



The Riley Group, Inc.

October 2, 2009

Mr. Romeo Gonyea
Russell Road Industrial Park, LLC
17600 147th Street SE - PMB 22
Monroe, Washington 98272

**RE: Groundwater Sampling Event – Third Quarter 2009
Russell Road Industrial Park (aka Hers Industrial Park)
4403 Russell Road, Mukilteo, Washington 98275
RGI Project #2005-087d
Ecology VCP #NW1554**

Dear Mr. Gonyea:

This letter report documents The Riley Group Inc.'s (RGI's) field protocols and findings associated with the sampling of seven out of 15 chemical injection and/or groundwater monitoring wells located at the Hers Industrial Park located at 4403 Russell Road, Mukilteo, Washington (referred to herein as the Site); Figures 1 to 3.

Mr. Romeo Gonyea (property owner) authorized RGI to prepare and implement the scope of work outlined in this report.

SITE LOCATION & DESCRIPTION

The Hers Industrial Park is a 10.7-acre, irregular-shaped lot that contains six (6) one-story light industrial buildings. The addresses for the Site buildings are: 4403, 4433 and 4463 Russell Road and 4440, 4470 and 4480 Chennault Beach Road. The halogenated volatile organic compound (HVOC) groundwater contaminant plume is located northeast and east of 4403-warehouse building, Figure 2 and Figure 3.

The Site's stormwater run-off system is an infiltration-type system with perforated drain lines and unlined cement block catch basins. Catch basin and perforated drain line locations are shown on the attached Figure 3.

3RD QUARTER 2009 SAMPLING EVENT

This 3rd Quarter 2009 groundwater sampling event was performed approximately three years from the last Fenton's chemical injection event. The most recent Fenton's chemical injection event was performed in October 2006.

SERVING THE PACIFIC NORTHWEST

North Puget Sound - Corporate Office
17522 Bothell Way NE, Suite A
Bothell, WA 98011
Phone 425.415.0551 ♦ Fax 425.415.0311

South Puget Sound Office
7406 – 27th Street West, Suite 301
University Place, WA 98466
Phone 253.565.0552 ♦ Fax 253.460.2981

Eastern Washington & Oregon Office
1838 South Washington Street
Kennewick, WA 99337
Phone 509.586.4840 ♦ Fax 509.586.4863

Static Water Levels and Groundwater Flow Direction

On September 16, 2009, RGI measured depth to water in 14 of the 15 existing groundwater-monitoring and injection wells. Monitoring well MW-14 was not accessible because it was apparently covered during recent asphalt patchwork at the property. Water level elevations recorded at each well location are summarized below and in Table 1 and Figure 3.

Depth to groundwater ranged from 4.48 feet (well MW6) to 7.05 feet (well MW11) below top of well casing (TOC). Depth to water measurements were recorded using an electronic water level meter. Based on water level measurements, the groundwater flow direction was determined to be towards the northeast with a gradient of approximately 0.027 foot per foot. A groundwater mound was observed beneath the northeast portion of the subject Site. Groundwater flow direction and gradient may vary spatially or seasonally.

Groundwater Well Development and Sample Collection

RGI sampled wells MW-1, MW-7, MW-8, MW-9, MW-10, MW-11 and MW-12 on September 16, 2009. Wells were sampled to evaluate groundwater quality at wells historically known to have had elevated chlorinated solvent concentrations in groundwater. Well purging and sampling protocols for this project are discussed below.

Prior to purging and sampling the wells, the headspace of each well casing was screened for volatile organic compounds (VOCs) using a portable gas analyzer equipped with a photoionization detector (PID). However, due to PID equipment malfunction accurate PID readings were not obtainable during this sampling event.

RGI used a clear disposable bailer to examine water in each well for the potential presence of LNAPL (light non-aqueous phase liquids - petroleum products floating on top of the water surface) and DNAPL (dense non-aqueous phase liquids-chlorinated solvents at the bottom of the screened portion of the well). RGI's examinations did not detect a film, sheen, discoloration (due to contaminants), LNAPL or DNAPL, sludge, or emulsion in any well.

Prior to groundwater sample collection, wells were developed using a peristaltic pump and/or disposable hand bailer. The pump/bailer was raised and lowered through the length of the screened interval to help clear fines from the filter pack and surrounding formation.

Each well was developed until at least three well casing volumes were removed from each well. Purge water was contained in a labeled 55-gallon drum and left on-Site pending profiling and off-Site disposal. Groundwater recovery, startup time, and duration of the purging operations were recorded on field data sheets. These field documents are maintained in a permanent project file.

Following purging activities, each well was left to recharge to at least 80% of its original water level prior to sampling. All wells were sampled using peristaltic pump under low flow conditions.

Groundwater samples were collected in laboratory-supplied 40-ml vials with Teflon caps (no headspace). Sample containers were kept in a cooler at approximately 4 degrees Celsius and transported to the analytical laboratory for analysis under proper chain-of-custody documentation.

Laboratory Analysis

Groundwater samples were submitted to OnSite Environmental, Inc. of Redmond, Washington. Samples were analyzed for the following:

- Halogenated volatile organic compounds (HVOCs) using EPA Test Method 8260B.

Findings

Analytical results for this 3rd Quarter 2009 and previous groundwater sampling data are summarized in Table 1 and are discussed below. In addition, Table 1 includes for reference the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A and B Groundwater Cleanup Levels (WAC 173-340-720 and the CLARC On-Line Interactive Database). A copy of the laboratory report and sample chain of custody is attached to this letter report (Appendix A). Contaminant trends for all wells are illustrated in line charts included in Appendix B.

In general, six of the eight accessible wells (MW-14 was not accessible) located within the groundwater contaminant/treatment area, have shown a relatively consistent decrease in HVOC concentrations (see charts in Appendix B). This decrease in TCE, PCE and other HVOC (i.e., chemical or biological breakdown products of TCE and PCE) concentrations in groundwater are likely the result of the Fenton's Reagent 2006 chemical injection events.

Examples of TCE, PCE and other HVOC concentration decreases for representative wells within the treatment area and in the vicinity of the treatment area are illustrated on line charts included in Appendix B and are discussed below:

- TCE and vinyl chloride concentrations from MW-1 decreased from 27 µg/L (TCE) and 0.51 µg/L (vinyl chloride) in March 2009 to 1.1 µg/L (TCE) and non-detect (vinyl chloride) during this September 2009 sampling event. Analytical results from the 3rd Quarter 2009 sampling event show all other HVOC concentrations to be either non-detect or below MTCA Method A Groundwater Cleanup Levels in well MW-1.
- TCE and PCE concentrations from well MW-7 have decreased from 7,000 µg/L (TCE) and 460 µg/L (PCE) in October 2005 to non-detect for both TCE and PCE in the previous April 2008 and March 2009 sampling events and the recent September 2009 sampling event (a 100% decrease). Well MW7 initially had the highest TCE and PCE concentrations in groundwater and was located closest to the suspect source area (storm drain) located east of the 4403 warehouse building. Other HVOC concentrations from this well have also decreased to either non-detectable levels or levels below the MTCA Method A Groundwater Cleanup Levels.

- TCE, PCE and other HVOC concentrations from well MW-8 have consistently been non-detect. Well MW-8 is located downgradient of the groundwater contaminant plume.
- TCE and PCE concentrations from well MW-12 have decreased from 1,700 µg/L (TCE) and 180 µg/L (PCE) in April 2006 to 320 µg/L (TCE) and 99 µg/L (PCE) in April 2008. Vinyl chloride, and cis-1,2 DCE concentrations have also showed a decrease in concentrations during the previous sampling events. During the most recent September 2009 sampling event, the TCE concentration in well MW-12 was identical to the 1st Quarter 2009 sampling event (230 µg/L) and vinyl chloride, PCE and cis-1,2 DCE concentrations were slightly higher (9.1 µg/L (vinyl chloride), 95 µg/L (PCE) and 160 µg/L (cis-1,2 DCE)).

Three wells (MW-9, MW-10 and MW-11) have shown an increase in one or more HVOC concentrations as summarized below:

- TCE, PCE and other HVOC concentrations from well MW-9 were non-detect during the previous two sampling events (May 2008 and March 2009). TCE and PCE concentrations from well MW-9 increased to detectable levels that were still below MTCA Method A Groundwater Cleanup Levels during the September 2009 sampling event. All other HVOC concentrations from the September 2009 sampling event were at non-detectable concentrations. MW-9 is located upgradient of the groundwater contaminant plume.
- PCE concentrations detected during previous sampling events at well MW-10 have fluctuated up and down, ranging between 11 µg/L and 23 µg/L. All other HVOC concentrations had been below their applicable MTCA Groundwater Cleanup Levels or non-detectable during the previous sampling events. During the 3rd Quarter 2009 sampling event, vinyl chloride concentrations from well MW-10 were detected at 4.1 µg/L (above MTCA Method A Groundwater Cleanup Levels) and all other HVOC concentrations were either non-detect or detected below the MTCA Method A Groundwater Cleanup Levels.
- TCE and PCE concentrations from well MW-11 decreased from 700 µg/L (TCE) and 150 µg/L (PCE) in January 2007 to 88 µg/L (TCE) and 8.4 µg/L (PCE) in March 2009. However, TCE and PCE concentrations in well MW-11 were detected at 580 µg/L (TCE) and 220 µg/L (PCE) during the recent 3rd Quarter 2009 sampling event. Additionally, cis-1,2 DCE concentrations in this well increased from 140 µg/L (January 2007) to 180 µg/L during this most recent sampling event. All other HVOC concentrations were either non-detect or detected below the MTCA Method A Groundwater Cleanup Levels during this September 2009 sampling event.

The reason for these HVOC concentration increases is unknown, but may be related to some lateral spreading of the groundwater contaminant plume during chemical injection events; or the redistribution of contaminants in vadose zone soil to groundwater.

Conclusions

The previous Fenton's in-situ chemical oxidation remedial effort appeared to be successful in reducing relatively high PCE and TCE concentrations within the groundwater contaminant plume/treatment area. Previously the PCE and TCE contaminant levels had significantly decreased in the groundwater contaminant plume/treatment area. In addition, concentrations of cis-1,2 DCE and vinyl chloride (both common chemical or biological degradation products of TCE/PCE) had either decreased or remained stable.

During the 3rd Quarter 2009 sampling event laboratory results showed that three wells (MW-9, MW-10 and MW-11) had a slight increase in HVOC concentrations. The reason for the increase in the HVOC concentrations is unknown, but may be related to lateral spreading during chemical injection events or the redistribution of contaminants in vadose zone soil to groundwater.

Based on our findings, RGI recommends that additional Fenton's chemical injection events be performed within the groundwater contaminant plume/treatment area. Additional injection and/or monitoring wells are also recommended to better control or monitor the groundwater contaminant plume. In addition to this, several of the existing injection and/or monitoring wells were noted to be in very poor condition. The conditions of these should be addressed by either replacement of the well seals, well monuments or well casing modification.

