



Ms. Carol C. Minsk
Project Manager

Mr. Lucas Berresford
Engineering Associate
Division of Site Assessment and Remediation
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject:
Monthly Progress Report – September 2009
AVX Corporation – Myrtle Beach Facility
801 17th Avenue South
Horry County, Myrtle Beach, South Carolina
SCD 062 690 557

Dear Ms. Minsk and Mr. Berresford:

On behalf of AVX Corporation (AVX), ARCADIS respectfully submits five copies of this Monthly Progress Report for September 2009 to the South Carolina Department of Health and Environmental Control (SCDHEC) for the AVX site located at 801 17th Avenue South in Horry County, Myrtle Beach, South Carolina (site).

Activities Performed During This Reporting Period

The following activities were performed by AVX or ARCADIS during this reporting period:

- Performed post-injection groundwater monitoring for the enhanced reductive dechlorination (ERD) pilot test.
- Continued analysis of pre- and post-injection groundwater monitoring data. A summary of findings follow with a more detailed summary provided in Attachment 1:
 - The total organic carbon (TOC) concentration in the injection wells at the time of injection was approximately 10,000 milligrams per liter. This was close to the injection solution strength (approximately 2% molasses)

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Our ref:
B0007393.0000

Imagine the result

- immediately following injection of approximately 325,000 gallons of solution.
- The TOC distribution after the injection is generally consistent with previous numeric model predictions. For example:
 - The TOC decay rate is consistent with expectations.
 - The predicted 40-day travel time from the injection radius of interest to OW-8D and OW-9D is generally consistent with the confirmation of arrival of TOC in the 26-day post-injection samples and the initiation of dechlorination in the 68-day post-injection samples.
 - No significant change in volatile organic compound (VOC) and TOC concentrations were observed in observation well OW-10D, which is at the predicted 100-day travel time distance.
 - Strong evidence for establishing conditions supporting dechlorination (e.g., OW-8D, OW-9D, and P-2D), including:
 - Reduction in concentration of trichloroethene.
 - Increase in daughter product to parent VOC ratios.
 - Confirmation of generation of vinyl chloride.
 - Overall reduction of total molar concentrations of combined VOCs and dissolved daughter product gases.
 - Most monitoring wells exhibited optimal pH (above 5.5) during the performance monitoring.
 - Based on TOC decay rate, quarterly injection frequency appears appropriate; therefore, the next injection event is schedule for the week of November 2, 2009.
 - TOC solution strength of 2% is appropriate.
 - Prepared a monthly status report.

- Followed up with Carol Minsk and the SCDHEC to help her understand the basis for risk calculations developed in ARCADIS' April 2009 *Supplemental Off-Site Soil Gas Investigation Report*. Support provided by Risk Assessor, Shawn Sager.
- Finalized predictive solute transport/decay modeling to help support evaluation of longer-term remedial measures.
- Began preparation for the next ERD injection event.
- Uploaded post-injection groundwater monitoring data into the database.
- Continued development of the Feasibility Study Report.
- Prepared the PDG Building pre-demolition strategy, prepared plans/specifications, and began scheduled future work.
- Modified the air stripper Operations and Maintenance Manual.
- Updated one-line drawing.
- Began preparation of the construction permit.
- Performed air stripper system shakedown.
- Began sequestering agent pilot study.

Activities Planned for the Next Reporting Period

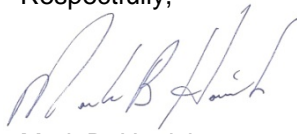
The following activities are expected to occur during the next reporting period:

- Finalize the air stripper pilot test program.
- Continue performing post-injection monitoring of the ERD pilot test.
- Continue evaluation of the ERD post-injection monitoring data to help select the timing of the next injection event.
- Plan for initiation of the next ERD pilot test injection event.

- Continue pre-design investigation planning to fill data gaps for design of a full-scale groundwater remediation system.
- Continue planning for demolition of the PDG Building.

If you have any questions, please contact me at 724.742.9180, ext. 518.

