL	1.00	0.133	1	2/11/2010	
2-Butanone	BQL	25.0	0.544	1	2/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	2/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	2/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	2/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	2/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	2/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	2/11/2010	
Chloroethane	BQL	1.00	0.106	1	2/11/2010	
Chloroform	BQL	1.00	0.0790	1	2/11/2010	
Chloromethane	BQL	1.00	0.146	1	2/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	2/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	2/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	2/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	2/11/2010	
Dibromomethane	BQL	1.00	0.113	1	2/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	2/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	2/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	2/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	2/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	2/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	2/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	2/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	2/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	2/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	2/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	2/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	2/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	2/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	2/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	2/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	2/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	2/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	2/11/2010	
2-Hexanone	BQL	5.00	0.720	1	2/11/2010	
Iodomethane	BQL	1.00	0.0420	1	2/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	2/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank (020510)
 Client Project ID: AVX Myrtle Beach, SC
 Lab Sample ID: G582-638-10B
 Lab Project ID: G582-638

Analyzed By: DVO
 Date Collected: 2/5/2010
 Date Received: 2/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	2/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	2/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	2/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	2/11/2010	
Naphthalene	BQL	1.00	0.133	1	2/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	2/11/2010	
Styrene	BQL	1.00	0.0850	1	2/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	2/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	2/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	2/11/2010	
Toluene	BQL	1.00	0.0760	1	2/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	2/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	2/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	2/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	2/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	2/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	2/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	2/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	2/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	2/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	2/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	2/11/2010	
o-Xylene	BQL	1.00	0.0650	1	2/11/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.5	95
Toluene-d8	10	9.93	99
4-Bromofluorobenzene	10	9.85	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3021110B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	2/11/2010	
Benzene	BQL	1.00	0.0650	1	2/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	2/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	2/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	2/11/2010	
Bromoform	BQL	1.00	0.120	1	2/11/2010	
Bromomethane	BQL	1.00	0.133	1	2/11/2010	
2-Butanone	BQL	25.0	0.544	1	2/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	2/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	2/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	2/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	2/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	2/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	2/11/2010	
Chloroethane	BQL	1.00	0.106	1	2/11/2010	
Chloroform	BQL	1.00	0.0790	1	2/11/2010	
Chloromethane	BQL	1.00	0.146	1	2/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	2/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	2/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	2/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	2/11/2010	
Dibromomethane	BQL	1.00	0.113	1	2/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	2/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	2/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	2/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	2/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	2/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	2/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	2/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	2/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	2/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	2/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	2/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	2/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	2/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	2/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	2/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	2/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	2/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	2/11/2010	
2-Hexanone	BQL	5.00	0.720	1	2/11/2010	
Iodomethane	BQL	1.00	0.0420	1	2/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	2/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3021110B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	2/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	2/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	2/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	2/11/2010	
Naphthalene	BQL	1.00	0.133	1	2/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	2/11/2010	
Styrene	BQL	1.00	0.0850	1	2/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	2/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	2/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	2/11/2010	
Toluene	BQL	1.00	0.0760	1	2/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	2/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	2/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	2/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	2/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	2/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	2/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	2/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	2/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	2/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	2/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	2/11/2010	
o-Xylene	BQL	1.00	0.0650	1	2/11/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.1	101
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	10.1	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3021110B

Filename: 0211303.D

Date Analyzed: 02/11/10 09:40

LCSD: LCS3021110C

Filename: 0211305.D

Date Analyzed: 02/11/10 10:41

COMPOUND	LCS	LCS	LCS	LCSD	LCSD	LCSD	% RPD	QC LIMITS	
	SPIKE (µg/L)	CONC (µg/L)	% REC #	SPIKE (µg/L)	CONC (µg/L)	% REC #		RPD	REC
acetone	25.0	26.9	108	25.0	26.5	106	1.54	30	23.5-141
acrolein	125	164	131	125	158	127	3.41	30	31.4-182
acrylonitrile	125	122	97.9	125	121	96.6	1.37	30	64.2-140
benzene	5.00	4.91	98.2	5.00	4.94	98.8	0.609	30	76.6-120
bromobenzene	5.00	5.04	101	5.00	4.83	96.6	4.26	30	75.0-122
bromochloromethane	5.00	4.83	96.6	5.00	4.87	97.4	0.825	30	74.8-127
bromodichloromethane	5.00	4.80	96.0	5.00	4.86	97.2	1.24	30	76.4-117
bromoform	5.00	5.09	102	5.00	5.12	102	0.588	30	62.4-127
bromomethane	5.00	4.76	95.2	5.00	4.56	91.2	4.29	30	34.2-166
2-butanone	25.0	29.6	118	25.0	28.9	115	2.53	30	44.9-126
n-butylbenzene	5.00	4.91	98.2	5.00	4.90	98.0	0.204	30	72.0-122
sec-butylbenzene	5.00	4.85	97.0	5.00	4.95	99.0	2.04	30	78.3-116
tert-butylbenzene	5.00	4.76	95.2	5.00	4.78	95.6	0.419	30	53.1-148
Carbon disulfide	5.00	4.86	97.2	5.00	4.90	98.0	0.820	30	69.0-118
carbon tetrachloride	5.00	4.74	94.8	5.00	4.85	97.0	2.29	30	71.7-124
chlorobenzene	5.00	4.89	97.8	5.00	4.73	94.6	3.33	30	75.5-116
chloroethane	5.00	4.83	96.6	5.00	4.78	95.6	1.04	30	78.2-138
2-chloroethyl vinyl ether	125	126	101	125	123	98.7	2.39	30	5.57-235
chloroform	5.00	4.83	96.6	5.00	4.88	97.6	1.03	30	80.6-117
chloromethane	5.00	4.86	97.2	5.00	4.84	96.8	0.412	30	72.6-127
2-chlorotoluene	5.00	4.86	97.2	5.00	4.75	95.0	2.29	30	81.4-117
4-chlorotoluene	5.00	5.02	100	5.00	4.95	99.0	1.40	30	82.1-116
dibromochloromethane	5.00	5.14	103	5.00	4.97	99.4	3.36	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	26.7	107	25.0	26.2	105	2.12	30	58.0-133
1,2-dibromoethane	5.00	5.01	100	5.00	4.98	99.6	0.601	30	75.5-118
dibromomethane	5.00	5.08	102	5.00	4.94	98.8	2.79	30	77.3-124
1,2-dichlorobenzene	5.00	4.73	94.6	5.00	4.86	97.2	2.71	30	76.3-115
1,3-dichlorobenzene	5.00	4.70	94.0	5.00	4.83	96.6	2.73	30	79.1-114
1,4-dichlorobenzene	5.00	4.67	93.4	5.00	4.70	94.0	0.640	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	25.1	100	25.0	24.9	99.5	0.960	30	52.3-130
dichlorodifluoromethane	5.00	4.67	93.4	5.00	4.67	93.4	0.00	30	69.8-134
1,1-dichloroethane	5.00	4.74	94.8	5.00	4.87	97.4	2.70	30	78.0-120
1,2-dichloroethane	5.00	4.88	97.6	5.00	4.91	98.2	0.613	30	72.8-126
1,1-dichloroethene	5.00	4.78	95.6	5.00	4.90	98.0	2.48	30	74.6-121
cis-1,2-dichloroethene	5.00	4.87	97.4	5.00	5.05	101	3.63	30	78.0-121
trans-1,2-dichloroethene	5.00	4.74	94.8	5.00	4.83	96.6	1.88	30	60.7-144
1,2-dichloropropane	5.00	4.74	94.8	5.00	4.84	96.8	2.09	30	75.8-119
1,3-dichloropropane	5.00	4.77	95.4	5.00	4.86	97.2	1.87	30	78.5-113
2,2-dichloropropane	5.00	5.09	102	5.00	5.13	103	0.783	30	75.6-130
1,1-dichloropropene	5.00	4.84	96.8	5.00	5.08	102	4.84	30	79.7-117
cis-1,3-dichloropropene	5.00	4.96	99.2	5.00	4.76	95.2	4.12	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3021110B

Filename: 0211303.D

Date Analyzed: 02/11/10 09:40

LCSD: LCS3021110C

Filename: 0211305.D

Date Analyzed: 02/11/10 10:41

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
trans-1,3-dichloropropene	5.00	4.92	98.4	5.00	4.93	98.6	0.203	30	79.0-113
Diisopropyl ether	5.00	4.88	97.6	5.00	4.88	97.6	0.00	30	71.8-115
ethylbenzene	5.00	4.81	96.2	5.00	4.91	98.2	2.06	30	80.5-115
hexachlorobutadiene	5.00	4.84	96.8	5.00	5.32	106	9.45	30	63.3-139
2-hexanone	25.0	29.2	117	25.0	28.6	114	1.97	30	46.8-123
Iodomethane	5.00	4.52	90.4	5.00	4.41	88.2	2.46	30	29.3-156
isopropylbenzene	5.00	4.91	98.2	5.00	4.97	99.4	1.21	30	81.6-114
4-isopropyltoluene	5.00	4.98	99.6	5.00	4.94	98.8	0.806	30	78.4-119
Methyl-tert-butyl ether	5.00	4.79	95.8	5.00	4.82	96.4	0.624	30	76.0-114
methylene chloride	5.00	4.66	93.2	5.00	4.68	93.6	0.428	30	72.9-120
4-methyl-2-pentanone	25.0	24.8	99.0	25.0	23.7	94.9	4.29	30	56.2-124
naphthalene	5.00	5.34	107	5.00	5.52	110	3.31	30	24.8-182
n-propyl benzene	5.00	4.84	96.8	5.00	4.91	98.2	1.44	30	79.0-116
styrene	5.00	6.74	135*	5.00	6.97	139*	3.36	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.80	96.0	5.00	4.93	98.6	2.67	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.93	98.6	5.00	5.00	100	1.41	30	69.7-119
tetrachloroethene	5.00	4.73	94.6	5.00	4.74	94.8	0.211	30	55.3-144
toluene	5.00	4.92	98.4	5.00	4.92	98.4	0.00	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.31	106	5.00	5.41	108	1.86	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.08	102	5.00	5.08	102	0.00	30	47.9-150
1,1,1-trichloroethane	5.00	4.72	94.4	5.00	4.82	96.4	2.10	30	78.8-120
1,1,2-trichloroethane	5.00	5.10	102	5.00	4.81	96.2	5.85	30	73.6-117
trichloroethene	5.00	4.77	95.4	5.00	4.85	97.0	1.66	30	80.1-116
trichlorofluoromethane	5.00	4.76	95.2	5.00	4.85	97.0	1.87	30	80.5-130
1,2,3-trichloropropane	5.00	5.08	102	5.00	4.87	97.4	4.22	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.77	95.4	5.00	4.72	94.4	1.05	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.89	97.8	5.00	4.98	99.6	1.82	30	79.4-114
Vinyl acetate	12.5	11.8	94.2	12.5	11.7	93.9	0.340	30	60.7-127
vinyl chloride	5.00	4.78	95.6	5.00	4.76	95.2	0.419	30	77.5-126
m/p-xylene	10.0	9.85	98.5	10.0	9.94	99.4	0.910	30	82.9-112
o-xylene	5.00	4.82	96.4	5.00	4.91	98.2	1.85	30	81.3-113

System Monitoring Compound Results

		LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS	
		(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC	
460-00-4	4-Bromofluorobenzene	10	10.35	104	10	10.18	102	84.7-115	
17060-07-0	1,2-Dichloroethane-d4	10	10.34	103	10	10.23	102	63.5-140	
2037-26-5	Toluene-d8	10	10.01	100	10	10.04	100	81.8-117	

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

LCS Spike Recovery: 1 failure(s) out of 72. LCSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVD

Reviewed by: 

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD3

EPA Sample No.: Amt. Filenames:

Analysis Dates:

Batch: 3021110

Sample g582-638-6a 5 mL 0211316.D

2010-02-11 16:36:00

Dilution: 800

MS g582-638-7a 5 mL 0211317.D

2010-02-11 17:06:00

Matrix: Water

MSD g582-638-8a 5 mL 0211318.D

2010-02-11 17:37:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	11800	59.2	20000	11800	59.1	0.135	30	17.7-85.2
acrolein	BQL	100000	155000	155	100000	153000	153	1.36	30	0.00-424
acrylonitrile	BQL	100000	94600	94.6	100000	94200	94.2	0.432	30	85.0-175
benzene	BQL	4000	4040	101	4000	3980	99.4	1.60	30	61.6-135
bromobenzene	BQL	4000	3610	90.2	4000	3930	98.2	8.49	30	65.1-125
bromochloromethane	BQL	4000	3820	95.6	4000	4030	101	5.30	30	75.5-126
bromodichloromethane	BQL	4000	3840	96.0	4000	3810	95.2	0.837	30	74.3-123
bromoform	BQL	4000	3810	95.2	4000	3910	97.8	2.69	30	52.3-122
bromomethane	BQL	4000	2540	63.4	4000	2650	66.2	4.32	30	10.0-284
2-butanone	BQL	20000	17900	89.6	20000	17700	88.5	1.17	30	36.1-107
n-butylbenzene	BQL	4000	3830	95.8	4000	3870	96.8	1.04	30	70.2-124
sec-butylbenzene	BQL	4000	3820	95.4	4000	3840	96.0	0.627	30	62.0-133
tert-butylbenzene	BQL	4000	3220	80.4	4000	3300	82.4	2.46	30	73.5-121
Carbon disulfide	BQL	4000	3940	98.6	4000	3990	99.8	1.21	30	68.8-129
carbon tetrachloride	BQL	4000	3900	97.4	4000	3860	96.6	0.825	30	71.8-122
chlorobenzene	BQL	4000	3730	93.2	4000	3750	93.8	0.642	30	77.2-118
chloroethane	BQL	4000	3520	88.0	4000	3680	92.0	4.44	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	87300	873*	10000	86200	862*	1.36	30	16.7-283
chloroform	BQL	4000	3910	97.8	4000	3940	98.6	0.815	30	74.0-128
chloromethane	BQL	4000	4220	105	4000	4110	103	2.50	30	72.0-138
2-chlorotoluene	BQL	4000	3800	95.0	4000	3900	97.6	2.70	30	79.3-118
4-chlorotoluene	BQL	4000	3910	97.8	4000	3890	97.2	0.615	30	76.8-120
dibromochloromethane	BQL	4000	3820	95.6	4000	3710	92.8	2.97	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	19800	99.1	20000	20600	103	3.80	30	20.2-171
1,2-dibromoethane	BQL	4000	3980	99.4	4000	3950	98.8	0.605	30	78.5-123
dibromomethane	BQL	4000	4180	105	4000	3990	99.8	4.70	30	71.3-137
1,2-dichlorobenzene	BQL	4000	3660	91.6	4000	3680	92.0	0.436	30	75.1-120
1,3-dichlorobenzene	BQL	4000	3700	92.6	4000	3700	92.4	0.216	30	73.1-121
1,4-dichlorobenzene	BQL	4000	3730	93.2	4000	3680	92.0	1.30	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	16900	84.6	20000	18100	90.4	6.67	30	25.7-149
dichlorodifluoromethane	BQL	4000	3660	91.4	4000	3630	90.8	0.659	30	41.7-166
1,1-dichloroethane	BQL	4000	3840	96.0	4000	3890	97.2	1.24	30	75.6-128
1,2-dichloroethane	BQL	4000	3960	99.0	4000	3990	99.8	0.805	30	71.1-127
1,1-dichloroethene	BQL	4000	3980	99.4	4000	3980	99.4	0.00	30	64.4-130
cis-1,2-dichloroethene	5110	4000	9490	109	4000	9470	109	0.366	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	4070	97.0	4000	3980	94.8	2.29	30	74.6-124
1,2-dichloropropane	BQL	4000	3860	96.6	4000	3860	96.4	0.207	30	76.5-129
1,3-dichloropropane	BQL	4000	3860	96.4	4000	3810	95.2	1.25	30	79.1-121
2,2-dichloropropane	BQL	4000	3810	95.2	4000	3850	96.2	1.04	30	31.5-157
1,1-dichloropropene	BQL	4000	4110	103	4000	4010	100	2.56	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	3780	94.6	4000	3780	94.4	0.212	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD3

Lab Code: NC00919

Batch: 3021110

EPA Sample No.: g582-638-6a, g582-638-7a, g582-638-8a

Dilution: 800

FileNames: 0211316.D, 0211317.D, 0211318.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	3770	90.4	4000	3780	90.8	0.442	30	44.7-144
Diisopropyl ether	BQL	4000	4030	101	4000	3980	99.4	1.40	30	79.4-122
ethylbenzene	BQL	4000	3840	96.0	4000	3820	95.4	0.627	30	73.8-126
hexachlorobutadiene	BQL	4000	3830	95.8	4000	3860	96.6	0.832	30	51.8-134
2-hexanone	BQL	20000	17800	88.8	20000	17900	89.5	0.763	30	41.6-111
Iodomethane	BQL	4000	3380	84.6	4000	3310	82.8	2.15	30	40.6-126
isopropylbenzene	BQL	4000	3900	97.6	4000	3880	97.0	0.617	30	74.3-123
4-isopropyltoluene	BQL	4000	3880	97.0	4000	3910	97.8	0.821	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	4000	100	4000	3900	97.6	2.43	30	66.5-136
methylene chloride	4620	4000	7380	69.2	4000	6410	44.8*	42.8*	30	48.6-155
4-methyl-2-pentanone	BQL	20000	19600	98.0	20000	19400	97.0	1.03	30	6.88-166
naphthalene	BQL	4000	3640	91.0	4000	4100	103	12.0	30	55.1-140
n-propyl benzene	BQL	4000	3810	95.2	4000	3940	98.4	3.30	30	71.6-128
styrene	BQL	4000	5440	136*	4000	5330	133*	2.08	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	3780	94.6	4000	3660	91.4	3.44	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	3790	94.8	4000	3910	97.8	3.12	30	75.7-136
tetrachloroethene	BQL	4000	3570	89.2	4000	3650	91.2	2.22	30	45.8-153
toluene	BQL	4000	4020	100	4000	3980	99.4	1.00	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3750	93.8	4000	4020	100	6.80	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3710	92.8	4000	3980	99.4	6.87	30	60.6-125
1,1,1-trichloroethane	BQL	4000	3820	95.4	4000	3820	95.6	0.209	30	78.4-121
1,1,2-trichloroethane	BQL	4000	3800	95.0	4000	3820	95.4	0.420	30	64.8-128
trichloroethene	4300	4000	8240	98.6	4000	8140	96.2	2.46	30	84.9-136
trichlorofluoromethane	BQL	4000	3560	89.0	4000	3660	91.4	2.66	30	76.8-132
1,2,3-trichloropropane	3750	4000	3740	-0.200*	4000	3720	-0.800*	120*	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	3630	90.8	4000	3730	93.2	2.61	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	3810	95.2	4000	3870	96.8	1.67	30	67.7-132
Vinyl acetate	BQL	10000	9750	97.5	10000	9530	95.3	2.32	30	0.00-355
vinyl chloride	2830	4000	6530	92.4	4000	6370	88.4	4.42	30	68.1-137
m/p-xylene	BQL	8000	7690	96.1	8000	7690	96.1	0.00	30	79.8-118
o-xylene	BQL	4000	3900	97.6	4000	3870	96.8	0.823	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	10.24	102	10	10.11	101	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.58	106	10	10.36	104	63.5-140
2037-26-5	Toluene-d8	10	10.19	102	10	10.32	103	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 4 failure(s) out of 72.

RPD: 2 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8021210B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	2/12/2010	
Benzene	BQL	1.00	0.0650	1	2/12/2010	
Bromobenzene	BQL	1.00	0.0560	1	2/12/2010	
Bromochloromethane	BQL	1.00	0.101	1	2/12/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	2/12/2010	
Bromoform	BQL	1.00	0.120	1	2/12/2010	
Bromomethane	BQL	1.00	0.133	1	2/12/2010	
2-Butanone	BQL	25.0	0.544	1	2/12/2010	
n-Butylbenzene	BQL	1.00	0.109	1	2/12/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	2/12/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	2/12/2010	
Carbon disulfide	BQL	1.00	0.0690	1	2/12/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	2/12/2010	
Chlorobenzene	BQL	1.00	0.0820	1	2/12/2010	
Chloroethane	BQL	1.00	0.106	1	2/12/2010	
Chloroform	BQL	1.00	0.0790	1	2/12/2010	
Chloromethane	BQL	1.00	0.146	1	2/12/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	2/12/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	2/12/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	2/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	2/12/2010	
Dibromomethane	BQL	1.00	0.113	1	2/12/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	2/12/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	2/12/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	2/12/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	2/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	2/12/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	2/12/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	2/12/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	2/12/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	2/12/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	2/12/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	2/12/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	2/12/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	2/12/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	2/12/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/12/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	2/12/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	2/12/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	2/12/2010	
Ethylbenzene	BQL	1.00	0.0770	1	2/12/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	2/12/2010	
2-Hexanone	BQL	5.00	0.720	1	2/12/2010	
Iodomethane	BQL	1.00	0.0420	1	2/12/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	2/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8021210B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL


Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	2/12/2010	
Methylene chloride	BQL	5.00	0.0980	1	2/12/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	2/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	2/12/2010	
Naphthalene	BQL	1.00	0.133	1	2/12/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	2/12/2010	
Styrene	BQL	1.00	0.0850	1	2/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	2/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	2/12/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	2/12/2010	
Toluene	BQL	1.00	0.0760	1	2/12/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	2/12/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	2/12/2010	
Trichloroethene	BQL	1.00	0.0540	1	2/12/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	2/12/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	2/12/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	2/12/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	2/12/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	2/12/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	2/12/2010	
Vinyl chloride	BQL	1.00	0.149	1	2/12/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	2/12/2010	
o-Xylene	BQL	1.00	0.0650	1	2/12/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		30	32.1	107		
Toluene-d8		30	29.5	98		
4-Bromofluorobenzene		30	29.1	97		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8021210A

Filename: 0212803.D

Date Analyzed: 02/12/10 13:47

LCSD: LCS8021210B

Filename: 0212804.D

Date Analyzed: 02/12/10 14:13

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
acetone	25.0	27.2	109	25.0	28.2	113	3.72	30	23.5-141
acrolein	125	127	102	125	134	107	5.31	30	31.4-182
acrylonitrile	125	124	98.9	125	129	103	4.33	30	64.2-140
benzene	5.00	5.08	102	5.00	5.10	102	0.00	30	76.6-120
bromobenzene	5.00	5.09	102	5.00	5.18	104	1.75	30	75.0-122
bromochloromethane	5.00	5.17	103	5.00	4.93	98.6	4.75	30	74.8-127
bromodichloromethane	5.00	4.82	96.4	5.00	5.21	104	7.78	30	76.4-117
bromoform	5.00	5.77	115	5.00	5.64	113	2.28	30	62.4-127
bromomethane	5.00	5.97	119	5.00	5.86	117	1.86	30	34.2-166
2-butanone	25.0	26.9	108	25.0	27.6	110	2.53	30	44.9-126
n-butylbenzene	5.00	5.13	103	5.00	5.14	103	0.195	30	72.0-122
sec-butylbenzene	5.00	5.06	101	5.00	5.20	104	2.73	30	78.3-116
tert-butylbenzene	5.00	4.93	98.6	5.00	5.10	102	3.39	30	53.1-148
Carbon disulfide	5.00	5.15	103	5.00	4.94	98.8	4.16	30	69.0-118
carbon tetrachloride	5.00	5.63	113	5.00	5.47	109	2.88	30	71.7-124
chlorobenzene	5.00	4.77	95.4	5.00	4.96	99.2	3.90	30	75.5-116
chloroethane	5.00	5.26	105	5.00	5.72	114	8.38	30	78.2-138
2-chloroethyl vinyl ether	125	126	101	125	132	106	4.82	30	5.57-235
chloroform	5.00	5.22	104	5.00	5.22	104	0.00	30	80.6-117
chloromethane	5.00	5.27	105	5.00	5.39	108	2.25	30	72.6-127
2-chlorotoluene	5.00	5.00	100	5.00	5.19	104	3.73	30	81.4-117
4-chlorotoluene	5.00	4.84	96.8	5.00	5.13	103	5.82	30	82.1-116
dibromochloromethane	5.00	5.22	104	5.00	5.42	108	3.76	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	27.5	110	25.0	27.4	110	0.546	30	58.0-133
1,2-dibromoethane	5.00	4.99	99.8	5.00	5.27	105	5.46	30	75.5-118
dibromomethane	5.00	5.00	100	5.00	4.92	98.4	1.61	30	77.3-124
1,2-dichlorobenzene	5.00	4.84	96.8	5.00	5.08	102	4.84	30	76.3-115
1,3-dichlorobenzene	5.00	4.72	94.4	5.00	4.98	99.6	5.36	30	79.1-114
1,4-dichlorobenzene	5.00	4.75	95.0	5.00	4.95	99.0	4.12	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	26.7	107	25.0	27.2	109	2.04	30	52.3-130
dichlorodifluoromethane	5.00	5.20	104	5.00	5.52	110	5.97	30	69.8-134
1,1-dichloroethane	5.00	4.93	98.6	5.00	5.10	102	3.39	30	78.0-120
1,2-dichloroethane	5.00	5.02	100	5.00	5.20	104	3.52	30	72.8-126
1,1-dichloroethene	5.00	5.26	105	5.00	4.95	99.0	5.88	30	74.6-121
cis-1,2-dichloroethene	5.00	4.03	80.6	5.00	4.17	83.4	3.41	30	78.0-121
trans-1,2-dichloroethene	5.00	4.98	99.6	5.00	4.93	98.6	1.01	30	60.7-144
1,2-dichloropropane	5.00	4.79	95.8	5.00	5.00	100	4.29	30	75.8-119
1,3-dichloropropane	5.00	5.11	102	5.00	5.25	105	2.70	30	78.5-113
2,2-dichloropropane	5.00	5.67	113	5.00	5.73	114	1.05	30	75.6-130
1,1-dichloropropene	5.00	5.08	102	5.00	5.02	100	1.19	30	79.7-117
cis-1,3-dichloropropene	5.00	5.11	102	5.00	5.08	102	0.589	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8021210A

Filename: 0212803.D

Date Analyzed: 02/12/10 13:47

LCSD: LCS8021210B

Filename: 0212804.D

Date Analyzed: 02/12/10 14:13

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	RPD	QC LIMITS	
								RPD	REC
trans-1,3-dichloropropene	5.00	5.11	102	5.00	5.18	104	1.36	30	79.0-113
Diisopropyl ether	5.00	4.92	98.4	5.00	5.10	102	3.59	30	71.8-115
ethylbenzene	5.00	4.86	97.2	5.00	5.09	102	4.62	30	80.5-115
hexachlorobutadiene	5.00	5.47	109	5.00	5.45	109	0.366	30	63.3-139
2-hexanone	25.0	26.3	105	25.0	28.2	113	6.83	30	46.8-123
Iodomethane	5.00	7.13	143	5.00	7.16	143	0.420	30	29.3-156
isopropylbenzene	5.00	4.92	98.4	5.00	5.17	103	4.96	30	81.6-114
4-isopropyltoluene	5.00	5.14	103	5.00	5.26	105	2.31	30	78.4-119
Methyl-tert-butyl ether	5.00	4.99	99.8	5.00	5.00	100	0.200	30	76.0-114
methylene chloride	5.00	5.08	102	5.00	4.98	99.6	1.99	30	72.9-120
4-methyl-2-pentanone	25.0	25.4	102	25.0	25.9	104	2.03	30	56.2-124
naphthalene	5.00	5.06	101	5.00	4.68	93.6	7.80	30	24.8-182
n-propyl benzene	5.00	4.95	99.0	5.00	5.12	102	3.38	30	79.0-116
styrene	5.00	7.12	142*	5.00	7.60	152*	6.52	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.45	109	5.00	5.54	111	1.64	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.91	98.2	5.00	5.38	108	9.14	30	69.7-119
tetrachloroethene	5.00	5.01	100	5.00	5.14	103	2.56	30	55.3-144
toluene	5.00	4.93	98.6	5.00	5.08	102	3.39	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.42	108	5.00	5.29	106	2.43	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.00	100	5.00	5.05	101	0.995	30	47.9-150
1,1,1-trichloroethane	5.00	5.13	103	5.00	5.07	101	1.18	30	78.8-120
1,1,2-trichloroethane	5.00	5.20	104	5.00	5.28	106	1.53	30	73.6-117
trichloroethene	5.00	5.01	100	5.00	5.00	100	0.00	30	80.1-116
trichlorofluoromethane	5.00	4.83	96.6	5.00	5.02	100	3.86	30	80.5-130
1,2,3-trichloropropane	5.00	4.97	99.4	5.00	5.21	104	4.72	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.83	96.6	5.00	5.03	101	4.06	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.99	99.8	5.00	5.27	105	5.46	30	79.4-114
Vinyl acetate	12.5	10.6	84.5	12.5	10.4	83.5	1.14	30	60.7-127
vinyl chloride	5.00	5.07	101	5.00	5.33	107	5.00	30	77.5-126
m/p-xylene	10.0	9.80	98.0	10.0	10.3	103	5.17	30	82.9-112
o-xylene	5.00	4.86	97.2	5.00	5.20	104	6.76	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	QC LIMITS REC
460-00-4 4-Bromofluorobenzene	30	30.57	102	30	30.66	102	84.7-115
17060-07-0 1,2-Dichloroethane-d4	30	30.05	100	30	30.04	100	63.5-140
2037-26-5 Toluene-d8	30	30.26	101	30	29.87	99.6	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

LCS Spike Recovery: 1 failure(s) out of 72. LCSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVO

Reviewed by: 

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD8

EPA Sample No.: Amt.