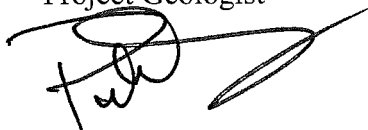
Any questions regarding our work or this report, the presentation of information, or interpretation of data are welcome and should be referred to the undersigned.

Sincerely yours,

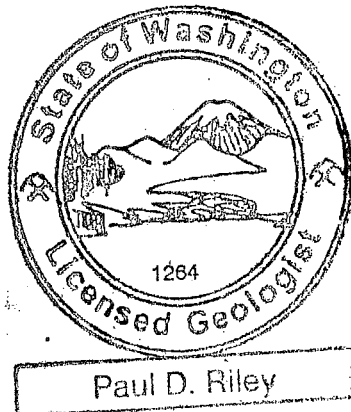
THE RILEY GROUP, INC.



Nicole Kapise
Project Geologist



Paul D. Riley, LG, LHG
Principal

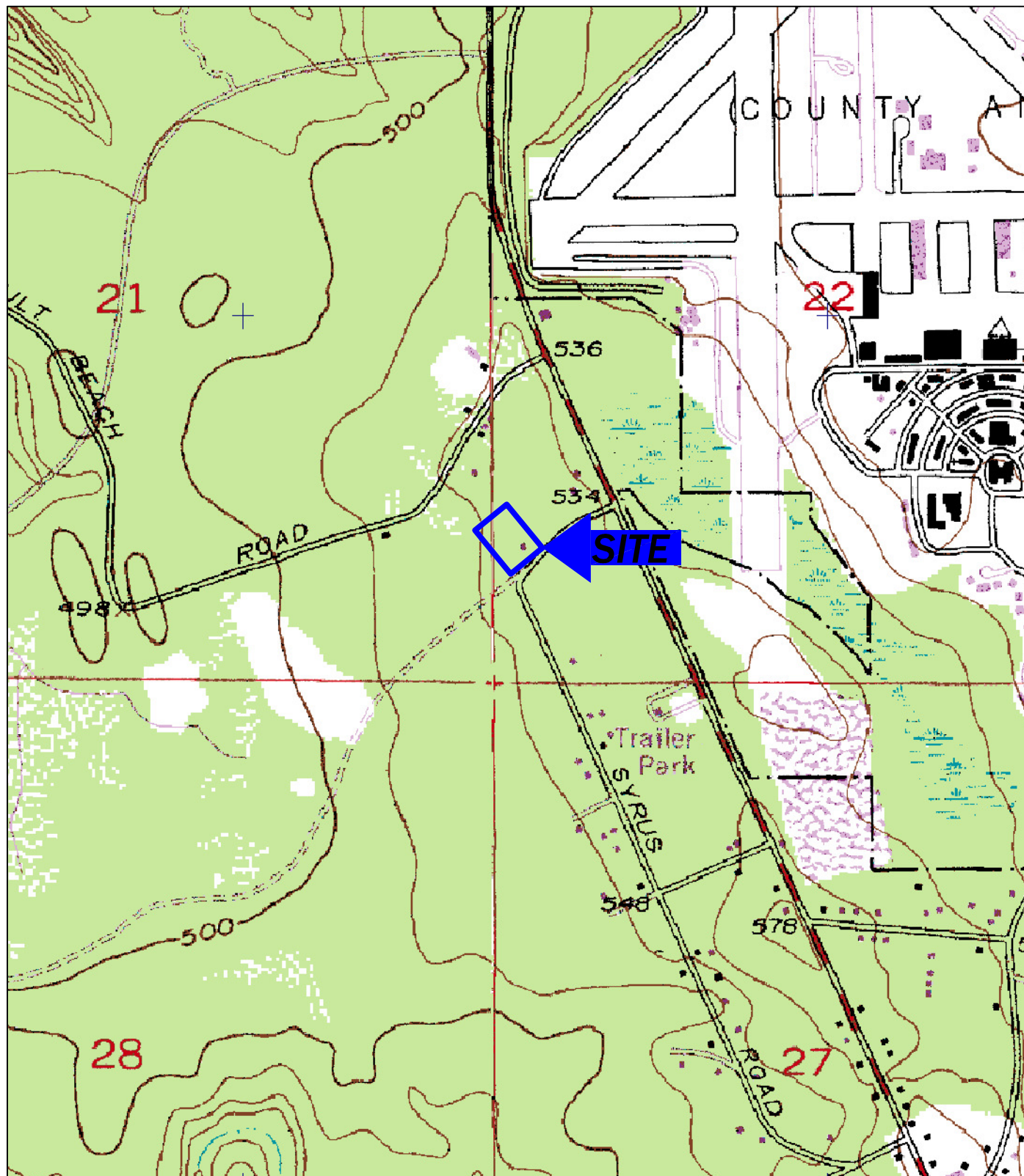


*Attachments: Figures 1, 2, and 3
Table 1
Appendices A & B*

Report Distribution

Mr. Romeo Gonyea – Site Owner (two copies)

*Ms. Jing Lui @ Washington State Department of Ecology
Northwest Region (one copy)*



USGS, 1991, Mukilteo, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'

0 500 1000 2000



The Riley Group, Inc.

17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Hers Industrial Park

Figure 1

Project Number

2005-087d

Site Vicinity Map

Date Drawn:

10/01/09

Address: 4403 Russell Road, Mukilteo, Washington



The Riley Group, Inc.
17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Hers Industrial Park

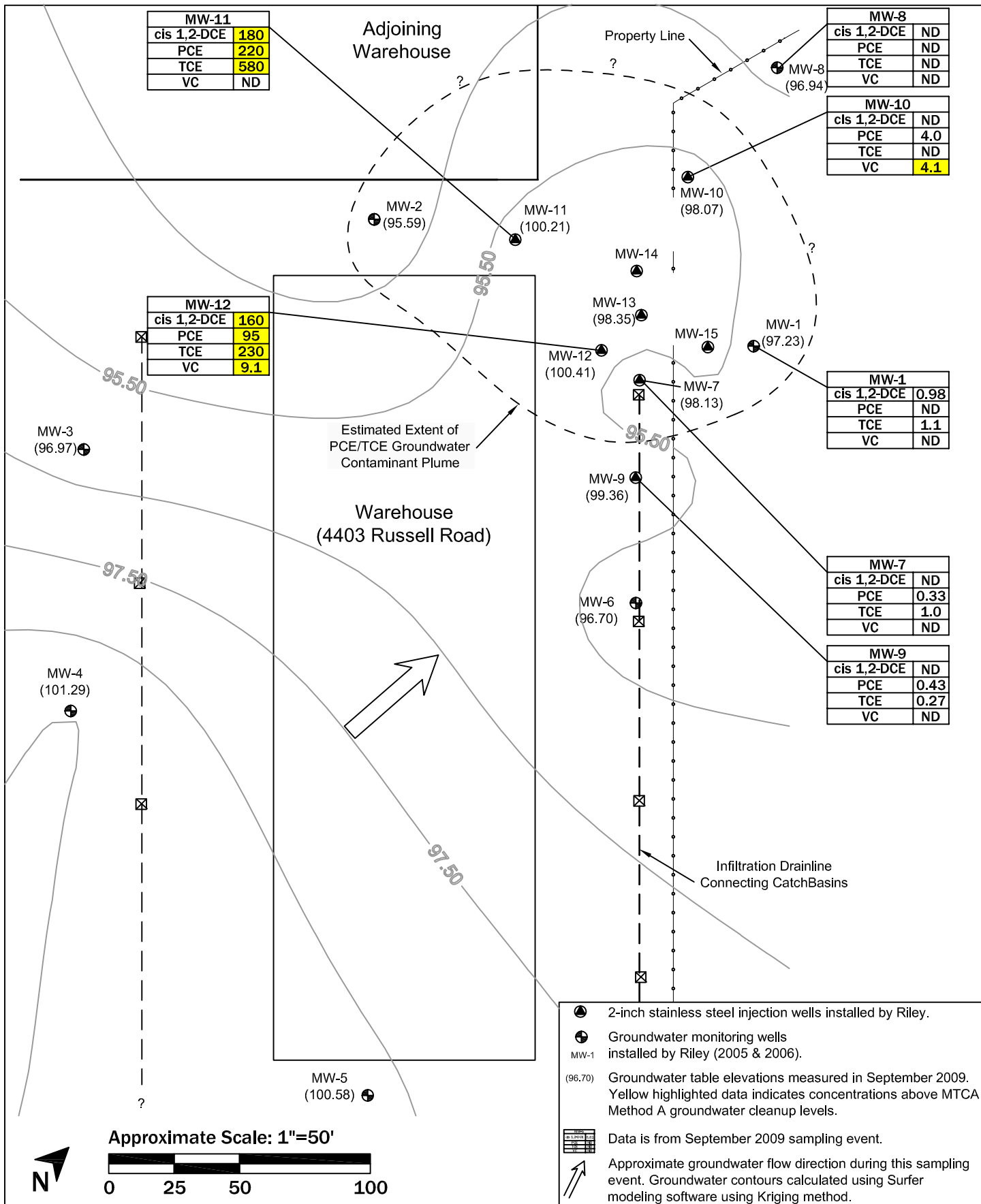
Figure 2

Project Number
2005-087d

Site and Surrounding Area

Date Drawn:
10/01/09

Address: 4403 Russell Road, Mukilteo, Washington



The Riley Group, Inc.
 17522 BOTHELL WAY NE
 BOTHELL, WASHINGTON 98011

Hers Industrial Park

Project Number
 2005-087d

**3rd Quarter 2009
 Sampling Site Plan**

Figure 3

Date Drawn:
 10/01/09

Address: 4403 Russell Road, Mukilteo, Washington

Table 1 - Summary of Groundwater Monitoring Well Sampling & Analytical Results - 3rd Quarter 2009**Hers Industrial Park, 4403 Russell Road, Mukilteo, Washington.****The Riley Group, Inc. Project #2005-087d.**