Respectfully,



Mark B. Hanish
Project Manager

Copies:

Ms. Myra Reece, South Carolina Department of Health and Environmental Control
Mr. Larry Ragsdale, South Carolina Department of Health and Environmental Control
Mr. Larry Blue CHMM, REM, AVX Corporation
Mr. William B. Popham, ARCADIS

ARCADIS

Attachment 1

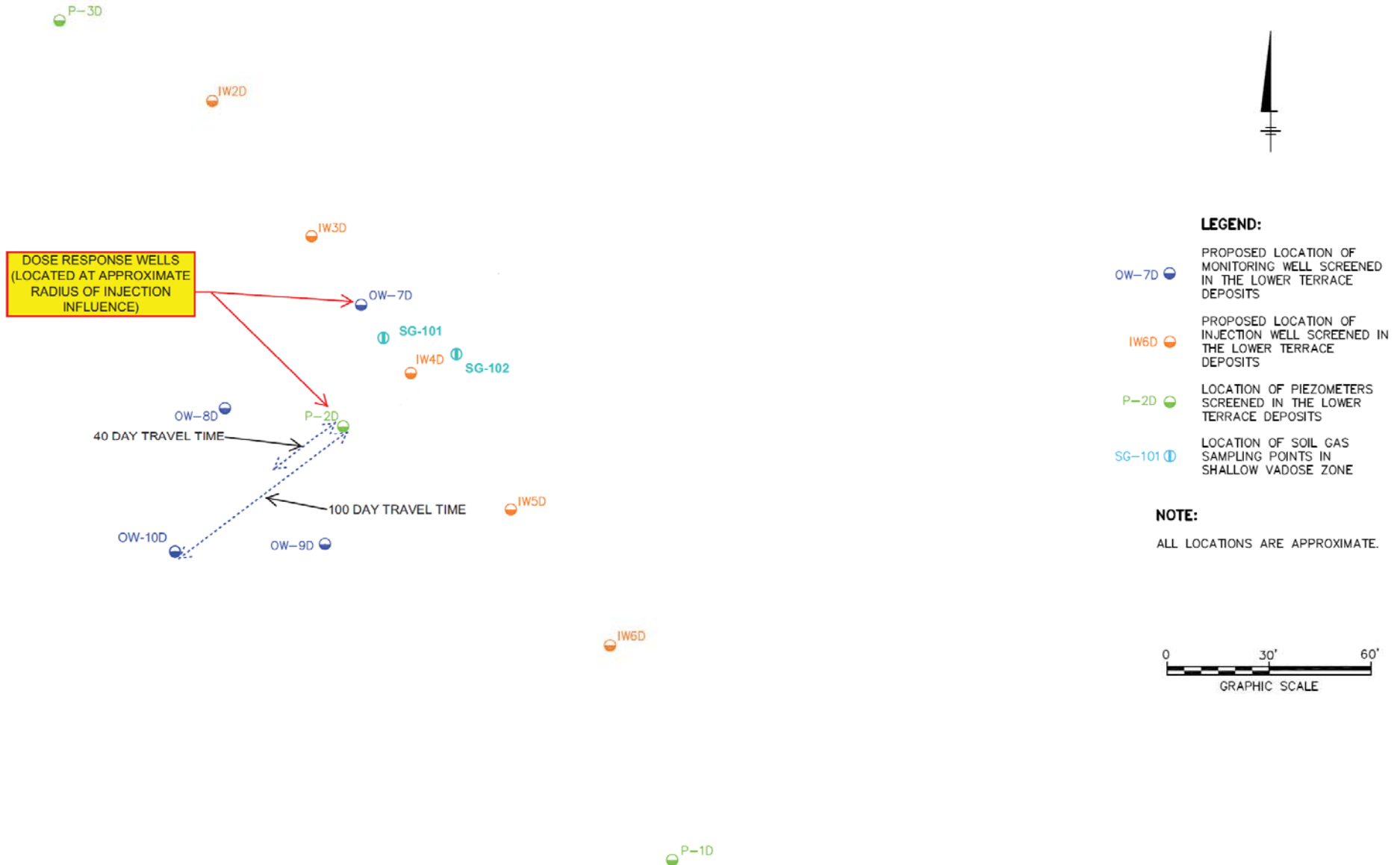
Performance Evaluation Update
Enhanced Reductive Dechlorination (ERD) Pilot Study

Performance Evaluation Update

Enhanced Reductive Dechlorination (ERD) Pilot Study

**AVX Corporation Facility
Myrtle Beach, South Carolina**

Pilot Study Layout



ERD Pilot Study Activities

- Baseline samples collected on July 20, 2009.
- First injection initiated on July 21, 2009 and completed on July 25, 2009.
- Five injection wells employed (IW-2D through IW-6D).
- Injection solution strength ~2% molasses.
- Injected ~65,000 gallons of solution per injection well (~325,000 gallons total).