FileNames:

Analysis Dates:

Batch: 8021210

Sample g582-638-6a

5 mL

0212819.D

2010-02-12 20:36:00

Dilution: 800

MS g582-638-7a

5 mL

0212820.D

2010-02-12 21:01:00

Matrix: Water

MSD g582-638-8a

5 mL

0212821.D

2010-02-12 21:27:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	17900	89.3*	20000	18100	90.7*	1.56	30	17.7-85.2
acrolein	BQL	100000	106000	106	100000	112000	112	5.39	30	0.00-424
acrylonitrile	BQL	100000	104000	104	100000	107000	107	2.88	30	85.0-175
benzene	BQL	4000	4100	103	4000	4360	109	6.05	30	61.6-135
bromobenzene	BQL	4000	4080	102	4000	4100	103	0.586	30	65.1-125
bromochloromethane	BQL	4000	4080	102	4000	4340	108	6.08	30	75.5-126
bromodichloromethane	BQL	4000	3930	98.2	4000	4150	104	5.54	30	74.3-123
bromoform	BQL	4000	3980	99.4	4000	3840	96.0	3.48	30	52.3-122
bromomethane	BQL	4000	3650	91.2	4000	4150	104	12.9	30	10.0-284
2-butanone	BQL	20000	19900	99.7	20000	21100	105	5.50	30	36.1-107
n-butylbenzene	BQL	4000	3780	94.6	4000	3920	98.0	3.53	30	70.2-124
sec-butylbenzene	BQL	4000	3900	97.6	4000	4000	100	2.43	30	62.0-133
tert-butylbenzene	BQL	4000	3780	94.4	4000	3910	97.8	3.54	30	73.5-121
Carbon disulfide	BQL	4000	4030	101	4000	4190	105	3.89	30	68.8-129
carbon tetrachloride	BQL	4000	4020	101	4000	4140	104	2.94	30	71.8-122
chlorobenzene	BQL	4000	3850	96.2	4000	3960	99.0	2.87	30	77.2-118
chloroethane	BQL	4000	4620	115	4000	4700	118	1.89	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	101000	1010*	10000	102000	1020*	0.718	30	16.7-283
chloroform	BQL	4000	4360	109	4000	4500	112	3.07	30	74.0-128
chloromethane	BQL	4000	4480	112	4000	4630	116	3.34	30	72.0-138
2-chlorotoluene	BQL	4000	3930	98.2	4000	4140	104	5.35	30	79.3-118
4-chlorotoluene	BQL	4000	3890	97.2	4000	3930	98.2	1.02	30	76.8-120
dibromochloromethane	BQL	4000	3820	95.4	4000	3890	97.2	1.87	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	18200	90.8	20000	18600	93.0	2.31	30	20.2-171
1,2-dibromoethane	BQL	4000	4210	105	4000	4180	105	0.572	30	78.5-123
dibromomethane	BQL	4000	4170	104	4000	4300	108	3.21	30	71.3-137
1,2-dichlorobenzene	BQL	4000	3870	96.8	4000	3980	99.4	2.65	30	75.1-120
1,3-dichlorobenzene	BQL	4000	3740	93.6	4000	3930	98.2	4.80	30	73.1-121
1,4-dichlorobenzene	BQL	4000	3690	92.2	4000	3870	96.8	4.87	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	19300	96.6	20000	19800	99.2	2.66	30	25.7-149
dichlorodifluoromethane	BQL	4000	4470	112	4000	4590	115	2.65	30	41.7-166
1,1-dichloroethane	BQL	4000	4240	106	4000	4400	110	3.70	30	75.6-128
1,2-dichloroethane	BQL	4000	4340	108	4000	4430	111	2.19	30	71.1-127
1,1-dichloroethene	BQL	4000	4300	107	4000	4350	109	1.30	30	64.4-130
cis-1,2-dichloroethene	5520	4000	8610	77.2	4000	8730	80.2	3.81	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	4210	100	4000	4440	106	5.61	30	74.6-124
1,2-dichloropropane	BQL	4000	4030	101	4000	4210	105	4.27	30	76.5-129
1,3-dichloropropane	BQL	4000	4090	102	4000	4220	105	3.08	30	79.1-121
2,2-dichloropropane	BQL	4000	4050	101	4000	4390	110	8.15	30	31.5-157
1,1-dichloropropene	BQL	4000	4010	100	4000	4270	107	6.38	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	3900	97.6	4000	4040	101	3.42	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD8

Lab Code: NC00919

Batch: 8021210

EPA Sample No.: g582-638-6a, g582-638-7a, g582-638-8a

Dilution: 800

FileNames: 0212819.D, 0212820.D, 0212821.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	3700	92.4	4000	4000	100	7.90	30	44.7-144
Diisopropyl ether	BQL	4000	4090	102	4000	4230	106	3.46	30	79.4-122
ethylbenzene	BQL	4000	3780	94.4	4000	4060	102	7.35	30	73.8-126
hexachlorobutadiene	BQL	4000	3780	94.6	4000	4080	102	7.53	30	51.8-134
2-hexanone	BQL	20000	20200	101	20000	20000	99.8	1.16	30	41.6-111
Iodomethane	BQL	4000	5010	125	4000	5490	137*	9.15	30	40.6-126
isopropylbenzene	BQL	4000	3860	96.4	4000	3980	99.6	3.26	30	74.3-123
4-isopropyltoluene	BQL	4000	3940	98.6	4000	4100	102	3.78	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	4100	103	4000	4140	103	0.777	30	66.5-136
methylene chloride	BQL	4000	4080	102	4000	4360	109	6.64	30	48.6-155
4-methyl-2-pentanone	BQL	20000	20700	103	20000	20900	104	1.15	30	6.88-166
naphthalene	BQL	4000	3210	80.2	4000	3360	84.0	4.63	30	55.1-140
n-propyl benzene	BQL	4000	3950	98.8	4000	3970	99.2	0.404	30	71.6-128
styrene	BQL	4000	5540	138*	4000	5770	144*	3.96	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	3890	97.2	4000	4120	103	5.79	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	4080	102	4000	3970	99.2	2.78	30	75.7-136
tetrachloroethene	BQL	4000	4030	101	4000	4050	101	0.396	30	45.8-153
toluene	BQL	4000	4130	103	4000	4240	106	2.68	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3700	92.4	4000	3770	94.2	1.93	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3440	86.0	4000	3760	94.0	8.89	30	60.6-125
1,1,1-trichloroethane	BQL	4000	4100	103	4000	4310	108	4.94	30	78.4-121
1,1,2-trichloroethane	BQL	4000	4340	108	4000	4370	109	0.735	30	64.8-128
trichloroethene	4590	4000	8900	108	4000	9220	116	7.17	30	84.9-136
trichlorofluoromethane	BQL	4000	4100	102	4000	4150	104	1.36	30	76.8-132
1,2,3-trichloropropane	BQL	4000	4220	105	4000	4270	107	1.32	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	3850	96.2	4000	3900	97.6	1.44	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	4000	100	4000	4100	102	2.37	30	67.7-132
Vinyl acetate	BQL	10000	8320	83.2	10000	8640	86.4	3.77	30	0.00-355
vinyl chloride	3280	4000	7480	105	4000	7790	113	7.16	30	68.1-137
m/p-xylene	BQL	8000	7830	97.9	8000	8220	103	4.88	30	79.8-118
o-xylene	BQL	4000	3800	95.0	4000	3940	98.6	3.72	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/kg)	MS CONC (µg/kg)	MS % REC #	MSD SPIKE (µg/kg)	MSD CONC (µg/kg)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	30	30.5	102	30	29.71	99.0	84.7-115
17060-07-0	1,2-Dichloroethane-d4	30	32.18	107	30	32.14	107	63.5-140
2037-26-5	Toluene-d8	30	31.38	105	30	31.39	105	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 4 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: OVD

Reviewed by: 



CHAIN OF CUSTODY RECORD SGS North America Inc.

- Locations Nationwide
- Alaska
 - New Jersey
 - North Carolina
 - Maryland
 - New York
 - Ohio

www.us.sgs.com

096340

1 CLIENT: **ARCADIS** PHONE NO.: **724 742-9180** x 518

CONTACT: **Mark Hawish** SITE/PWSID#: **P0007393.0000.00006**

PROJECT: **AVX Myrtle Beach, SC** FAX NO.: **724 742-9189**

REPORTS TO: **Mark Hawish** QUOTE #: _____ P.O. NUMBER: _____

INVOICE TO: **Mark Hawish**

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No	SAMPLE TYPE	Preservatives Used	Analysis Required	CONTAINERS	REMARKS
	IW-2D (020510)	2/5/10	0955	Water	1	G	HCl H ₂ SO ₄	Method 846 Method 9010	1	
	IW-4D (020510)	2/5/10	1010	Water	1	G			1	
	P-3D (020510)	2/5/10	1135	Water	3	G			3	
	OW-7D (020510)	2/5/10	1215	Water	1	G			1	
	OW-8D (020510)	2/5/10	1230	Water	4	G			4	
	P-2D (020510)	2/5/10	1310	Water	3	G			3	
	OW-10D (020510)	2/5/10	1325	Water	4	G			4	
	P-1D (020510)	2/5/10	1430	Water	4	G			4	
	OW-9D (020510)	2/5/10	1510	Water	4	G			4	
	OW-9D MS (020510)	2/5/10	1510	Water	3	G			3	

3

SGS Reference: **G582-638**

Shipping Carrier: **Fed Ex**

Shipping Ticket No: _____

Special Deliverable Requirements: _____

Special Instructions: **ONLY ANALYZING VOC NO TDC 2/18 bac per Pick Out**

Requested Turnaround Time: _____

4

Samples Received Cold? (Circle) YES NO

Temperature °C: **1.5**

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

5

Collected/Relinquished By: (1) **James E. Cooper** Received By: _____

Relinquished By: (2) _____ Received By: _____

Relinquished By: (3) _____ Received By: _____

Relinquished By: (4) _____ Received By: **James E. Cooper**

Date: 2/5/10 Time: 1700

Date: _____ Time: _____

Date: _____ Time: _____

Date: 2/6/10 Time: 1020

RUSH STD

Date Needed: _____



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 12
Lab Proj #: P1002171
Report Date: 02/22/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 13

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1002171-01	P-1D
P1002171-02	P-2D
P1002171-03	P-3D
P1002171-04	IW-2D
P1002171-05	IW-4D
P1002171-06	OW-10D
P1002171-07	OW-9D
P1002171-08	OW-8D
P1002171-09	OW-7D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 2-22-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-1D	Water	P1002171-01	16 Feb. 10	12:35	17 Feb. 10	11:05	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		13.0	5.0	mg/L	9060	2/19/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-2D	Water	P1002171-02	16 Feb. 10 12:52		17 Feb. 10 11:05		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		3600.0	500.0	mg/L	9060	2/19/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-3D	Water	P1002171-03	16 Feb. 10 13:20		17 Feb. 10 11:05		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		9.6	5.0	mg/L	9060	2/19/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
IW-2D	Water	P1002171-04	16 Feb. 10	13:35	17 Feb. 10	11:05	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		2600.0	500.0	mg/L	9060	2/19/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-4D	Water	P1002171-05	16 Feb. 10 13:43	17 Feb. 10 11:05			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7800.0	1000.0	mg/L	9060	2/20/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-10D	Water	P1002171-06	16 Feb. 10 13:47		17 Feb. 10 11:05		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5.1	5.0	mg/L	9060	2/20/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
OW-9D	Water	P1002171-07	16 Feb. 10 13:54	17 Feb. 10 11:05

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		70.0	10.0	mg/L	9060	2/20/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P1002171-08	16 Feb. 10	14:00	17 Feb. 10	11:05	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		380.0	50.0	mg/L	9060	2/20/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P1002171-09	16 Feb. 10 14:06		17 Feb. 10 11:05		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		130.0	25.0	mg/L	9060	2/20/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100220001-MB

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	1.0	mg/L		5.0		- NA

M100220001-LCS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0	mg/L	36.00		103.00	70 - 130

P1002171-01A-DUP

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	13.0	mg/L				- NA	0.00	0 - 20

P1002171-01A-MS

	<u>Result</u>		<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	62.0	mg/L	50.00		98.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 12
 Lab Proj #: P1002171
 Report Date: 02/22/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100221001-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M100221001-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0 mg/L	36.00	103.00	70 - 130

P1002174-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	5.4 mg/L			- NA	1.87	0 - 20

P1002174-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	55.0 mg/L	50.00	99.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

RCR 2071

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: ARCADIS

Co. Address: One Adams Place, 310 Seven Fields Blvd Suite 210

Phone #: 724-742-9180 Fax #: 724-742-9189

Proj. Manager: Mark Hamish

Proj. Name/Number: AVX/B0007393 0000.00006

Sampler's signature: Ray [Signature]

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Parameters Requested	Remarks
		Water	Vapor/Solid					
P-1D	Grab	X		2/16/10	1235			
P-2D	Grab	X		2/16/10	1252			
P-3D	Grab	X		2/16/10	1320			
IW-2D	Grab	X		2/16/10	1335			
IW-4D	Grab	X		2/16/10	1343			
OW-10D	Grab	X		2/16/10	1347			
OW-9D	Grab	X		2/16/p	1354			
OW-8D	Grab	X		2/16/b	1400			
OW-7D	Grab	X		2/16/10	1406			

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
[Signature]	ARCADIS	2/16/10	1530	[Signature]	Fed Ex	2/11	1400
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 13
Lab Proj #: P1003072
Report Date: 03/17/10
Client Proj Name: B0007393.0000
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 14

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1003072-01	WELL IW-2D
P1003072-02	WELL IW-4D
P1003072-03	WELL OW-7D
P1003072-04	WELL OW-8D
P1003072-05	WELL OW-9D
P1003072-06	WELL OW-10D
P1003072-07	WELL P-1D
P1003072-08	WELL P-2D
P1003072-09	WELL P-3D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HH) **Date:** 3-17-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
WELL IW-2D	Water	P1003072-01	04 Mar. 10	9:45	08 Mar. 10	8:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		1500.0	250.0	mg/L	9060	3/10/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
WELL IW-4D	Water	P1003072-02	04 Mar. 10 10:40		08 Mar. 10 8:14		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		6300.0	1000.0	mg/L	9060	3/11/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
WELL OW-7D	Water	P1003072-03	04 Mar. 10 11:25	08 Mar. 10 8:14			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		52.0	5.0	mg/L	9060	3/10/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
WELL OW-8D	Water	P1003072-04	04 Mar. 10 12:45	08 Mar. 10 8:14			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		2000.0	500.0	mg/L	9060	3/10/10	md
RiskAnalysis							
N Ethane		1.800	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		140.000	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		5700.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>
WELL OW-9D	Water	P1003072-05			04 Mar. 10 14:50		08 Mar. 10 8:14
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		21.0	5.0	mg/L	9060	3/10/10	md
RiskAnalysis							
N Ethane		0.580	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		19.000	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		1200.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
WELL OW-10D	Water	P1003072-06	04 Mar. 10 15:35	08 Mar. 10 8:14			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		8.3	5.0	mg/L	9060	3/11/10	md
RiskAnalysis							
N Ethane		0.620	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		11.000	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		240.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
WELL P-1D	Water	P1003072-07			04 Mar. 10 16:40	08 Mar. 10 8:14	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		9.2	5.0	mg/L	9060	3/11/10	md
RiskAnalysis							
N Ethane		0.069	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		1.200	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		6200.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
WELL P-2D	Water	P1003072-08	04 Mar. 10 18:15	08 Mar. 10 8:14			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4200.0	500.0	mg/L	9060	3/11/10	md
RiskAnalysis							
N Ethane		0.160	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		18.000	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		510.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
WELL P-3D	Water	P1003072-09	05 Mar. 10 9:50	08 Mar. 10 8:14			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		13.0	5.0	mg/L	9060	3/11/10	md
RiskAnalysis							
N Ethane		0.120	0.025	ug/L	AM20GAX	3/16/10	rw
N Ethene		52.000	0.025	ug/L	AM20GAX	3/16/10	rw
N Methane		1400.000	0.100	ug/L	AM20GAX	3/16/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100311020-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M100311020-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	35.0 mg/L	36.00	97.00	70 - 130

P1003072-05A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	21.0 mg/L			- NA	0.00	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100312012-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5.0		- NA

M100312012-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	34.0 mg/L	36.00	94.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 13 of 13
 Lab Proj #: P1003072
 Report Date: 03/17/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M100316002-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M100316002-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	51.000 ug/L	45.00	113.00	75 - 125
Ethene	46.000 ug/L	40.80	113.00	75 - 125
Methane	920.000 ug/L	825.00	112.00	75 - 125

M100316002-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	52.000 ug/L	45.00	116.00	75 - 125	1.94	0 - 20
Ethene	47.000 ug/L	40.80	115.00	75 - 125	2.15	0 - 20
Methane	930.000 ug/L	825.00	113.00	75 - 125	1.08	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: ARCADIS
 Co. Address: ONE ADAMS PLACE 310 SEVEN FIELDS BLD. SUITE 210 SEVEN FIELDS, PA 15046
 Phone #: 724.742.9180 x584 Fax #: 724.742.9189
 Proj. Manager: RICHARD MATOR
 Proj. Name/Number: AVX MERTIE BEACH / B0007393.0000
 Sampler's signature: Ryan Habersang
RYAN HABERSANG

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Parameters Requested	Remarks
		Water	Vapor/Solid					
WELL IW-2D	GRAB	✓		3/4/10	9:45	9:40°F		
WELL IW-4D	GRAB	✓		3/4/10	10:40			
WELL OW-7D	GRAB	✓		3/4/10	11:25			
WELL OW-8D	LOW FLOW	✓		3/4/10	12:45			
WELL OW-9D	PDB	✓		3/4/10	14:50			
WELL OW-10D	PDB	✓		3/4/10	15:35			
WELL P-1D	PDB	✓		3/4/10	16:40			
WELL P-2D	LOW FLOW	✓		3/4/10	18:15			
WELL P-3D	PDB	✓		3/5/10	9:50			

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
<u>RYAN HABERSANG</u>	<u>ARCADIS</u>	<u>3/5/10</u>	<u>12:00</u>	<u>[Signature]</u>			
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:



Mark Hanish
Arcadis
600 Waterfront Dr.
Pittsburgh, PA 15222

Report Number: G582-648

Client Project: AVX Myrtle Beach

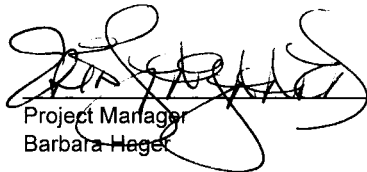
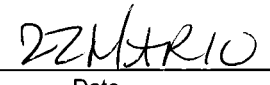
Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

 for 
Project Manager Date
Barbara Hager

Case Narrative

Arcadis

SGS Project: **G582-648**

Project Name: **AVX Myrtle Beach**


SGS North America Inc.

March 22nd, 2010

- Six water samples were accepted into the laboratory on March 6th, 2010 at 1015 for analyses as indicated on the chain of custody. The samples were received in good condition, with a temperature of 2.4°C.
- All extractions and analyses were completed within holding time limits, with the following quality control exceptions.

8260 Analyses

- The submitted **Trip Blank** contains a reported concentration for Methylene Chloride of 0.560 µg/L. Sample **P-1D** also a reported concentration for Methylene Chloride of 2.30 µg/L.

 _____ Date 3/22/10
Craig R Tronzo
Data Validation

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-8D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-1A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/4/2010 12:45
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25000	2180	1000	3/12/2010	
Benzene	BQL	1000	65.0	1000	3/12/2010	
Bromobenzene	BQL	1000	56.0	1000	3/12/2010	
Bromochloromethane	BQL	1000	101	1000	3/12/2010	
Bromodichloromethane	BQL	1000	76.0	1000	3/12/2010	
Bromoform	BQL	1000	120	1000	3/12/2010	
Bromomethane	BQL	1000	133	1000	3/12/2010	
2-Butanone	BQL	25000	544	1000	3/12/2010	
n-Butylbenzene	BQL	1000	109	1000	3/12/2010	
sec-Butylbenzene	BQL	1000	84.0	1000	3/12/2010	
tert-Butylbenzene	BQL	1000	50.0	1000	3/12/2010	
Carbon disulfide	BQL	1000	69.0	1000	3/12/2010	
Carbon tetrachloride	BQL	1000	87.0	1000	3/12/2010	
Chlorobenzene	BQL	1000	82.0	1000	3/12/2010	
Chloroethane	BQL	1000	106	1000	3/12/2010	
Chloroform	BQL	1000	79.0	1000	3/12/2010	
Chloromethane	BQL	1000	146	1000	3/12/2010	
2-Chlorotoluene	BQL	1000	99.0	1000	3/12/2010	
4-Chlorotoluene	BQL	1000	80.0	1000	3/12/2010	
Dibromochloromethane	BQL	1000	90.0	1000	3/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5000	1210	1000	3/12/2010	
Dibromomethane	BQL	1000	113	1000	3/12/2010	
1,2-Dibromoethane (EDB)	BQL	1000	124	1000	3/12/2010	
1,2-Dichlorobenzene	BQL	1000	127	1000	3/12/2010	
1,3-Dichlorobenzene	BQL	1000	81.0	1000	3/12/2010	
1,4-Dichlorobenzene	BQL	1000	79.0	1000	3/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5000	630	1000	3/12/2010	
1,1-Dichloroethane	BQL	1000	74.0	1000	3/12/2010	
1,1-Dichloroethene	BQL	1000	89.0	1000	3/12/2010	
1,2-Dichloroethane	BQL	1000	79.0	1000	3/12/2010	
cis-1,2-Dichloroethene	3330	1000	65.0	1000	3/12/2010	
trans-1,2-dichloroethene	BQL	1000	89.0	1000	3/12/2010	
1,2-Dichloropropane	BQL	1000	94.0	1000	3/12/2010	
1,3-Dichloropropane	BQL	1000	127	1000	3/12/2010	
2,2-Dichloropropane	BQL	1000	59.0	1000	3/12/2010	
1,1-Dichloropropene	BQL	1000	72.0	1000	3/12/2010	
cis-1,3-Dichloropropene	BQL	1000	76.0	1000	3/12/2010	
trans-1,3-Dichloropropene	BQL	1000	76.0	1000	3/12/2010	
Dichlorodifluoromethane	BQL	5000	94.0	1000	3/12/2010	
Diisopropyl ether (DIPE)	BQL	1000	73.0	1000	3/12/2010	
Ethylbenzene	BQL	1000	77.0	1000	3/12/2010	
Hexachlorobutadiene	BQL	1000	228	1000	3/12/2010	
2-Hexanone	BQL	5000	720	1000	3/12/2010	
Iodomethane	BQL	1000	42.0	1000	3/12/2010	
Isopropylbenzene	BQL	1000	71.0	1000	3/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-8D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-1A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/4/2010 12:45
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1000	48.0	1000	3/12/2010	
Methylene chloride	BQL	5000	98.0	1000	3/12/2010	
4-Methyl-2-pentanone	BQL	5000	550	1000	3/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1000	67.0	1000	3/12/2010	
Naphthalene	BQL	1000	133	1000	3/12/2010	
n-Propyl benzene	BQL	1000	80.0	1000	3/12/2010	
Styrene	BQL	1000	85.0	1000	3/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1000	90.0	1000	3/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1000	115	1000	3/12/2010	
Tetrachloroethene	BQL	1000	69.0	1000	3/12/2010	
Toluene	BQL	1000	76.0	1000	3/12/2010	
1,2,3-Trichlorobenzene	BQL	1000	190	1000	3/12/2010	
1,2,4-Trichlorobenzene	BQL	1000	119	1000	3/12/2010	
Trichloroethene	490	1000	54.0	1000	3/12/2010	J
1,1,1-Trichloroethane	BQL	1000	54.0	1000	3/12/2010	
1,1,2-Trichloroethane	BQL	1000	182	1000	3/12/2010	
Trichlorofluoromethane	BQL	1000	111	1000	3/12/2010	
1,2,3-Trichloropropane	BQL	1000	120	1000	3/12/2010	
1,2,4-Trimethylbenzene	BQL	1000	65.0	1000	3/12/2010	
1,3,5-Trimethylbenzene	BQL	1000	74.0	1000	3/12/2010	
Vinyl chloride	4480	1000	149	1000	3/12/2010	
m-,p-Xylene	BQL	2000	98.0	1000	3/12/2010	
o-Xylene	BQL	1000	65.0	1000	3/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	30.1	100
Toluene-d8	30	28	93
4-Bromofluorobenzene	30	26.9	90

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: GVD

Reviewed By: [Signature]

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-9D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-2A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/4/2010 14:50
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	3/11/2010	
Benzene	BQL	800	52.0	800	3/11/2010	
Bromobenzene	BQL	800	44.8	800	3/11/2010	
Bromochloromethane	BQL	800	80.8	800	3/11/2010	
Bromodichloromethane	BQL	800	60.8	800	3/11/2010	
Bromoform	BQL	800	96.0	800	3/11/2010	
Bromomethane	BQL	800	106	800	3/11/2010	
2-Butanone	BQL	20000	435	800	3/11/2010	
n-Butylbenzene	BQL	800	87.2	800	3/11/2010	
sec-Butylbenzene	BQL	800	67.2	800	3/11/2010	
tert-Butylbenzene	BQL	800	40.0	800	3/11/2010	
Carbon disulfide	BQL	800	55.2	800	3/11/2010	
Carbon tetrachloride	BQL	800	69.6	800	3/11/2010	
Chlorobenzene	BQL	800	65.6	800	3/11/2010	
Chloroethane	BQL	800	84.8	800	3/11/2010	
Chloroform	BQL	800	63.2	800	3/11/2010	
Chloromethane	BQL	800	117	800	3/11/2010	
2-Chlorotoluene	BQL	800	79.2	800	3/11/2010	
4-Chlorotoluene	BQL	800	64.0	800	3/11/2010	
Dibromochloromethane	BQL	800	72.0	800	3/11/2010	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	3/11/2010	
Dibromomethane	BQL	800	90.4	800	3/11/2010	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	3/11/2010	
1,2-Dichlorobenzene	BQL	800	102	800	3/11/2010	
1,3-Dichlorobenzene	BQL	800	64.8	800	3/11/2010	
1,4-Dichlorobenzene	BQL	800	63.2	800	3/11/2010	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	3/11/2010	
1,1-Dichloroethane	BQL	800	59.2	800	3/11/2010	
1,1-Dichloroethene	BQL	800	71.2	800	3/11/2010	
1,2-Dichloroethane	BQL	800	63.2	800	3/11/2010	
cis-1,2-Dichloroethene	2690	800	52.0	800	3/11/2010	
trans-1,2-dichloroethene	BQL	800	71.2	800	3/11/2010	
1,2-Dichloropropane	BQL	800	75.2	800	3/11/2010	
1,3-Dichloropropane	BQL	800	102	800	3/11/2010	
2,2-Dichloropropane	BQL	800	47.2	800	3/11/2010	
1,1-Dichloropropene	BQL	800	57.6	800	3/11/2010	
cis-1,3-Dichloropropene	BQL	800	60.8	800	3/11/2010	
trans-1,3-Dichloropropene	BQL	800	60.8	800	3/11/2010	
Dichlorodifluoromethane	BQL	4000	75.2	800	3/11/2010	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	3/11/2010	
Ethylbenzene	BQL	800	61.6	800	3/11/2010	
Hexachlorobutadiene	BQL	800	182	800	3/11/2010	
2-Hexanone	BQL	4000	576	800	3/11/2010	
Iodomethane	BQL	800	33.6	800	3/11/2010	
Isopropylbenzene	BQL	800	56.8	800	3/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-9D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-2A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/4/2010 14:50
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	3/11/2010	
Methylene chloride	BQL	4000	78.4	800	3/11/2010	
4-Methyl-2-pentanone	BQL	4000	440	800	3/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	3/11/2010	
Naphthalene	BQL	800	106	800	3/11/2010	
n-Propyl benzene	BQL	800	64.0	800	3/11/2010	
Styrene	BQL	800	68.0	800	3/11/2010	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	3/11/2010	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	3/11/2010	
Tetrachloroethene	BQL	800	55.2	800	3/11/2010	
Toluene	BQL	800	60.8	800	3/11/2010	
1,2,3-Trichlorobenzene	BQL	800	152	800	3/11/2010	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	3/11/2010	
Trichloroethene	3310	800	43.2	800	3/11/2010	
1,1,1-Trichloroethane	BQL	800	43.2	800	3/11/2010	
1,1,2-Trichloroethane	BQL	800	146	800	3/11/2010	
Trichlorofluoromethane	BQL	800	88.8	800	3/11/2010	
1,2,3-Trichloropropane	BQL	800	96.0	800	3/11/2010	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	3/11/2010	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	3/11/2010	
Vinyl chloride	1970	800	119	800	3/11/2010	
m-,p-Xylene	BQL	1600	78.4	800	3/11/2010	
o-Xylene	BQL	800	52.0	800	3/11/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	30.6	102
Toluene-d8	30	27.9	93
4-Bromofluorobenzene	30	27.6	92

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: CLP

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-10D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-3A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/4/2010 15:35
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	3/16/2010	
Benzene	BQL	800	52.0	800	3/16/2010	
Bromobenzene	BQL	800	44.8	800	3/16/2010	
Bromochloromethane	BQL	800	80.8	800	3/16/2010	
Bromodichloromethane	BQL	800	60.8	800	3/16/2010	
Bromoform	BQL	800	96.0	800	3/16/2010	
Bromomethane	BQL	800	106	800	3/16/2010	
2-Butanone	BQL	20000	435	800	3/16/2010	
n-Butylbenzene	BQL	800	87.2	800	3/16/2010	
sec-Butylbenzene	BQL	800	67.2	800	3/16/2010	
tert-Butylbenzene	BQL	800	40.0	800	3/16/2010	
Carbon disulfide	BQL	800	55.2	800	3/16/2010	
Carbon tetrachloride	BQL	800	69.6	800	3/16/2010	
Chlorobenzene	BQL	800	65.6	800	3/16/2010	
Chloroethane	BQL	800	84.8	800	3/16/2010	
Chloroform	BQL	800	63.2	800	3/16/2010	
Chloromethane	BQL	800	117	800	3/16/2010	
2-Chlorotoluene	BQL	800	79.2	800	3/16/2010	
4-Chlorotoluene	BQL	800	64.0	800	3/16/2010	
Dibromochloromethane	BQL	800	72.0	800	3/16/2010	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	3/16/2010	
Dibromomethane	BQL	800	90.4	800	3/16/2010	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	3/16/2010	
1,2-Dichlorobenzene	BQL	800	102	800	3/16/2010	
1,3-Dichlorobenzene	BQL	800	64.8	800	3/16/2010	
1,4-Dichlorobenzene	BQL	800	63.2	800	3/16/2010	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	3/16/2010	
1,1-Dichloroethane	BQL	800	59.2	800	3/16/2010	
1,1-Dichloroethene	BQL	800	71.2	800	3/16/2010	
1,2-Dichloroethane	BQL	800	63.2	800	3/16/2010	
cis-1,2-Dichloroethene	17900	800	52.0	800	3/16/2010	
trans-1,2-dichloroethene	344	800	71.2	800	3/16/2010	J
1,2-Dichloropropane	BQL	800	75.2	800	3/16/2010	
1,3-Dichloropropane	BQL	800	102	800	3/16/2010	
2,2-Dichloropropane	BQL	800	47.2	800	3/16/2010	
1,1-Dichloropropene	BQL	800	57.6	800	3/16/2010	
cis-1,3-Dichloropropene	BQL	800	60.8	800	3/16/2010	
trans-1,3-Dichloropropene	BQL	800	60.8	800	3/16/2010	
Dichlorodifluoromethane	BQL	4000	75.2	800	3/16/2010	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	3/16/2010	
Ethylbenzene	BQL	800	61.6	800	3/16/2010	
Hexachlorobutadiene	BQL	800	182	800	3/16/2010	
2-Hexanone	BQL	4000	576	800	3/16/2010	
Iodomethane	BQL	800	33.6	800	3/16/2010	
Isopropylbenzene	BQL	800	56.8	800	3/16/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-3A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/4/2010 15:35
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	3/16/2010	
Methylene chloride	BQL	4000	78.4	800	3/16/2010	
4-Methyl-2-pentanone	BQL	4000	440	800	3/16/2010	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	3/16/2010	
Naphthalene	BQL	800	106	800	3/16/2010	
n-Propyl benzene	BQL	800	64.0	800	3/16/2010	
Styrene	BQL	800	68.0	800	3/16/2010	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	3/16/2010	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	3/16/2010	
Tetrachloroethene	BQL	800	55.2	800	3/16/2010	
Toluene	BQL	800	60.8	800	3/16/2010	
1,2,3-Trichlorobenzene	BQL	800	152	800	3/16/2010	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	3/16/2010	
Trichloroethene	BQL	800	43.2	800	3/16/2010	
1,1,1-Trichloroethane	BQL	800	43.2	800	3/16/2010	
1,1,2-Trichloroethane	BQL	800	146	800	3/16/2010	
Trichlorofluoromethane	BQL	800	88.8	800	3/16/2010	
1,2,3-Trichloropropane	BQL	800	96.0	800	3/16/2010	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	3/16/2010	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	3/16/2010	
Vinyl chloride	1940	800	119	800	3/16/2010	
m-,p-Xylene	BQL	1600	78.4	800	3/16/2010	
o-Xylene	BQL	800	52.0	800	3/16/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	29.7	99
Toluene-d8	30	27.3	91
4-Bromofluorobenzene	30	26.5	88