Sample ID	Date	TOC Elevation	Depth to Water (ft)	Water Elevation	HVOCs							
					cis-1,2 DCE	1,1-DCA	1,1,1-TCA	PCE	TCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW1												
MW1	09/2009	100	5.02	94.98	0.98	ND<0.2	ND<0.2	ND<0.2	1.1	ND<0.2	0.62	ND<0.2
MW1-H2O	03/2009	100	2.77	97.23	3.3	ND<0.2	ND<0.2	ND<0.2	27	ND<0.2	0.62	0.51
MW1-H2O	04/2008 & 05/2008	100	2.32	97.68	3.3	ND<0.2	ND<0.2	ND<0.2	6.4	ND<0.2	0.39	0.76
MW1-H2O	01/2007	100	2	98	2.5	ND < 0.2	ND < 0.2	ND < 0.2	3	ND < 0.2	0.56	0.59
MW1-H2O	05/2006	100	5.9	94.1	2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	0.4
MW1-H2O	09/2005 & 10/2005	100	4.91	95.09	0.25	ND < 0.2	ND < 0.2	ND < 0.2	1.3	ND	ND	ND
MW2												
MW2	09/2009	100.59	6.98	93.61	---	---	---	---	---	---	---	---
MW2-H2O	03/2009	100.59	5.00	95.59	---	---	---	---	---	---	---	---
MW2-H2O	04/2008 & 05/2008	100.59	4.7	95.89	0.35	ND<0.2	ND<0.2	ND<0.2	3.0	ND<0.2	ND<0.2	ND<0.2
MW2-H2O	01/2007	100.59	5.9	94.69	0.75	ND < 0.2	0.33	ND < 0.2	6.8	ND < 0.2	ND < 0.2	ND < 0.2
MW2-H2O	05/2006	100.59	5.55	95.04	5	ND < 2	ND < 2	ND < 2	11	ND < 2	ND < 2	ND < 0.2
MW2-H2O	09/2005 & 10/2005	100.59	6.81	93.78	0.91	ND < 0.2	0.36	ND < 0.2	4.1	ND	ND	ND
MW3												
MW3	09/2009	102.56	6.54	96.02	---	---	---	---	---	---	---	---
MW3-H2O	03/2009	102.56	5.59	96.97	---	---	---	---	---	---	---	---
MW3-H2O	04/2008 & 05/2008	102.56	5.25	97.31	1.4	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW3-H2O	01/2007	102.56	5.8	96.76	2.9	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2
MW3-H2O	09/2005 & 10/2005	102.56	6.37	96.19	0.96	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND	ND	ND
MW4												
MW4	09/2009	105.33	5.78	99.55	---	---	---	---	---	---	---	---
MW4-H2O	03/2009	105.33	4.04	101.29	---	---	---	---	---	---	---	---
MW4-H2O	04/2008 & 05/2008	105.33	4.22	101.11	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW4-H2O	01/2007	105.33	4.5	100.83	---	---	---	---	---	---	---	---
MW4-H2O	09/2005 & 10/2005	105.33	5.62	99.71	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND	ND	ND
MW5												
MW5	09/2009	103.69	4.98	98.71	---	---	---	---	---	---	---	---
MW5-H2O	03/2009	103.69	3.11	100.58	---	---	---	---	---	---	---	---
MW5-H2O	04/2008 & 05/2008	103.69	2.96	100.73	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW5-H2O	01/2007	103.69	4.5	99.19	0.61	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2
MW5-H2O	09/2005 & 10/2005	103.69	4.62	99.07	0.43	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND	ND	ND
MTCA Method A and B ¹ Groundwater Cleanup Level					80 ¹	800 ¹	200	5	5	160 ¹	800 ¹	0.2

Table 1 Continued - Summary of Groundwater Monitoring Well Sampling & Analytical Results - 3rd Quarter 2009**Hers Industrial Park, 4403 Russell Road, Mukilteo, Washington.****The Riley Group, Inc. Project #2005-087d.**

The Kinley Group, Inc. Project #2005-0070												
Sample ID	Date	TOC Elevation	Depth to Water (ft)	Water Elevation	HVOCs							
					cis-1,2 DCE	1,1-DCA	1,1,1-TCA	PCE	TCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW6												
MW6	09/2009	99.46	4.48	94.98	---	---	---	---	---	---	---	---
MW6-H2O	03/2009	99.46	2.76	96.7	---	---	---	---	---	---	---	---
MW6-H2O	04/2008 & 05/2008	99.46	1.75	97.71	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW6-H2O	01/2007	99.46	2	97.46	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2
MW6-H2O	05/2006	99.46	2.22	97.24	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 0.2
MW6-H2O	09/2005 & 10/2005	99.46	4.16	95.3	0.33	0.36	ND < 0.2	3.9	0.26	ND	ND	ND
MW7												
MW7	09/2009	99.76	5.12	94.64	ND<0.2	ND<0.2	ND<0.2	0.33	1.0	ND<0.2	ND<0.2	ND<0.2
MW7-H2O	03/2009	99.76	1.63	98.13	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW7-H2O	04/2008 & 05/2008	99.76	2.21	97.55	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW7-H2O	01/2007	99.76	3.5	96.26	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	0.22	ND < 0.2	ND < 0.2	ND < 0.2
MW7-H2O	05/2006	99.76	3.3	96.46	ND < 2	ND < 2	ND < 2	10	21	ND < 2	ND < 2	0.7
MW7-H2O	09/2005 & 10/2005	99.76	4.8	94.96	140	ND < 50	ND < 50	460	7,000	ND	ND	ND
MW8												
MW8	09/2009	99.97	5.66	94.31	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW8-H2O	03/2009	99.97	3.03	96.94	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW8-H2O	04/2008 & 05/2008	99.97	2.35	97.62	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW8-H2O	01/2007	99.97	3.8	96.17	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2
MW8-H2O	05/2006	99.97	3.31	96.66	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 2	ND < 0.2
MW8-H2O	09/2005 & 10/2005	99.97	5.41	94.56	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND < 0.2	ND	ND	ND
MW9												
MW9	09/2009	101.22	5.12	96.1	ND<0.2	ND<0.2	ND<0.2	0.43	0.27	ND<0.2	ND<0.2	ND<0.2
MW9-H2O	03/2009	101.22	1.86	99.36	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW9-H2O	04/2008 & 05/2008	101.22	2.65	98.57	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW9-H2O	01/2007	101.22	---	---	---	---	---	---	---	---	---	---
MW10												
MW10	09/2009	101.99	6.23	95.76	ND<0.2	5.1	ND<0.2	4.0	ND<0.2	ND<0.2	6.3	4.1
MW10-H2O	03/2009	101.99	3.92	98.07	ND<0.2	ND<0.2	ND<0.2	18	0.53	ND<0.2	ND<0.2	ND<0.2
MW10-H2O	04/2008 & 05/2008	101.99	3.33	98.66	ND<0.2	ND<0.2	ND<0.2	22	0.60	ND<0.2	ND<0.2	ND<0.2
MW10-H2O	01/2007	101.99	4.5	97.49	ND < 0.2	ND < 0.2	ND < 0.2	11	0.54	ND < 0.2	ND < 0.2	ND < 0.2
MW10-H2O	05/2006	101.99	4.45	97.54	ND < 2	ND < 2	ND < 2	23	ND < 2	ND < 2	ND < 2	ND < 0.2
MTCA Method A and B ¹ Groundwater Cleanup Level					80 ¹	800 ¹	200	5	5	160 ¹	800 ¹	0.2

Table 1 Continued - Summary of Groundwater Monitoring Well Sampling & Analytical Results - 3rd Quarter 2009**Hers Industrial Park, 4403 Russell Road, Mukilteo, Washington.****The Riley Group, Inc. Project #2005-087d.**

Sample ID	Date	TOC Elevation	Depth to Water (ft)	Water Elevation	HVOCs							
					cis-1,2 DCE	1,1-DCA	1,1,1-TCA	PCE	TCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW11												
MW11	09/2009	102.89	7.05	95.84	180	1.0	5.2	220	580	ND<0.2	1.7	ND<0.2
MW11-H2O	03/2009	102.89	2.68	100.21	5.2	1.0	1.4	8.4	88	ND<0.2	1.7	ND<0.2
MW11-H2O	04/2008 & 05/2008	102.89	4.46	98.43	11	2.0	2.2	14	130	ND<0.2	3.3	ND<0.2
MW11-H2O	01/2007	102.89	5.9	96.99	140	8.5	10	150	700	ND < 4	12	ND < 4
MW11-H2O	05/2006	102.89	5.5	97.39	42	6	11	58	270	ND < 2	5	1.4
MW12												
MW12	09/2009	102.13	5.99	96.14	160	1.7	ND<0.2	95	230	2.8	2.2	9.1
MW12-H2O	03/2009	102.13	1.72	100.41	130	ND<0.2	ND<0.2	85	230	2.6	2.2	8.2
MW12-H2O	04/2008 & 05/2008	102.13	3.39	98.74	220	2.7	ND<0.2	99	320	3.5	3.3	17
MW12-H2O	01/2007	102.13	3.8	98.33	240	2.6	3	140	480	2.7	2.1	8.9
MW12-H2O	06/2006	102.13	4.35	97.78	290	4	9	180	1,700	4	8	23
MW13												
MW13	09/2009	101.42	5.34	96.08	---	---	---	---	---	---	---	---
MW13-H2O	03/2009	101.42	3.07	98.35	---	---	---	---	---	---	---	---
MW13-H2O	04/2008 & 05/2008	101.42	2.66	98.76	9.6	0.49	ND<0.2	4.2	25	0.28	0.94	2.9
MW13-H2O	01/2007	101.42	3.3	98.12	9.1	1.2	1.1	11	44	0.3	1.3	1.9
MW13-H2O	06/2006	101.42	3.95	97.47	12	ND < 2	5	9	270	ND < 2	ND < 2	1.4
MW14												
MW14	09/2009	101.73	---	---	---	---	---	---	---	---	---	---
MW14-H2O	03/2009	101.73	---	---	---	---	---	---	---	---	---	---
MW14-H2O	04/2008 & 05/2008	101.73	1.86	99.87	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2
MW14-H2O	01/2007	101.73	5.8	95.93	4.3	ND < 0.2	ND < 0.2	ND < 0.2	2.6	ND < 0.2	ND < 0.2	ND < 0.2
MW14-H2O	06/2006	101.73	5.3	96.43	ND < 2	ND < 2	ND < 2	ND < 2	17	ND < 2	ND < 2	ND < 0.2
MW15												
MW15	09/2009	101.28	5.27	96.01	---	---	---	---	---	---	---	---
MW15-H2O	03/2009	101.28	---	---	---	---	---	---	---	---	---	---
MW15-H2O	04/2008 & 05/2008	101.28	2.46	98.82	ND<0.2	ND<0.2	ND<0.2	0.26	4.8	ND<0.2	ND<0.2	ND<0.2
MW15-H2O	01/2007	101.28	3.8	97.48	ND < 10	ND < 10	11	28	1,000	ND < 10	ND < 10	ND < 10
MW15-H2O	06/2006	101.28	3.9	97.38	3	ND < 2	ND < 2	ND < 2	26	ND < 2	ND < 2	0.9
MTCA Method A and B ¹ Groundwater Cleanup Level					80 ¹	800 ¹	200	5	5	160 ¹	800 ¹	0.2

Table 1 Continued - Summary of Groundwater Monitoring Well Sampling & Analytical Results - 3rd Quarter 2009**Hers Industrial Park, 4403 Russell Road, Mukilteo, Washington.****The Riley Group, Inc. Project #2005-087d.****Notes:**¹ Published Method B values.

TOC: top of casing elevation based on arbitrary reference datum of 100 feet above mean sea level.

Depth to water, measured in feet from well TOC to static water table using electronic water level meter.

HVOCs: Halogenated Volatile Organic Compounds determined using EPA Test Method 8260. Only select compounds are shown in table.

DCE: Dichloroethene; DCA, Dichloroethane.

PCE: Tetrachloroethene.

TCA: Trichloroethane; TCE: Trichloroethene.

Unless noted otherwise all results and detection limits given in ppb, parts per billion (ug/L).

ND: contaminant not detected at noted analytical detection limit.

---: not analyzed or not applicable.

Bold and shaded concentrations, if any, are at or above the applicable MTCA Method A or B¹ Groundwater Cleanup Level (WAC 173-340-900, Table 720-1) and CLARC Interactive Database (March 2007).