ERD Pilot Study Results

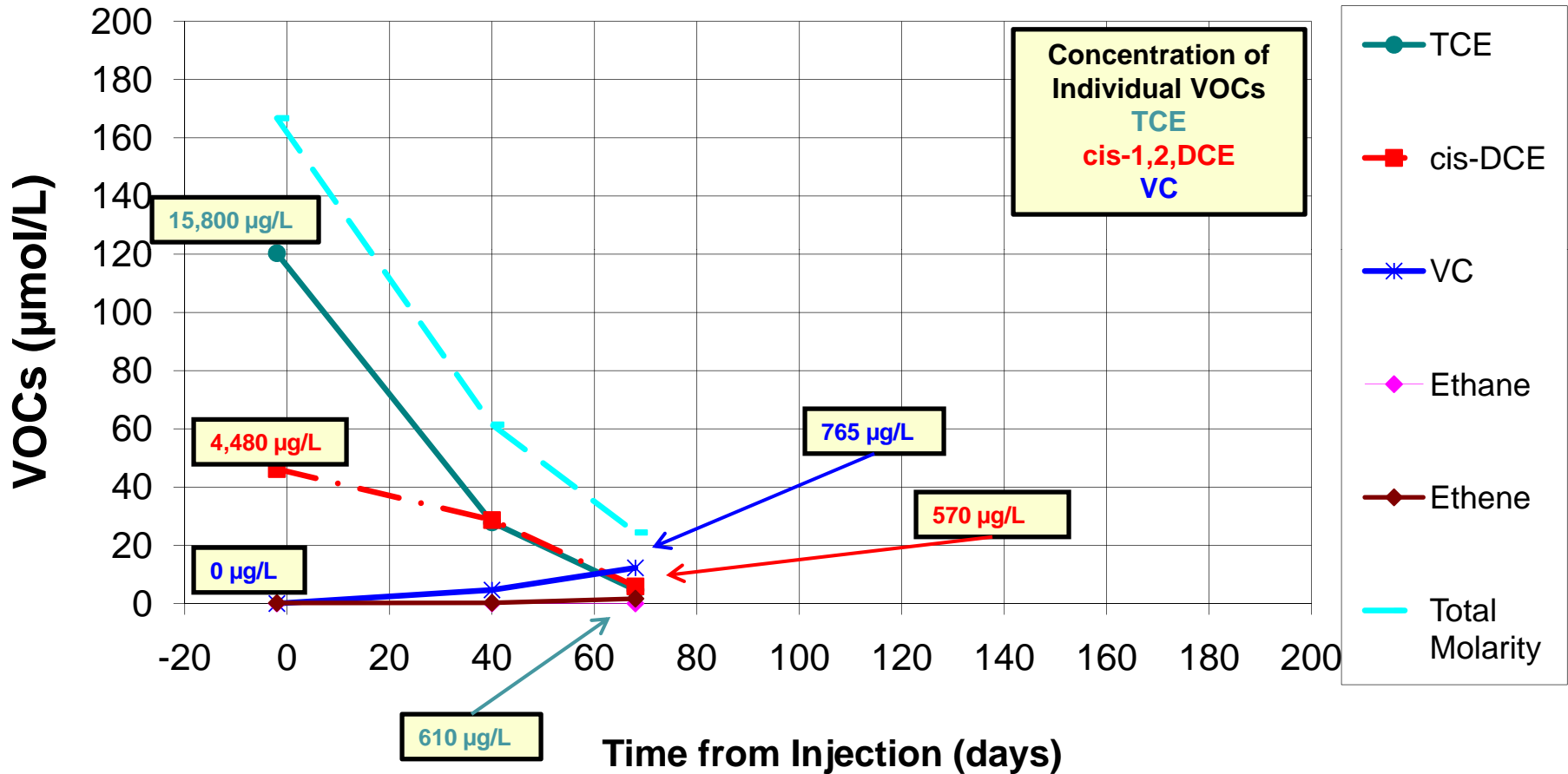
- Total organic carbon (TOC) concentration in injection wells ~10,000 milligrams per liter, close to the injection solution strength (~2% molasses) immediately following injection of ~325,000 gallons of solution.
- The TOC distribution after the injection is generally consistent with previous numeric model prediction. For example:
 - The TOC decay rate is consistent with expectations
 - The predicted 40-day travel time from the injection radius of interest (ROI) to OW-8D and OW-9D is generally consistent with the confirmation of arrival of TOC in the 26-day post-injection samples and the initiation of dechlorination in the 68-day post-injection samples.
 - No significant change in volatile organic compound (VOC) and TOC concentrations were observed in observation well OW-10D which is at the predicted 100-day travel time distance.