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: 010

Reviewed By: ,

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-1D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-4A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/4/2010 16:40
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	250	21.8	10	3/11/2010	
Benzene	BQL	10.0	0.650	10	3/11/2010	
Bromobenzene	BQL	10.0	0.560	10	3/11/2010	
Bromochloromethane	BQL	10.0	1.01	10	3/11/2010	
Bromodichloromethane	BQL	10.0	0.760	10	3/11/2010	
Bromoform	BQL	10.0	1.20	10	3/11/2010	
Bromomethane	BQL	10.0	1.33	10	3/11/2010	
2-Butanone	BQL	250	5.44	10	3/11/2010	
n-Butylbenzene	BQL	10.0	1.09	10	3/11/2010	
sec-Butylbenzene	BQL	10.0	0.840	10	3/11/2010	
tert-Butylbenzene	BQL	10.0	0.500	10	3/11/2010	
Carbon disulfide	BQL	10.0	0.690	10	3/11/2010	
Carbon tetrachloride	BQL	10.0	0.870	10	3/11/2010	
Chlorobenzene	BQL	10.0	0.820	10	3/11/2010	
Chloroethane	BQL	10.0	1.06	10	3/11/2010	
Chloroform	BQL	10.0	0.790	10	3/11/2010	
Chloromethane	BQL	10.0	1.46	10	3/11/2010	
2-Chlorotoluene	BQL	10.0	0.990	10	3/11/2010	
4-Chlorotoluene	BQL	10.0	0.800	10	3/11/2010	
Dibromochloromethane	BQL	10.0	0.900	10	3/11/2010	
1,2-Dibromo-3-chloropropane	BQL	50.0	12.1	10	3/11/2010	
Dibromomethane	BQL	10.0	1.13	10	3/11/2010	
1,2-Dibromoethane (EDB)	BQL	10.0	1.24	10	3/11/2010	
1,2-Dichlorobenzene	BQL	10.0	1.27	10	3/11/2010	
1,3-Dichlorobenzene	BQL	10.0	0.810	10	3/11/2010	
1,4-Dichlorobenzene	BQL	10.0	0.790	10	3/11/2010	
trans-1,4-Dichloro-2-butene	BQL	50.0	6.30	10	3/11/2010	
1,1-Dichloroethane	BQL	10.0	0.740	10	3/11/2010	
1,1-Dichloroethene	BQL	10.0	0.890	10	3/11/2010	
1,2-Dichloroethane	BQL	10.0	0.790	10	3/11/2010	
cis-1,2-Dichloroethene	263	10.0	0.650	10	3/11/2010	
trans-1,2-dichloroethene	BQL	10.0	0.890	10	3/11/2010	
1,2-Dichloropropane	BQL	10.0	0.940	10	3/11/2010	
1,3-Dichloropropane	BQL	10.0	1.27	10	3/11/2010	
2,2-Dichloropropane	BQL	10.0	0.590	10	3/11/2010	
1,1-Dichloropropene	BQL	10.0	0.720	10	3/11/2010	
cis-1,3-Dichloropropene	BQL	10.0	0.760	10	3/11/2010	
trans-1,3-Dichloropropene	BQL	10.0	0.760	10	3/11/2010	
Dichlorodifluoromethane	BQL	50.0	0.940	10	3/11/2010	
Diisopropyl ether (DIPE)	BQL	10.0	0.730	10	3/11/2010	
Ethylbenzene	BQL	10.0	0.770	10	3/11/2010	
Hexachlorobutadiene	BQL	10.0	2.28	10	3/11/2010	
2-Hexanone	BQL	50.0	7.20	10	3/11/2010	
Iodomethane	BQL	10.0	0.420	10	3/11/2010	
Isopropylbenzene	BQL	10.0	0.710	10	3/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-1D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-4A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/4/2010 16:40
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	10.0	0.480	10	3/11/2010	
Methylene chloride	2.30	50.0	0.980	10	3/11/2010	J
4-Methyl-2-pentanone	BQL	50.0	5.50	10	3/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	10.0	0.670	10	3/11/2010	
Naphthalene	BQL	10.0	1.33	10	3/11/2010	
n-Propyl benzene	BQL	10.0	0.800	10	3/11/2010	
Styrene	BQL	10.0	0.850	10	3/11/2010	
1,1,1,2-Tetrachloroethane	BQL	10.0	0.900	10	3/11/2010	
1,1,2,2-Tetrachloroethane	BQL	10.0	1.15	10	3/11/2010	
Tetrachloroethene	BQL	10.0	0.690	10	3/11/2010	
Toluene	BQL	10.0	0.760	10	3/11/2010	
1,2,3-Trichlorobenzene	BQL	10.0	1.90	10	3/11/2010	
1,2,4-Trichlorobenzene	BQL	10.0	1.19	10	3/11/2010	
Trichloroethene	BQL	10.0	0.540	10	3/11/2010	
1,1,1-Trichloroethane	BQL	10.0	0.540	10	3/11/2010	
1,1,2-Trichloroethane	BQL	10.0	1.82	10	3/11/2010	
Trichlorofluoromethane	BQL	10.0	1.11	10	3/11/2010	
1,2,3-Trichloropropane	BQL	10.0	1.20	10	3/11/2010	
1,2,4-Trimethylbenzene	BQL	10.0	0.650	10	3/11/2010	
1,3,5-Trimethylbenzene	BQL	10.0	0.740	10	3/11/2010	
Vinyl chloride	7.00	10.0	1.49	10	3/11/2010	J
m-,p-Xylene	BQL	20.0	0.980	10	3/11/2010	
o-Xylene	BQL	10.0	0.650	10	3/11/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	31.6	105
Toluene-d8	30	28.3	94
4-Bromofluorobenzene	30	27.4	91

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: CVO

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-5A
Lab Project ID: G582-648

Analyzed By: DVO
Date Collected: 3/4/2010 18:15
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	290	1000	87.2	40	3/17/2010	J
Benzene	BQL	40.0	2.60	40	3/17/2010	
Bromobenzene	BQL	40.0	2.24	40	3/17/2010	
Bromochloromethane	BQL	40.0	4.04	40	3/17/2010	
Bromodichloromethane	BQL	40.0	3.04	40	3/17/2010	
Bromoform	BQL	40.0	4.80	40	3/17/2010	
Bromomethane	BQL	40.0	5.32	40	3/17/2010	
2-Butanone	539	1000	21.8	40	3/17/2010	J
n-Butylbenzene	BQL	40.0	4.36	40	3/17/2010	
sec-Butylbenzene	BQL	40.0	3.36	40	3/17/2010	
tert-Butylbenzene	BQL	40.0	2.00	40	3/17/2010	
Carbon disulfide	BQL	40.0	2.76	40	3/17/2010	
Carbon tetrachloride	BQL	40.0	3.48	40	3/17/2010	
Chlorobenzene	BQL	40.0	3.28	40	3/17/2010	
Chloroethane	BQL	40.0	4.24	40	3/17/2010	
Chloroform	BQL	40.0	3.16	40	3/17/2010	
Chloromethane	BQL	40.0	5.84	40	3/17/2010	
2-Chlorotoluene	BQL	40.0	3.96	40	3/17/2010	
4-Chlorotoluene	BQL	40.0	3.20	40	3/17/2010	
Dibromochloromethane	BQL	40.0	3.60	40	3/17/2010	
1,2-Dibromo-3-chloropropane	BQL	200	48.4	40	3/17/2010	
Dibromomethane	BQL	40.0	4.52	40	3/17/2010	
1,2-Dibromoethane (EDB)	BQL	40.0	4.96	40	3/17/2010	
1,2-Dichlorobenzene	BQL	40.0	5.08	40	3/17/2010	
1,3-Dichlorobenzene	BQL	40.0	3.24	40	3/17/2010	
1,4-Dichlorobenzene	BQL	40.0	3.16	40	3/17/2010	
trans-1,4-Dichloro-2-butene	BQL	200	25.2	40	3/17/2010	
1,1-Dichloroethane	BQL	40.0	2.96	40	3/17/2010	
1,1-Dichloroethene	BQL	40.0	3.56	40	3/17/2010	
1,2-Dichloroethane	BQL	40.0	3.16	40	3/17/2010	
cis-1,2-Dichloroethene	298	40.0	2.60	40	3/17/2010	
trans-1,2-dichloroethene	18.4	40.0	3.56	40	3/17/2010	J
1,2-Dichloropropane	BQL	40.0	3.76	40	3/17/2010	
1,3-Dichloropropane	BQL	40.0	5.08	40	3/17/2010	
2,2-Dichloropropane	BQL	40.0	2.36	40	3/17/2010	
1,1-Dichloropropene	BQL	40.0	2.88	40	3/17/2010	
cis-1,3-Dichloropropene	BQL	40.0	3.04	40	3/17/2010	
trans-1,3-Dichloropropene	BQL	40.0	3.04	40	3/17/2010	
Dichlorodifluoromethane	BQL	200	3.76	40	3/17/2010	
Diisopropyl ether (DIPE)	BQL	40.0	2.92	40	3/17/2010	
Ethylbenzene	6.40	40.0	3.08	40	3/17/2010	J
Hexachlorobutadiene	BQL	40.0	9.12	40	3/17/2010	
2-Hexanone	BQL	200	28.8	40	3/17/2010	
Iodomethane	BQL	40.0	1.68	40	3/17/2010	
Isopropylbenzene	BQL	40.0	2.84	40	3/17/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-5A
 Lab Project ID: G582-648

Analyzed By: DVO
 Date Collected: 3/4/2010 18:15
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	40.0	1.92	40	3/17/2010	
Methylene chloride	BQL	200	3.92	40	3/17/2010	
4-Methyl-2-pentanone	BQL	200	22.0	40	3/17/2010	
Methyl-tert-butyl ether (MTBE)	BQL	40.0	2.68	40	3/17/2010	
Naphthalene	BQL	40.0	5.32	40	3/17/2010	
n-Propyl benzene	BQL	40.0	3.20	40	3/17/2010	
Styrene	BQL	40.0	3.40	40	3/17/2010	
1,1,1,2-Tetrachloroethane	BQL	40.0	3.60	40	3/17/2010	
1,1,2,2-Tetrachloroethane	BQL	40.0	4.60	40	3/17/2010	
Tetrachloroethene	BQL	40.0	2.76	40	3/17/2010	
Toluene	BQL	40.0	3.04	40	3/17/2010	
1,2,3-Trichlorobenzene	BQL	40.0	7.60	40	3/17/2010	
1,2,4-Trichlorobenzene	BQL	40.0	4.76	40	3/17/2010	
Trichloroethene	918	40.0	2.16	40	3/17/2010	
1,1,1-Trichloroethane	BQL	40.0	2.16	40	3/17/2010	
1,1,2-Trichloroethane	BQL	40.0	7.28	40	3/17/2010	
Trichlorofluoromethane	BQL	40.0	4.44	40	3/17/2010	
1,2,3-Trichloropropane	BQL	40.0	4.80	40	3/17/2010	
1,2,4-Trimethylbenzene	BQL	40.0	2.60	40	3/17/2010	
1,3,5-Trimethylbenzene	BQL	40.0	2.96	40	3/17/2010	
Vinyl chloride	1730	40.0	5.96	40	3/17/2010	
m-,p-Xylene	BQL	80.0	3.92	40	3/17/2010	
o-Xylene	BQL	40.0	2.60	40	3/17/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.9	109
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.7	97

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-3D
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-6A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/5/2010 9:50
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	2500	218	100	3/11/2010	
Benzene	BQL	100	6.50	100	3/11/2010	
Bromobenzene	BQL	100	5.60	100	3/11/2010	
Bromochloromethane	BQL	100	10.1	100	3/11/2010	
Bromodichloromethane	BQL	100	7.60	100	3/11/2010	
Bromoform	BQL	100	12.0	100	3/11/2010	
Bromomethane	BQL	100	13.3	100	3/11/2010	
2-Butanone	BQL	2500	54.4	100	3/11/2010	
n-Butylbenzene	BQL	100	10.9	100	3/11/2010	
sec-Butylbenzene	BQL	100	8.40	100	3/11/2010	
tert-Butylbenzene	BQL	100	5.00	100	3/11/2010	
Carbon disulfide	BQL	100	6.90	100	3/11/2010	
Carbon tetrachloride	BQL	100	8.70	100	3/11/2010	
Chlorobenzene	BQL	100	8.20	100	3/11/2010	
Chloroethane	BQL	100	10.6	100	3/11/2010	
Chloroform	BQL	100	7.90	100	3/11/2010	
Chloromethane	BQL	100	14.6	100	3/11/2010	
2-Chlorotoluene	BQL	100	9.90	100	3/11/2010	
4-Chlorotoluene	BQL	100	8.00	100	3/11/2010	
Dibromochloromethane	BQL	100	9.00	100	3/11/2010	
1,2-Dibromo-3-chloropropane	BQL	500	121	100	3/11/2010	
Dibromomethane	BQL	100	11.3	100	3/11/2010	
1,2-Dibromoethane (EDB)	BQL	100	12.4	100	3/11/2010	
1,2-Dichlorobenzene	BQL	100	12.7	100	3/11/2010	
1,3-Dichlorobenzene	BQL	100	8.10	100	3/11/2010	
1,4-Dichlorobenzene	BQL	100	7.90	100	3/11/2010	
trans-1,4-Dichloro-2-butene	BQL	500	63.0	100	3/11/2010	
1,1-Dichloroethane	BQL	100	7.40	100	3/11/2010	
1,1-Dichloroethene	BQL	100	8.90	100	3/11/2010	
1,2-Dichloroethane	BQL	100	7.90	100	3/11/2010	
cis-1,2-Dichloroethene	624	100	6.50	100	3/11/2010	
trans-1,2-dichloroethene	BQL	100	8.90	100	3/11/2010	
1,2-Dichloropropane	BQL	100	9.40	100	3/11/2010	
1,3-Dichloropropane	BQL	100	12.7	100	3/11/2010	
2,2-Dichloropropane	BQL	100	5.90	100	3/11/2010	
1,1-Dichloropropene	BQL	100	7.20	100	3/11/2010	
cis-1,3-Dichloropropene	BQL	100	7.60	100	3/11/2010	
trans-1,3-Dichloropropene	BQL	100	7.60	100	3/11/2010	
Dichlorodifluoromethane	BQL	500	9.40	100	3/11/2010	
Diisopropyl ether (DIPE)	BQL	100	7.30	100	3/11/2010	
Ethylbenzene	BQL	100	7.70	100	3/11/2010	
Hexachlorobutadiene	BQL	100	22.8	100	3/11/2010	
2-Hexanone	BQL	500	72.0	100	3/11/2010	
Iodomethane	BQL	100	4.20	100	3/11/2010	
Isopropylbenzene	BQL	100	7.10	100	3/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-3D
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-6A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/5/2010 9:50
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	100	4.80	100	3/11/2010	
Methylene chloride	BQL	500	9.80	100	3/11/2010	
4-Methyl-2-pentanone	BQL	500	55.0	100	3/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	100	6.70	100	3/11/2010	
Naphthalene	BQL	100	13.3	100	3/11/2010	
n-Propyl benzene	BQL	100	8.00	100	3/11/2010	
Styrene	BQL	100	8.50	100	3/11/2010	
1,1,1,2-Tetrachloroethane	BQL	100	9.00	100	3/11/2010	
1,1,2,2-Tetrachloroethane	BQL	100	11.5	100	3/11/2010	
Tetrachloroethene	BQL	100	6.90	100	3/11/2010	
Toluene	BQL	100	7.60	100	3/11/2010	
1,2,3-Trichlorobenzene	BQL	100	19.0	100	3/11/2010	
1,2,4-Trichlorobenzene	BQL	100	11.9	100	3/11/2010	
Trichloroethene	30.0	100	5.40	100	3/11/2010	J
1,1,1-Trichloroethane	BQL	100	5.40	100	3/11/2010	
1,1,2-Trichloroethane	BQL	100	18.2	100	3/11/2010	
Trichlorofluoromethane	BQL	100	11.1	100	3/11/2010	
1,2,3-Trichloropropane	BQL	100	12.0	100	3/11/2010	
1,2,4-Trimethylbenzene	BQL	100	6.50	100	3/11/2010	
1,3,5-Trimethylbenzene	BQL	100	7.40	100	3/11/2010	
Vinyl chloride	341	100	14.9	100	3/11/2010	
m-,p-Xylene	BQL	200	9.80	100	3/11/2010	
o-Xylene	BQL	100	6.50	100	3/11/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	30.2	101
Toluene-d8	30	27.4	91
4-Bromofluorobenzene	30	27.1	90

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: CLP

Reviewed By: CLP

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: Trip Blank (Not on COC)
Client Project ID: AVX Myrtle Beach
Lab Sample ID: G582-648-7A
Lab Project ID: G582-648

Analyzed By: CLP
Date Collected: 3/5/2010 0:00
Date Received: 3/6/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	3/11/2010	
Benzene	BQL	1.00	0.0650	1	3/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	3/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	3/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	3/11/2010	
Bromoform	BQL	1.00	0.120	1	3/11/2010	
Bromomethane	BQL	1.00	0.133	1	3/11/2010	
2-Butanone	BQL	25.0	0.544	1	3/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	3/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	3/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	3/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	3/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	3/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	3/11/2010	
Chloroethane	BQL	1.00	0.106	1	3/11/2010	
Chloroform	BQL	1.00	0.0790	1	3/11/2010	
Chloromethane	BQL	1.00	0.146	1	3/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	3/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	3/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	3/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	3/11/2010	
Dibromomethane	BQL	1.00	0.113	1	3/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	3/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	3/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	3/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	3/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	3/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	3/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	3/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	3/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	3/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	3/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	3/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	3/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	3/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	3/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	3/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	3/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	3/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	3/11/2010	
2-Hexanone	BQL	5.00	0.720	1	3/11/2010	
Iodomethane	BQL	1.00	0.0420	1	3/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	3/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank (Not on COC)
 Client Project ID: AVX Myrtle Beach
 Lab Sample ID: G582-648-7A
 Lab Project ID: G582-648

Analyzed By: CLP
 Date Collected: 3/5/2010 0:00
 Date Received: 3/6/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	3/11/2010	
Methylene chloride	0.560	5.00	0.0980	1	3/11/2010	J
4-Methyl-2-pentanone	BQL	5.00	0.550	1	3/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	3/11/2010	
Naphthalene	BQL	1.00	0.133	1	3/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	3/11/2010	
Styrene	BQL	1.00	0.0850	1	3/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	3/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	3/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	3/11/2010	
Toluene	BQL	1.00	0.0760	1	3/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	3/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	3/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	3/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	3/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	3/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	3/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	3/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	3/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	3/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	3/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	3/11/2010	
o-Xylene	BQL	1.00	0.0650	1	3/11/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	36.6	122
Toluene-d8	30	33.3	111
4-Bromofluorobenzene	30	27.8	93

Comments:

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Analyst: DNU

Reviewed By: ,

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8031110B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result	Quantitation UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	3/11/2010	
Benzene	BQL	1.00	0.0650	1	3/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	3/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	3/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	3/11/2010	
Bromoform	BQL	1.00	0.120	1	3/11/2010	
Bromomethane	BQL	1.00	0.133	1	3/11/2010	
2-Butanone	BQL	25.0	0.544	1	3/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	3/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	3/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	3/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	3/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	3/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	3/11/2010	
Chloroethane	BQL	1.00	0.106	1	3/11/2010	
Chloroform	BQL	1.00	0.0790	1	3/11/2010	
Chloromethane	BQL	1.00	0.146	1	3/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	3/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	3/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	3/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	3/11/2010	
Dibromomethane	BQL	1.00	0.113	1	3/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	3/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	3/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	3/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	3/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	3/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	3/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	3/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	3/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	3/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	3/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	3/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	3/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	3/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	3/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	3/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	3/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	3/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	3/11/2010	
2-Hexanone	BQL	5.00	0.720	1	3/11/2010	
Iodomethane	BQL	1.00	0.0420	1	3/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	3/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8031110B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	3/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	3/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	3/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	3/11/2010	
Naphthalene	BQL	1.00	0.133	1	3/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	3/11/2010	
Styrene	BQL	1.00	0.0850	1	3/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	3/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	3/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	3/11/2010	
Toluene	BQL	1.00	0.0760	1	3/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	3/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	3/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	3/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	3/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	3/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	3/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	3/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	3/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	3/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	3/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	3/11/2010	
o-Xylene	BQL	1.00	0.0650	1	3/11/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		30	29.8	99		
Toluene-d8		30	28	93		
4-Bromofluorobenzene		30	27.1	90		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: CLP

Reviewed By: DVD

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8031110A

Filename: 0311803.D

Date Analyzed: 03/11/10 13:37

LCSD: LCS8031110B

Filename: 0311804.D

Date Analyzed: 03/11/10 14:11

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	% RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
acetone	25.0	26.2	105	25.0	23.9	95.8	9.20	30	23.5-141
acrolein	125	153	123	125	147	118	4.26	30	31.4-182
acrylonitrile	125	132	105	125	126	100	4.73	30	64.2-140
benzene	5.00	5.05	101	5.00	4.85	97.0	4.04	30	76.6-120
bromobenzene	5.00	4.93	98.6	5.00	4.79	95.8	2.88	30	75.0-122
bromochloromethane	5.00	5.62	112	5.00	5.35	107	4.92	30	74.8-127
bromodichloromethane	5.00	6.01	120*	5.00	4.56	91.2	27.4	30	76.4-117
bromoform	5.00	5.19	104	5.00	4.87	97.4	6.36	30	62.4-127
bromomethane	5.00	5.99	120	5.00	5.77	115	3.74	30	34.2-166
2-butanone	25.0	27.2	109	25.0	24.0	96.0	12.3	30	44.9-126
n-butylbenzene	5.00	4.84	96.8	5.00	4.71	94.2	2.72	30	72.0-122
sec-butylbenzene	5.00	4.96	99.2	5.00	4.88	97.6	1.63	30	78.3-116
tert-butylbenzene	5.00	4.77	95.4	5.00	4.79	95.8	0.418	30	53.1-148
Carbon disulfide	5.00	5.33	107	5.00	5.03	101	5.79	30	69.0-118
carbon tetrachloride	5.00	5.30	106	5.00	5.01	100	5.62	30	71.7-124
chlorobenzene	5.00	5.03	101	5.00	4.97	99.4	1.60	30	75.5-116
chloroethane	5.00	5.79	116	5.00	5.71	114	1.39	30	78.2-138
2-chloroethyl vinyl ether	125	125	100	125	122	97.4	2.64	30	5.57-235
chloroform	5.00	5.12	102	5.00	4.95	99.0	3.38	30	80.6-117
chloromethane	5.00	5.41	108	5.00	5.04	101	7.08	30	72.6-127
2-chlorotoluene	5.00	4.99	99.8	5.00	4.96	99.2	0.603	30	81.4-117
4-chlorotoluene	5.00	5.18	104	5.00	5.00	100	3.54	30	82.1-116
dibromochloromethane	5.00	4.87	97.4	5.00	4.52	90.4	7.45	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	24.7	98.9	25.0	23.1	92.3	6.94	30	58.0-133
1,2-dibromoethane	5.00	5.18	104	5.00	4.81	96.2	7.41	30	75.5-118
dibromomethane	5.00	6.35	127*	5.00	5.76	115	9.74	30	77.3-124
1,2-dichlorobenzene	5.00	5.13	103	5.00	5.02	100	2.17	30	76.3-115
1,3-dichlorobenzene	5.00	5.17	103	5.00	5.02	100	2.94	30	79.1-114
1,4-dichlorobenzene	5.00	5.28	106	5.00	5.12	102	3.08	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	27.1	108	25.0	24.8	99.4	8.77	30	52.3-130
dichlorodifluoromethane	5.00	5.49	110	5.00	5.52	110	0.545	30	69.8-134
1,1-dichloroethane	5.00	5.13	103	5.00	4.77	95.4	7.27	30	78.0-120
1,2-dichloroethane	5.00	5.12	102	5.00	4.91	98.2	4.19	30	72.8-126
1,1-dichloroethene	5.00	5.29	106	5.00	4.97	99.4	6.43	30	74.6-121
cis-1,2-dichloroethene	5.00	4.98	99.6	5.00	4.69	93.8	6.00	30	78.0-121
trans-1,2-dichloroethene	5.00	5.13	103	5.00	5.07	101	1.18	30	60.7-144
1,2-dichloropropane	5.00	5.75	115	5.00	4.84	96.8	17.2	30	75.8-119
1,3-dichloropropane	5.00	5.17	103	5.00	4.89	97.8	5.57	30	78.5-113
2,2-dichloropropane	5.00	5.07	101	5.00	4.96	99.2	2.19	30	75.6-130
1,1-dichloropropene	5.00	4.97	99.4	5.00	4.85	97.0	2.44	30	79.7-117
cis-1,3-dichloropropene	5.00	5.50	110	5.00	5.18	104	5.99	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8031110A

Filename: 0311803.D

Date Analyzed: 03/11/10 13:37

LCSD: LCS8031110B

Filename: 0311804.D

Date Analyzed: 03/11/10 14:11

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	RPD
trans-1,3-dichloropropene	5.00	5.66	113*	5.00	5.27	105	7.14	30	79.0-113
Diisopropyl ether	5.00	5.11	102	5.00	4.63	92.6	9.86	30	71.8-115
ethylbenzene	5.00	5.04	101	5.00	4.98	99.6	1.20	30	80.5-115
hexachlorobutadiene	5.00	5.29	106	5.00	5.22	104	1.33	30	63.3-139
2-hexanone	25.0	26.7	107	25.0	24.5	98.0	8.59	30	46.8-123
Iodomethane	5.00	7.03	140	5.00	6.80	136	3.33	30	29.3-156
isopropylbenzene	5.00	4.98	99.6	5.00	4.84	96.8	2.85	30	81.6-114
4-isopropyltoluene	5.00	4.79	95.8	5.00	4.63	92.6	3.40	30	78.4-119
Methyl-tert-butyl ether	5.00	5.01	100	5.00	4.74	94.8	5.54	30	76.0-114
methylene chloride	5.00	5.45	109	5.00	5.18	104	5.08	30	72.9-120
4-methyl-2-pentanone	25.0	26.5	106	25.0	24.4	97.4	8.42	30	56.2-124
naphthalene	5.00	4.79	95.8	5.00	4.49	89.8	6.46	30	24.8-182
n-propyl benzene	5.00	4.90	98.0	5.00	4.72	94.4	3.74	30	79.0-116
styrene	5.00	3.43	68.6	5.00	3.32	66.4	3.26	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.05	101	5.00	4.77	95.4	5.70	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.16	103	5.00	4.88	97.6	5.58	30	69.7-119
tetrachloroethene	5.00	5.14	103	5.00	5.09	102	0.978	30	55.3-144
toluene	5.00	4.76	95.2	5.00	4.61	92.2	3.20	30	78.6-117
1,2,3-trichlorobenzene	5.00	4.94	98.8	5.00	4.60	92.0	7.13	30	20.8-193
1,2,4-trichlorobenzene	5.00	4.86	97.2	5.00	4.64	92.8	4.63	30	47.9-150
1,1,1-trichloroethane	5.00	5.16	103	5.00	4.99	99.8	3.35	30	78.8-120
1,1,2-trichloroethane	5.00	5.45	109	5.00	5.07	101	7.22	30	73.6-117
trichloroethene	5.00	5.23	105	5.00	5.07	101	3.88	30	80.1-116
trichlorofluoromethane	5.00	5.62	112	5.00	5.60	112	0.356	30	80.5-130
1,2,3-trichloropropane	5.00	5.31	106	5.00	4.93	98.6	7.42	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.14	103	5.00	5.01	100	2.56	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.92	98.4	5.00	4.80	96.0	2.47	30	79.4-114
Vinyl acetate	12.5	13.3	107	12.5	12.3	98.4	8.04	30	60.7-127
vinyl chloride	5.00	5.18	104	5.00	5.01	100	3.34	30	77.5-126
m/p-xylene	10.0	9.99	99.9	10.0	9.70	97.0	2.94	30	82.9-112
o-xylene	5.00	5.02	100	5.00	4.81	96.2	4.27	30	81.3-113

System Monitoring Compound Results

		LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS	
		(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC	
460-00-4	4-Bromofluorobenzene	30	29.64	98.8	30	29.04	96.8	84.7-115	
17060-07-0	1,2-Dichloroethane-d4	30	29.95	99.8	30	29.3	97.7	63.5-140	
2037-26-5	Toluene-d8	30	29.82	99.4	30	29.66	98.9	81.8-117	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 3 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst:

Reviewed by:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental Lab Code: NC00919 Inst: MSD8
 EPA Sample No.: Amt. Filenames: Analysis Dates: Batch: 8031110
 Sample g582-648-2a 5 mL 0311814.D 2010-03-11 21:35:00 Dilution: 800
 MS g582-648-2a 5 mL 0311815.D 2010-03-11 22:08:00 Matrix: Water
 MSD g582-648-2a 5 mL 0311816.D 2010-03-11 22:42:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	13900	69.3	20000	14800	73.8	6.21	30	17.7-85.2
acrolein	BQL	100000	107000	107	100000	114000	114	6.52	30	0.00-424
acrylonitrile	BQL	100000	93000	93.0	100000	96400	96.4	3.66	30	85.0-175
benzene	BQL	4000	3670	91.8	4000	3720	93.0	1.30	30	61.6-135
bromobenzene	BQL	4000	3780	94.6	4000	3850	96.2	1.68	30	65.1-125
bromochloromethane	BQL	4000	4340	108	4000	4420	111	1.82	30	75.5-126
bromodichloromethane	BQL	4000	3410	85.2	4000	3410	85.2	0.00	30	74.3-123
bromoform	BQL	4000	3460	86.6	4000	3500	87.4	0.920	30	52.3-122
bromomethane	BQL	4000	4480	112	4000	4640	116	3.51	30	10.0-284
2-butanone	BQL	20000	15100	75.6	20000	15700	78.4	3.53	30	36.1-107
n-butylbenzene	BQL	4000	3390	84.8	4000	3270	81.8	3.60	30	70.2-124
sec-butylbenzene	BQL	4000	3580	89.6	4000	3560	89.0	0.672	30	62.0-133
tert-butylbenzene	BQL	4000	3410	85.2	4000	3490	87.2	2.32	30	73.5-121
Carbon disulfide	BQL	4000	3520	88.0	4000	3680	92.0	4.44	30	68.8-129
carbon tetrachloride	BQL	4000	3530	88.2	4000	3640	91.0	3.12	30	71.8-122
chlorobenzene	BQL	4000	3850	96.2	4000	3820	95.4	0.835	30	77.2-118
chloroethane	BQL	4000	4400	110	4000	4420	110	0.363	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	80600	806*	10000	81900	819*	1.54	30	16.7-283
chloroform	BQL	4000	3830	95.8	4000	3850	96.2	0.417	30	74.0-128
chloromethane	BQL	4000	4020	100	4000	4060	101	0.991	30	72.0-138
2-chlorotoluene	BQL	4000	3640	91.0	4000	3620	90.6	0.440	30	79.3-118
4-chlorotoluene	BQL	4000	3820	95.4	4000	3800	95.0	0.420	30	76.8-120
dibromochloromethane	BQL	4000	3170	79.2	4000	3320	83.0	4.68	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	15400	77.1	20000	16100	80.7	4.56	30	20.2-171
1,2-dibromoethane	BQL	4000	3740	93.6	4000	3840	96.0	2.53	30	78.5-123
dibromomethane	BQL	4000	4190	105	4000	4780	120	13.2	30	71.3-137
1,2-dichlorobenzene	BQL	4000	3840	96.0	4000	3820	95.4	0.627	30	75.1-120
1,3-dichlorobenzene	BQL	4000	3820	95.4	4000	3950	98.8	3.50	30	73.1-121
1,4-dichlorobenzene	BQL	4000	3970	99.2	4000	3950	98.8	0.404	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	17500	87.4	20000	18300	91.5	4.56	30	25.7-149
dichlorodifluoromethane	BQL	4000	3930	98.2	4000	3980	99.4	1.21	30	41.7-166
1,1-dichloroethane	BQL	4000	3800	95.0	4000	3700	92.4	2.77	30	75.6-128
1,2-dichloroethane	BQL	4000	3830	95.8	4000	3950	98.8	3.08	30	71.1-127
1,1-dichloroethene	BQL	4000	4000	100	4000	3890	97.2	2.84	30	64.4-130
cis-1,2-dichloroethene	2690	4000	5890	80.0	4000	5740	76.4	4.60	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	3980	99.6	4000	3860	96.6	3.06	30	74.6-124
1,2-dichloropropane	BQL	4000	3740	93.6	4000	3710	92.8	0.858	30	76.5-129
1,3-dichloropropane	BQL	4000	3680	92.0	4000	3740	93.4	1.51	30	79.1-121
2,2-dichloropropane	BQL	4000	3380	84.6	4000	3380	84.4	0.237	30	31.5-157
1,1-dichloropropene	BQL	4000	3580	89.4	4000	3620	90.6	1.33	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	3730	93.2	4000	3820	95.4	2.33	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD8