14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 23, 2009

Paul Riley
The Riley Group, Inc.
17522 Bothell Way NE, Suite A
Bothell, WA 98011

Re: Analytical Data for Project 2005-087D
Laboratory Reference No. 0909-156

Dear Paul:

Enclosed are the analytical results and associated quality control data for samples submitted on September 17, 2009.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister
Project Manager

Enclosures

Date of Report: September 23, 2009
Samples Submitted: September 17, 2009
Laboratory Reference: 0909-156
Project: 2005-087D

Case Narrative

Samples were collected on September 16, 2009, and received by the laboratory on September 17, 2009. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

HALOGENATED VOLATILES by EPA 8260B

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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-01

Client ID: **MW1**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	0.98		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	1.1		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

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Lab ID: 09-156-01
 Client ID: **MW1**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	71-126
Toluene-d8	93	76-116
4-Bromofluorobenzene	93	70-123

Date of Report: September 23, 2009
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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-02

Client ID: MW7

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	1.0		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: September 23, 2009
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HALOGENATED VOLATILES by EPA 8260B

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Lab ID: 09-156-02
 Client ID: MW7

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.33		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	81	71-126
Toluene-d8	88	76-116
4-Bromofluorobenzene	87	70-123

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-03

Client ID: MW8

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

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Lab ID: 09-156-03
 Client ID: MW8

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	71-126
Toluene-d8	89	76-116
4-Bromofluorobenzene	90	70-123

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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-04

Client ID: MW9

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	0.27		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

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Lab ID: 09-156-04
 Client ID: MW9

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.43		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	71-126
Toluene-d8	87	76-116
4-Bromofluorobenzene	84	70-123

Date of Report: September 23, 2009
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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-05

Client ID: MW10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

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Lab ID: 09-156-05
 Client ID: **MW10**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	4.0		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	85	71-126
Toluene-d8	85	76-116
4-Bromofluorobenzene	85	70-123

Date of Report: September 23, 2009
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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-06

Client ID: MW11

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		4.0
Chloromethane	ND		20
Vinyl Chloride	4.1		4.0
Bromomethane	ND		4.0
Chloroethane	ND		20
Trichlorofluoromethane	ND		4.0
1,1-Dichloroethene	6.3		4.0
Iodomethane	ND		20
Methylene Chloride	ND		20
(trans) 1,2-dichloroethene	ND		4.0
1,1-Dichloroethane	5.1		4.0
2,2-Dichloropropane	ND		4.0
(cis) 1,2-Dichloroethene	180		4.0
Bromochloromethane	ND		4.0
Chloroform	ND		4.0
1,1,1-Trichloroethane	5.2		4.0
Carbon Tetrachloride	ND		4.0
1,1-Dichloropropene	ND		4.0
1,2-Dichloroethane	ND		4.0
Trichloroethene	580		4.0
1,2-Dichloropropane	ND		4.0
Dibromomethane	ND		4.0
Bromodichloromethane	ND		4.0
2-Chloroethyl Vinyl Ether	ND		20
(cis) 1,3-Dichloropropene	ND		4.0
(trans) 1,3-Dichloropropene	ND		4.0

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

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Lab ID: 09-156-06
 Client ID: **MW11**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		4.0
Tetrachloroethene	220		4.0
1,3-Dichloropropane	ND		4.0
Dibromochloromethane	ND		4.0
1,2-Dibromoethane	ND		4.0
Chlorobenzene	ND		4.0
1,1,1,2-Tetrachloroethane	ND		4.0
Bromoform	ND		20
Bromobenzene	ND		4.0
1,1,2,2-Tetrachloroethane	ND		4.0
1,2,3-Trichloropropane	ND		4.0
2-Chlorotoluene	ND		4.0
4-Chlorotoluene	ND		4.0
1,3-Dichlorobenzene	ND		4.0
1,4-Dichlorobenzene	ND		4.0
1,2-Dichlorobenzene	ND		4.0
1,2-Dibromo-3-chloropropane	ND		20
1,2,4-Trichlorobenzene	ND		4.0
Hexachlorobutadiene	ND		4.0
1,2,3-Trichlorobenzene	ND		4.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	71-126
Toluene-d8	88	76-116
4-Bromofluorobenzene	88	70-123

Date of Report: September 23, 2009
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Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: 09-156-07

Client ID: MW12

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		1.0
Chloromethane	ND		5.0
Vinyl Chloride	9.1		1.0
Bromomethane	ND		1.0
Chloroethane	ND		5.0
Trichlorofluoromethane	ND		1.0
1,1-Dichloroethene	2.2		1.0
Iodomethane	ND		5.0
Methylene Chloride	ND		5.0
(trans) 1,2-dichloroethene	2.8		1.0
1,1-Dichloroethane	1.7		1.0
2,2-Dichloropropane	ND		1.0
(cis) 1,2-Dichloroethene	160		1.0
Bromochloromethane	ND		1.0
Chloroform	ND		1.0
1,1,1-Trichloroethane	ND		1.0
Carbon Tetrachloride	ND		1.0
1,1-Dichloropropene	ND		1.0
1,2-Dichloroethane	ND		1.0
Trichloroethene	230		1.0
1,2-Dichloropropane	ND		1.0
Dibromomethane	ND		1.0
Bromodichloromethane	ND		1.0
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		1.0
(trans) 1,3-Dichloropropene	ND		1.0

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

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Lab ID: 09-156-07
 Client ID: **MW12**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		1.0
Tetrachloroethene	95		1.0
1,3-Dichloropropane	ND		1.0
Dibromochloromethane	ND		1.0
1,2-Dibromoethane	ND		1.0
Chlorobenzene	ND		1.0
1,1,1,2-Tetrachloroethane	ND		1.0
Bromoform	ND		5.0
Bromobenzene	ND		1.0
1,1,2,2-Tetrachloroethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0
2-Chlorotoluene	ND		1.0
4-Chlorotoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0
1,4-Dichlorobenzene	ND		1.0
1,2-Dichlorobenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		1.0
Hexachlorobutadiene	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	85	71-126
Toluene-d8	87	76-116
4-Bromofluorobenzene	86	70-123

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL

page 1 of 2

Date Extracted: 9-18-09

Date Analyzed: 9-18-09

Matrix: Water

Units: ug/L (ppb)

Lab ID: MB0918W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	1.9		1.0
(trans) 1,2-dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL

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Lab ID: MB0918W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	71-126
Toluene-d8	85	76-116
4-Bromofluorobenzene	85	70-123

Date of Report: September 23, 2009
 Samples Submitted: September 17, 2009
 Laboratory Reference: 0909-156
 Project: 2005-087D

**HALOGENATED VOLATILES by EPA 8260B
 SB/SBD QUALITY CONTROL**

Date Extracted: 9-18-09
 Date Analyzed: 9-18-09

 Matrix: Water
 Units: ug/L (ppb)

Lab ID: SB0918W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	8.66	87	8.75	88	70-130	
Benzene	10.0	9.28	93	9.56	96	70-130	
Trichloroethene	10.0	9.60	96	9.35	94	70-123	
Toluene	10.0	9.50	95	9.33	93	77-120	
Chlorobenzene	10.0	9.68	97	9.67	97	73-115	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	1	21	
Benzene	3	18	
Trichloroethene	3	18	
Toluene	2	17	
Chlorobenzene	0	18	



Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in the diesel range are impacting the lube oil range result.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL

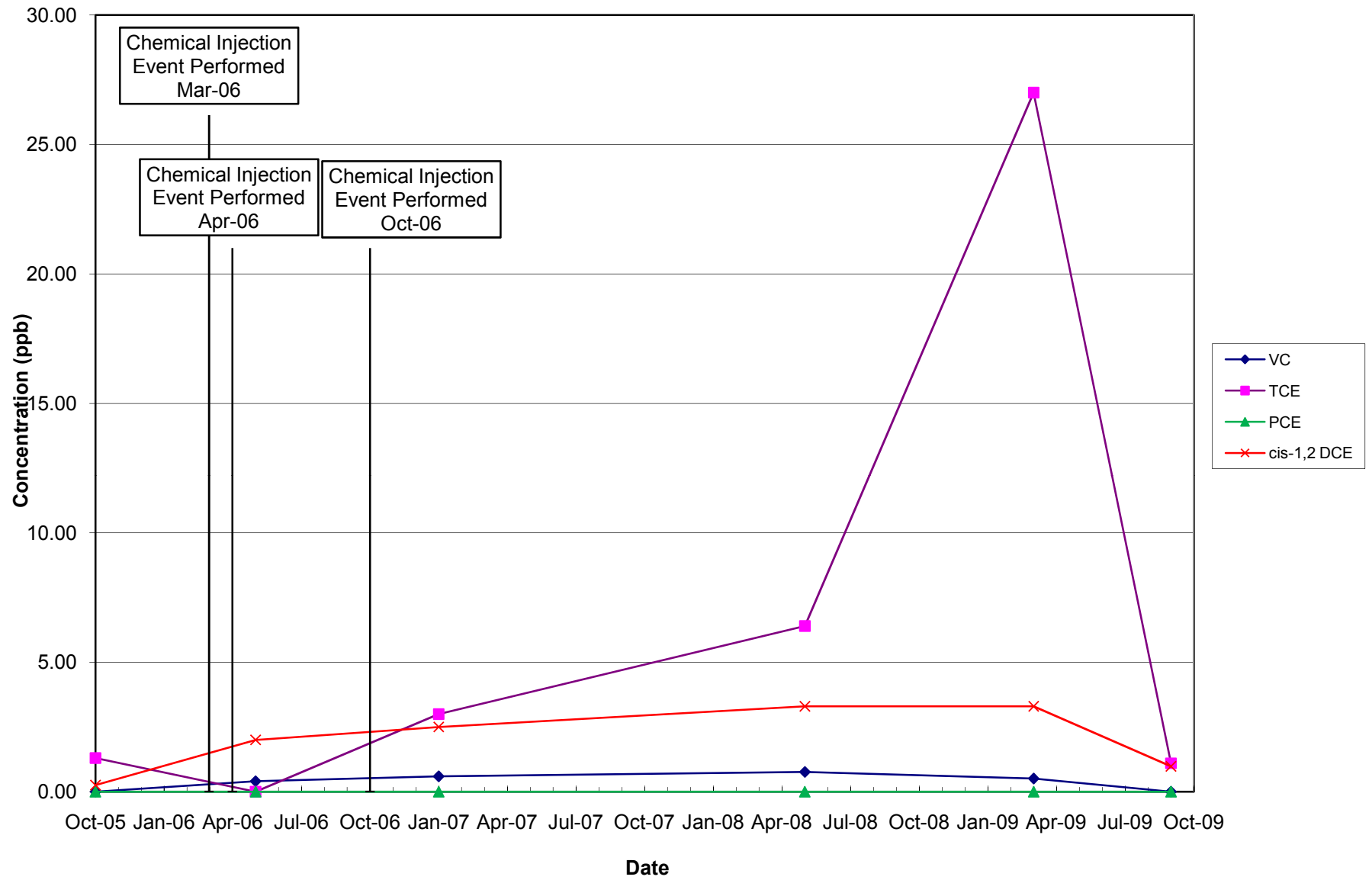
PQL - Practical Quantitation Limit

RPD - Relative Percent Difference

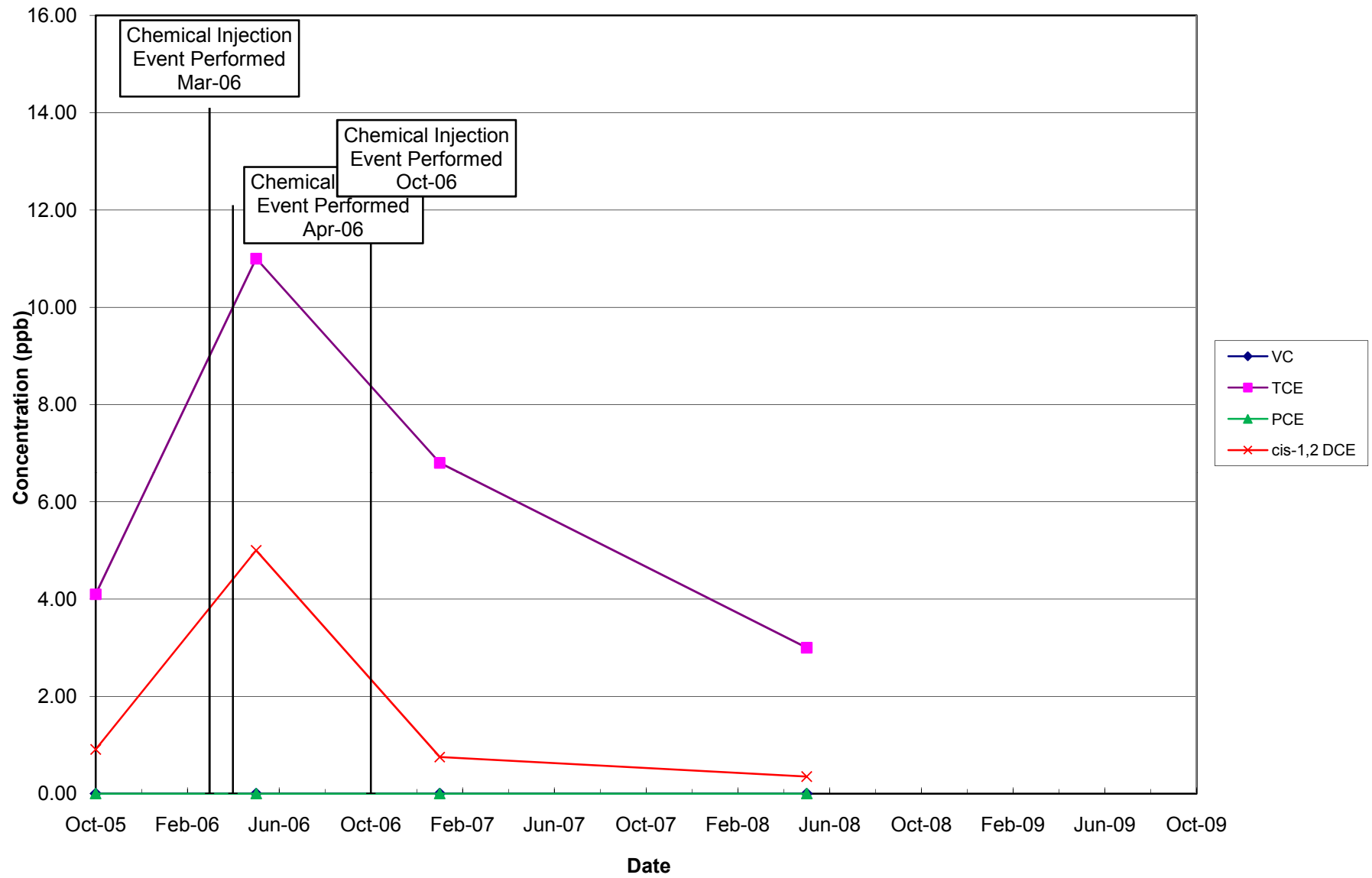
Chain of Custody

Turnaround Request (in working days) (Check One) ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☒ Standard (7 working days) (TPH analysis 5 working days) ☐ _____ (other)					Laboratory Number: 09-156																		
					Requested Analysis																		
Company: <u>The Riley Group</u> Project Number: <u>2005-0870</u> Project Name: <u>HERS Industrial Park</u> Project Manager: <u>Paul Riley</u> Sampled by: <u>Nizah Kayise</u>					NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664						% Moisture
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.																		
1	MW1	9/16/09	13:00	GW	3					X													
2	MW7		14:15																				
3	MW8		12:05																				
4	MW9		13:25																				
5	MW10		11:50																				
6	MW11		12:20																				
7	MW12		14:30																				
Signature		Company		Date	Time	Comments/Special Instructions																	
Relinquished by <u>Nizah Kayise</u>		RGI		9/17/09	7:30am																		
Received by <u>[Signature]</u>		RGI		9/17/09	7:30																		
Relinquished by <u>[Signature]</u>		RGI		9/17/09	1230																		
Received by <u>[Signature]</u>		SPEEDY		9/17/09	1230																		
Relinquished by <u>[Signature]</u>		SPEEDY		9/17/09	1256																		
Received by <u>[Signature]</u>		ASIDE		9/17/09	1256																		
Reviewed by/Date		Reviewed by/Date		Chromatograms with final report ☐																			