ERD Pilot Study Results

- Strong evidence for establishing conditions supporting dechlorination (e.g., OW-8D, OW-9D and P-2D, charts as followed), including:
 - Reduction in concentration of TCE.
 - Increase in daughter product to parent VOC ratios.
 - Confirmation of generation of vinyl chloride formation.
 - Overall reduction of total molar concentrations of combined VOCs and dissolved daughter product gases.
- Most monitoring wells exhibit optimal pH (above 5.5) during the performance monitoring.

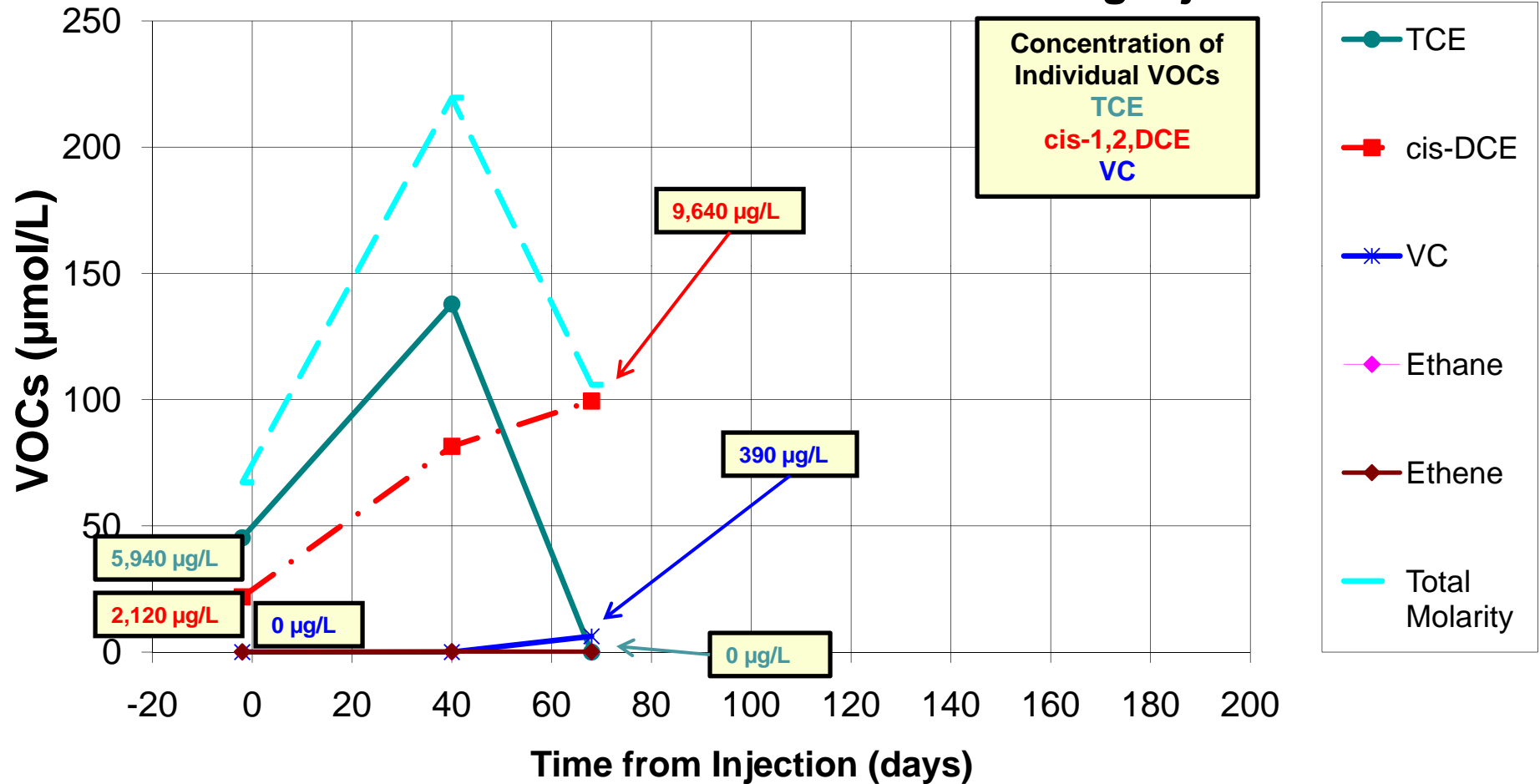
PZ-2D (ROI Well)