Lab Code: NC00919

Batch: 8031110

EPA Sample No.: g582-648-2a, g582-648-2a, g582-648-2a

Dilution: 800

FileNames: 0311814.D, 0311815.D, 0311816.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	3690	92.2	4000	3740	93.6	1.51	30	44.7-144
Diisopropyl ether	BQL	4000	3590	89.8	4000	3550	88.8	1.12	30	79.4-122
ethylbenzene	BQL	4000	3740	93.4	4000	3560	89.0	4.82	30	73.8-126
hexachlorobutadiene	BQL	4000	3820	95.6	4000	3750	93.8	1.90	30	51.8-134
2-hexanone	BQL	20000	16700	83.7	20000	17800	89.1	6.25	30	41.6-111
Iodomethane	BQL	4000	5360	134*	4000	5490	137*	2.36	30	40.6-126
isopropylbenzene	BQL	4000	3490	87.2	4000	3450	86.2	1.15	30	74.3-123
4-isopropyltoluene	BQL	4000	3370	84.2	4000	3330	83.2	1.19	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	3600	90.0	4000	3660	91.6	1.76	30	66.5-136
methylene chloride	BQL	4000	3890	97.2	4000	3940	98.4	1.23	30	48.6-155
4-methyl-2-pentanone	BQL	20000	16900	84.7	20000	18000	89.9	5.96	30	6.88-166
naphthalene	BQL	4000	3100	77.6	4000	3240	81.0	4.29	30	55.1-140
n-propyl benzene	BQL	4000	3540	88.4	4000	3530	88.2	0.226	30	71.6-128
styrene	BQL	4000	2390	59.8*	4000	2480	62.0*	3.61	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	3300	82.6	4000	3430	85.8	3.80	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	3660	91.6	4000	3820	95.6	4.27	30	75.7-136
tetrachloroethene	BQL	4000	3840	96.0	4000	3780	94.4	1.68	30	45.8-153
toluene	BQL	4000	3600	90.0	4000	3660	91.4	1.54	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3620	90.6	4000	3620	90.4	0.221	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3300	82.6	4000	3380	84.4	2.16	30	60.6-125
1,1,1-trichloroethane	BQL	4000	3710	92.8	4000	3710	92.8	0.00	30	78.4-121
1,1,2-trichloroethane	BQL	4000	3940	98.4	4000	4020	100	2.01	30	64.8-128
trichloroethene	3310	4000	7330	100	4000	7220	97.6	2.83	30	84.9-136
trichlorofluoromethane	BQL	4000	4300	108	4000	4300	108	0.00	30	76.8-132
1,2,3-trichloropropane	BQL	4000	3630	90.8	4000	3900	97.4	7.01	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	3750	93.8	4000	3810	95.2	1.48	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	3580	89.6	4000	3590	89.8	0.223	30	67.7-132
Vinyl acetate	BQL	10000	9230	92.3	10000	9490	94.9	2.74	30	0.00-355
vinyl chloride	1970	4000	5700	93.4	4000	5870	97.6	4.40	30	68.1-137
m/p-xylene	BQL	8000	7180	89.8	8000	7200	90.0	0.222	30	79.8-118
o-xylene	BQL	4000	3500	87.4	4000	3480	87.0	0.459	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	30	29.55	98.5	30	29.51	98.4	84.7-115
17060-07-0	1,2-Dichloroethane-d4	30	30.36	101	30	30.16	100	63.5-140
2037-26-5	Toluene-d8	30	29.41	98.0	30	29.67	98.9	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 3 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: cl

Reviewed by: DVO

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8031610B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	3/16/2010	
Benzene	BQL	1.00	0.0650	1	3/16/2010	
Bromobenzene	BQL	1.00	0.0560	1	3/16/2010	
Bromochloromethane	BQL	1.00	0.101	1	3/16/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	3/16/2010	
Bromoform	BQL	1.00	0.120	1	3/16/2010	
Bromomethane	BQL	1.00	0.133	1	3/16/2010	
2-Butanone	BQL	25.0	0.544	1	3/16/2010	
n-Butylbenzene	BQL	1.00	0.109	1	3/16/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	3/16/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	3/16/2010	
Carbon disulfide	BQL	1.00	0.0690	1	3/16/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	3/16/2010	
Chlorobenzene	BQL	1.00	0.0820	1	3/16/2010	
Chloroethane	BQL	1.00	0.106	1	3/16/2010	
Chloroform	BQL	1.00	0.0790	1	3/16/2010	
Chloromethane	BQL	1.00	0.146	1	3/16/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	3/16/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	3/16/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	3/16/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	3/16/2010	
Dibromomethane	BQL	1.00	0.113	1	3/16/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	3/16/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	3/16/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	3/16/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	3/16/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	3/16/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	3/16/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	3/16/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	3/16/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	3/16/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	3/16/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	3/16/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	3/16/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	3/16/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	3/16/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/16/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/16/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	3/16/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	3/16/2010	
Ethylbenzene	BQL	1.00	0.0770	1	3/16/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	3/16/2010	
2-Hexanone	BQL	5.00	0.720	1	3/16/2010	
Iodomethane	BQL	1.00	0.0420	1	3/16/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	3/16/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8031610B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	3/16/2010	
Methylene chloride	BQL	5.00	0.0980	1	3/16/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	3/16/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	3/16/2010	
Naphthalene	BQL	1.00	0.133	1	3/16/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	3/16/2010	
Styrene	BQL	1.00	0.0850	1	3/16/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	3/16/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	3/16/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	3/16/2010	
Toluene	BQL	1.00	0.0760	1	3/16/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	3/16/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	3/16/2010	
Trichloroethene	BQL	1.00	0.0540	1	3/16/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	3/16/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	3/16/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	3/16/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	3/16/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	3/16/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	3/16/2010	
Vinyl chloride	BQL	1.00	0.149	1	3/16/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	3/16/2010	
o-Xylene	BQL	1.00	0.0650	1	3/16/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	29.1	97
Toluene-d8	30	28	93
4-Bromofluorobenzene	30	27.1	90

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVD

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8031610A

Filename: 0316803.D

Date Analyzed: 03/16/10 12:37

LCSD: LCS8031610B

Filename: 0316804.D

Date Analyzed: 03/16/10 13:02

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	% RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
acetone	25.0	24.2	97.0	25.0	24.1	96.4	0.662	30	23.5-141
acrolein	125	134	107	125	134	107	0.545	30	31.4-182
acrylonitrile	125	114	90.9	125	114	91.1	0.211	30	64.2-140
benzene	5.00	4.64	92.8	5.00	4.75	95.0	2.34	30	76.6-120
bromobenzene	5.00	4.83	96.6	5.00	4.86	97.2	0.619	30	75.0-122
bromochloromethane	5.00	5.39	108	5.00	5.29	106	1.87	30	74.8-127
bromodichloromethane	5.00	5.00	100	5.00	4.73	94.6	5.55	30	76.4-117
bromoform	5.00	6.08	122	5.00	5.63	113	7.68	30	62.4-127
bromomethane	5.00	5.76	115	5.00	5.49	110	4.80	30	34.2-166
2-butanone	25.0	22.6	90.4	25.0	22.7	90.8	0.530	30	44.9-126
n-butylbenzene	5.00	4.72	94.4	5.00	4.72	94.4	0.00	30	72.0-122
sec-butylbenzene	5.00	4.86	97.2	5.00	4.76	95.2	2.08	30	78.3-116
tert-butylbenzene	5.00	4.61	92.2	5.00	4.74	94.8	2.78	30	53.1-148
Carbon disulfide	5.00	5.00	100	5.00	4.91	98.2	1.82	30	69.0-118
carbon tetrachloride	5.00	5.54	111	5.00	5.46	109	1.45	30	71.7-124
chlorobenzene	5.00	4.66	93.2	5.00	4.62	92.4	0.862	30	75.5-116
chloroethane	5.00	5.88	118	5.00	5.41	108	8.32	30	78.2-138
2-chloroethyl vinyl ether	125	111	88.7	125	113	90.1	1.58	30	5.57-235
chloroform	5.00	4.84	96.8	5.00	4.77	95.4	1.46	30	80.6-117
chloromethane	5.00	5.37	107	5.00	5.04	101	6.34	30	72.6-127
2-chlorotoluene	5.00	4.61	92.2	5.00	4.88	97.6	5.69	30	81.4-117
4-chlorotoluene	5.00	4.76	95.2	5.00	4.90	98.0	2.90	30	82.1-116
dibromochloromethane	5.00	4.93	98.6	5.00	4.81	96.2	2.46	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	22.2	88.8	25.0	22.0	88.0	0.860	30	58.0-133
1,2-dibromoethane	5.00	4.79	95.8	5.00	4.78	95.6	0.209	30	75.5-118
dibromomethane	5.00	5.83	117	5.00	4.58	91.6	24.0	30	77.3-124
1,2-dichlorobenzene	5.00	4.70	94.0	5.00	4.72	94.4	0.425	30	76.3-115
1,3-dichlorobenzene	5.00	4.74	94.8	5.00	4.72	94.4	0.423	30	79.1-114
1,4-dichlorobenzene	5.00	4.90	98.0	5.00	4.80	96.0	2.06	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	23.4	93.5	25.0	23.7	94.8	1.32	30	52.3-130
dichlorodifluoromethane	5.00	5.47	109	5.00	5.11	102	6.80	30	69.8-134
1,1-dichloroethane	5.00	4.94	98.8	5.00	4.71	94.2	4.77	30	78.0-120
1,2-dichloroethane	5.00	4.70	94.0	5.00	4.62	92.4	1.72	30	72.8-126
1,1-dichloroethene	5.00	5.24	105	5.00	5.28	106	0.948	30	74.6-121
cis-1,2-dichloroethene	5.00	4.75	95.0	5.00	4.82	96.4	1.46	30	78.0-121
trans-1,2-dichloroethene	5.00	4.77	95.4	5.00	4.81	96.2	0.835	30	60.7-144
1,2-dichloropropane	5.00	4.91	98.2	5.00	4.28	85.6	13.7	30	75.8-119
1,3-dichloropropane	5.00	4.54	90.8	5.00	4.63	92.6	1.96	30	78.5-113
2,2-dichloropropane	5.00	5.25	105	5.00	5.11	102	2.70	30	75.6-130
1,1-dichloropropene	5.00	4.87	97.4	5.00	4.88	97.6	0.205	30	79.7-117
cis-1,3-dichloropropene	5.00	5.16	103	5.00	4.99	99.8	3.35	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8031610A

Filename: 0316803.D

Date Analyzed: 03/16/10 12:37

LCSD: LCS8031610B

Filename: 0316804.D

Date Analyzed: 03/16/10 13:02

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
trans-1,3-dichloropropene	5.00	5.35	107	5.00	5.20	104	2.84	30	79.0-113
Diisopropyl ether	5.00	4.64	92.8	5.00	4.49	89.8	3.28	30	71.8-115
ethylbenzene	5.00	4.56	91.2	5.00	4.64	92.8	1.74	30	80.5-115
hexachlorobutadiene	5.00	5.26	105	5.00	5.28	106	0.380	30	63.3-139
2-hexanone	25.0	22.7	91.0	25.0	23.7	94.7	4.01	30	46.8-123
Iodomethane	5.00	6.51	130	5.00	6.47	129	0.616	30	29.3-156
isopropylbenzene	5.00	4.57	91.4	5.00	4.55	91.0	0.438	30	81.6-114
4-isopropyltoluene	5.00	4.72	94.4	5.00	4.69	93.8	0.638	30	78.4-119
Methyl-tert-butyl ether	5.00	4.45	89.0	5.00	4.55	91.0	2.22	30	76.0-114
methylene chloride	5.00	4.75	95.0	5.00	4.53	90.6	4.74	30	72.9-120
4-methyl-2-pentanone	25.0	20.8	83.3	25.0	21.6	86.3	3.54	30	56.2-124
naphthalene	5.00	4.05	81.0	5.00	4.19	83.8	3.40	30	24.8-182
n-propyl benzene	5.00	4.58	91.6	5.00	4.60	92.0	0.436	30	79.0-116
styrene	5.00	4.58	91.6	5.00	4.56	91.2	0.438	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.23	105	5.00	5.24	105	0.191	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.34	86.8	5.00	4.49	89.8	3.40	30	69.7-119
tetrachloroethene	5.00	5.04	101	5.00	5.01	100	0.597	30	55.3-144
toluene	5.00	4.61	92.2	5.00	4.69	93.8	1.72	30	78.6-117
1,2,3-trichlorobenzene	5.00	4.53	90.6	5.00	4.69	93.8	3.47	30	20.8-193
1,2,4-trichlorobenzene	5.00	4.55	91.0	5.00	4.61	92.2	1.31	30	47.9-150
1,1,1-trichloroethane	5.00	5.10	102	5.00	4.98	99.6	2.38	30	78.8-120
1,1,2-trichloroethane	5.00	4.90	98.0	5.00	4.81	96.2	1.85	30	73.6-117
trichloroethene	5.00	4.86	97.2	5.00	4.71	94.2	3.13	30	80.1-116
trichlorofluoromethane	5.00	6.42	128	5.00	6.17	123	3.97	30	80.5-130
1,2,3-trichloropropane	5.00	4.34	86.8	5.00	4.57	91.4	5.16	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.78	95.6	5.00	4.76	95.2	0.419	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.67	93.4	5.00	4.58	91.6	1.94	30	79.4-114
Vinyl acetate	12.5	11.7	93.4	12.5	11.3	90.3	3.40	30	60.7-127
vinyl chloride	5.00	4.99	99.8	5.00	4.99	99.8	0.00	30	77.5-126
m/p-xylene	10.0	9.21	92.1	10.0	9.47	94.7	2.78	30	82.9-112
o-xylene	5.00	4.46	89.2	5.00	4.45	89.0	0.224	30	81.3-113

System Monitoring Compound Results

		LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	30	29.47	98.2	30	29.52	98.4	84.7-115
17060-07-0	1,2-Dichloroethane-d4	30	29.85	99.5	30	28.84	96.1	63.5-140
2037-26-5	Toluene-d8	30	30.22	101	30	29.89	99.6	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVD

Reviewed by: 

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD8

EPA Sample No.: Amt. Filenames:

Analysis Dates:

Batch: 8031610

Sample g582-648-3a 5 mL 0316814.D

2010-03-16 17:11:00

Dilution: 800

MS g582-648-3a 5 mL 0316815.D

2010-03-16 17:35:00

Matrix: Water

MSD g582-648-3a 5 mL 0316816.D 2010-03-16 18:00:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	%	QC LIMITS	
									RPD	REC
acetone	BQL	20000	13700	68.4	20000	14600	73.1	6.73	30	17.7-85.2
acrolein	BQL	100000	117000	117	100000	130000	130	10.4	30	0.00-424
acrylonitrile	BQL	100000	99600	99.6	100000	110000	110	9.88	30	85.0-175
benzene	BQL	4000	4100	102	4000	4020	101	1.77	30	61.6-135
bromobenzene	BQL	4000	4220	106	4000	4070	102	3.66	30	65.1-125
bromochloromethane	BQL	4000	4740	118	4000	4760	119	0.505	30	75.5-126
bromodichloromethane	BQL	4000	3940	98.4	4000	3920	98.0	0.407	30	74.3-123
bromoform	BQL	4000	3870	96.8	4000	3970	99.2	2.45	30	52.3-122
bromomethane	BQL	4000	4800	120	4000	4880	122	1.65	30	10.0-284
2-butanone	BQL	20000	14700	73.7	20000	15200	75.8	2.73	30	36.1-107
n-butylbenzene	BQL	4000	3760	94.0	4000	3660	91.4	2.80	30	70.2-124
sec-butylbenzene	BQL	4000	3860	96.6	4000	3830	95.8	0.832	30	62.0-133
tert-butylbenzene	BQL	4000	3760	94.0	4000	3660	91.6	2.59	30	73.5-121
Carbon disulfide	BQL	4000	4030	101	4000	4080	102	1.18	30	68.8-129
carbon tetrachloride	BQL	4000	4430	111	4000	4480	112	1.08	30	71.8-122
chlorobenzene	BQL	4000	4150	104	4000	4050	101	2.54	30	77.2-118
chloroethane	BQL	4000	5130	128	4000	5060	126	1.41	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	86700	867*	10000	92400	924*	6.38	30	16.7-283
chloroform	BQL	4000	4460	111	4000	4220	106	5.34	30	74.0-128
chloromethane	BQL	4000	4940	124	4000	4990	125	0.966	30	72.0-138
2-chlorotoluene	BQL	4000	4000	100	4000	3930	98.2	1.82	30	79.3-118
4-chlorotoluene	BQL	4000	4140	103	4000	3890	97.2	6.18	30	76.8-120
dibromochloromethane	BQL	4000	3660	91.4	4000	3740	93.4	2.16	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	20000	15100	75.4	20000	16200	81.0	7.06	30	20.2-171
1,2-dibromoethane	BQL	4000	3830	95.8	4000	3940	98.4	2.68	30	78.5-123
dibromomethane	BQL	4000	4070	102	4000	4130	103	1.36	30	71.3-137
1,2-dichlorobenzene	BQL	4000	4080	102	4000	4040	101	0.985	30	75.1-120
1,3-dichlorobenzene	BQL	4000	4180	104	4000	4030	101	3.51	30	73.1-121
1,4-dichlorobenzene	BQL	4000	4170	104	4000	3930	98.2	5.93	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	16400	82.2	20000	17200	86.2	4.75	30	25.7-149
dichlorodifluoromethane	BQL	4000	5060	126	4000	5170	129	2.19	30	41.7-166
1,1-dichloroethane	BQL	4000	4320	108	4000	4140	104	4.16	30	75.6-128
1,2-dichloroethane	BQL	4000	4290	107	4000	4190	105	2.26	30	71.1-127
1,1-dichloroethene	BQL	4000	4680	117	4000	4740	118	1.19	30	64.4-130
cis-1,2-dichloroethene	17900	4000	24200	157*	4000	24100	155*	1.41	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	4750	110	4000	4750	110	0.00	30	74.6-124
1,2-dichloropropane	BQL	4000	3920	98.0	4000	3910	97.8	0.204	30	76.5-129
1,3-dichloropropane	BQL	4000	3890	97.2	4000	3920	98.0	0.820	30	79.1-121
2,2-dichloropropane	BQL	4000	4190	105	4000	4200	105	0.191	30	31.5-157
1,1-dichloropropene	BQL	4000	4080	102	4000	4060	101	0.590	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	4150	104	4000	4180	105	0.768	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: MATRIX INTERFERENCE

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD8

Lab Code: NC00919

Batch: 8031610

EPA Sample No.: g582-648-3a, g582-648-3a, g582-648-3a

Dilution: 800

FileNames: 0316814.D, 0316815.D, 0316816.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	4330	108	4000	4320	108	0.185	30	44.7-144
Diisopropyl ether	BQL	4000	3900	97.6	4000	3860	96.6	1.03	30	79.4-122
ethylbenzene	BQL	4000	3780	94.4	4000	3700	92.4	2.14	30	73.8-126
hexachlorobutadiene	BQL	4000	4380	109	4000	4140	104	5.45	30	51.8-134
2-hexanone	BQL	20000	15100	75.4	20000	16300	81.5	7.85	30	41.6-111
Iodomethane	BQL	4000	5420	135*	4000	5640	141*	4.05	30	40.6-126
isopropylbenzene	BQL	4000	3680	92.0	4000	3640	91.0	1.09	30	74.3-123
4-isopropyltoluene	BQL	4000	3740	93.4	4000	3660	91.4	2.16	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	3860	96.6	4000	3870	96.8	0.207	30	66.5-136
methylene chloride	BQL	4000	4350	109	4000	4400	110	1.10	30	48.6-155
4-methyl-2-pentanone	BQL	20000	15800	78.8	20000	17200	86.2	8.97	30	6.88-166
naphthalene	BQL	4000	2960	74.0	4000	3130	78.2	5.52	30	55.1-140
n-propyl benzene	BQL	4000	3770	94.2	4000	3690	92.2	2.14	30	71.6-128
styrene	BQL	4000	2560	64.0*	4000	2470	61.8*	3.50	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	4060	101	4000	3900	97.6	3.82	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	3780	94.6	4000	3810	95.2	0.632	30	75.7-136
tetrachloroethene	BQL	4000	4390	110	4000	4260	107	2.96	30	45.8-153
toluene	BQL	4000	4090	102	4000	3940	98.6	3.58	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	3720	93.0	4000	3620	90.4	2.84	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	3640	91.0	4000	3570	89.2	2.00	30	60.6-125
1,1,1-trichloroethane	BQL	4000	4300	108	4000	4230	106	1.69	30	78.4-121
1,1,2-trichloroethane	BQL	4000	4140	104	4000	4140	104	0.00	30	64.8-128
trichloroethene	BQL	4000	4290	107	4000	4290	107	0.00	30	84.9-136
trichlorofluoromethane	BQL	4000	5810	145*	4000	5720	143*	1.53	30	76.8-132
1,2,3-trichloropropane	BQL	4000	3710	92.8	4000	3970	99.2	6.67	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	4100	102	4000	3850	96.2	6.24	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	3870	96.8	4000	3700	92.4	4.65	30	67.7-132
Vinyl acetate	BQL	10000	9690	96.9	10000	9900	99.0	2.20	30	0.00-355
vinyl chloride	1940	4000	6630	117	4000	6790	121	3.35	30	68.1-137
m/p-xylene	BQL	8000	7820	97.7	8000	7470	93.4	4.50	30	79.8-118
o-xylene	BQL	4000	3660	91.6	4000	3580	89.6	2.21	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	30	30.1	100	30	29.9	99.7	84.7-115
17060-07-0	1,2-Dichloroethane-d4	30	30.75	102	30	30.52	102	63.5-140
2037-26-5	Toluene-d8	30	30.55	102	30	30.82	103	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 5 failure(s) out of 72. MSD Spike Recovery: 5 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3031710B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	3/17/2010	
Benzene	BQL	1.00	0.0650	1	3/17/2010	
Bromobenzene	BQL	1.00	0.0560	1	3/17/2010	
Bromochloromethane	BQL	1.00	0.101	1	3/17/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	3/17/2010	
Bromoform	BQL	1.00	0.120	1	3/17/2010	
Bromomethane	BQL	1.00	0.133	1	3/17/2010	
2-Butanone	BQL	25.0	0.544	1	3/17/2010	
n-Butylbenzene	BQL	1.00	0.109	1	3/17/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	3/17/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	3/17/2010	
Carbon disulfide	BQL	1.00	0.0690	1	3/17/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	3/17/2010	
Chlorobenzene	BQL	1.00	0.0820	1	3/17/2010	
Chloroethane	BQL	1.00	0.106	1	3/17/2010	
Chloroform	BQL	1.00	0.0790	1	3/17/2010	
Chloromethane	BQL	1.00	0.146	1	3/17/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	3/17/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	3/17/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	3/17/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	3/17/2010	
Dibromomethane	BQL	1.00	0.113	1	3/17/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	3/17/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	3/17/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	3/17/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	3/17/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	3/17/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	3/17/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	3/17/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	3/17/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	3/17/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	3/17/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	3/17/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	3/17/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	3/17/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	3/17/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/17/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	3/17/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	3/17/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	3/17/2010	
Ethylbenzene	BQL	1.00	0.0770	1	3/17/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	3/17/2010	
2-Hexanone	BQL	5.00	0.720	1	3/17/2010	
Iodomethane	BQL	1.00	0.0420	1	3/17/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	3/17/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3031710B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL


Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	3/17/2010	
Methylene chloride	BQL	5.00	0.0980	1	3/17/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	3/17/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	3/17/2010	
Naphthalene	BQL	1.00	0.133	1	3/17/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	3/17/2010	
Styrene	BQL	1.00	0.0850	1	3/17/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	3/17/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	3/17/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	3/17/2010	
Toluene	BQL	1.00	0.0760	1	3/17/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	3/17/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	3/17/2010	
Trichloroethene	BQL	1.00	0.0540	1	3/17/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	3/17/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	3/17/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	3/17/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	3/17/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	3/17/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	3/17/2010	
Vinyl chloride	BQL	1.00	0.149	1	3/17/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	3/17/2010	
o-Xylene	BQL	1.00	0.0650	1	3/17/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.6	106		
Toluene-d8		10	9.92	99		
4-Bromofluorobenzene		10	9.72	97		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3031710A

Filename: 0317303.D

Date Analyzed: 03/17/10 10:26

LCS: LCS3031710B

Filename: 0317304.D

Date Analyzed: 03/17/10 10:57

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCS SPIKE	LCS CONC	LCS %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	29.2	117	25.0	29.0	116	0.550	30	23.5-141
acrolein	125	109	87.0	125	112	89.8	3.14	30	31.4-182
acrylonitrile	125	120	96.2	125	125	100	3.94	30	64.2-140
benzene	5.00	4.88	97.6	5.00	4.79	95.8	1.86	30	76.6-120
bromobenzene	5.00	4.87	97.4	5.00	4.81	96.2	1.24	30	75.0-122
bromochloromethane	5.00	4.96	99.2	5.00	4.94	98.8	0.404	30	74.8-127
bromodichloromethane	5.00	5.21	104	5.00	5.10	102	2.13	30	76.4-117
bromoform	5.00	4.81	96.2	5.00	4.61	92.2	4.25	30	62.4-127
bromomethane	5.00	5.07	101	5.00	4.85	97.0	4.44	30	34.2-166
2-butanone	25.0	28.1	112	25.0	28.0	112	0.107	30	44.9-126
n-butylbenzene	5.00	4.93	98.6	5.00	4.88	97.6	1.02	30	72.0-122
sec-butylbenzene	5.00	4.83	96.6	5.00	4.78	95.6	1.04	30	78.3-116
tert-butylbenzene	5.00	4.98	99.6	5.00	4.86	97.2	2.44	30	53.1-148
Carbon disulfide	5.00	5.13	103	5.00	5.02	100	2.17	30	69.0-118
carbon tetrachloride	5.00	5.07	101	5.00	4.94	98.8	2.60	30	71.7-124
chlorobenzene	5.00	4.78	95.6	5.00	4.79	95.8	0.209	30	75.5-116
chloroethane	5.00	4.89	97.8	5.00	4.98	99.6	1.82	30	78.2-138
2-chloroethyl vinyl ether	125	131	105	125	130	104	1.14	30	5.57-235
chloroform	5.00	4.99	99.8	5.00	5.07	101	1.59	30	80.6-117
chloromethane	5.00	5.14	103	5.00	5.04	101	1.96	30	72.6-127
2-chlorotoluene	5.00	4.87	97.4	5.00	4.74	94.8	2.70	30	81.4-117
4-chlorotoluene	5.00	5.00	100	5.00	4.98	99.6	0.401	30	82.1-116
dibromochloromethane	5.00	4.71	94.2	5.00	4.83	96.6	2.52	30	73.1-117
1,2-dibromo-3-chloropropane	25.0	26.4	106	25.0	27.3	109	3.31	30	58.0-133
1,2-dibromoethane	5.00	4.96	99.2	5.00	4.89	97.8	1.42	30	75.5-118
dibromomethane	5.00	5.12	102	5.00	5.15	103	0.584	30	77.3-124
1,2-dichlorobenzene	5.00	5.06	101	5.00	4.96	99.2	2.00	30	76.3-115
1,3-dichlorobenzene	5.00	4.95	99.0	5.00	4.91	98.2	0.811	30	79.1-114
1,4-dichlorobenzene	5.00	5.15	103	5.00	4.93	98.6	4.36	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	27.4	110	25.0	25.7	103	6.36	30	52.3-130
dichlorodifluoromethane	5.00	4.53	90.6	5.00	4.67	93.4	3.04	30	69.8-134
1,1-dichloroethane	5.00	5.05	101	5.00	5.02	100	0.596	30	78.0-120
1,2-dichloroethane	5.00	5.12	102	5.00	5.11	102	0.196	30	72.8-126
1,1-dichloroethene	5.00	4.90	98.0	5.00	4.74	94.8	3.32	30	74.6-121
cis-1,2-dichloroethene	5.00	4.92	98.4	5.00	4.81	96.2	2.26	30	78.0-121
trans-1,2-dichloroethene	5.00	4.89	97.8	5.00	4.84	96.8	1.03	30	60.7-144
1,2-dichloropropane	5.00	5.18	104	5.00	5.20	104	0.385	30	75.8-119
1,3-dichloropropane	5.00	4.77	95.4	5.00	4.85	97.0	1.66	30	78.5-113
2,2-dichloropropane	5.00	4.99	99.8	5.00	4.93	98.6	1.21	30	75.6-130
1,1-dichloropropene	5.00	4.87	97.4	5.00	4.82	96.4	1.03	30	79.7-117
cis-1,3-dichloropropene	5.00	5.19	104	5.00	5.18	104	0.193	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3031710A

Filename: 0317303.D

Date Analyzed: 03/17/10 10:26

LCS: LCS3031710B

Filename: 0317304.D

Date Analyzed: 03/17/10 10:57

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCS SPIKE	LCS CONC	LCS %	RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
trans-1,3-dichloropropene	5.00	5.22	104	5.00	5.25	105	0.573	30	79.0-113
Diisopropyl ether	5.00	5.12	102	5.00	5.16	103	0.778	30	71.8-115
ethylbenzene	5.00	4.75	95.0	5.00	4.67	93.4	1.70	30	80.5-115
hexachlorobutadiene	5.00	5.27	105	5.00	5.10	102	3.28	30	63.3-139
2-hexanone	25.0	27.0	108	25.0	27.2	109	0.885	30	46.8-123
Iodomethane	5.00	4.33	86.6	5.00	4.65	93.0	7.13	30	29.3-156
isopropylbenzene	5.00	4.84	96.8	5.00	4.66	93.2	3.79	30	81.6-114
4-isopropyltoluene	5.00	4.81	96.2	5.00	4.66	93.2	3.17	30	78.4-119
Methyl-tert-butyl ether	5.00	4.91	98.2	5.00	4.96	99.2	1.01	30	76.0-114
methylene chloride	5.00	5.03	101	5.00	5.02	100	0.199	30	72.9-120
4-methyl-2-pentanone	25.0	25.9	104	25.0	25.6	102	1.28	30	56.2-124
naphthalene	5.00	5.56	111	5.00	5.26	105	5.54	30	24.8-182
n-propyl benzene	5.00	4.81	96.2	5.00	4.69	93.8	2.53	30	79.0-116
styrene	5.00	3.48	69.6	5.00	3.48	69.6	0.00	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.87	97.4	5.00	4.72	94.4	3.13	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.39	108	5.00	5.32	106	1.31	30	69.7-119
tetrachloroethene	5.00	4.27	85.4	5.00	4.36	87.2	2.08	30	55.3-144
toluene	5.00	4.88	97.6	5.00	4.81	96.2	1.44	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.71	114	5.00	5.11	102	11.1	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.45	109	5.00	5.18	104	5.08	30	47.9-150
1,1,1-trichloroethane	5.00	5.19	104	5.00	5.01	100	3.53	30	78.8-120
1,1,2-trichloroethane	5.00	5.15	103	5.00	5.05	101	1.96	30	73.6-117
trichloroethene	5.00	4.95	99.0	5.00	5.03	101	2.00	30	80.1-116
trichlorofluoromethane	5.00	5.52	110	5.00	5.60	112	1.44	30	80.5-130
1,2,3-trichloropropane	5.00	5.11	102	5.00	5.10	102	0.196	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.01	100	5.00	4.86	97.2	3.04	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.85	97.0	5.00	4.72	94.4	2.72	30	79.4-114
Vinyl acetate	12.5	13.2	106	12.5	13.2	105	0.606	30	60.7-127
vinyl chloride	5.00	4.77	95.4	5.00	4.84	96.8	1.46	30	77.5-126
m/p-xylene	10.0	9.72	97.2	10.0	9.56	95.6	1.66	30	82.9-112
o-xylene	5.00	4.93	98.6	5.00	4.82	96.4	2.26	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE	LCS CONC	LCS %	LCS SPIKE	LCS CONC	LCS %	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC	
460-00-4	4-Bromofluorobenzene	10	9.76	97.6	10	10.06	101	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.63	106	10	10.82	108	63.5-140
2037-26-5	Toluene-d8	10	9.89	98.9	10	10.09	101	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCS: Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: Ovo

Reviewed by: [Signature]