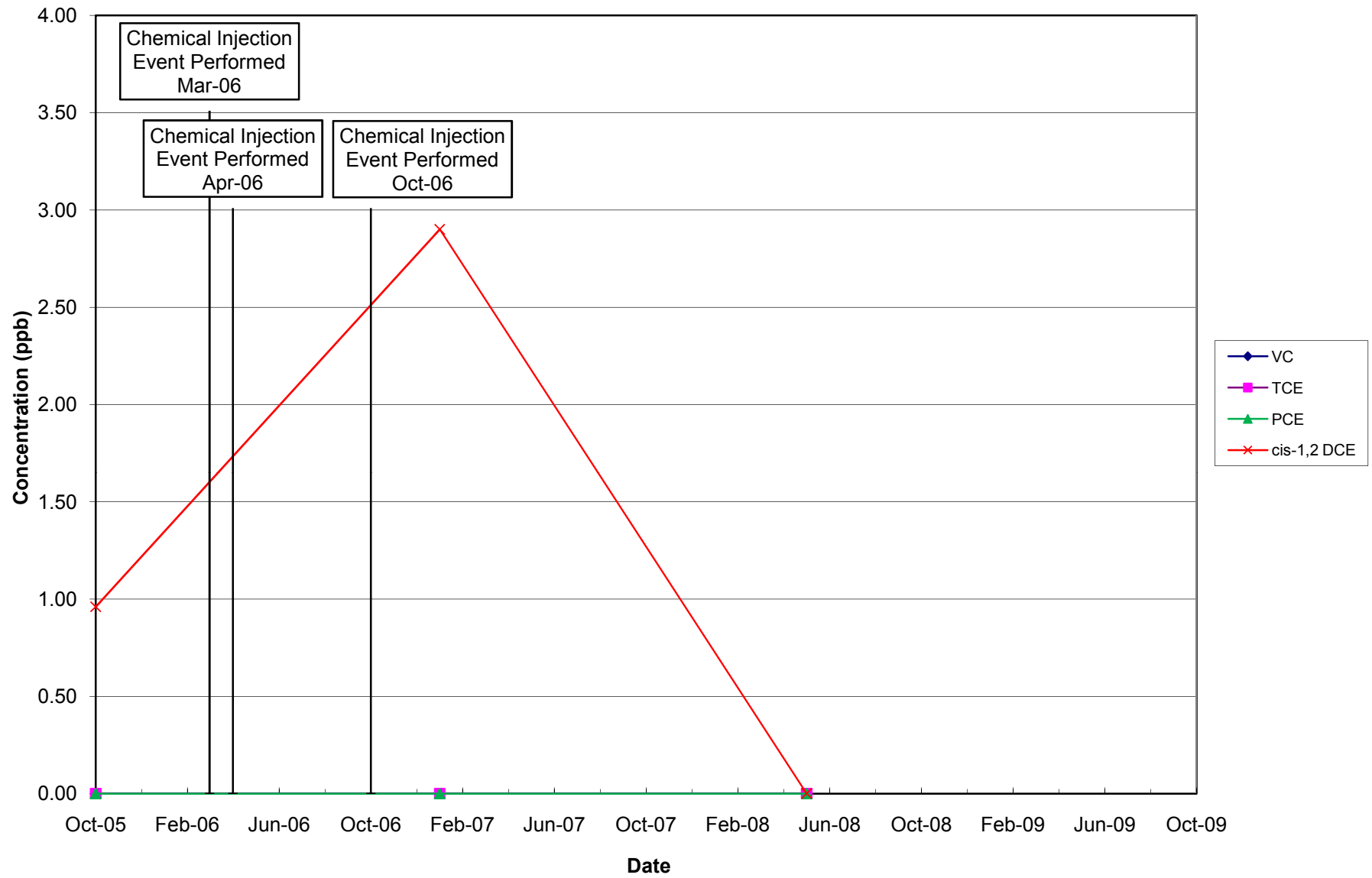
Well MW 1



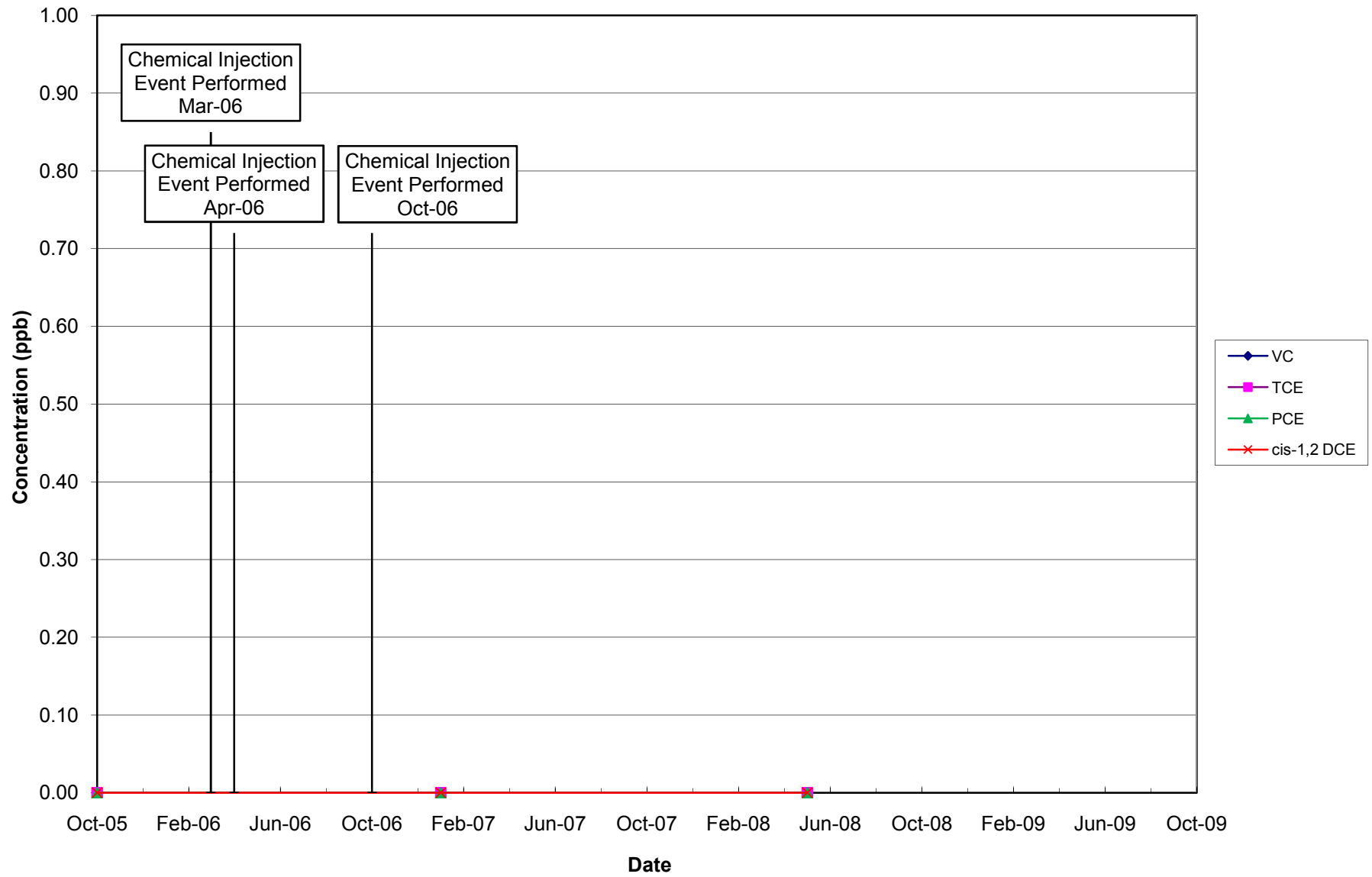
Well MW 2



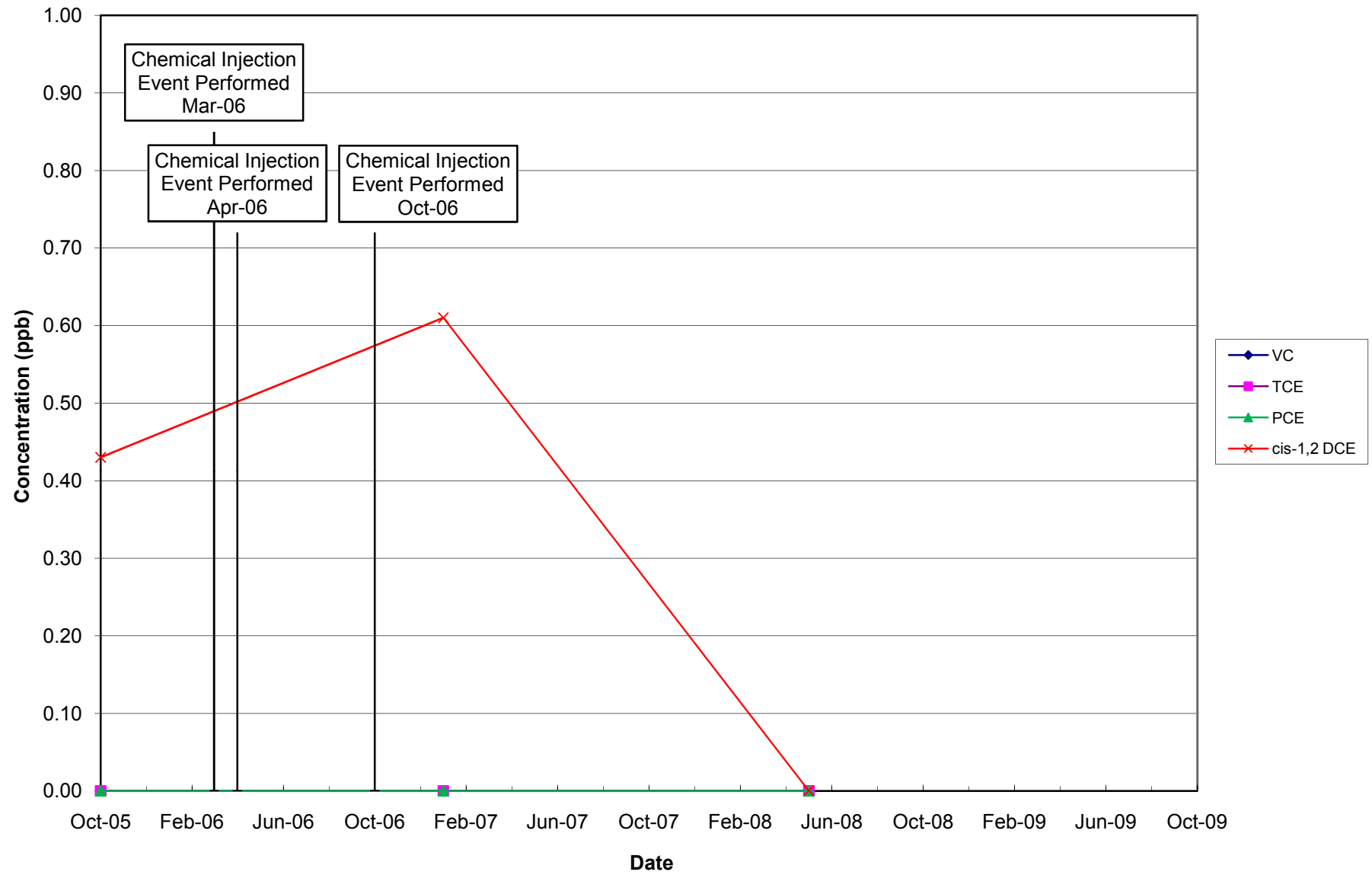
Well MW 3