Molar Concentrations of VOCs vs. Time Following Injection

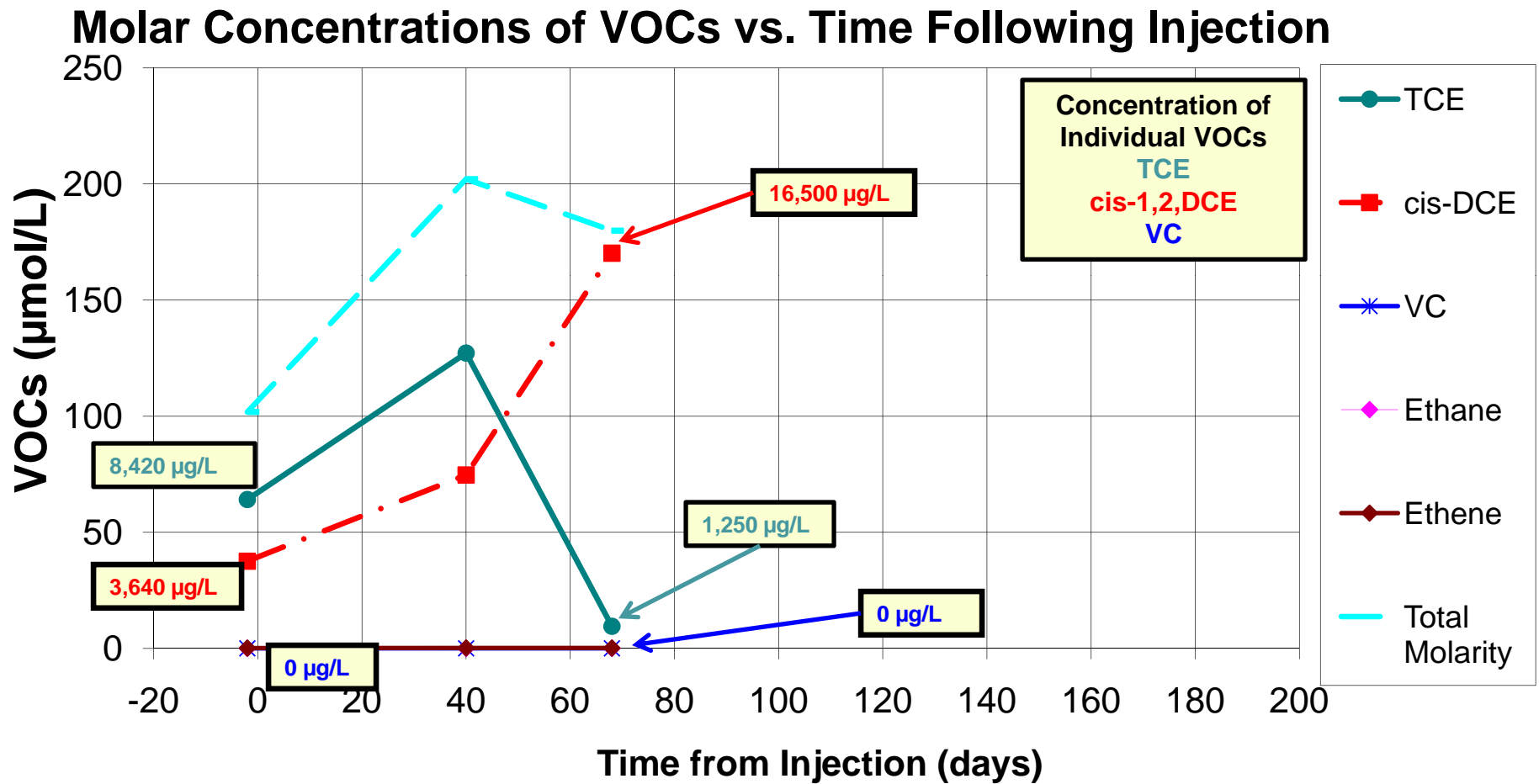


OW-8D (40-Day Travel Time Well)

Molar Concentrations of VOCs vs. Time Following Injection



OW-9D (40-Day Travel Time Well)



ERD Pilot Study Next Steps

- Based on TOC decay rate, quarterly injection frequency appears appropriate; therefore, the next injection event is schedule for the week of November 2, 2009.
- TOC solution strength of 2% is appropriate.
- Additional evaluation of ERD pilot study performance to follow receipt of additional performance data.