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1 CLIENT: **ARCADIS** X574
 CONTACT: **RICHARD MATOR** PHONE NO.: **781 742-9180**
 PROJECT: **AUX MYErtle BOEH** SITE/PWSID#: **SUITE 210**
 REPORTS TO: **CNE ADAMS PLACE, 310 SEVEN FIELDS BLDG.**
SEVEN FIELDS, PA 16046 FAX NO.: **724 742-9189**
 INVOICE TO: **↑** QUOTE #:
 P.O. NUMBER: **800 7393 0000**

SGS Reference: **CS82-648** PAGE **1** OF **1**

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used Analysis Required (3)	HCI	REMARKS
	GW-8D	3/4/10	12:45		3	C			low flow (supplies)
	GW-9D	3/4/10	14:50		3	C			PDB
	GW-10D	3/4/10	15:35		3	C			PDB
	P-1D	3/4/10	16:40		3	C			PDB
	P-2D	3/4/10	18:15		3	C			low flow (supplies)
	P-3D	3/5/10	9:50		2	C			PDB (NUT)
									ENOUGH SAMPLE FOR 3rd BOTTLE

2

4

5

Collected/Relinquished By: (1) **RYAN HABERSANG** Date **3/5/10** Time **12:00** Received By:
 Relinquished By: (2) Date Date Received By:
 Relinquished By: (3) Date Date Received By:
 Relinquished By: (4) Date **3/6/10** Time **10:15** Received By: **Burton Hagen**

Shipping Carrier:
 Shipping Ticket No:
 Special Deliverable Requirements:
 Special Instructions:
 Samples Received Cold? (Circle) YES NO
 Temperature °C: **2.7**
 Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
 Requested Turnaround Time: RUSH STD Date Needed



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 12
Lab Proj #: P1003403
Report Date: 04/12/10
Client Proj Name: B0007393.0000
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 13

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1003403-01	IW-2D
P1003403-02	OW-7D
P1003403-03	IW-4D
P1003403-04	P-2D
P1003403-05	OW-8D
P1003403-06	OW-10D
P1003403-07	OW-9D
P1003403-08	P-1D
P1003403-09	P-3D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 4/12/10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative: The TOC analyses were performed by Pace Analytical Services

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>
IW-2D	Water	P1003403-01	29 Mar. 10 9:50	30 Mar. 10 12:39

<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		1100.0	50	mg/L	9060	4/8/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-7D	Water	P1003403-02	29 Mar. 10 10:05	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		3600.0	50	mg/L	9060	4/8/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
IW-4D	Water	P1003403-03	29 Mar. 10 10:20	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4300.0	100	mg/L	9060	4/8/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 5 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-2D	Water	P1003403-04	29 Mar. 10 10:45	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4500.0	100	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane		0.110	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		6.600	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		270.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 6 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-8D	Water	P1003403-05			29 Mar. 10 11:10	30 Mar. 10 12:39	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		2900.0	50	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane		0.680	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		220.000	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		3500.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-10D	Water	P1003403-06	29 Mar. 10 11:20	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4500.0	100	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane		0.700	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		18.000	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		640.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-9D	Water	P1003403-07	29 Mar. 10 11:40	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4600.0	50	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane		0.130	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		14.000	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		680.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

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 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>
P-1D	Water	P1003403-08			29 Mar. 10 11:50		30 Mar. 10 12:39
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		340.0	50	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane	J	0.007	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		8.700	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		9300.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 10 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
P-3D	Water	P1003403-09	29 Mar. 10 12:15	30 Mar. 10 12:39			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		150.0	50	mg/L	9060	4/8/10	pas
RiskAnalysis							
N Ethane		0.130	0.025	ug/L	AM20GAX	4/9/10	rw
N Ethene		67.000	0.025	ug/L	AM20GAX	4/9/10	rw
N Methane		3500.000	0.100	ug/L	AM20GAX	4/9/10	rw



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 11 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: In House Dissolved Gas Sample Preparation
Analysis Method: Light Hydrocarbons (C1-C4) in Water

M100409001-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	< 0.025 ug/L		0.025		- NA
Ethene	< 0.025 ug/L		0.025		- NA
Methane	< 0.100 ug/L		0.100		- NA

M100409001-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Ethane	50.000 ug/L	45.00	111.00	75 - 125
Ethene	45.000 ug/L	40.80	110.00	75 - 125
Methane	890.000 ug/L	825.00	108.00	75 - 125

M100409001-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Ethane	51.000 ug/L	45.00	113.00	75 - 125	1.98	0 - 20
Ethene	46.000 ug/L	40.80	113.00	75 - 125	2.20	0 - 20
Methane	890.000 ug/L	825.00	108.00	75 - 125	0.00	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 12
 Lab Proj #: P1003403
 Report Date: 04/12/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100412019-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 1.0 mg/L		1.0		- NA

M100412019-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	9.6 mg/L	10.01		96.00	85 - 115

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Mark Hanish
Arcadis
600 Waterfront Dr.
Pittsburgh, PA 15222

Report Number: G582-661

Client Project: AVX-Myrtle Beach, SC

Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Barbara Hager at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America, Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America, Inc.

Barbara Hager

Project Manager
Barbara Hager

April 14, 2010

Date

SGS North America, Inc.
List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

UJ = Target analytes with recoveries that are $10\% < \%R < LCL$; # of MEs are allowable and compounds are not detected in the sample.

mg/Kg = milligram per kilogram, ppm, parts per million

$\mu\text{g}/\text{kg}$ = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

$\mu\text{g}/\text{L}$ = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% Solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block; see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D
Client Project ID: AVX-Myrtle Beach, SC
Lab Sample ID: G582-661-1A
Lab Project ID: G582-661

Analyzed By: DVO
Date Collected: 3/29/2010 10:45
Date Received: 3/30/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	224	1000	87.2	40	4/12/2010	J
Benzene	BQL	40.0	2.60	40	4/12/2010	
Bromobenzene	BQL	40.0	2.24	40	4/12/2010	
Bromochloromethane	BQL	40.0	4.04	40	4/12/2010	
Bromodichloromethane	BQL	40.0	3.04	40	4/12/2010	
Bromoform	BQL	40.0	4.80	40	4/12/2010	
Bromomethane	BQL	40.0	5.32	40	4/12/2010	
2-Butanone	480	1000	21.8	40	4/12/2010	J
n-Butylbenzene	BQL	40.0	4.36	40	4/12/2010	
sec-Butylbenzene	BQL	40.0	3.36	40	4/12/2010	
tert-Butylbenzene	BQL	40.0	2.00	40	4/12/2010	
Carbon disulfide	BQL	40.0	2.76	40	4/12/2010	
Carbon tetrachloride	BQL	40.0	3.48	40	4/12/2010	
Chlorobenzene	BQL	40.0	3.28	40	4/12/2010	
Chloroethane	BQL	40.0	4.24	40	4/12/2010	
Chloroform	BQL	40.0	3.16	40	4/12/2010	
Chloromethane	BQL	40.0	5.84	40	4/12/2010	
2-Chlorotoluene	BQL	40.0	3.96	40	4/12/2010	
4-Chlorotoluene	BQL	40.0	3.20	40	4/12/2010	
Dibromochloromethane	BQL	40.0	3.60	40	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	200	48.4	40	4/12/2010	
Dibromomethane	BQL	40.0	4.52	40	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	40.0	4.96	40	4/12/2010	
1,2-Dichlorobenzene	BQL	40.0	5.08	40	4/12/2010	
1,3-Dichlorobenzene	BQL	40.0	3.24	40	4/12/2010	
1,4-Dichlorobenzene	BQL	40.0	3.16	40	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	200	25.2	40	4/12/2010	
1,1-Dichloroethane	BQL	40.0	2.96	40	4/12/2010	
1,1-Dichloroethene	BQL	40.0	3.56	40	4/12/2010	
1,2-Dichloroethane	BQL	40.0	3.16	40	4/12/2010	
cis-1,2-Dichloroethene	215	40.0	2.60	40	4/12/2010	
trans-1,2-dichloroethene	9.60	40.0	3.56	40	4/12/2010	J
1,2-Dichloropropane	BQL	40.0	3.76	40	4/12/2010	
1,3-Dichloropropane	BQL	40.0	5.08	40	4/12/2010	
2,2-Dichloropropane	BQL	40.0	2.36	40	4/12/2010	
1,1-Dichloropropene	BQL	40.0	2.88	40	4/12/2010	
cis-1,3-Dichloropropene	BQL	40.0	3.04	40	4/12/2010	
trans-1,3-Dichloropropene	BQL	40.0	3.04	40	4/12/2010	
Dichlorodifluoromethane	BQL	200	3.76	40	4/12/2010	
Diisopropyl ether (DIPE)	BQL	40.0	2.92	40	4/12/2010	
Ethylbenzene	BQL	40.0	3.08	40	4/12/2010	
Hexachlorobutadiene	BQL	40.0	9.12	40	4/12/2010	
2-Hexanone	BQL	200	28.8	40	4/12/2010	
Iodomethane	BQL	40.0	1.68	40	4/12/2010	
Isopropylbenzene	BQL	40.0	2.84	40	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-2D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-1A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010 10:45
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	40.0	1.92	40	4/12/2010	
Methylene chloride	BQL	200	3.92	40	4/12/2010	
4-Methyl-2-pentanone	BQL	200	22.0	40	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	40.0	2.68	40	4/12/2010	
Naphthalene	BQL	40.0	5.32	40	4/12/2010	
n-Propyl benzene	BQL	40.0	3.20	40	4/12/2010	
Styrene	BQL	40.0	3.40	40	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	40.0	3.60	40	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	40.0	4.60	40	4/12/2010	
Tetrachloroethene	BQL	40.0	2.76	40	4/12/2010	
Toluene	BQL	40.0	3.04	40	4/12/2010	
1,2,3-Trichlorobenzene	BQL	40.0	7.60	40	4/12/2010	
1,2,4-Trichlorobenzene	BQL	40.0	4.76	40	4/12/2010	
Trichloroethene	571	40.0	2.16	40	4/12/2010	
1,1,1-Trichloroethane	BQL	40.0	2.16	40	4/12/2010	
1,1,2-Trichloroethane	BQL	40.0	7.28	40	4/12/2010	
Trichlorofluoromethane	BQL	40.0	4.44	40	4/12/2010	
1,2,3-Trichloropropane	BQL	40.0	4.80	40	4/12/2010	
1,2,4-Trimethylbenzene	BQL	40.0	2.60	40	4/12/2010	
1,3,5-Trimethylbenzene	BQL	40.0	2.96	40	4/12/2010	
Vinyl chloride	716	40.0	5.96	40	4/12/2010	
m-,p-Xylene	BQL	80.0	3.92	40	4/12/2010	
o-Xylene	BQL	40.0	2.60	40	4/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11.3	113
Toluene-d8	10	9.66	97
4-Bromofluorobenzene	10	9.81	98

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: [Signature]

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: OW-8D
Client Project ID: AVX-Myrtle Beach, SC
Lab Sample ID: G582-661-2B
Lab Project ID: G582-661

Analyzed By: CLP
Date Collected: 3/29/2010 11:10
Date Received: 3/30/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	5000	436	200	4/12/2010	
Benzene	BQL	200	13.0	200	4/12/2010	
Bromobenzene	BQL	200	11.2	200	4/12/2010	
Bromochloromethane	BQL	200	20.2	200	4/12/2010	
Bromodichloromethane	BQL	200	15.2	200	4/12/2010	
Bromoform	BQL	200	24.0	200	4/12/2010	
Bromomethane	BQL	200	26.6	200	4/12/2010	
2-Butanone	946	5000	109	200	4/12/2010	J
n-Butylbenzene	BQL	200	21.8	200	4/12/2010	
sec-Butylbenzene	BQL	200	16.8	200	4/12/2010	
tert-Butylbenzene	BQL	200	10.0	200	4/12/2010	
Carbon disulfide	BQL	200	13.8	200	4/12/2010	
Carbon tetrachloride	BQL	200	17.4	200	4/12/2010	
Chlorobenzene	BQL	200	16.4	200	4/12/2010	
Chloroethane	BQL	200	21.2	200	4/12/2010	
Chloroform	BQL	200	15.8	200	4/12/2010	
Chloromethane	BQL	200	29.2	200	4/12/2010	
2-Chlorotoluene	BQL	200	19.8	200	4/12/2010	
4-Chlorotoluene	BQL	200	16.0	200	4/12/2010	
Dibromochloromethane	BQL	200	18.0	200	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	1000	242	200	4/12/2010	
Dibromomethane	BQL	200	22.6	200	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	200	24.8	200	4/12/2010	
1,2-Dichlorobenzene	BQL	200	25.4	200	4/12/2010	
1,3-Dichlorobenzene	BQL	200	16.2	200	4/12/2010	
1,4-Dichlorobenzene	BQL	200	15.8	200	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	1000	126	200	4/12/2010	
1,1-Dichloroethane	BQL	200	14.8	200	4/12/2010	
1,1-Dichloroethene	BQL	200	17.8	200	4/12/2010	
1,2-Dichloroethane	BQL	200	15.8	200	4/12/2010	
cis-1,2-Dichloroethene	1950	200	13.0	200	4/12/2010	
trans-1,2-dichloroethene	224	200	17.8	200	4/12/2010	
1,2-Dichloropropane	BQL	200	18.8	200	4/12/2010	
1,3-Dichloropropane	BQL	200	25.4	200	4/12/2010	
2,2-Dichloropropane	BQL	200	11.8	200	4/12/2010	
1,1-Dichloropropene	BQL	200	14.4	200	4/12/2010	
cis-1,3-Dichloropropene	BQL	200	15.2	200	4/12/2010	
trans-1,3-Dichloropropene	BQL	200	15.2	200	4/12/2010	
Dichlorodifluoromethane	BQL	1000	18.8	200	4/12/2010	
Diisopropyl ether (DIPE)	BQL	200	14.6	200	4/12/2010	
Ethylbenzene	BQL	200	15.4	200	4/12/2010	
Hexachlorobutadiene	BQL	200	45.6	200	4/12/2010	
2-Hexanone	BQL	1000	144	200	4/12/2010	
Iodomethane	BQL	200	8.40	200	4/12/2010	
Isopropylbenzene	BQL	200	14.2	200	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-8D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-2B
 Lab Project ID: G582-661

Analyzed By: CLP
 Date Collected: 3/29/2010 11:10
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	200	9.60	200	4/12/2010	
Methylene chloride	BQL	1000	19.6	200	4/12/2010	
4-Methyl-2-pentanone	BQL	1000	110	200	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	200	13.4	200	4/12/2010	
Naphthalene	BQL	200	26.6	200	4/12/2010	
n-Propyl benzene	BQL	200	16.0	200	4/12/2010	
Styrene	BQL	200	17.0	200	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	200	18.0	200	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	200	23.0	200	4/12/2010	
Tetrachloroethene	BQL	200	13.8	200	4/12/2010	
Toluene	BQL	200	15.2	200	4/12/2010	
1,2,3-Trichlorobenzene	BQL	200	38.0	200	4/12/2010	
1,2,4-Trichlorobenzene	BQL	200	23.8	200	4/12/2010	
Trichloroethene	1530	200	10.8	200	4/12/2010	
1,1,1-Trichloroethane	BQL	200	10.8	200	4/12/2010	
1,1,2-Trichloroethane	BQL	200	36.4	200	4/12/2010	
Trichlorofluoromethane	BQL	200	22.2	200	4/12/2010	
1,2,3-Trichloropropane	BQL	200	24.0	200	4/12/2010	
1,2,4-Trimethylbenzene	BQL	200	13.0	200	4/12/2010	
1,3,5-Trimethylbenzene	BQL	200	14.8	200	4/12/2010	
Vinyl chloride	3190	200	29.8	200	4/12/2010	
m-,p-Xylene	BQL	400	19.6	200	4/12/2010	
o-Xylene	BQL	200	13.0	200	4/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	29.8	99
Toluene-d8	30	25.1	84
4-Bromofluorobenzene	30	30	100

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVD

Reviewed By: [Signature]

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D
Client Project ID: AVX-Myrtle Beach, SC
Lab Sample ID: G582-661-3A
Lab Project ID: G582-661

Analyzed By: DVO
Date Collected: 3/29/2010 11:20
Date Received: 3/30/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	20000	1740	800	4/11/2010	
Benzene	BQL	800	52.0	800	4/11/2010	
Bromobenzene	BQL	800	44.8	800	4/11/2010	
Bromochloromethane	BQL	800	80.8	800	4/11/2010	
Bromodichloromethane	BQL	800	60.8	800	4/11/2010	
Bromoform	BQL	800	96.0	800	4/11/2010	
Bromomethane	BQL	800	106	800	4/11/2010	
2-Butanone	BQL	20000	435	800	4/11/2010	
n-Butylbenzene	BQL	800	87.2	800	4/11/2010	
sec-Butylbenzene	BQL	800	67.2	800	4/11/2010	
tert-Butylbenzene	BQL	800	40.0	800	4/11/2010	
Carbon disulfide	BQL	800	55.2	800	4/11/2010	
Carbon tetrachloride	BQL	800	69.6	800	4/11/2010	
Chlorobenzene	BQL	800	65.6	800	4/11/2010	
Chloroethane	BQL	800	84.8	800	4/11/2010	
Chloroform	BQL	800	63.2	800	4/11/2010	
Chloromethane	BQL	800	117	800	4/11/2010	
2-Chlorotoluene	BQL	800	79.2	800	4/11/2010	
4-Chlorotoluene	BQL	800	64.0	800	4/11/2010	
Dibromochloromethane	BQL	800	72.0	800	4/11/2010	
1,2-Dibromo-3-chloropropane	BQL	4000	968	800	4/11/2010	
Dibromomethane	BQL	800	90.4	800	4/11/2010	
1,2-Dibromoethane (EDB)	BQL	800	99.2	800	4/11/2010	
1,2-Dichlorobenzene	BQL	800	102	800	4/11/2010	
1,3-Dichlorobenzene	BQL	800	64.8	800	4/11/2010	
1,4-Dichlorobenzene	BQL	800	63.2	800	4/11/2010	
trans-1,4-Dichloro-2-butene	BQL	4000	504	800	4/11/2010	
1,1-Dichloroethane	BQL	800	59.2	800	4/11/2010	
1,1-Dichloroethene	BQL	800	71.2	800	4/11/2010	
1,2-Dichloroethane	BQL	800	63.2	800	4/11/2010	
cis-1,2-Dichloroethene	12800	800	52.0	800	4/11/2010	
trans-1,2-dichloroethene	296	800	71.2	800	4/11/2010	J
1,2-Dichloropropane	BQL	800	75.2	800	4/11/2010	
1,3-Dichloropropane	BQL	800	102	800	4/11/2010	
2,2-Dichloropropane	BQL	800	47.2	800	4/11/2010	
1,1-Dichloropropene	BQL	800	57.6	800	4/11/2010	
cis-1,3-Dichloropropene	BQL	800	60.8	800	4/11/2010	
trans-1,3-Dichloropropene	BQL	800	60.8	800	4/11/2010	
Dichlorodifluoromethane	BQL	4000	75.2	800	4/11/2010	
Diisopropyl ether (DIPE)	BQL	800	58.4	800	4/11/2010	
Ethylbenzene	BQL	800	61.6	800	4/11/2010	
Hexachlorobutadiene	BQL	800	182	800	4/11/2010	
2-Hexanone	BQL	4000	576	800	4/11/2010	
Iodomethane	BQL	800	33.6	800	4/11/2010	
Isopropylbenzene	BQL	800	56.8	800	4/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-10D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-3A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010 11:20
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	800	38.4	800	4/11/2010	
Methylene chloride	176	4000	78.4	800	4/11/2010	J
4-Methyl-2-pentanone	BQL	4000	440	800	4/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	800	53.6	800	4/11/2010	
Naphthalene	BQL	800	106	800	4/11/2010	
n-Propyl benzene	BQL	800	64.0	800	4/11/2010	
Styrene	BQL	800	68.0	800	4/11/2010	
1,1,1,2-Tetrachloroethane	BQL	800	72.0	800	4/11/2010	
1,1,2,2-Tetrachloroethane	BQL	800	92.0	800	4/11/2010	
Tetrachloroethene	BQL	800	55.2	800	4/11/2010	
Toluene	BQL	800	60.8	800	4/11/2010	
1,2,3-Trichlorobenzene	BQL	800	152	800	4/11/2010	
1,2,4-Trichlorobenzene	BQL	800	95.2	800	4/11/2010	
Trichloroethene	BQL	800	43.2	800	4/11/2010	
1,1,1-Trichloroethane	BQL	800	43.2	800	4/11/2010	
1,1,2-Trichloroethane	BQL	800	146	800	4/11/2010	
Trichlorofluoromethane	BQL	800	88.8	800	4/11/2010	
1,2,3-Trichloropropane	BQL	800	96.0	800	4/11/2010	
1,2,4-Trimethylbenzene	BQL	800	52.0	800	4/11/2010	
1,3,5-Trimethylbenzene	BQL	800	59.2	800	4/11/2010	
Vinyl chloride	3080	800	119	800	4/11/2010	
m-,p-Xylene	BQL	1600	78.4	800	4/11/2010	
o-Xylene	BQL	800	52.0	800	4/11/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	8.96	90
Toluene-d8	10	9.5	95
4-Bromofluorobenzene	10	10.1	101

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: NA

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-9D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-4A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010 11:40
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	5000	436	200	4/12/2010	
Benzene	BQL	200	13.0	200	4/12/2010	
Bromobenzene	BQL	200	11.2	200	4/12/2010	
Bromochloromethane	BQL	200	20.2	200	4/12/2010	
Bromodichloromethane	BQL	200	15.2	200	4/12/2010	
Bromoform	BQL	200	24.0	200	4/12/2010	
Bromomethane	BQL	200	26.6	200	4/12/2010	
2-Butanone	BQL	5000	109	200	4/12/2010	
n-Butylbenzene	BQL	200	21.8	200	4/12/2010	
sec-Butylbenzene	BQL	200	16.8	200	4/12/2010	
tert-Butylbenzene	BQL	200	10.0	200	4/12/2010	
Carbon disulfide	BQL	200	13.8	200	4/12/2010	
Carbon tetrachloride	BQL	200	17.4	200	4/12/2010	
Chlorobenzene	BQL	200	16.4	200	4/12/2010	
Chloroethane	BQL	200	21.2	200	4/12/2010	
Chloroform	BQL	200	15.8	200	4/12/2010	
Chloromethane	BQL	200	29.2	200	4/12/2010	
2-Chlorotoluene	BQL	200	19.8	200	4/12/2010	
4-Chlorotoluene	BQL	200	16.0	200	4/12/2010	
Dibromochloromethane	BQL	200	18.0	200	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	1000	242	200	4/12/2010	
Dibromomethane	BQL	200	22.6	200	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	200	24.8	200	4/12/2010	
1,2-Dichlorobenzene	BQL	200	25.4	200	4/12/2010	
1,3-Dichlorobenzene	BQL	200	16.2	200	4/12/2010	
1,4-Dichlorobenzene	BQL	200	15.8	200	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	1000	126	200	4/12/2010	
1,1-Dichloroethane	BQL	200	14.8	200	4/12/2010	
1,1-Dichloroethene	BQL	200	17.8	200	4/12/2010	
1,2-Dichloroethane	BQL	200	15.8	200	4/12/2010	
cis-1,2-Dichloroethene	2930	200	13.0	200	4/12/2010	
trans-1,2-dichloroethene	98.0	200	17.8	200	4/12/2010	J
1,2-Dichloropropane	BQL	200	18.8	200	4/12/2010	
1,3-Dichloropropane	BQL	200	25.4	200	4/12/2010	
2,2-Dichloropropane	BQL	200	11.8	200	4/12/2010	
1,1-Dichloropropene	BQL	200	14.4	200	4/12/2010	
cis-1,3-Dichloropropene	BQL	200	15.2	200	4/12/2010	
trans-1,3-Dichloropropene	BQL	200	15.2	200	4/12/2010	
Dichlorodifluoromethane	BQL	1000	18.8	200	4/12/2010	
Diisopropyl ether (DIPE)	BQL	200	14.6	200	4/12/2010	
Ethylbenzene	BQL	200	15.4	200	4/12/2010	
Hexachlorobutadiene	BQL	200	45.6	200	4/12/2010	
2-Hexanone	BQL	1000	144	200	4/12/2010	
Iodomethane	BQL	200	8.40	200	4/12/2010	
Isopropylbenzene	BQL	200	14.2	200	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: OW-9D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-4A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010 11:40
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	200	9.60	200	4/12/2010	
Methylene chloride	BQL	1000	19.6	200	4/12/2010	
4-Methyl-2-pentanone	BQL	1000	110	200	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	200	13.4	200	4/12/2010	
Naphthalene	BQL	200	26.6	200	4/12/2010	
n-Propyl benzene	BQL	200	16.0	200	4/12/2010	
Styrene	BQL	200	17.0	200	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	200	18.0	200	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	200	23.0	200	4/12/2010	
Tetrachloroethene	BQL	200	13.8	200	4/12/2010	
Toluene	BQL	200	15.2	200	4/12/2010	
1,2,3-Trichlorobenzene	BQL	200	38.0	200	4/12/2010	
1,2,4-Trichlorobenzene	BQL	200	23.8	200	4/12/2010	
Trichloroethene	1530	200	10.8	200	4/12/2010	
1,1,1-Trichloroethane	BQL	200	10.8	200	4/12/2010	
1,1,2-Trichloroethane	BQL	200	36.4	200	4/12/2010	
Trichlorofluoromethane	BQL	200	22.2	200	4/12/2010	
1,2,3-Trichloropropane	BQL	200	24.0	200	4/12/2010	
1,2,4-Trimethylbenzene	BQL	200	13.0	200	4/12/2010	
1,3,5-Trimethylbenzene	BQL	200	14.8	200	4/12/2010	
Vinyl chloride	2810	200	29.8	200	4/12/2010	
m-,p-Xylene	BQL	400	19.6	200	4/12/2010	
o-Xylene	BQL	200	13.0	200	4/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	11	110
Toluene-d8	10	9.62	96
4-Bromofluorobenzene	10	9.46	95

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-1D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-5B
 Lab Project ID: G582-661

Analyzed By: CLP
 Date Collected: 3/29/2010 11:50
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	50.0	4.36	2	4/12/2010	
Benzene	BQL	2.00	0.130	2	4/12/2010	
Bromobenzene	BQL	2.00	0.112	2	4/12/2010	
Bromochloromethane	BQL	2.00	0.202	2	4/12/2010	
Bromodichloromethane	BQL	2.00	0.152	2	4/12/2010	
Bromoform	BQL	2.00	0.240	2	4/12/2010	
Bromomethane	BQL	2.00	0.266	2	4/12/2010	
2-Butanone	BQL	50.0	1.09	2	4/12/2010	
n-Butylbenzene	BQL	2.00	0.218	2	4/12/2010	
sec-Butylbenzene	BQL	2.00	0.168	2	4/12/2010	
tert-Butylbenzene	BQL	2.00	0.100	2	4/12/2010	
Carbon disulfide	BQL	2.00	0.138	2	4/12/2010	
Carbon tetrachloride	BQL	2.00	0.174	2	4/12/2010	
Chlorobenzene	BQL	2.00	0.164	2	4/12/2010	
Chloroethane	BQL	2.00	0.212	2	4/12/2010	
Chloroform	BQL	2.00	0.158	2	4/12/2010	
Chloromethane	BQL	2.00	0.292	2	4/12/2010	
2-Chlorotoluene	BQL	2.00	0.198	2	4/12/2010	
4-Chlorotoluene	BQL	2.00	0.160	2	4/12/2010	
Dibromochloromethane	BQL	2.00	0.180	2	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	10.0	2.42	2	4/12/2010	
Dibromomethane	BQL	2.00	0.226	2	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	2.00	0.248	2	4/12/2010	
1,2-Dichlorobenzene	BQL	2.00	0.254	2	4/12/2010	
1,3-Dichlorobenzene	BQL	2.00	0.162	2	4/12/2010	
1,4-Dichlorobenzene	BQL	2.00	0.158	2	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	10.0	1.26	2	4/12/2010	
1,1-Dichloroethane	BQL	2.00	0.148	2	4/12/2010	
1,1-Dichloroethene	BQL	2.00	0.178	2	4/12/2010	
1,2-Dichloroethane	BQL	2.00	0.158	2	4/12/2010	
cis-1,2-Dichloroethene	27.0	2.00	0.130	2	4/12/2010	
trans-1,2-dichloroethene	BQL	2.00	0.178	2	4/12/2010	
1,2-Dichloropropane	BQL	2.00	0.188	2	4/12/2010	
1,3-Dichloropropane	BQL	2.00	0.254	2	4/12/2010	
2,2-Dichloropropane	BQL	2.00	0.118	2	4/12/2010	
1,1-Dichloropropene	BQL	2.00	0.144	2	4/12/2010	
cis-1,3-Dichloropropene	BQL	2.00	0.152	2	4/12/2010	
trans-1,3-Dichloropropene	BQL	2.00	0.152	2	4/12/2010	
Dichlorodifluoromethane	BQL	10.0	0.188	2	4/12/2010	
Diisopropyl ether (DIPE)	BQL	2.00	0.146	2	4/12/2010	
Ethylbenzene	BQL	2.00	0.154	2	4/12/2010	
Hexachlorobutadiene	BQL	2.00	0.456	2	4/12/2010	
2-Hexanone	BQL	10.0	1.44	2	4/12/2010	
Iodomethane	BQL	2.00	0.0840	2	4/12/2010	
Isopropylbenzene	BQL	2.00	0.142	2	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-1D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-5B
 Lab Project ID: G582-661

Analyzed By: CLP
 Date Collected: 3/29/2010 11:50
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	2.00	0.0960	2	4/12/2010	
Methylene chloride	BQL	10.0	0.196	2	4/12/2010	
4-Methyl-2-pentanone	BQL	10.0	1.10	2	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	2.00	0.134	2	4/12/2010	
Naphthalene	BQL	2.00	0.266	2	4/12/2010	
n-Propyl benzene	BQL	2.00	0.160	2	4/12/2010	
Styrene	BQL	2.00	0.170	2	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	2.00	0.180	2	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.230	2	4/12/2010	
Tetrachloroethene	BQL	2.00	0.138	2	4/12/2010	
Toluene	BQL	2.00	0.152	2	4/12/2010	
1,2,3-Trichlorobenzene	BQL	2.00	0.380	2	4/12/2010	
1,2,4-Trichlorobenzene	BQL	2.00	0.238	2	4/12/2010	
Trichloroethene	BQL	2.00	0.108	2	4/12/2010	
1,1,1-Trichloroethane	BQL	2.00	0.108	2	4/12/2010	
1,1,2-Trichloroethane	BQL	2.00	0.364	2	4/12/2010	
Trichlorofluoromethane	BQL	2.00	0.222	2	4/12/2010	
1,2,3-Trichloropropane	BQL	2.00	0.240	2	4/12/2010	
1,2,4-Trimethylbenzene	BQL	2.00	0.130	2	4/12/2010	
1,3,5-Trimethylbenzene	BQL	2.00	0.148	2	4/12/2010	
Vinyl chloride	34.4	2.00	0.298	2	4/12/2010	
m-,p-Xylene	BQL	4.00	0.196	2	4/12/2010	
o-Xylene	BQL	2.00	0.130	2	4/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	30	29.5	98
Toluene-d8	30	25.3	84
4-Bromofluorobenzene	30	29.8	99

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVD

Reviewed By: MPA

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: P-3D
Client Project ID: AVX-Myrtle Beach, SC
Lab Sample ID: G582-661-6A
Lab Project ID: G582-661

Analyzed By: DVO
Date Collected: 3/29/2010 12:15
Date Received: 3/30/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	500	43.6	20	4/12/2010	
Benzene	BQL	20.0	1.30	20	4/12/2010	
Bromobenzene	BQL	20.0	1.12	20	4/12/2010	
Bromochloromethane	BQL	20.0	2.02	20	4/12/2010	
Bromodichloromethane	BQL	20.0	1.52	20	4/12/2010	
Bromoform	BQL	20.0	2.40	20	4/12/2010	
Bromomethane	BQL	20.0	2.66	20	4/12/2010	
2-Butanone	57.6	500	10.9	20	4/12/2010	J
n-Butylbenzene	BQL	20.0	2.18	20	4/12/2010	
sec-Butylbenzene	BQL	20.0	1.68	20	4/12/2010	
tert-Butylbenzene	BQL	20.0	1.00	20	4/12/2010	
Carbon disulfide	BQL	20.0	1.38	20	4/12/2010	
Carbon tetrachloride	BQL	20.0	1.74	20	4/12/2010	
Chlorobenzene	BQL	20.0	1.64	20	4/12/2010	
Chloroethane	BQL	20.0	2.12	20	4/12/2010	
Chloroform	BQL	20.0	1.58	20	4/12/2010	
Chloromethane	BQL	20.0	2.92	20	4/12/2010	
2-Chlorotoluene	BQL	20.0	1.98	20	4/12/2010	
4-Chlorotoluene	BQL	20.0	1.60	20	4/12/2010	
Dibromochloromethane	BQL	20.0	1.80	20	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	100	24.2	20	4/12/2010	
Dibromomethane	BQL	20.0	2.26	20	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	20.0	2.48	20	4/12/2010	
1,2-Dichlorobenzene	BQL	20.0	2.54	20	4/12/2010	
1,3-Dichlorobenzene	BQL	20.0	1.62	20	4/12/2010	
1,4-Dichlorobenzene	BQL	20.0	1.58	20	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	100	12.6	20	4/12/2010	
1,1-Dichloroethane	BQL	20.0	1.48	20	4/12/2010	
1,1-Dichloroethene	BQL	20.0	1.78	20	4/12/2010	
1,2-Dichloroethane	BQL	20.0	1.58	20	4/12/2010	
cis-1,2-Dichloroethene	43.6	20.0	1.30	20	4/12/2010	
trans-1,2-dichloroethene	BQL	20.0	1.78	20	4/12/2010	
1,2-Dichloropropane	BQL	20.0	1.88	20	4/12/2010	
1,3-Dichloropropane	BQL	20.0	2.54	20	4/12/2010	
2,2-Dichloropropane	BQL	20.0	1.18	20	4/12/2010	
1,1-Dichloropropene	BQL	20.0	1.44	20	4/12/2010	
cis-1,3-Dichloropropene	BQL	20.0	1.52	20	4/12/2010	
trans-1,3-Dichloropropene	BQL	20.0	1.52	20	4/12/2010	
Dichlorodifluoromethane	BQL	100	1.88	20	4/12/2010	
Diisopropyl ether (DIPE)	BQL	20.0	1.46	20	4/12/2010	
Ethylbenzene	BQL	20.0	1.54	20	4/12/2010	
Hexachlorobutadiene	BQL	20.0	4.56	20	4/12/2010	
2-Hexanone	BQL	100	14.4	20	4/12/2010	
Iodomethane	BQL	20.0	0.840	20	4/12/2010	
Isopropylbenzene	BQL	20.0	1.42	20	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: P-3D
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-6A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010 12:15
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	20.0	0.960	20	4/12/2010	
Methylene chloride	BQL	100	1.96	20	4/12/2010	
4-Methyl-2-pentanone	BQL	100	11.0	20	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	20.0	1.34	20	4/12/2010	
Naphthalene	BQL	20.0	2.66	20	4/12/2010	
n-Propyl benzene	BQL	20.0	1.60	20	4/12/2010	
Styrene	BQL	20.0	1.70	20	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	20.0	1.80	20	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	20.0	2.30	20	4/12/2010	
Tetrachloroethene	BQL	20.0	1.38	20	4/12/2010	
Toluene	BQL	20.0	1.52	20	4/12/2010	
1,2,3-Trichlorobenzene	BQL	20.0	3.80	20	4/12/2010	
1,2,4-Trichlorobenzene	BQL	20.0	2.38	20	4/12/2010	
Trichloroethene	BQL	20.0	1.08	20	4/12/2010	
1,1,1-Trichloroethane	BQL	20.0	1.08	20	4/12/2010	
1,1,2-Trichloroethane	BQL	20.0	3.64	20	4/12/2010	
Trichlorofluoromethane	BQL	20.0	2.22	20	4/12/2010	
1,2,3-Trichloropropane	BQL	20.0	2.40	20	4/12/2010	
1,2,4-Trimethylbenzene	BQL	20.0	1.30	20	4/12/2010	
1,3,5-Trimethylbenzene	BQL	20.0	1.48	20	4/12/2010	
Vinyl chloride	430	20.0	2.98	20	4/12/2010	
m-,p-Xylene	BQL	40.0	1.96	20	4/12/2010	
o-Xylene	BQL	20.0	1.30	20	4/12/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.8	108
Toluene-d8	10	9.72	97
4-Bromofluorobenzene	10	9.97	100

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: [Signature]

SGS North America, Inc.