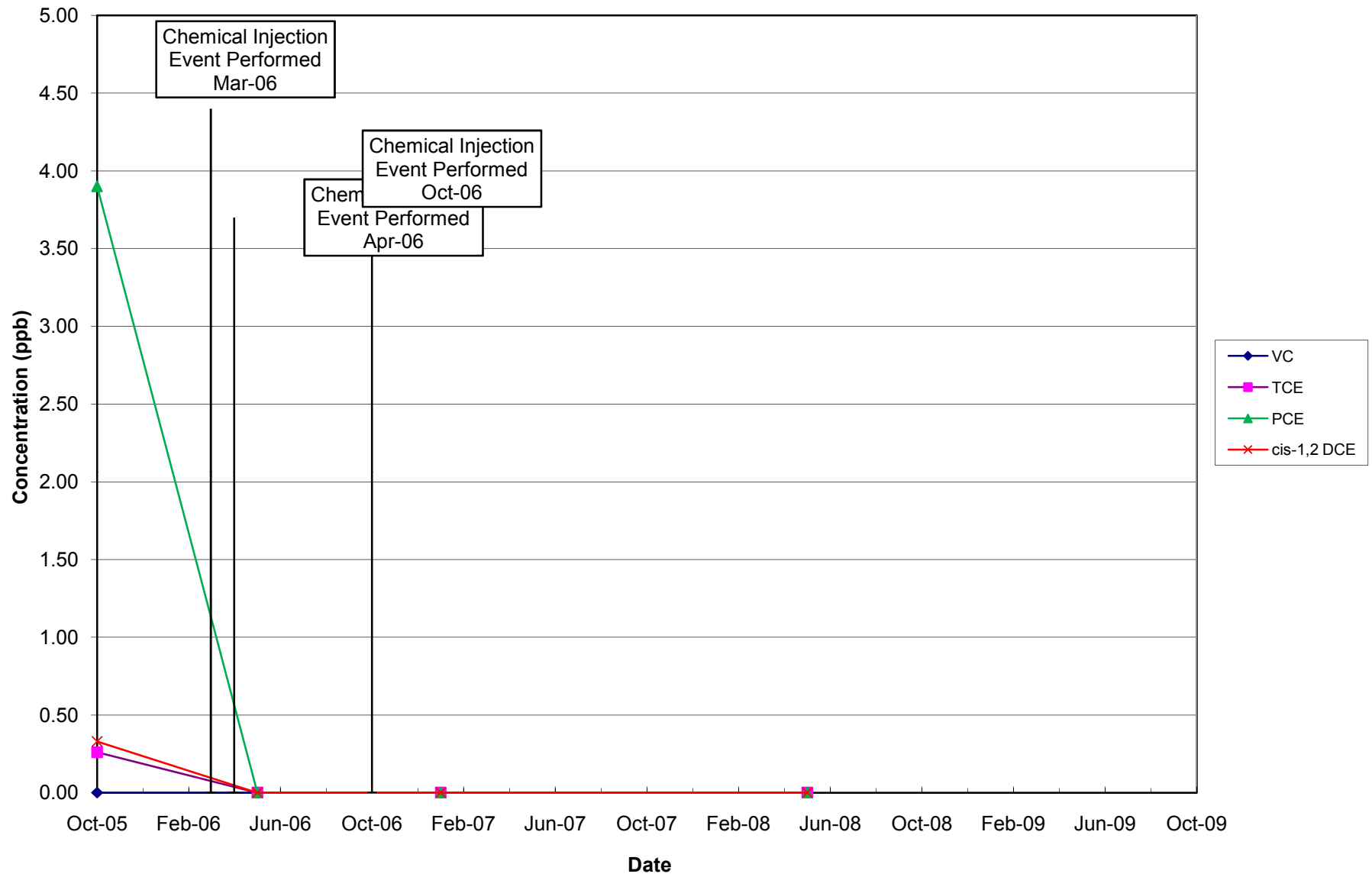
Well MW 4



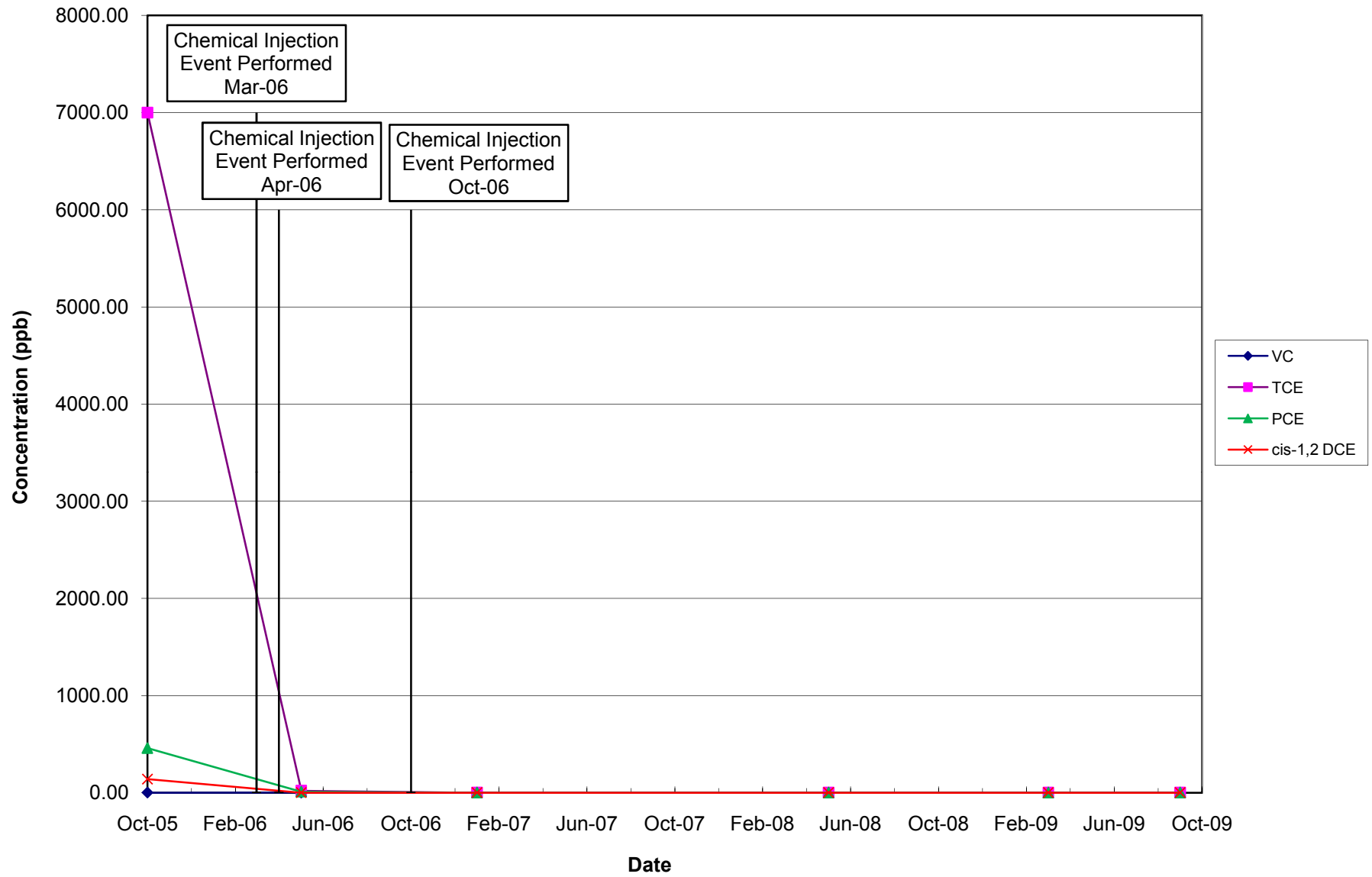
Well MW 5



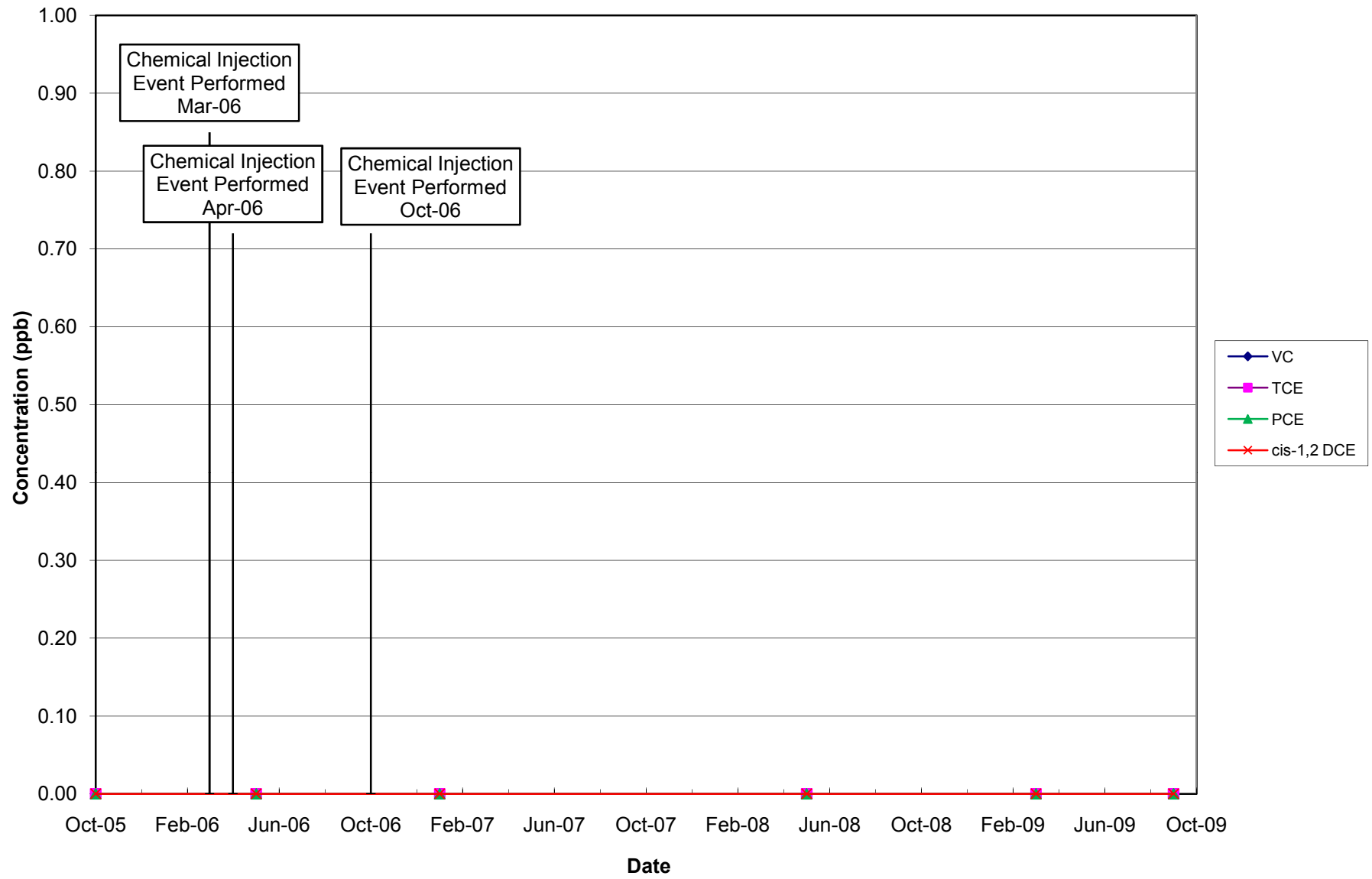
Well MW 6



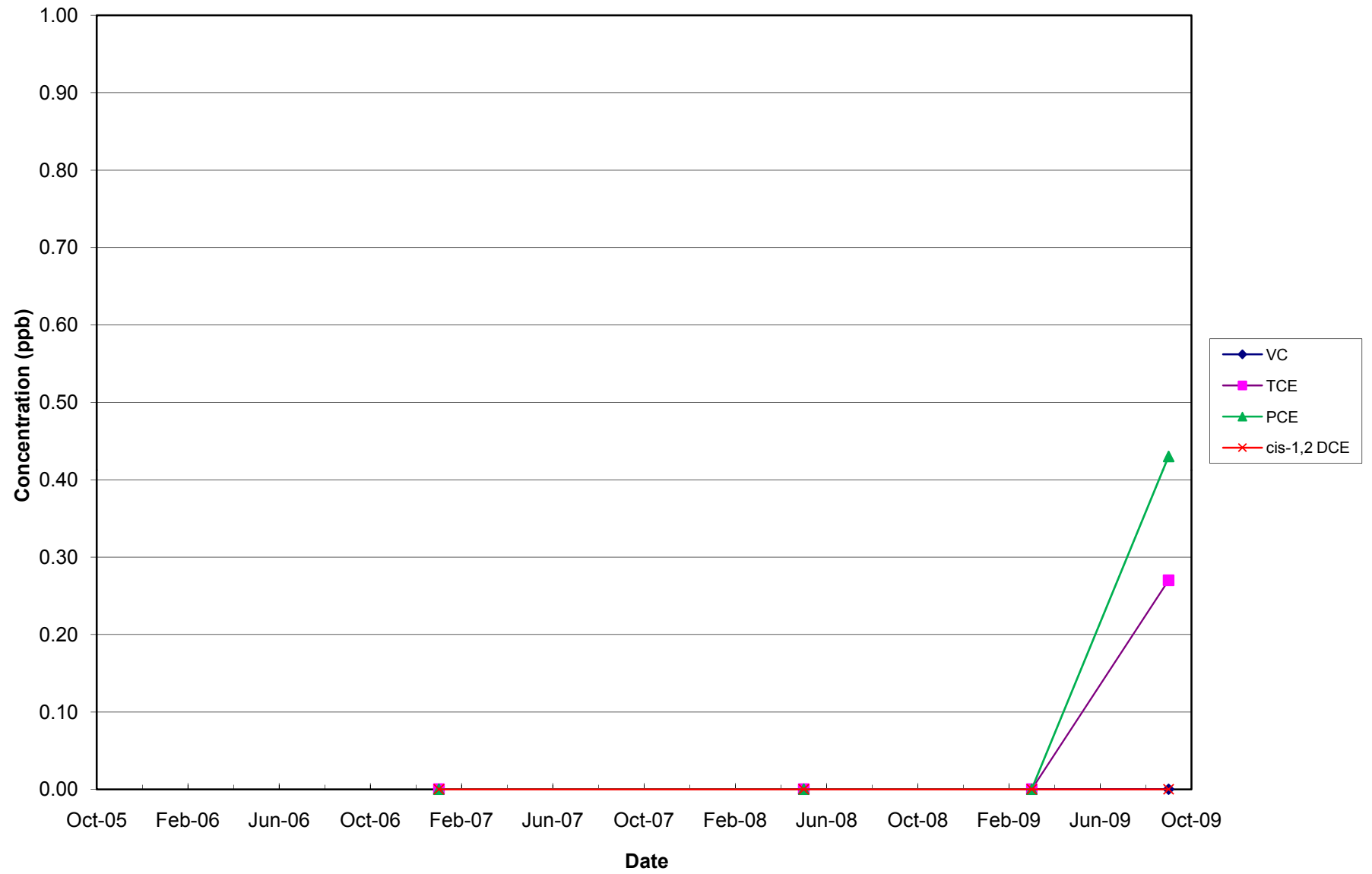