Results for Volatiles
by GCMS 8260

Client Sample ID: Trip Blank
Client Project ID: AVX-Myrtle Beach, SC
Lab Sample ID: G582-661-7A
Lab Project ID: G582-661

Analyzed By: DVO
Date Collected: 3/29/2010
Date Received: 3/30/2010
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	4/11/2010	
Benzene	BQL	1.00	0.0650	1	4/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	4/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	4/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	4/11/2010	
Bromoform	BQL	1.00	0.120	1	4/11/2010	
Bromomethane	BQL	1.00	0.133	1	4/11/2010	
2-Butanone	BQL	25.0	0.544	1	4/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	4/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	4/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	4/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	4/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	4/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	4/11/2010	
Chloroethane	BQL	1.00	0.106	1	4/11/2010	
Chloroform	BQL	1.00	0.0790	1	4/11/2010	
Chloromethane	BQL	1.00	0.146	1	4/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	4/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	4/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	4/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	4/11/2010	
Dibromomethane	BQL	1.00	0.113	1	4/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	4/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	4/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	4/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	4/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	4/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	4/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	4/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	4/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	4/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	4/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	4/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	4/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	4/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	4/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	4/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	4/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	4/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	4/11/2010	
2-Hexanone	BQL	5.00	0.720	1	4/11/2010	
Iodomethane	BQL	1.00	0.0420	1	4/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	4/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Trip Blank
 Client Project ID: AVX-Myrtle Beach, SC
 Lab Sample ID: G582-661-7A
 Lab Project ID: G582-661

Analyzed By: DVO
 Date Collected: 3/29/2010
 Date Received: 3/30/2010
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	4/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	4/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	4/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	4/11/2010	
Naphthalene	BQL	1.00	0.133	1	4/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	4/11/2010	
Styrene	BQL	1.00	0.0850	1	4/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	4/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	4/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	4/11/2010	
Toluene	BQL	1.00	0.0760	1	4/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	4/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	4/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	4/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	4/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	4/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	4/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	4/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	4/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	4/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	4/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	4/11/2010	
o-Xylene	BQL	1.00	0.0650	1	4/11/2010	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.5	105
Toluene-d8	10	9.5	95
4-Bromofluorobenzene	10	9.65	97

Comments:

Not enough sample to confirm low surrogate by reanalysis.

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3041110B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	4/11/2010	
Benzene	BQL	1.00	0.0650	1	4/11/2010	
Bromobenzene	BQL	1.00	0.0560	1	4/11/2010	
Bromochloromethane	BQL	1.00	0.101	1	4/11/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	4/11/2010	
Bromoform	BQL	1.00	0.120	1	4/11/2010	
Bromomethane	BQL	1.00	0.133	1	4/11/2010	
2-Butanone	BQL	25.0	0.544	1	4/11/2010	
n-Butylbenzene	BQL	1.00	0.109	1	4/11/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	4/11/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	4/11/2010	
Carbon disulfide	BQL	1.00	0.0690	1	4/11/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	4/11/2010	
Chlorobenzene	BQL	1.00	0.0820	1	4/11/2010	
Chloroethane	BQL	1.00	0.106	1	4/11/2010	
Chloroform	BQL	1.00	0.0790	1	4/11/2010	
Chloromethane	BQL	1.00	0.146	1	4/11/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	4/11/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	4/11/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	4/11/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	4/11/2010	
Dibromomethane	BQL	1.00	0.113	1	4/11/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	4/11/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	4/11/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	4/11/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	4/11/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	4/11/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	4/11/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	4/11/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	4/11/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	4/11/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	4/11/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	4/11/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	4/11/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	4/11/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	4/11/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/11/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/11/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	4/11/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	4/11/2010	
Ethylbenzene	BQL	1.00	0.0770	1	4/11/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	4/11/2010	
2-Hexanone	BQL	5.00	0.720	1	4/11/2010	
Iodomethane	BQL	1.00	0.0420	1	4/11/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	4/11/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3041110B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	4/11/2010	
Methylene chloride	BQL	5.00	0.0980	1	4/11/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	4/11/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	4/11/2010	
Naphthalene	BQL	1.00	0.133	1	4/11/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	4/11/2010	
Styrene	BQL	1.00	0.0850	1	4/11/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	4/11/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	4/11/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	4/11/2010	
Toluene	BQL	1.00	0.0760	1	4/11/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	4/11/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	4/11/2010	
Trichloroethene	BQL	1.00	0.0540	1	4/11/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	4/11/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	4/11/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	4/11/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	4/11/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	4/11/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	4/11/2010	
Vinyl chloride	BQL	1.00	0.149	1	4/11/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	4/11/2010	
o-Xylene	BQL	1.00	0.0650	1	4/11/2010	


	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.4	104
Toluene-d8	10	9.48	95
4-Bromofluorobenzene	10	9.97	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: 

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3041110A

Filename: 0411304.D

Date Analyzed: 04/11/10 16:01

LCSD: LCS3041110B

Filename: 0411305.D

Date Analyzed: 04/11/10 16:32

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	25.1	100	25.0	22.9	91.6	9.05	30	23.5-141
acrolein	125	116	92.8	125	109	87.5	5.91	30	31.4-182
acrylonitrile	125	117	93.8	125	113	90.1	4.01	30	64.2-140
benzene	5.00	4.57	91.4	5.00	4.66	93.2	1.95	30	76.6-120
bromobenzene	5.00	5.04	101	5.00	4.91	98.2	2.61	30	75.0-122
bromochloromethane	5.00	4.58	91.6	5.00	4.80	96.0	4.69	30	74.8-127
bromodichloromethane	5.00	4.85	97.0	5.00	5.00	100	3.04	30	76.4-117
bromoform	5.00	5.39	108	5.00	5.00	100	7.51	30	62.4-127
bromomethane	5.00	4.25	85.0	5.00	4.54	90.8	6.60	30	34.2-166
2-butanone	25.0	24.3	97.2	25.0	22.8	91.2	6.28	30	44.9-126
n-butylbenzene	5.00	5.03	101	5.00	4.97	99.4	1.20	30	72.0-122
sec-butylbenzene	5.00	4.95	99.0	5.00	5.07	101	2.40	30	78.3-116
tert-butylbenzene	5.00	4.99	99.8	5.00	5.30	106	6.02	30	53.1-148
Carbon disulfide	5.00	4.45	89.0	5.00	4.55	91.0	2.22	30	69.0-118
carbon tetrachloride	5.00	4.73	94.6	5.00	4.85	97.0	2.50	30	71.7-124
chlorobenzene	5.00	5.00	100	5.00	4.94	98.8	1.21	30	75.5-116
chloroethane	5.00	4.49	89.8	5.00	4.57	91.4	1.77	30	78.2-138
2-chloroethyl vinyl ether	125	121	97.0	125	116	92.7	4.55	30	5.57-235
chloroform	5.00	4.65	93.0	5.00	4.77	95.4	2.55	30	80.6-117
chloromethane	5.00	4.80	96.0	5.00	4.68	93.6	2.53	30	72.6-127
2-chlorotoluene	5.00	4.98	99.6	5.00	5.08	102	1.99	30	81.4-117
4-chlorotoluene	5.00	4.92	98.4	5.00	4.95	99.0	0.608	30	82.1-116
dibromochloromethane	5.00	5.14	103	5.00	5.03	101	2.16	30	73.1-117
1,2-dibromo-3-chloropropane	30.0	34.3	114	30.0	30.9	103	10.5	30	58.0-133
1,2-dibromoethane	5.00	5.24	105	5.00	4.90	98.0	6.71	30	75.5-118
dibromomethane	5.00	4.72	94.4	5.00	4.86	97.2	2.92	30	77.3-124
1,2-dichlorobenzene	5.00	5.05	101	5.00	4.86	97.2	3.83	30	76.3-115
1,3-dichlorobenzene	5.00	4.91	98.2	5.00	5.01	100	2.02	30	79.1-114
1,4-dichlorobenzene	5.00	4.89	97.8	5.00	4.99	99.8	2.02	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	22.9	91.6	25.0	25.6	102	11.1	30	52.3-130
dichlorodifluoromethane	5.00	4.71	94.2	5.00	4.68	93.6	0.639	30	69.8-134
1,1-dichloroethane	5.00	4.68	93.6	5.00	4.69	93.8	0.213	30	78.0-120
1,2-dichloroethane	5.00	4.89	97.8	5.00	4.87	97.4	0.410	30	72.8-126
1,1-dichloroethene	5.00	4.42	88.4	5.00	4.43	88.6	0.226	30	74.6-121
cis-1,2-dichloroethene	5.00	4.58	91.6	5.00	4.63	92.6	1.08	30	78.0-121
trans-1,2-dichloroethene	5.00	4.62	92.4	5.00	4.70	94.0	1.72	30	60.7-144
1,2-dichloropropane	5.00	4.49	89.8	5.00	4.49	89.8	0.00	30	75.8-119
1,3-dichloropropane	5.00	5.03	101	5.00	5.02	100	0.199	30	78.5-113
2,2-dichloropropane	5.00	5.03	101	5.00	5.01	100	0.398	30	75.6-130
1,1-dichloropropene	5.00	4.61	92.2	5.00	4.79	95.8	3.83	30	79.7-117
cis-1,3-dichloropropene	5.00	4.64	92.8	5.00	4.71	94.2	1.50	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3041110A

Filename: 0411304.D

Date Analyzed: 04/11/10 16:01

LCS: LCS3041110B

Filename: 0411305.D

Date Analyzed: 04/11/10 16:32

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	% RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
trans-1,3-dichloropropene	5.00	4.89	97.8	5.00	4.86	97.2	0.615	30	79.0-113
Diisopropyl ether	5.00	4.66	93.2	5.00	4.62	92.4	0.862	30	71.8-115
ethylbenzene	5.00	4.88	97.6	5.00	4.95	99.0	1.42	30	80.5-115
hexachlorobutadiene	5.00	5.40	108	5.00	5.51	110	2.02	30	63.3-139
2-hexanone	25.0	26.0	104	25.0	25.2	101	3.28	30	46.8-123
Iodomethane	5.00	3.99	79.8	5.00	4.75	95.0	17.4	30	29.3-156
isopropylbenzene	5.00	5.01	100	5.00	5.04	101	0.597	30	81.6-114
4-isopropyltoluene	5.00	4.97	99.4	5.00	5.08	102	2.19	30	78.4-119
Methyl-tert-butyl ether	5.00	4.80	96.0	5.00	4.81	96.2	0.208	30	76.0-114
methylene chloride	5.00	4.36	87.2	5.00	4.41	88.2	1.14	30	72.9-120
4-methyl-2-pentanone	25.0	24.9	99.6	25.0	23.2	93.0	6.94	30	56.2-124
naphthalene	5.00	5.36	107	5.00	5.05	101	5.96	30	24.8-182
n-propyl benzene	5.00	4.87	97.4	5.00	5.06	101	3.83	30	79.0-116
styrene	5.00	5.05	101	5.00	4.98	99.6	1.40	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.01	100	5.00	5.04	101	0.597	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.46	109	5.00	5.26	105	3.73	30	69.7-119
tetrachloroethene	5.00	4.36	87.2	5.00	4.74	94.8	8.35	30	55.3-144
toluene	5.00	4.62	92.4	5.00	4.51	90.2	2.41	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.30	106	5.00	5.12	102	3.45	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.20	104	5.00	5.04	101	3.12	30	47.9-150
1,1,1-trichloroethane	5.00	4.78	95.6	5.00	4.87	97.4	1.86	30	78.8-120
1,1,2-trichloroethane	5.00	5.09	102	5.00	5.01	100	1.58	30	73.6-117
trichloroethene	5.00	4.56	91.2	5.00	4.55	91.0	0.220	30	80.1-116
trichlorofluoromethane	5.00	4.74	94.8	5.00	4.77	95.4	0.631	30	80.5-130
1,2,3-trichloropropane	5.00	4.87	97.4	5.00	5.17	103	5.98	30	35.6-152
1,2,4-trimethylbenzene	5.00	4.91	98.2	5.00	5.06	101	3.01	30	77.0-116
1,3,5-trimethylbenzene	5.00	4.83	96.6	5.00	4.99	99.8	3.26	30	79.4-114
Vinyl acetate	12.5	12.3	98.7	12.5	12.0	96.3	2.46	30	60.7-127
vinyl chloride	5.00	4.54	90.8	5.00	4.46	89.2	1.78	30	77.5-126
m/p-xylene	10.0	10.1	101	10.0	10.0	100	0.896	30	82.9-112
o-xylene	5.00	5.02	100	5.00	5.08	102	1.19	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC
460-00-4 4-Bromofluorobenzene	10	10.31	103	10	10.14	101	84.7-115
17060-07-0 1,2-Dichloroethane-d4	10	10.43	104	10	10.49	105	63.5-140
2037-26-5 Toluene-d8	10	9.51	95.1	10	9.57	95.7	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVO

Reviewed by: [Signature]

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD3

EPA Sample No.:	Amt.	FileNames:	Analysis Dates:	Batch: 3041110
Sample g582-661-3a	5 mL	0411318.D	2010-04-11 23:10:00	Dilution: 800
MS g582-661-3a	5 mL	0411321.D	2010-04-12 00:42:00	Matrix: Water
MSD g582-661-3a	5 mL	0411322.D	2010-04-12 01:12:00	

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	20000	9760	48.8	20000	9420	47.1	3.59	30	17.7-85.2
acrolein	BQL	100000	97000	97.0	100000	92700	92.7	4.50	30	0.00-424
acrylonitrile	BQL	100000	96700	96.7	100000	94700	94.7	2.10	30	85.0-175
benzene	BQL	4000	4310	108	4000	3690	92.2	15.6	30	61.6-135
bromobenzene	BQL	4000	4370	109	4000	3830	95.8	13.1	30	65.1-125
bromochloromethane	BQL	4000	4150	104	4000	3750	93.8	10.1	30	75.5-126
bromodichloromethane	BQL	4000	4590	115	4000	3880	97.0	16.8	30	74.3-123
bromoform	BQL	4000	4450	111	4000	3780	94.4	16.3	30	52.3-122
bromomethane	BQL	4000	3500	87.6	4000	3340	83.6	4.67	30	10.0-284
2-butanone	BQL	20000	14400	71.8	20000	13000	65.1	9.87	30	36.1-107
n-butylbenzene	BQL	4000	4570	114	4000	3870	96.8	16.5	30	70.2-124
sec-butylbenzene	BQL	4000	4550	114	4000	3860	96.6	16.3	30	62.0-133
tert-butylbenzene	BQL	4000	4950	124*	4000	4340	108	13.3	30	73.5-121
Carbon disulfide	BQL	4000	4220	106	4000	3610	90.2	15.7	30	68.8-129
carbon tetrachloride	BQL	4000	4520	113	4000	3790	94.8	17.5	30	71.8-122
chlorobenzene	BQL	4000	4450	111	4000	3750	93.8	17.0	30	77.2-118
chloroethane	BQL	4000	4260	107	4000	3840	96.0	10.5	30	10.0-233
2-chloroethyl vinyl ether	BQL	10000	84400	844*	10000	82400	824*	2.48	30	16.7-283
chloroform	BQL	4000	4350	109	4000	3750	93.8	14.8	30	74.0-128
chloromethane	BQL	4000	4340	108	4000	4010	100	7.86	30	72.0-138
2-chlorotoluene	BQL	4000	4550	114	4000	3920	98.0	14.9	30	79.3-118
4-chlorotoluene	BQL	4000	4530	113	4000	3940	98.6	13.8	30	76.8-120
dibromochloromethane	BQL	4000	4370	109	4000	3830	95.8	13.1	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	24000	25100	104	24000	25300	105	0.889	30	20.2-171
1,2-dibromoethane	BQL	4000	4330	108	4000	3820	95.4	12.6	30	78.5-123
dibromomethane	BQL	4000	4330	108	4000	3820	95.6	12.4	30	71.3-137
1,2-dichlorobenzene	BQL	4000	4400	110	4000	3960	99.0	10.5	30	75.1-120
1,3-dichlorobenzene	BQL	4000	4500	113	4000	3810	95.2	16.7	30	73.1-121
1,4-dichlorobenzene	BQL	4000	4490	112	4000	3810	95.2	16.4	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	20000	21300	106	20000	19400	97.2	9.08	30	25.7-149
dichlorodifluoromethane	BQL	4000	4300	108	4000	3910	97.8	9.54	30	41.7-166
1,1-dichloroethane	BQL	4000	4410	110	4000	3800	95.0	14.8	30	75.6-128
1,2-dichloroethane	BQL	4000	4500	112	4000	4010	100	11.5	30	71.1-127
1,1-dichloroethene	BQL	4000	4220	105	4000	3600	90.0	15.8	30	64.4-130
cis-1,2-dichloroethene	12800	4000	18900	152*	4000	17700	122	22.1	30	72.7-134
trans-1,2-dichloroethene	BQL	4000	4740	111	4000	4050	93.8	16.8	30	74.6-124
1,2-dichloropropane	BQL	4000	4100	102	4000	3630	90.8	12.0	30	76.5-129
1,3-dichloropropane	BQL	4000	4440	111	4000	3800	95.0	15.5	30	79.1-121
2,2-dichloropropane	BQL	4000	4170	104	4000	3650	91.2	13.3	30	31.5-157
1,1-dichloropropene	BQL	4000	4360	109	4000	3740	93.6	15.2	30	72.5-120
cis-1,3-dichloropropene	BQL	4000	4230	106	4000	3600	90.0	16.1	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD3

Lab Code: NC00919

Batch: 3041110

EPA Sample No.: g582-661-3a, g582-661-3a, g582-661-3a

Dilution: 800

FileNames: 0411318.D, 0411321.D, 0411322.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	4000	4290	107	4000	3740	93.4	13.8	30	44.7-144
Diisopropyl ether	BQL	4000	4220	105	4000	3750	93.8	11.6	30	79.4-122
ethylbenzene	BQL	4000	4530	113	4000	3940	98.6	13.8	30	73.8-126
hexachlorobutadiene	BQL	4000	4540	114	4000	3920	98.0	14.7	30	51.8-134
2-hexanone	BQL	20000	15200	76.3	20000	13400	67.0	12.9	30	41.6-111
Iodomethane	BQL	4000	4510	113	4000	4280	107	5.28	30	40.6-126
isopropylbenzene	BQL	4000	4700	117	4000	3890	97.2	18.8	30	74.3-123
4-isopropyltoluene	BQL	4000	4630	116	4000	3900	97.4	17.3	30	74.6-122
Methyl-tert-butyl ether	BQL	4000	4170	104	4000	3730	93.2	11.1	30	66.5-136
methylene chloride	BQL	4000	4110	98.4	4000	3590	85.4	14.1	30	48.6-155
4-methyl-2-pentanone	BQL	20000	20000	100	20000	18400	91.8	8.71	30	6.88-166
naphthalene	BQL	4000	3980	99.6	4000	3800	95.0	4.73	30	55.1-140
n-propyl benzene	BQL	4000	4580	114	4000	3940	98.6	14.8	30	71.6-128
styrene	BQL	4000	4550	114	4000	3960	99.0	13.9	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	4000	4460	112	4000	3890	97.2	13.8	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	4000	4570	114	4000	3900	97.6	15.7	30	75.7-136
tetrachloroethene	BQL	4000	3270	81.8	4000	2770	69.2	16.7	30	45.8-153
toluene	BQL	4000	4230	106	4000	3680	92.0	14.0	30	66.4-128
1,2,3-trichlorobenzene	BQL	4000	4100	102	4000	3840	96.0	6.45	30	61.0-126
1,2,4-trichlorobenzene	BQL	4000	4180	104	4000	3880	97.0	7.35	30	60.6-125
1,1,1-trichloroethane	BQL	4000	4520	113	4000	3870	96.8	15.4	30	78.4-121
1,1,2-trichloroethane	BQL	4000	4500	113	4000	3880	97.0	14.9	30	64.8-128
trichloroethene	BQL	4000	4300	108	4000	3760	94.0	13.5	30	84.9-136
trichlorofluoromethane	BQL	4000	4410	110	4000	3950	98.8	10.9	30	76.8-132
1,2,3-trichloropropane	BQL	4000	4210	105	4000	3700	92.6	12.7	30	10.0-218
1,2,4-trimethylbenzene	BQL	4000	4660	116	4000	4000	100	15.2	30	31.0-172
1,3,5-trimethylbenzene	BQL	4000	4630	116	4000	4020	100	14.2	30	67.7-132
Vinyl acetate	BQL	10000	11300	113	10000	10200	102	10.6	30	0.00-355
vinyl chloride	3080	4000	7880	120	4000	7370	107	11.3	30	68.1-137
m/p-xylene	BQL	8000	9300	116	8000	7900	98.7	16.4	30	79.8-118
o-xylene	BQL	4000	4630	116	4000	3980	99.6	15.0	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	9.88	98.8	10	9.8	98.0	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	10.66	107	10	10.86	108	63.5-140
2037-26-5	Toluene-d8	10	9.72	97.2	10	9.8	98.0	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVO

Reviewed by: [Signature]

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3041210B
Lab Project ID:

Analyzed By: DVO
Date Collected:
Date Received:
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	4/12/2010	
Benzene	BQL	1.00	0.0650	1	4/12/2010	
Bromobenzene	BQL	1.00	0.0560	1	4/12/2010	
Bromochloromethane	BQL	1.00	0.101	1	4/12/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	4/12/2010	
Bromoform	BQL	1.00	0.120	1	4/12/2010	
Bromomethane	BQL	1.00	0.133	1	4/12/2010	
2-Butanone	BQL	25.0	0.544	1	4/12/2010	
n-Butylbenzene	BQL	1.00	0.109	1	4/12/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	4/12/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	4/12/2010	
Carbon disulfide	BQL	1.00	0.0690	1	4/12/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	4/12/2010	
Chlorobenzene	BQL	1.00	0.0820	1	4/12/2010	
Chloroethane	BQL	1.00	0.106	1	4/12/2010	
Chloroform	BQL	1.00	0.0790	1	4/12/2010	
Chloromethane	BQL	1.00	0.146	1	4/12/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	4/12/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	4/12/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	4/12/2010	
Dibromomethane	BQL	1.00	0.113	1	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	4/12/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	4/12/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	4/12/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	4/12/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	4/12/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	4/12/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	4/12/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	4/12/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	4/12/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	4/12/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	4/12/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	4/12/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	4/12/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/12/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/12/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	4/12/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	4/12/2010	
Ethylbenzene	BQL	1.00	0.0770	1	4/12/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	4/12/2010	
2-Hexanone	BQL	5.00	0.720	1	4/12/2010	
Iodomethane	BQL	1.00	0.0420	1	4/12/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK3041210B
 Lab Project ID:

Analyzed By: DVO
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	4/12/2010	
Methylene chloride	BQL	5.00	0.0980	1	4/12/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	4/12/2010	
Naphthalene	BQL	1.00	0.133	1	4/12/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	4/12/2010	
Styrene	BQL	1.00	0.0850	1	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	4/12/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	4/12/2010	
Toluene	BQL	1.00	0.0760	1	4/12/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	4/12/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	4/12/2010	
Trichloroethene	BQL	1.00	0.0540	1	4/12/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	4/12/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	4/12/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	4/12/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	4/12/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	4/12/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	4/12/2010	
Vinyl chloride	BQL	1.00	0.149	1	4/12/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	4/12/2010	
o-Xylene	BQL	1.00	0.0650	1	4/12/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		10	10.9	109		
Toluene-d8		10	9.59	96		
4-Bromofluorobenzene		10	9.68	97		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: DVO

Reviewed By: DVO

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3041210A

Filename: 0412303.D

Date Analyzed: 04/12/10 09:31

LCSD: LCS3041210B

Filename: 0412304.D

Date Analyzed: 04/12/10 10:01

COMPOUND	LCS	LCS	LCS	LCSD	LCSD	LCSD	% RPD	QC LIMITS	
	SPIKE (µg/L)	CONC (µg/L)	% REC #	SPIKE (µg/L)	CONC (µg/L)	% REC #		RPD	REC
acetone	25.0	21.2	84.8	25.0	21.8	87.2	2.79	30	23.5-141
acrolein	125	109	87.5	125	109	87.3	0.275	30	31.4-182
acrylonitrile	125	112	89.4	125	115	92.3	3.22	30	64.2-140
benzene	5.00	4.69	93.8	5.00	4.55	91.0	3.03	30	76.6-120
bromobenzene	5.00	4.70	94.0	5.00	4.68	93.6	0.426	30	75.0-122
bromochloromethane	5.00	4.60	92.0	5.00	4.51	90.2	1.98	30	74.8-127
bromodichloromethane	5.00	4.96	99.2	5.00	5.02	100	1.20	30	76.4-117
bromoform	5.00	4.89	97.8	5.00	5.24	105	6.91	30	62.4-127
bromomethane	5.00	4.84	96.8	5.00	4.74	94.8	2.09	30	34.2-166
2-butanone	25.0	22.3	89.2	25.0	23.5	94.0	5.20	30	44.9-126
n-butylbenzene	5.00	5.26	105	5.00	5.07	101	3.68	30	72.0-122
sec-butylbenzene	5.00	5.02	100	5.00	4.97	99.4	1.00	30	78.3-116
tert-butylbenzene	5.00	5.52	110	5.00	5.44	109	1.46	30	53.1-148
Carbon disulfide	5.00	4.50	90.0	5.00	4.40	88.0	2.25	30	69.0-118
carbon tetrachloride	5.00	4.84	96.8	5.00	4.84	96.8	0.00	30	71.7-124
chlorobenzene	5.00	4.78	95.6	5.00	4.85	97.0	1.45	30	75.5-116
chloroethane	5.00	4.60	92.0	5.00	4.43	88.6	3.76	30	78.2-138
2-chloroethyl vinyl ether	125	116	92.6	125	116	92.5	0.112	30	5.57-235
chloroform	5.00	4.82	96.4	5.00	4.81	96.2	0.208	30	80.6-117
chloromethane	5.00	4.80	96.0	5.00	4.64	92.8	3.39	30	72.6-127
2-chlorotoluene	5.00	5.06	101	5.00	5.03	101	0.595	30	81.4-117
4-chlorotoluene	5.00	5.04	101	5.00	5.01	100	0.597	30	82.1-116
dibromochloromethane	5.00	4.94	98.8	5.00	5.05	101	2.20	30	73.1-117
1,2-dibromo-3-chloropropane	30.0	32.1	107	30.0	31.6	105	1.60	30	58.0-133
1,2-dibromoethane	5.00	4.65	93.0	5.00	4.76	95.2	2.34	30	75.5-118
dibromomethane	5.00	4.74	94.8	5.00	4.96	99.2	4.54	30	77.3-124
1,2-dichlorobenzene	5.00	5.10	102	5.00	5.06	101	0.787	30	76.3-115
1,3-dichlorobenzene	5.00	5.05	101	5.00	4.98	99.6	1.40	30	79.1-114
1,4-dichlorobenzene	5.00	4.93	98.6	5.00	5.03	101	2.01	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	26.6	106	25.0	25.6	102	3.64	30	52.3-130
dichlorodifluoromethane	5.00	4.88	97.6	5.00	4.78	95.6	2.07	30	69.8-134
1,1-dichloroethane	5.00	4.83	96.6	5.00	4.76	95.2	1.46	30	78.0-120
1,2-dichloroethane	5.00	5.10	102	5.00	4.98	99.6	2.38	30	72.8-126
1,1-dichloroethene	5.00	4.55	91.0	5.00	4.34	86.8	4.72	30	74.6-121
cis-1,2-dichloroethene	5.00	4.58	91.6	5.00	4.51	90.2	1.54	30	78.0-121
trans-1,2-dichloroethene	5.00	4.54	90.8	5.00	4.47	89.4	1.55	30	60.7-144
1,2-dichloropropane	5.00	4.67	93.4	5.00	4.49	89.8	3.93	30	75.8-119
1,3-dichloropropane	5.00	4.62	92.4	5.00	5.00	100	7.90	30	78.5-113
2,2-dichloropropane	5.00	5.23	105	5.00	5.14	103	1.74	30	75.6-130
1,1-dichloropropene	5.00	4.88	97.6	5.00	4.75	95.0	2.70	30	79.7-117
cis-1,3-dichloropropene	5.00	4.77	95.4	5.00	4.66	93.2	2.33	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS3041210A

Filename: 0412303.D

Date Analyzed: 04/12/10 09:31

LCSD: LCS3041210B

Filename: 0412304.D

Date Analyzed: 04/12/10 10:01

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	% RPD	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #		RPD	REC
trans-1,3-dichloropropene	5.00	4.91	98.2	5.00	4.90	98.0	0.204	30	79.0-113
Diisopropyl ether	5.00	4.58	91.6	5.00	4.70	94.0	2.59	30	71.8-115
ethylbenzene	5.00	5.01	100	5.00	4.92	98.4	1.81	30	80.5-115
hexachlorobutadiene	5.00	5.60	112	5.00	5.46	109	2.53	30	63.3-139
2-hexanone	25.0	22.3	89.3	25.0	23.8	95.4	6.67	30	46.8-123
Iodomethane	5.00	4.60	92.0	5.00	4.41	88.2	4.22	30	29.3-156
isopropylbenzene	5.00	5.06	101	5.00	5.03	101	0.595	30	81.6-114
4-isopropyltoluene	5.00	5.12	102	5.00	5.10	102	0.391	30	78.4-119
Methyl-tert-butyl ether	5.00	4.64	92.8	5.00	4.76	95.2	2.55	30	76.0-114
methylene chloride	5.00	4.21	84.2	5.00	4.25	85.0	0.946	30	72.9-120
4-methyl-2-pentanone	25.0	23.1	92.5	25.0	24.0	96.0	3.65	30	56.2-124
naphthalene	5.00	5.20	104	5.00	5.31	106	2.09	30	24.8-182
n-propyl benzene	5.00	5.08	102	5.00	5.04	101	0.790	30	79.0-116
styrene	5.00	5.04	101	5.00	4.98	99.6	1.20	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	4.84	96.8	5.00	4.89	97.8	1.03	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	5.23	105	5.00	5.30	106	1.33	30	69.7-119
tetrachloroethene	5.00	3.71	74.2	5.00	3.89	77.8	4.74	30	55.3-144
toluene	5.00	4.71	94.2	5.00	4.42	88.4	6.35	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.42	108	5.00	5.47	109	0.918	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.48	110	5.00	5.05	101	8.17	30	47.9-150
1,1,1-trichloroethane	5.00	4.76	95.2	5.00	4.82	96.4	1.25	30	78.8-120
1,1,2-trichloroethane	5.00	4.85	97.0	5.00	4.91	98.2	1.23	30	73.6-117
trichloroethene	5.00	4.57	91.4	5.00	4.53	90.6	0.879	30	80.1-116
trichlorofluoromethane	5.00	4.94	98.8	5.00	4.91	98.2	0.609	30	80.5-130
1,2,3-trichloropropane	5.00	5.04	101	5.00	5.10	102	1.18	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.15	103	5.00	5.10	102	0.976	30	77.0-116
1,3,5-trimethylbenzene	5.00	5.13	103	5.00	5.11	102	0.391	30	79.4-114
Vinyl acetate	12.5	12.4	99.4	12.5	12.5	100	0.881	30	60.7-127
vinyl chloride	5.00	4.62	92.4	5.00	4.42	88.4	4.42	30	77.5-126
m/p-xylene	10.0	10.1	101	10.0	10.1	101	0.00	30	82.9-112
o-xylene	5.00	5.04	101	5.00	5.07	101	0.593	30	81.3-113

System Monitoring Compound Results

		LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	QC LIMITS	
		(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	REC	
460-00-4	4-Bromofluorobenzene	10	9.56	95.6	10	9.89	98.9	84.7-115	
17060-07-0	1,2-Dichloroethane-d4	10	10.65	106	10	10.73	107	63.5-140	
2037-26-5	Toluene-d8	10	9.68	96.8	10	9.6	96.0	81.8-117	

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS: _____

Analyst: DVO

Reviewed by: 

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD3

EPA Sample No.:	Amt.	FileNames:	Analysis Dates:	Batch: 3041210
Sample g582-661-4a	5 mL	0412309.D	2010-04-12 12:34:00	Dilution: 200
MS g582-661-4a	5 mL	0412310.D	2010-04-12 13:05:00	Matrix: Water
MSD g582-661-4a	5 mL	0412311.D	2010-04-12 13:36:00	

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	5000	2360	47.2	5000	2400	47.9	1.51	30	17.7-85.2
acrolein	BQL	25000	21900	87.5	25000	22900	91.6	4.61	30	0.00-424
acrylonitrile	BQL	25000	22300	89.1	25000	23200	93.0	4.24	30	85.0-175
benzene	BQL	1000	946	94.6	1000	952	95.2	0.632	30	61.6-135
bromobenzene	BQL	1000	1010	101	1000	994	99.4	1.60	30	65.1-125
bromochloromethane	BQL	1000	902	90.2	1000	948	94.8	4.97	30	75.5-126
bromodichloromethane	BQL	1000	990	99.0	1000	1020	102	2.59	30	74.3-123
bromoform	BQL	1000	1020	102	1000	1090	109	6.06	30	52.3-122
bromomethane	BQL	1000	822	82.2	1000	874	87.4	6.13	30	10.0-284
2-butanone	BQL	5000	3540	70.8	5000	3590	71.9	1.46	30	36.1-107
n-butylbenzene	BQL	1000	1010	101	1000	1040	104	3.11	30	70.2-124
sec-butylbenzene	BQL	1000	1000	100	1000	1020	102	1.38	30	62.0-133
tert-butylbenzene	BQL	1000	1100	110	1000	1080	108	1.47	30	73.5-121
Carbon disulfide	BQL	1000	902	90.2	1000	920	92.0	1.98	30	68.8-129
carbon tetrachloride	BQL	1000	1010	101	1000	1030	103	1.97	30	71.8-122
chlorobenzene	BQL	1000	984	98.4	1000	1000	100	2.01	30	77.2-118
chloroethane	BQL	1000	1040	104	1000	954	95.4	8.43	30	10.0-233
2-chloroethyl vinyl ether	BQL	2500	16800	673*	2500	16600	664*	1.24	30	16.7-283
chloroform	BQL	1000	990	99.0	1000	1020	102	3.18	30	74.0-128
chloromethane	BQL	1000	934	93.4	1000	994	99.4	6.22	30	72.0-138
2-chlorotoluene	BQL	1000	1010	101	1000	1010	101	0.198	30	79.3-118
4-chlorotoluene	BQL	1000	922	92.2	1000	992	99.2	7.31	30	76.8-120
dibromochloromethane	BQL	1000	988	98.8	1000	1060	106	7.41	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	6000	6390	106	6000	6490	108	1.46	30	20.2-171
1,2-dibromoethane	BQL	1000	1000	100	1000	1010	101	0.598	30	78.5-123
dibromomethane	BQL	1000	996	99.6	1000	994	99.4	0.201	30	71.3-137
1,2-dichlorobenzene	BQL	1000	1010	101	1000	1020	102	1.18	30	75.1-120
1,3-dichlorobenzene	BQL	1000	1020	102	1000	1000	100	1.78	30	73.1-121
1,4-dichlorobenzene	BQL	1000	970	97.0	1000	1000	100	3.24	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	5000	5220	104	5000	4860	97.2	7.10	30	25.7-149
dichlorodifluoromethane	BQL	1000	952	95.2	1000	1010	101	6.31	30	41.7-166
1,1-dichloroethane	BQL	1000	962	96.2	1000	978	97.8	1.65	30	75.6-128
1,2-dichloroethane	BQL	1000	1090	109	1000	1100	110	0.365	30	71.1-127
1,1-dichloroethene	BQL	1000	844	84.4	1000	908	90.8	7.30	30	64.4-130
cis-1,2-dichloroethene	2930	1000	3830	89.6	1000	3960	103	14.1	30	72.7-134
trans-1,2-dichloroethene	BQL	1000	1040	94.0	1000	1070	97.6	3.76	30	74.6-124
1,2-dichloropropane	BQL	1000	930	93.0	1000	946	94.6	1.70	30	76.5-129
1,3-dichloropropane	BQL	1000	1010	101	1000	1050	105	3.89	30	79.1-121
2,2-dichloropropane	BQL	1000	1060	106	1000	1070	107	0.749	30	31.5-157
1,1-dichloropropene	BQL	1000	956	95.6	1000	964	96.4	0.833	30	72.5-120
cis-1,3-dichloropropene	BQL	1000	952	95.2	1000	956	95.6	0.419	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD3

Lab Code: NC00919

Batch: 3041210

EPA Sample No.: g582-661-4a, g582-661-4a, g582-661-4a

Dilution: 200

Filenames: 0412309.D, 0412310.D, 0412311.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	1000	994	99.4	1000	1000	100	0.602	30	44.7-144
Diisopropyl ether	BQL	1000	942	94.2	1000	948	94.8	0.635	30	79.4-122
ethylbenzene	BQL	1000	1010	101	1000	1010	101	0.197	30	73.8-126
hexachlorobutadiene	BQL	1000	1040	104	1000	1090	109	4.31	30	51.8-134
2-hexanone	BQL	5000	3500	70.0	5000	3630	72.6	3.59	30	41.6-111
Iodomethane	BQL	1000	886	88.6	1000	994	99.4	11.5	30	40.6-126
isopropylbenzene	BQL	1000	1010	101	1000	1020	102	1.18	30	74.3-123
4-isopropyltoluene	BQL	1000	1010	101	1000	1030	103	2.15	30	74.6-122
Methyl-tert-butyl ether	BQL	1000	960	96.0	1000	982	98.2	2.26	30	66.5-136
methylene chloride	BQL	1000	858	85.8	1000	900	90.0	4.78	30	48.6-155
4-methyl-2-pentanone	BQL	5000	4700	93.9	5000	4750	95.0	1.14	30	6.88-166
naphthalene	BQL	1000	912	91.2	1000	958	95.8	4.92	30	55.1-140
n-propyl benzene	BQL	1000	1020	102	1000	1030	103	0.783	30	71.6-128
styrene	BQL	1000	990	99.0	1000	1010	101	1.80	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	1000	1030	103	1000	1030	103	0.777	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	1000	1010	101	1000	1090	109	7.22	30	75.7-136
tetrachloroethene	BQL	1000	720	72.0	1000	730	73.0	1.38	30	45.8-153
toluene	BQL	1000	922	92.2	1000	930	93.0	0.864	30	66.4-128
1,2,3-trichlorobenzene	BQL	1000	916	91.6	1000	1000	100	9.17	30	61.0-126
1,2,4-trichlorobenzene	BQL	1000	972	97.2	1000	998	99.8	2.64	30	60.6-125
1,1,1-trichloroethane	BQL	1000	994	99.4	1000	1040	104	4.72	30	78.4-121
1,1,2-trichloroethane	BQL	1000	988	98.8	1000	1010	101	2.20	30	64.8-128
trichloroethene	1520	1000	2520	99.4	1000	2560	104	4.14	30	84.9-136
trichlorofluoromethane	BQL	1000	1020	102	1000	1070	107	4.97	30	76.8-132
1,2,3-trichloropropane	BQL	1000	1000	100	1000	1040	104	3.73	30	10.0-218
1,2,4-trimethylbenzene	BQL	1000	1000	100	1000	1010	101	0.794	30	31.0-172
1,3,5-trimethylbenzene	BQL	1000	994	99.4	1000	1030	103	3.36	30	67.7-132
Vinyl acetate	BQL	2500	2600	104	2500	2650	106	2.13	30	0.00-355
vinyl chloride	2810	1000	3780	96.4	1000	3900	109	12.3	30	68.1-137
m/p-xylene	BQL	2000	2070	103	2000	2020	101	2.05	30	79.8-118
o-xylene	BQL	1000	1030	103	1000	1010	101	1.76	30	80.0-121

System Monitoring Compound Results

		MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4	4-Bromofluorobenzene	10	10.18	102	10	10.55	105	84.7-115
17060-07-0	1,2-Dichloroethane-d4	10	11.19	112	10	11.54	115	63.5-140
2037-26-5	Toluene-d8	10	9.57	95.7	10	9.82	98.2	81.8-117

Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 1 failure(s) out of 72. MSD Spike Recovery: 1 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst: DVO

Reviewed by: 

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8041210B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	25.0	2.18	1	4/12/2010	
Benzene	BQL	1.00	0.0650	1	4/12/2010	
Bromobenzene	BQL	1.00	0.0560	1	4/12/2010	
Bromochloromethane	BQL	1.00	0.101	1	4/12/2010	
Bromodichloromethane	BQL	1.00	0.0760	1	4/12/2010	
Bromoform	BQL	1.00	0.120	1	4/12/2010	
Bromomethane	BQL	1.00	0.133	1	4/12/2010	
2-Butanone	BQL	25.0	0.544	1	4/12/2010	
n-Butylbenzene	BQL	1.00	0.109	1	4/12/2010	
sec-Butylbenzene	BQL	1.00	0.0840	1	4/12/2010	
tert-Butylbenzene	BQL	1.00	0.0500	1	4/12/2010	
Carbon disulfide	BQL	1.00	0.0690	1	4/12/2010	
Carbon tetrachloride	BQL	1.00	0.0870	1	4/12/2010	
Chlorobenzene	BQL	1.00	0.0820	1	4/12/2010	
Chloroethane	BQL	1.00	0.106	1	4/12/2010	
Chloroform	BQL	1.00	0.0790	1	4/12/2010	
Chloromethane	BQL	1.00	0.146	1	4/12/2010	
2-Chlorotoluene	BQL	1.00	0.0990	1	4/12/2010	
4-Chlorotoluene	BQL	1.00	0.0800	1	4/12/2010	
Dibromochloromethane	BQL	1.00	0.0900	1	4/12/2010	
1,2-Dibromo-3-chloropropane	BQL	5.00	1.21	1	4/12/2010	
Dibromomethane	BQL	1.00	0.113	1	4/12/2010	
1,2-Dibromoethane (EDB)	BQL	1.00	0.124	1	4/12/2010	
1,2-Dichlorobenzene	BQL	1.00	0.127	1	4/12/2010	
1,3-Dichlorobenzene	BQL	1.00	0.0810	1	4/12/2010	
1,4-Dichlorobenzene	BQL	1.00	0.0790	1	4/12/2010	
trans-1,4-Dichloro-2-butene	BQL	5.00	0.630	1	4/12/2010	
1,1-Dichloroethane	BQL	1.00	0.0740	1	4/12/2010	
1,1-Dichloroethene	BQL	1.00	0.0890	1	4/12/2010	
1,2-Dichloroethane	BQL	1.00	0.0790	1	4/12/2010	
cis-1,2-Dichloroethene	BQL	1.00	0.0650	1	4/12/2010	
trans-1,2-dichloroethene	BQL	1.00	0.0890	1	4/12/2010	
1,2-Dichloropropane	BQL	1.00	0.0940	1	4/12/2010	
1,3-Dichloropropane	BQL	1.00	0.127	1	4/12/2010	
2,2-Dichloropropane	BQL	1.00	0.0590	1	4/12/2010	
1,1-Dichloropropene	BQL	1.00	0.0720	1	4/12/2010	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/12/2010	
trans-1,3-Dichloropropene	BQL	1.00	0.0760	1	4/12/2010	
Dichlorodifluoromethane	BQL	5.00	0.0940	1	4/12/2010	
Diisopropyl ether (DIPE)	BQL	1.00	0.0730	1	4/12/2010	
Ethylbenzene	BQL	1.00	0.0770	1	4/12/2010	
Hexachlorobutadiene	BQL	1.00	0.228	1	4/12/2010	
2-Hexanone	BQL	5.00	0.720	1	4/12/2010	
Iodomethane	BQL	1.00	0.0420	1	4/12/2010	
Isopropylbenzene	BQL	1.00	0.0710	1	4/12/2010	

**Results for Volatiles
by GCMS 8260**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: VBLK8041210B
 Lab Project ID:

Analyzed By: CLP
 Date Collected:
 Date Received:
 Matrix: Water
 Sample Amount: 5 mL

Compound	Result UG/L	Quantitation Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
4-Isopropyltoluene	BQL	1.00	0.0480	1	4/12/2010	
Methylene chloride	BQL	5.00	0.0980	1	4/12/2010	
4-Methyl-2-pentanone	BQL	5.00	0.550	1	4/12/2010	
Methyl-tert-butyl ether (MTBE)	BQL	1.00	0.0670	1	4/12/2010	
Naphthalene	BQL	1.00	0.133	1	4/12/2010	
n-Propyl benzene	BQL	1.00	0.0800	1	4/12/2010	
Styrene	BQL	1.00	0.0850	1	4/12/2010	
1,1,1,2-Tetrachloroethane	BQL	1.00	0.0900	1	4/12/2010	
1,1,2,2-Tetrachloroethane	BQL	1.00	0.115	1	4/12/2010	
Tetrachloroethene	BQL	1.00	0.0690	1	4/12/2010	
Toluene	BQL	1.00	0.0760	1	4/12/2010	
1,2,3-Trichlorobenzene	BQL	1.00	0.190	1	4/12/2010	
1,2,4-Trichlorobenzene	BQL	1.00	0.119	1	4/12/2010	
Trichloroethene	BQL	1.00	0.0540	1	4/12/2010	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	4/12/2010	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	4/12/2010	
Trichlorofluoromethane	BQL	1.00	0.111	1	4/12/2010	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	4/12/2010	
1,2,4-Trimethylbenzene	BQL	1.00	0.0650	1	4/12/2010	
1,3,5-Trimethylbenzene	BQL	1.00	0.0740	1	4/12/2010	
Vinyl chloride	BQL	1.00	0.149	1	4/12/2010	
m-,p-Xylene	BQL	2.00	0.0980	1	4/12/2010	
o-Xylene	BQL	1.00	0.0650	1	4/12/2010	
		Spike Added	Spike Result	Percent Recovered		
1,2-Dichloroethane-d4		30	28.1	94		
Toluene-d8		30	26.6	89		
4-Bromofluorobenzene		30	28.4	95		

Comments:

Flags:

BQL = Below Quantitation Limits.

Analyst: CLP

Reviewed By: CLP

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8041210A

Filename: 0412803.D

Date Analyzed: 04/12/10 09:31

LCSD: LCS8041210B

Filename: 0412804.D

Date Analyzed: 04/12/10 09:56

COMPOUND	LCS SPIKE	LCS CONC	LCS %	LCSD SPIKE	LCSD CONC	LCSD %	%	QC LIMITS	
	(µg/L)	(µg/L)	REC #	(µg/L)	(µg/L)	REC #	RPD	RPD	REC
acetone	25.0	24.2	97.0	25.0	25.7	103	5.77	30	23.5-141
acrolein	125	124	99.3	125	129	104	4.19	30	31.4-182
acrylonitrile	125	126	101	125	134	107	5.42	30	64.2-140
benzene	5.00	5.21	104	5.00	5.20	104	0.00	30	76.6-120
bromobenzene	5.00	4.83	96.6	5.00	4.78	95.6	1.04	30	75.0-122
bromochloromethane	5.00	4.86	97.2	5.00	4.78	95.6	1.66	30	74.8-127
bromodichloromethane	5.00	5.03	101	5.00	5.13	103	1.97	30	76.4-117
bromoform	5.00	5.60	112	5.00	5.59	112	0.179	30	62.4-127
bromomethane	5.00	5.97	119	5.00	5.46	109	8.92	30	34.2-166
2-butanone	25.0	23.4	93.8	25.0	24.2	96.6	2.94	30	44.9-126
n-butylbenzene	5.00	5.03	101	5.00	4.83	96.6	4.06	30	72.0-122
sec-butylbenzene	5.00	5.16	103	5.00	5.15	103	0.194	30	78.3-116
tert-butylbenzene	5.00	5.07	101	5.00	5.01	100	1.19	30	53.1-148
Carbon disulfide	5.00	5.27	105	5.00	5.11	102	3.08	30	69.0-118
carbon tetrachloride	5.00	5.52	110	5.00	5.56	111	0.722	30	71.7-124
chlorobenzene	5.00	4.98	99.6	5.00	5.11	102	2.38	30	75.5-116
chloroethane	5.00	5.01	100	5.00	5.14	103	2.56	30	78.2-138
2-chloroethyl vinyl ether	125	125	100	125	138	110	9.28	30	5.57-235
chloroform	5.00	4.93	98.6	5.00	4.85	97.0	1.64	30	80.6-117
chloromethane	5.00	5.18	104	5.00	5.37	107	3.60	30	72.6-127
2-chlorotoluene	5.00	5.08	102	5.00	4.88	97.6	4.02	30	81.4-117
4-chlorotoluene	5.00	5.01	100	5.00	4.91	98.2	2.02	30	82.1-116
dibromochloromethane	5.00	5.40	108	5.00	5.50	110	1.83	30	73.1-117
1,2-dibromo-3-chloropropane	30.0	32.3	108	30.0	33.2	110	2.60	30	58.0-133
1,2-dibromoethane	5.00	5.23	105	5.00	5.25	105	0.382	30	75.5-118
dibromomethane	5.00	4.91	98.2	5.00	4.84	96.8	1.44	30	77.3-124
1,2-dichlorobenzene	5.00	5.07	101	5.00	5.11	102	0.786	30	76.3-115
1,3-dichlorobenzene	5.00	5.13	103	5.00	5.09	102	0.783	30	79.1-114
1,4-dichlorobenzene	5.00	4.97	99.4	5.00	5.00	100	0.602	30	76.8-115
trans-1,4-Dichloro-2-butene	25.0	25.8	103	25.0	27.3	109	5.60	30	52.3-130
dichlorodifluoromethane	5.00	5.39	108	5.00	5.43	108	0.739	30	69.8-134
1,1-dichloroethane	5.00	4.78	95.6	5.00	4.83	96.6	1.04	30	78.0-120
1,2-dichloroethane	5.00	4.87	97.4	5.00	4.79	95.8	1.66	30	72.8-126
1,1-dichloroethene	5.00	4.90	98.0	5.00	4.85	97.0	1.02	30	74.6-121
cis-1,2-dichloroethene	5.00	4.82	96.4	5.00	4.56	91.2	5.54	30	78.0-121
trans-1,2-dichloroethene	5.00	4.93	98.6	5.00	4.91	98.2	0.406	30	60.7-144
1,2-dichloropropane	5.00	5.33	107	5.00	5.29	106	0.753	30	75.8-119
1,3-dichloropropane	5.00	5.18	104	5.00	5.13	103	0.970	30	78.5-113
2,2-dichloropropane	5.00	5.23	105	5.00	5.18	104	0.961	30	75.6-130
1,1-dichloropropene	5.00	5.31	106	5.00	5.24	105	1.33	30	79.7-117
cis-1,3-dichloropropene	5.00	4.95	99.0	5.00	4.94	98.8	0.202	30	79.8-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

SGS North America, Inc.

SGS Environmental Services

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Dilution: 1

Lab Code: NC00919

Matrix: Water

LCS: LCS8041210A

Filename: 0412803.D

Date Analyzed: 04/12/10 09:31

LCSD: LCS8041210B

Filename: 0412804.D

Date Analyzed: 04/12/10 09:56

COMPOUND	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	% RPD	QC LIMITS	
								RPD	REC
trans-1,3-dichloropropene	5.00	5.10	102	5.00	5.26	105	3.09	30	79.0-113
Diisopropyl ether	5.00	5.00	100	5.00	5.02	100	0.399	30	71.8-115
ethylbenzene	5.00	4.98	99.6	5.00	5.02	100	0.800	30	80.5-115
hexachlorobutadiene	5.00	5.60	112	5.00	5.43	108	3.08	30	63.3-139
2-hexanone	25.0	22.9	91.8	25.0	24.6	98.4	6.98	30	46.8-123
Iodomethane	5.00	4.26	85.2	5.00	4.13	82.6	3.10	30	29.3-156
isopropylbenzene	5.00	5.01	100	5.00	5.08	102	1.39	30	81.6-114
4-isopropyltoluene	5.00	5.02	100	5.00	5.05	101	0.596	30	78.4-119
Methyl-tert-butyl ether	5.00	4.89	97.8	5.00	4.97	99.4	1.62	30	76.0-114
methylene chloride	5.00	4.78	95.6	5.00	4.64	92.8	2.97	30	72.9-120
4-methyl-2-pentanone	25.0	22.5	90.0	25.0	24.3	97.4	7.81	30	56.2-124
naphthalene	5.00	4.97	99.4	5.00	5.01	100	0.802	30	24.8-182
n-propyl benzene	5.00	5.06	101	5.00	5.03	101	0.595	30	79.0-116
styrene	5.00	4.91	98.2	5.00	5.04	101	2.61	30	64.8-132
1,1,1,2-tetrachloroethane	5.00	5.59	112	5.00	5.28	106	5.70	30	78.8-118
1,1,2,2-tetrachloroethane	5.00	4.97	99.4	5.00	5.35	107	7.36	30	69.7-119
tetrachloroethene	5.00	5.46	109	5.00	5.48	110	0.366	30	55.3-144
toluene	5.00	4.91	98.2	5.00	4.92	98.4	0.203	30	78.6-117
1,2,3-trichlorobenzene	5.00	5.05	101	5.00	5.00	100	0.995	30	20.8-193
1,2,4-trichlorobenzene	5.00	5.03	101	5.00	4.91	98.2	2.41	30	47.9-150
1,1,1-trichloroethane	5.00	5.29	106	5.00	5.25	105	0.759	30	78.8-120
1,1,2-trichloroethane	5.00	5.22	104	5.00	5.23	105	0.191	30	73.6-117
trichloroethene	5.00	5.18	104	5.00	5.14	103	0.966	30	80.1-116
trichlorofluoromethane	5.00	5.57	111	5.00	5.42	108	2.73	30	80.5-130
1,2,3-trichloropropane	5.00	5.39	108	5.00	5.01	100	7.31	30	35.6-152
1,2,4-trimethylbenzene	5.00	5.03	101	5.00	5.00	100	0.598	30	77.0-116
1,3,5-trimethylbenzene	5.00	5.06	101	5.00	5.02	100	0.794	30	79.4-114
Vinyl acetate	12.5	10.9	87.4	12.5	10.8	86.5	1.10	30	60.7-127
vinyl chloride	5.00	5.48	110	5.00	5.39	108	1.66	30	77.5-126
m/p-xylene	10.0	10.1	101	10.0	10.4	104	2.24	30	82.9-112
o-xylene	5.00	4.90	98.0	5.00	4.78	95.6	2.48	30	81.3-113

System Monitoring Compound Results

	LCS SPIKE (µg/L)	LCS CONC (µg/L)	LCS % REC #	LCSD SPIKE (µg/L)	LCSD CONC (µg/L)	LCSD % REC #	QC LIMITS REC
460-00-4 4-Bromofluorobenzene	30	31.75	106	30	30.64	102	84.7-115
17060-07-0 1,2-Dichloroethane-d4	30	28.43	94.8	30	28.35	94.5	63.5-140
2037-26-5 Toluene-d8	30	28.87	96.2	30	29.44	98.1	81.8-117

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS Spike Recovery: 0 failure(s) out of 72. LCSD Spike Recovery: 0 failure(s) out of 72.

RPD: 0 out of 72 outside of limits

COMMENTS:

Analyst:



Reviewed by:



SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Lab Code: NC00919

Inst: MSD8

EPA Sample No.: Amt. FileNames: Analysis Dates: Batch: 8041210

Sample g375-121-8a 5 mL 0412812.D 2010-04-12 13:59:00 Dilution: 2

MS g375-121-16a 5 mL 0412813.D 2010-04-12 14:23:00 Matrix: Water

MSD g375-121-17a 5 mL 0412814.D 2010-04-12 14:48:00

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
acetone	BQL	50.0	26.6	53.2	50.0	28.5	57.1	7.04	30	17.7-85.2
acrolein	BQL	250	231	92.3	250	261	104	12.3	30	0.00-424
acrylonitrile	BQL	250	247	98.8	250	274	110	10.3	30	85.0-175
benzene	BQL	10.0	10.0	100	10.0	10.7	107	6.36	30	61.6-135
bromobenzene	BQL	10.0	9.98	99.8	10.0	9.84	98.4	1.41	30	65.1-125
bromochloromethane	BQL	10.0	10.3	103	10.0	10.5	105	2.50	30	75.5-126
bromodichloromethane	BQL	10.0	9.06	90.6	10.0	9.82	98.2	8.05	30	74.3-123
bromoform	BQL	10.0	9.98	99.8	10.0	10.6	106	5.84	30	52.3-122
bromomethane	BQL	10.0	11.1	111	10.0	12.8	128	14.6	30	10.0-284
2-butanone	BQL	50.0	33.2	66.4	50.0	35.9	71.8	7.93	30	36.1-107
n-butylbenzene	BQL	10.0	9.72	97.2	10.0	9.82	98.2	1.02	30	70.2-124
sec-butylbenzene	BQL	10.0	10.1	101	10.0	10.3	103	2.16	30	62.0-133
tert-butylbenzene	BQL	10.0	9.76	97.6	10.0	9.86	98.6	1.02	30	73.5-121
Carbon disulfide	BQL	10.0	9.46	94.6	10.0	10.5	105	10.8	30	68.8-129
carbon tetrachloride	BQL	10.0	9.98	99.8	10.0	11.0	110	10.1	30	71.8-122
chlorobenzene	BQL	10.0	10.1	101	10.0	10.4	104	3.71	30	77.2-118
chloroethane	BQL	10.0	10.5	105	10.0	10.7	107	1.69	30	10.0-233
2-chloroethyl vinyl ether	BQL	25.0	0.00	0.00*	25.0	0.00	0.00*	--	30	16.7-283
chloroform	BQL	10.0	10.0	100	10.0	10.6	106	5.24	30	74.0-128
chloromethane	BQL	10.0	10.2	102	10.0	10.9	109	6.26	30	72.0-138
2-chlorotoluene	BQL	10.0	9.16	91.6	10.0	9.90	99.0	7.76	30	79.3-118
4-chlorotoluene	BQL	10.0	9.90	99.0	10.0	10.3	103	3.96	30	76.8-120
dibromochloromethane	BQL	10.0	10.4	104	10.0	10.5	105	1.15	30	69.0-117
1,2-dibromo-3-chloropropane	BQL	60.0	60.0	100	60.0	59.9	99.9	0.0667	30	20.2-171
1,2-dibromoethane	BQL	10.0	10.1	101	10.0	10.2	102	1.58	30	78.5-123
dibromomethane	BQL	10.0	9.08	90.8	10.0	10.1	101	10.2	30	71.3-137
1,2-dichlorobenzene	BQL	10.0	10.1	101	10.0	10.5	105	3.69	30	75.1-120
1,3-dichlorobenzene	BQL	10.0	10.3	103	10.0	10.3	103	0.194	30	73.1-121
1,4-dichlorobenzene	BQL	10.0	10.1	101	10.0	10.3	103	2.36	30	74.8-118
trans-1,4-Dichloro-2-butene	BQL	50.0	48.5	97.0	50.0	50.6	101	4.28	30	25.7-149
dichlorodifluoromethane	BQL	10.0	10.2	102	10.0	11.2	112	8.96	30	41.7-166
1,1-dichloroethane	5.28	10.0	13.9	86.6	10.0	15.0	97.6	11.9	30	75.6-128
1,2-dichloroethane	BQL	10.0	9.56	95.6	10.0	10.0	100	4.90	30	71.1-127
1,1-dichloroethene	37.2	10.0	39.2	19.6*	10.0	46.1	89.0	128*	30	64.4-130
cis-1,2-dichloroethene	2.84	10.0	11.3	84.6	10.0	12.4	95.6	12.2	30	72.7-134
trans-1,2-dichloroethene	BQL	10.0	9.54	95.4	10.0	10.6	106	10.3	30	74.6-124
1,2-dichloropropane	BQL	10.0	9.84	98.4	10.0	10.3	103	4.57	30	76.5-129
1,3-dichloropropane	BQL	10.0	10.2	102	10.0	10.2	102	0.589	30	79.1-121
2,2-dichloropropane	BQL	10.0	9.80	98.0	10.0	10.8	108	9.34	30	31.5-157
1,1-dichloropropene	BQL	10.0	10.2	102	10.0	10.5	105	3.47	30	72.5-120
cis-1,3-dichloropropene	BQL	10.0	6.78	67.8	10.0	7.32	73.2	7.66	30	66.6-132

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

SGS North America, Inc.

SGS Environmental Services

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SGS Environmental

Inst: MSD8

Lab Code: NC00919

Batch: 8041210

EPA Sample No.: g375-121-8a, g375-121-16a, g375-121-17a

Dilution: 2

Filename: 0412812.D, 0412813.D, 0412814.D

Matrix: Water

COMPOUND	SAMPLE CONC (µg/L)	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	% RPD	QC LIMITS	
									RPD	REC
trans-1,3-dichloropropene	BQL	10.0	9.32	93.2	10.0	9.68	96.8	3.79	30	44.7-144
Diisopropyl ether	BQL	10.0	9.54	95.4	10.0	10.4	104	8.82	30	79.4-122
ethylbenzene	BQL	10.0	9.74	97.4	10.0	9.90	99.0	1.63	30	73.8-126
hexachlorobutadiene	BQL	10.0	10.9	109	10.0	10.7	107	1.86	30	51.8-134
2-hexanone	BQL	50.0	34.6	69.3	50.0	36.9	73.8	6.21	30	41.6-111
Iodomethane	BQL	10.0	8.68	86.8	10.0	10.1	101	15.5	30	40.6-126
isopropylbenzene	BQL	10.0	9.90	99.0	10.0	9.82	98.2	0.811	30	74.3-123
4-isopropyltoluene	BQL	10.0	9.88	98.8	10.0	9.92	99.2	0.404	30	74.6-122
Methyl-tert-butyl ether	BQL	10.0	9.26	92.6	10.0	10.2	102	10.0	30	66.5-136
methylene chloride	BQL	10.0	9.50	95.0	10.0	10.8	108	12.6	30	48.6-155
4-methyl-2-pentanone	BQL	50.0	41.8	83.6	50.0	44.9	89.8	7.15	30	6.88-166
naphthalene	BQL	10.0	9.62	96.2	10.0	9.50	95.0	1.26	30	55.1-140
n-propyl benzene	BQL	10.0	9.86	98.6	10.0	10.1	101	2.40	30	71.6-128
styrene	BQL	10.0	9.66	96.6	10.0	9.86	98.6	2.05	30	73.2-123
1,1,1,2-tetrachloroethane	BQL	10.0	10.4	104	10.0	10.2	102	1.56	30	69.4-120
1,1,2,2-tetrachloroethane	BQL	10.0	10.5	105	10.0	10.7	107	1.88	30	75.7-136
tetrachloroethene	BQL	10.0	11.1	111	10.0	11.7	117	5.42	30	45.8-153
toluene	BQL	10.0	9.12	91.2	10.0	9.92	99.2	8.40	30	66.4-128
1,2,3-trichlorobenzene	BQL	10.0	9.94	99.4	10.0	10.3	103	3.36	30	61.0-126
1,2,4-trichlorobenzene	BQL	10.0	9.76	97.6	10.0	9.82	98.2	0.613	30	60.6-125
1,1,1-trichloroethane	3.08	10.0	11.4	83.2	10.0	12.4	93.6	11.8	30	78.4-121
1,1,2-trichloroethane	BQL	10.0	10.1	101	10.0	10.7	107	5.58	30	64.8-128
trichloroethene	33.4	10.0	38.8	54.0*	10.0	41.5	81.2*	40.2*	30	84.9-136
trichlorofluoromethane	BQL	10.0	10.9	108	10.0	11.7	117	7.62	30	76.8-132
1,2,3-trichloropropane	BQL	10.0	10.2	102	10.0	11.4	114	12.0	30	10.0-218
1,2,4-trimethylbenzene	BQL	10.0	10.1	101	10.0	10.3	103	2.16	30	31.0-172
1,3,5-trimethylbenzene	BQL	10.0	9.94	99.4	10.0	10.0	100	1.00	30	67.7-132
Vinyl acetate	BQL	25.0	21.1	84.4	25.0	22.8	91.3	7.83	30	0.00-355
vinyl chloride	BQL	10.0	10.4	104	10.0	10.9	109	4.88	30	68.1-137
m/p-xylene	BQL	20.0	19.6	97.8	20.0	20.5	102	4.50	30	79.8-118
o-xylene	BQL	10.0	9.48	94.8	10.0	9.66	96.6	1.88	30	80.0-121

System Monitoring Compound Results

	MS SPIKE (µg/L)	MS CONC (µg/L)	MS % REC #	MSD SPIKE (µg/L)	MSD CONC (µg/L)	MSD % REC #	QC LIMITS REC
460-00-4 4-Bromofluorobenzene	30	32.4	108	30	32.4	108	84.7-115
17060-07-0 1,2-Dichloroethane-d4	30	28.82	96.1	30	29.61	98.7	63.5-140
2037-26-5 Toluene-d8	30	25.95	86.5	30	27.59	92.0	81.8-117


Column to be used to flag recovery and RPD values with an asterisk


* Values outside of QC limits

MS Spike Recovery: 3 failure(s) out of 72. MSD Spike Recovery: 2 failure(s) out of 72.

RPD: 3 out of 72 outside of limits

COMMENTS:

Analyst: 

Reviewed by: 



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 13
Lab Proj #: P1004320
Report Date: 04/30/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 18

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1004320-01	OW-7D
P1004320-02	OW-10D
P1004320-03	P-2D
P1004320-04	OW-9D
P1004320-05	OW-8D
P1004320-06	P-1D
P1004320-07	P-3D
P1004320-08	BATCH CONFIRM 4D
P1004320-14	BATCH CONFIRM IW-5D
P1004320-22	BATCH CONFIRM IW-4D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: _____

Debbie Hallo

Date: _____

5-3-10

Project Manager: _____

Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P1004320-01	13 Apr. 10 11:00		21 Apr. 10 12:15		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		460.0	250	mg/L	9060	4/28/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
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 Seven Fields, PA 16046

Page: Page 3 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P1004320-02			13 Apr. 10 11:15	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		1700.0	250	mg/L	9060	4/28/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-2D	Water	P1004320-03	13 Apr. 10 11:20		21 Apr. 10 12:15		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5200.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
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 Seven Fields, PA 16046

Page: Page 5 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P1004320-04			13 Apr. 10 11:32	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4000.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Seven Fields, PA 16046

Page: Page 6 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-8D	Water	P1004320-05	13 Apr. 10	11:40	21 Apr. 10	12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		1000.0	250	mg/L	9060	4/28/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
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Page: Page 7 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-1D	Water	P1004320-06			13 Apr. 10 11:55	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		170.0	25.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Page: Page 8 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-3D	Water	P1004320-07	13 Apr. 10 12:05		21 Apr. 10 12:15		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		14.0	5	mg/L	9060	4/29/10	pas



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
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Page: Page 9 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
BATCH CONFIRM 4D	Water	P1004320-08			13 Apr. 10 13:45	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		8300.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
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Page: Page 10 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
BATCH CONFIRM IW-5D	Water	P1004320-14	17 Apr. 10 7:30	21 Apr. 10 12:15			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		7000.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
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Page: Page 11 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
BATCH CONFIRM IW-4D	Water	P1004320-22	18 Apr. 10 8:05	21 Apr. 10 12:15			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7900.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
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 Seven Fields, PA 16046

Page: Page 12 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100429016-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 5.0 mg/L		5		- NA

M100429016-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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 Suite 210
 Seven Fields, PA 16046

Page: Page 13 of 13
 Lab Proj #: P1004320
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100430020-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	0.8 mg/L		5.0		- NA

M100430020-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0 mg/L	36.00	103.00	70 - 130

P1004320-03A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	5100.0 mg/L			- NA	1.94	0 - 20

P1004320-04A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	3600.0 mg/L			- NA	10.53	0 - 20

P1004321-13A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	7900.0 mg/L			- NA	0.00	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

P1004320

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: ARCADIS
 Co. Address: One Adams Place, 310 Sewer Fields Blvd Suite 210
 Phone #: 724-742-9180 Fax #: 724-742-9189
 Proj. Manager: Mark Hanish
 Proj. Name/Number: AUX MB / B0007393.0000.00006
 Sampler's signature: [Signature]

Results to: Rich Meter
 Invoice to: Rich Meter

Sample ID	Sample Description	Sample Type Water Vapor Solid	Date	Time	Temp	Parameters Requested	Remarks
OW-7D	Grab	X	4/13/10	1100			
OW-10D	Grab	X	4/13/10	1115			
P-2D	Grab	X	4/13/10	1120			
OW-9D	Grab	X	4/13/10	1132			
OW-8D	Grab	X	4/13/10	1140			
P-1D	Grab	X	4/13/10	1155			
P-3D	Grab	X	4/13/10	1205			
Batch Confirm 4D	Grab	X	4/13/10	1345			
P-2D	Grab	X	4/14/10	0051			
OW-7D	Grab	X	4/14/10	0113			
OW-7D	Grab	X	4/14/10	0758			
P-2D	Grab	X	4/14/10	0810			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Company:
<u>[Signature]</u>	4/13/10	1600	<u>Feb Exp</u>			
<u>[Signature]</u>			<u>[Signature]</u>			



Microseeps
Lab. Proj. #

P1004320

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No.: (412) 826-3433

Company: ARCADIS
 Co. Address: One Adam Place, 310 Seven Fields Blvd Suite 210
 Phone #: 724-742-9180 Fax #: 724-742-9189
 Proj. Manager: Mark Hanish
 Proj. Name/Number: AVX MB / B0007393.000.00006
 Sampler's signature: [Signature]

Sample ID	Sample Description	Sample Type Water Vapor Solid	Date	Time	cooler temp.	Parameters Requested	Remarks
P-2D	Grab	X	4/16/10	2039			
Batch Confir. TW-5D	Grab	X	4/17/10	0730			
OW-7D	Grab	X	4/17/10	0744			
P-2D	Grab	X	4/17/10	0753			
P-2D	Grab	X	4/17/10	2037			
OW-7D	Grab	X	4/17/10	2053			
OW-7D	Grab	X	4/18/10	0305			
OW-7D	Grab	X	4/18/10	0739			
P-2D	Grab	X	4/18/10	0758			
Batch Confir. TW-5D	Grab	X	4/18/10	0805			
OW-7D	Grab	X	4/18/10	2030			
P-2D	Grab	X	4/18/10	2040			

Results to: Rich Motor
 Invoice to: Rich Motor

Relinquished by: [Signature] Date: 4/21/10 Time: 1000
 Company: ARCADIS

Relinquished by: [Signature] Date: 4/21/10 Time: 1000
 Company: ARCADIS

Relinquished by: [Signature] Date: 4/21/10 Time: 1000
 Company: ARCADIS

Debbie Hallo

From: McDonough, Jeffrey [Jeffrey.McDonough@arcadis-us.com]
Sent: Thursday, April 22, 2010 4:56 PM
To: Debbie Hallo
Subject: FW: Chain of Custody Change - HOLD samples
Attachments: img-4221544-0001.pdf; img-4221543-0001.pdf; img-4221543-0001.pdf;

From: McDonough, Jeffrey
Sent: Thursday, April 22, 2010 4:44 PM
To: 'hhauser@microseeps.com'
Subject: Chain of Custody Change - HOLD samples

Hi Heather,

Please see the attached COCs with the updated HOLDs on several samples. I apologize for sending them as individual PDFs, but the file is much to large if I merge them all together.

Please send me a quick confirmation that you got this. And I am the person to contact if there are any questions. We will be in touch of which HOLD samples to run and when. Please note that if no HOLD remark was added, the samples may be run as normal. Additionally, what is your policy on holding samples? (i.e., how long do we have to decide if we will run the samples?)

Thanks
Jeff

Jeffrey McDonough | Staff Environmental Engineer | Jeffrey.McDonough@arcadis-us.com

ARCADIS U.S., Inc. | 6 Terry Drive, Suite 300 | Newtown PA 18940
T. 267.685.1854 | M. 267.615.1863 | F. 267.685.1801
www.arcadis-us.com

ARCADIS, Imagine the result
Please consider the environment before printing this email.

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Microseeps Lab
Proj #

90001320

CHAIN OF CUSTODY RECORD

Microseeps
COC company

Phone (412) 826-6245

Microseeps Inc 220 William Pitt Way Pittsburgh, PA 15238

Fax No. (412) 826-3493

Company

ARCADIS

Co. Address

220 William Pitt Way Pittsburgh, PA 15238

Phone #

(412) 826-6245

Proj. Manager

Mark Hensch

Proj. Name/Number

ADD MB / 90001320

Sampler's signature

[Signature]

Parameters Requested	Results to
	Field Data
	Invoice to:
	Field Office
	Remarks

Sample ID	Sample Description	Sample Type Water Vapor Spill	Date	Time	Company	Received by	Date	Time	Company	Received by	Date	Time
OW-TR	Gravel		9/14/06	1100								
OW-MR	Gravel		9/14/06	1105								
P-20	Gravel		9/14/06	1120								
OW-70	Gravel		9/14/06	1132								
OW-80	Gravel		9/14/06	1140								
P-10	Gravel		9/14/06	1155								
P-30	Gravel		9/14/06	1205								
OW-90	Gravel		9/14/06	1245								
P-21	Gravel		9/14/06	0850								
OW-10	Gravel		9/14/06	0915								
OW-11	Gravel		9/14/06	0930								
P-22	Gravel		9/14/06	0945								

Reinquished by	Company	Date	Time	Received by	Company	Date	Time
<i>[Signature]</i>	ARCADIS	9/14/06	1100	FILE Ex			
<i>[Signature]</i>							

WHITE COPY - Accompany Samples

YELLOW COPY - Laboratory File

PINK COPY - Submitter



Microseeps
Lab. Proj. #

CHAIN-OF-CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-3245

Microseeps, Inc. 220 William Pitt Way

Pittsburgh, PA 15238

Fax No: (412) 826-3436

Company: REAR
 Co. Address: One of the 215 South 30th St
 Phone #: 724-261-1111 Fax: 724-261-1111
 Proj. Manager: Jack Frank
 Proj. Name/Number: AMA MB / B000735 WOODM
 Sampler's signature: [Signature]

Sample ID	Sample Description	Sample Type Water Vapour Solid	Date	Time	Temp
P-2D	Cond	X	4/16/06	07:59	70.2
Cond	Cond	X	4/16/06	07:58	
Cond	Cond	X	4/16/06	07:57	
Cond	Cond	X	4/16/06	07:56	
Cond	Cond	X	4/16/06	07:55	
Cond	Cond	X	4/16/06	07:54	
Cond	Cond	X	4/16/06	07:53	
Cond	Cond	X	4/16/06	07:52	
Cond	Cond	X	4/16/06	07:51	
Cond	Cond	X	4/16/06	07:50	
Cond	Cond	X	4/16/06	07:49	
Cond	Cond	X	4/16/06	07:48	
Cond	Cond	X	4/16/06	07:47	
Cond	Cond	X	4/16/06	07:46	
Cond	Cond	X	4/16/06	07:45	
Cond	Cond	X	4/16/06	07:44	
Cond	Cond	X	4/16/06	07:43	
Cond	Cond	X	4/16/06	07:42	
Cond	Cond	X	4/16/06	07:41	
Cond	Cond	X	4/16/06	07:40	
Cond	Cond	X	4/16/06	07:39	
Cond	Cond	X	4/16/06	07:38	
Cond	Cond	X	4/16/06	07:37	
Cond	Cond	X	4/16/06	07:36	
Cond	Cond	X	4/16/06	07:35	
Cond	Cond	X	4/16/06	07:34	
Cond	Cond	X	4/16/06	07:33	
Cond	Cond	X	4/16/06	07:32	
Cond	Cond	X	4/16/06	07:31	
Cond	Cond	X	4/16/06	07:30	
Cond	Cond	X	4/16/06	07:29	
Cond	Cond	X	4/16/06	07:28	
Cond	Cond	X	4/16/06	07:27	
Cond	Cond	X	4/16/06	07:26	
Cond	Cond	X	4/16/06	07:25	
Cond	Cond	X	4/16/06	07:24	
Cond	Cond	X	4/16/06	07:23	
Cond	Cond	X	4/16/06	07:22	
Cond	Cond	X	4/16/06	07:21	
Cond	Cond	X	4/16/06	07:20	
Cond	Cond	X	4/16/06	07:19	
Cond	Cond	X	4/16/06	07:18	
Cond	Cond	X	4/16/06	07:17	
Cond	Cond	X	4/16/06	07:16	
Cond	Cond	X	4/16/06	07:15	
Cond	Cond	X	4/16/06	07:14	
Cond	Cond	X	4/16/06	07:13	
Cond	Cond	X	4/16/06	07:12	
Cond	Cond	X	4/16/06	07:11	
Cond	Cond	X	4/16/06	07:10	
Cond	Cond	X	4/16/06	07:09	
Cond	Cond	X	4/16/06	07:08	
Cond	Cond	X	4/16/06	07:07	
Cond	Cond	X	4/16/06	07:06	
Cond	Cond	X	4/16/06	07:05	
Cond	Cond	X	4/16/06	07:04	
Cond	Cond	X	4/16/06	07:03	
Cond	Cond	X	4/16/06	07:02	
Cond	Cond	X	4/16/06	07:01	
Cond	Cond	X	4/16/06	07:00	

Parameters Requested	Results to	Remarks
		HOLD VM 13
		HOLD VM 15
		HOLD VM 16
		HOLD VM 17
		HOLD VM 18
		HOLD VM 19
		HOLD VM 20
		HOLD VM 21
		HOLD VM 22
		HOLD VM 23
		HOLD VM 24

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[Signature]	AR	4/16/06	07:10	[Signature]	AR	4/16/06	07:10
[Signature]	Company	Date	Time	[Signature]	Company	Date	Time
[Signature]	Company	Date	Time	[Signature]	Company	Date	Time

WHITE COPY: Accompany Samples

YELLOW COPY: Laboratory File

PINK COPY: Submitter



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 12
Lab Proj #: P1004321
Report Date: 04/30/10
Client Proj Name: B0007393.0000.00006
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 17

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1004321-01	BATCH CONFIRM IW-4D
P1004321-09	BATCH CONFIRM IW-5D
P1004321-13	BATCH CONFIRM IW-4D
P1004321-16	OW-7D
P1004321-17	P-2D
P1004321-18	OW-10D
P1004321-19	OW-9D
P1004321-20	OW-8D
P1004321-21	P-1D
P1004321-22	P-3D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 5-3-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
BATCH CONFIRM IW-4D	Water	P1004321-01	14 Apr. 10 20:00	21 Apr. 10 12:15			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7600.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
BATCH CONFIRM IW-5D	Water	P1004321-09	16 Apr. 10 7:20	21 Apr. 10 12:15			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		7700.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
BATCH CONFIRM IW-4D	Water	P1004321-13			19 Apr. 10 7:16	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem - N Total Organic Carbon		7900.0	1000.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd:
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P1004321-16			19 Apr. 10 20:11	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		1500.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-2D	Water	P1004321-17			19 Apr. 10 20:29	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		5200.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-10D	Water	P1004321-18			19 Apr. 10 20:40	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4800.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-9D	Water	P1004321-19			19 Apr. 10 20:48	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		4100.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
OW-8D	Water	P1004321-20	19 Apr. 10 20:56	21 Apr. 10 12:15			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		3800.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
P-1D	Water	P1004321-21	19 Apr. 10 21:11		21 Apr. 10 12:15		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem N Total Organic Carbon		140.0	25.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
P-3D	Water	P1004321-22			19 Apr. 10 21:20	21 Apr. 10 12:15	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		2700.0	500.0	mg/L	9060	4/29/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 12
 Lab Proj #: P1004321
 Report Date: 04/30/10
 Client Proj Name: B0007393.0000.00006
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100430020-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	0.8 mg/L		5.0		- NA

M100430020-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0 mg/L	36.00	103.00	70 - 130

P1004320-03A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	5100.0 mg/L			- NA	1.94	0 - 20

P1004320-04A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	3600.0 mg/L			- NA	10.53	0 - 20

P1004321-13A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	7900.0 mg/L			- NA	0.00	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps
Lab. Proj. #

80001321

CHAIN - OF - CUSTODY RECORD

Microseeps
COC cont. #

Phone: (412) 826-5245 Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238 Fax No. (412) 826-3433

Company: ARCADIS
 Co. Address: One Adams Place, 310 Swan Fields Blvd Suite 210
 Phone #: 724-742-9180 Fax #: 724-742-9189
 Proj. Manager: Mark Hanisk
 Proj. Name/Number: AUX MB R0007393.0000.00006
 Sampler's signature: Ricky Shy

Results to: Rich Meter
 Invoice to: Rich Meter

Sample ID	Sample Description	Sample Type		Date	Time	Cooler Temp.	Parameters Requested	Remarks
		Water	Vapor/Solid					
Batch Confir. IW-4D	Grab	X		4/19/10	0716			
P-2D	Grab	X		4/19/10	0729			
OW-7D	Grab	X		4/19/10	0750			
OW-7D	Grab	X		4/19/10	2011			
P-2D	Grab	X		4/19/10	2029			
OW-10D	Grab	X		4/19/10	2040			
OW-9D	Grab	X		4/19/10	2048			
OW-8P	Grab	X		4/19/10	2052			
P-1D	Grab	X		4/19/10	2111			
P-3D	Grab	X		4/19/10	2120			

Relinquished by: <u>Ricky Shy</u>	Company: <u>ARCADES</u>	Date: <u>4/20/10</u>	Time: <u>1600</u>	Received by: <u>Fed Ex</u>	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date: <u>4/21</u>	Time: <u>1100</u>
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

Debbie Hallo

From: McDonough, Jeffrey [Jeffrey.McDonough@arcadis-us.com]
Sent: Thursday, April 22, 2010 4:56 PM
To: Debbie Hallo
Subject: FW: Chain of Custody Change - HOLD samples
Attachments: img-4221544-0001.pdf; img-4221543-0001.pdf; img-4221543-0001.pdf; img-4221543-0001.pdf

From: McDonough, Jeffrey
Sent: Thursday, April 22, 2010 4:44 PM
To: 'hhauser@microseeps.com'
Subject: Chain of Custody Change - HOLD samples

Hi Heather,

Please see the attached COCs with the updated HOLDs on several samples. I apologize for sending them as individual PDFs, but the file is much to large if I merge them all together.

Please send me a quick confirmation that you got this. And I am the person to contact if there are any questions. We will be in touch of which HOLD samples to run and when. Please note that if no HOLD remark was added, the samples may be run as normal. Additionally, what is your policy on holding samples? (i.e., how long do we have to decide if we will run the samples?)

Thanks
Jeff

Jeffrey McDonough | Staff Environmental Engineer | Jeffrey.McDonough@arcadis-us.com

ARCADIS U.S., Inc. | 6 Terry Drive, Suite 300 | Newtown PA 18940
T. 267.685.1854 | M. 267.615.1863 | F. 267.685.1801
www.arcadis-us.com

ARCADIS, Imagine the result
Please consider the environment before printing this email.

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Microseeps
Lab. Proj. #

CHAIN-OF-CUSTODY RECORD

Microseeps
COC cont. #

Phone (412) 826-6245

Microseeps, Inc. 220 William Pitt Way

Pittsburgh, PA 15238

Fax No. (412) 826-3443

Company: ARCO

Co. Address: 1000 10th Ave

Phone #: 724-771-4100

Proj. Manager: ARCO

Proj. Name Number: AVR 340 / 89 07 397

Sampler's Signature: [Signature]

Sample ID	Sample Description	Sample by pt. (Water, Vapor, Soil)	Date	Time	Received by	Date	Time	Company	Remarks
OW-70	Grab	X	11/16/00	1:00	[Signature]	11/16/00	1:00	ARCO	HOLD VM 02
OW-70	Grab	X	11/16/00	2:00	[Signature]	11/16/00	2:00	ARCO	HOLD VM 03
OW-70	Grab	X	11/16/00	3:00	[Signature]	11/16/00	3:00	ARCO	HOLD VM 04
P-27	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 05
OW-70	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 06
OW-70	Grab	X	11/16/00	2:00	[Signature]	11/16/00	2:00	ARCO	HOLD VM 07
P-27	Grab	X	11/16/00	2:00	[Signature]	11/16/00	2:00	ARCO	HOLD VM 08
OW-70	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 09
P-27	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 10
OW-70	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 11
OW-70	Grab	X	11/16/00	4:00	[Signature]	11/16/00	4:00	ARCO	HOLD VM 12

Relinquished by	Company	Date	Time	Received by	Company	Date	Time
[Signature]	ARCO	11/16/00	1:00	[Signature]	ARCO	11/16/00	1:00
[Signature]	ARCO	11/16/00	2:00	[Signature]	ARCO	11/16/00	2:00
[Signature]	ARCO	11/16/00	3:00	[Signature]	ARCO	11/16/00	3:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00
[Signature]	ARCO	11/16/00	2:00	[Signature]	ARCO	11/16/00	2:00
[Signature]	ARCO	11/16/00	2:00	[Signature]	ARCO	11/16/00	2:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00
[Signature]	ARCO	11/16/00	4:00	[Signature]	ARCO	11/16/00	4:00

WHITE COPY: Accompany Samples

YELLOW COPY: Laboratory File

PINK COPY: Submitter



Client Name: Arcadis
Contact: Mark Hanish
Address: 310 Seven Fields Blvd.
Suite 210
Seven Fields, PA 16046

Page: Page 1 of 12
Lab Proj #: P1004402
Report Date: 05/11/10
Client Proj Name: B0007393.0000
Client Proj #: AVXMB

Laboratory Results

Total pages in data package: 15

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1004402-01	OW-7D
P1004402-02	PZ-2D
P1004402-03	OW-7D
P1004402-04	PZ-2D
P1004402-05	OW-7D
P1004402-06	OW-7D
P1004402-07	PZ-2D
P1004402-08	OW-7D

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo **Date:** 5-11-10

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 2 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>		<u>Received</u>		
OW-7D	Water	P1004402-01	16 Apr. 10 7:37		28 Apr. 10 12:38		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		330.0	50.0	mg/L	9060	5/7/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 3 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-2D	Water	P1004402-02	16 Apr. 10 7:51	28 Apr. 10 12:38			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		5700.0	1000.0	mg/L	9060	5/7/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 4 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P1004402-03			16 Apr. 10 20:20	28 Apr. 10 12:38	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		87.0	25.0	mg/L	9060	5/7/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 5 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-2D	Water	P1004402-04	16 Apr. 10 20:39	28 Apr. 10 12:38			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		5600.0	1000.0	mg/L	9060	5/7/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 6 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P1004402-05			17 Apr. 10 7:44	28 Apr. 10 12:38	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		76.0	25.0	mg/L	9060	5/7/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 7 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>		<u>Received</u>	
OW-7D	Water	P1004402-06			18 Apr. 10 20:30		28 Apr. 10 12:38	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>	
WetChem								
N Total Organic Carbon		940.0	250.0	mg/L	9060	5/7/10	md	



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 8 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>			
PZ-2D	Water	P1004402-07	19 Apr. 10 7:29	28 Apr. 10 12:38			
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		5900.0	1000.0	mg/L	9060	5/10/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 9 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
OW-7D	Water	P1004402-08			19 Apr. 10 7:50	28 Apr. 10 12:38	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
WetChem							
N Total Organic Carbon		1100.0	250.0	mg/L	9060	5/6/10	md



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 10 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100507041-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 2.0 mg/L		2.0		- NA

M100507041-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P1004398-01A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	6.5 mg/L			- NA	1.53	0 - 20

P1004398-01A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	27.0 mg/L	20.00	102.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 11 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100510003-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 2.0 mg/L		2.0		- NA

M100510003-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	36.0 mg/L	36.00	100.00	70 - 130

P1004402-03A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	88.0 mg/L			- NA	1.14	0 - 20

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Arcadis
 Contact: Mark Hanish
 Address: 310 Seven Fields Blvd.
 Suite 210
 Seven Fields, PA 16046

Page: Page 12 of 12
 Lab Proj #: P1004402
 Report Date: 05/11/10
 Client Proj Name: B0007393.0000
 Client Proj #: AVXMB

Prep Method: Total Organic Carbon
Analysis Method: Total Organic Carbon

M100511008-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	< 2.0 mg/L		2.0		- NA

M100511008-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	37.0 mg/L	36.00	103.00	70 - 130

P1004413-02A-DUP

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Total Organic Carbon	< 2.0 mg/L			- NA	0.00	0 - 20

P1004413-02A-MS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Total Organic Carbon	21.0 mg/L	20.00	105.00	70 - 130

Outlined Results indicate results outside of Control limits



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

1004402

AGM-P AUX MB

Debbie Hallo

From: McDonough, Jeffrey [Jeffrey.McDonough@arcadis-us.com]
 Sent: Wednesday, April 28, 2010 11:00 AM
 To: Debbie Hallo
 Cc: Mator, Richard; Hanish, Mark; Nelson, Denice
 Subject: TOC Samples to run

Done Re-log the samples below for TOC
 Discard the remaining samples

Hi Debbie,

Per our conversation last week about holding TOC samples for the Myrtle Beach sample set, please run the following samples previously placed on HOLD:

- 1 OW-7D 4/16/10 07:37 P1004321-10
- 2 PZ-2D 4/16/10 07:51 P1004321-11
- 3 OW-7D 4/16/10 20:20 P1004321-12
- 4 PZ-2D 4/16/10 20:39 P1004320-13
- 5 OW-7D 4/17/10 07:44 P1004320-15
- 6 OW-7D 4/18/10 20:30 P1004320-23
- 7 PZ-2D 4/19/10 07:29 P1004321-14
- 8 OW-7D 4/19/10 07:50 P1004321-15

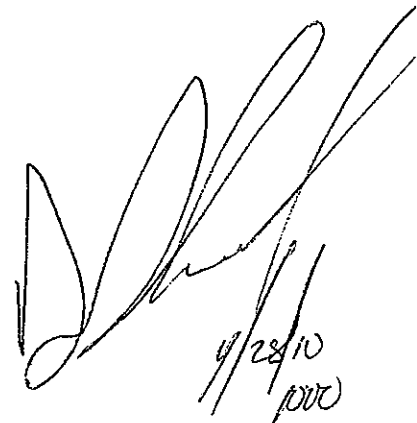
I will follow up with a phone call as well in case you have any questions.

Thanks

Jeffrey McDonough | Staff Environmental Engineer | Jeffrey.McDonough@arcadis-us.com

ARCADIS U.S., Inc. | 6 Terry Drive, Suite 300 | Newtown PA 18940
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4/28/10
 JMD

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Debbie Hallo

From: McDonough, Jeffrey [Jeffrey.McDonough@arcadis-us.com]
Sent: Wednesday, April 28, 2010 11:03 AM
To: Debbie Hallo
Cc: Mator, Richard; Hanish, Mark; Nelson, Denice
Subject: RE: TOC Samples to run

Debbie,

Please discard the remaining samples as we will not run them.

Thank you.
Jeff

From: McDonough, Jeffrey
Sent: Wednesday, April 28, 2010 11:00 AM
To: 'Debbie Hallo'
Cc: Mator, Richard; Hanish, Mark; Nelson, Denice
Subject: TOC Samples to run

Hi Debbie,

Per our conversation last week about holding TOC samples for the Myrtle Beach sample set, please run the following samples previously placed on HOLD:

OW-7D 4/16/10 07:37

PZ-2D 4/16/10 07:51

OW-7D 4/16/10 20:20

PZ-2D 4/16/10 20:39

OW-7D 4/17/10 07:44

OW-7D 4/18/10 20:30

PZ-2D 4/19/10 07:29

OW-7D 4/19/10 07:50

I will follow up with a phone call as well in case you have any questions.

Thanks

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