Well MW 7



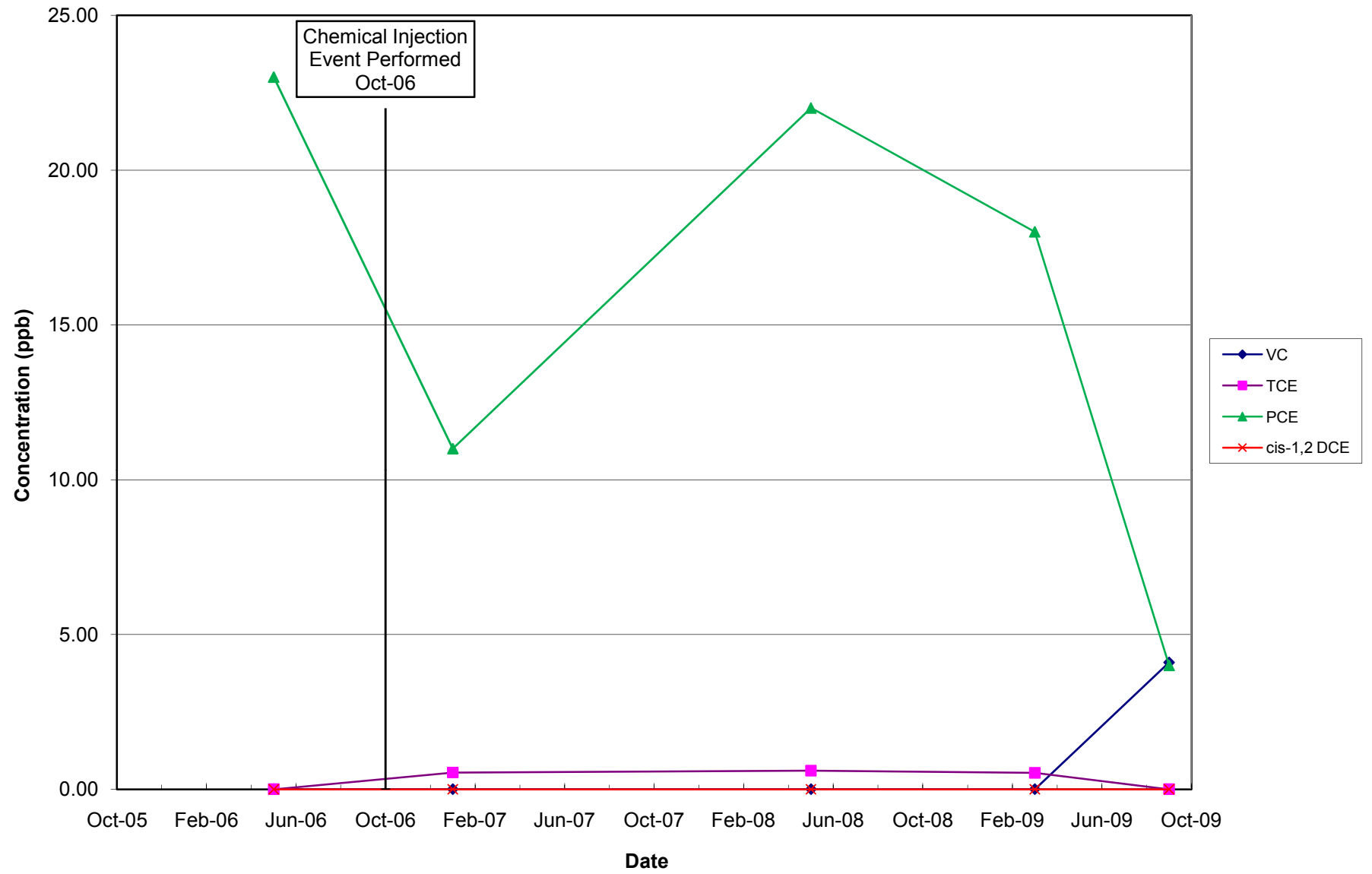
Well MW 8



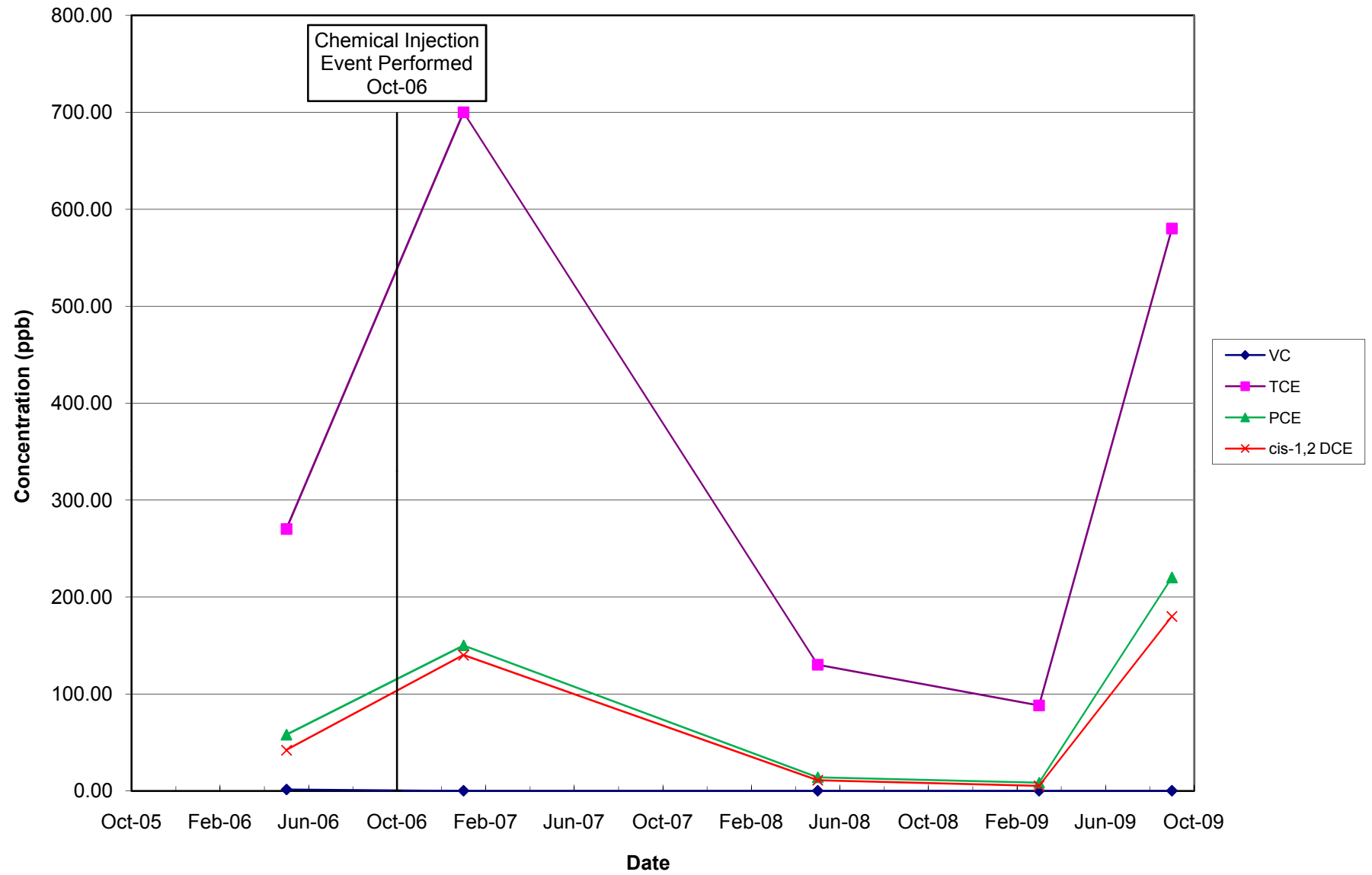
Well MW 9



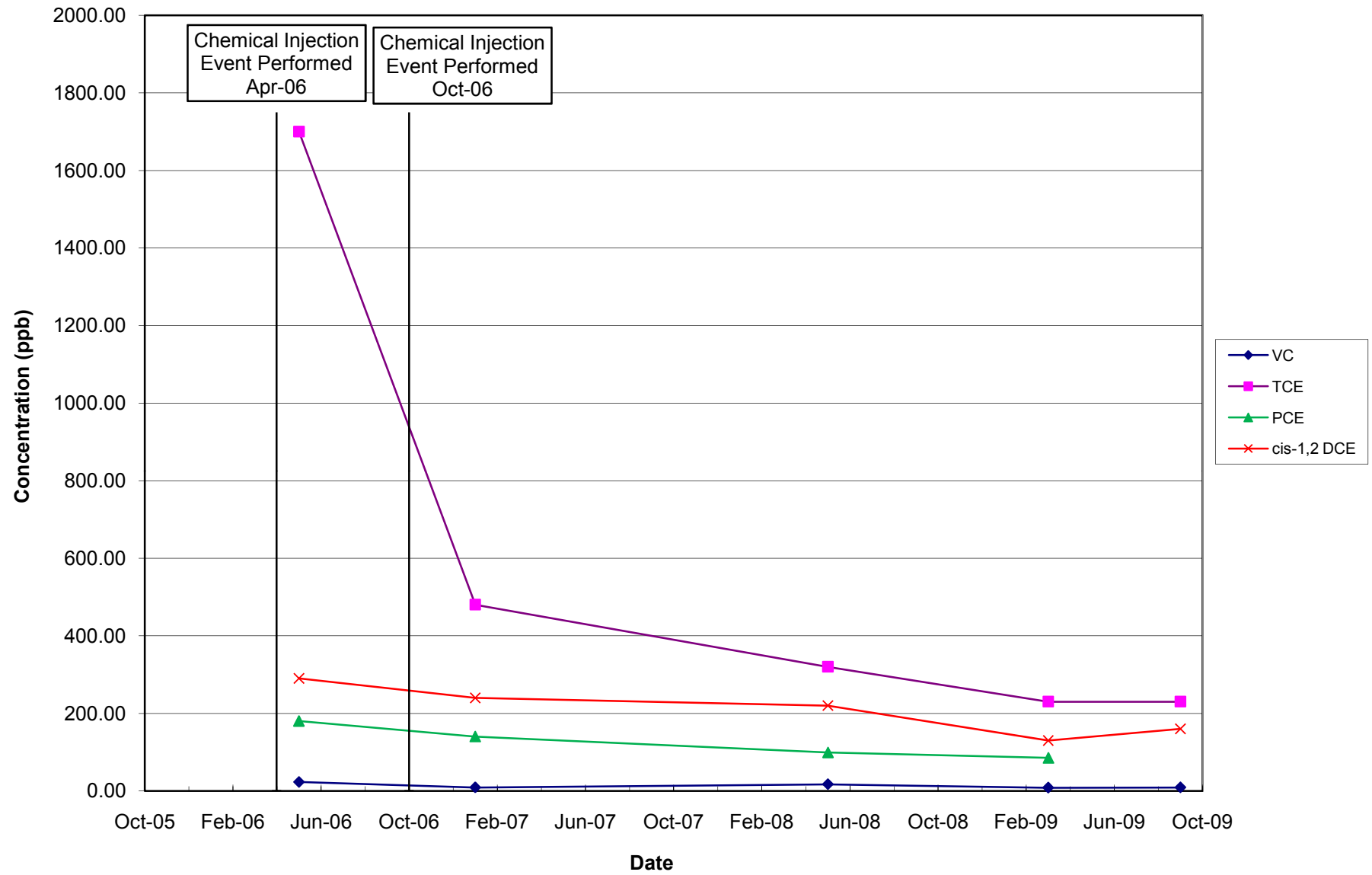
Well MW 10



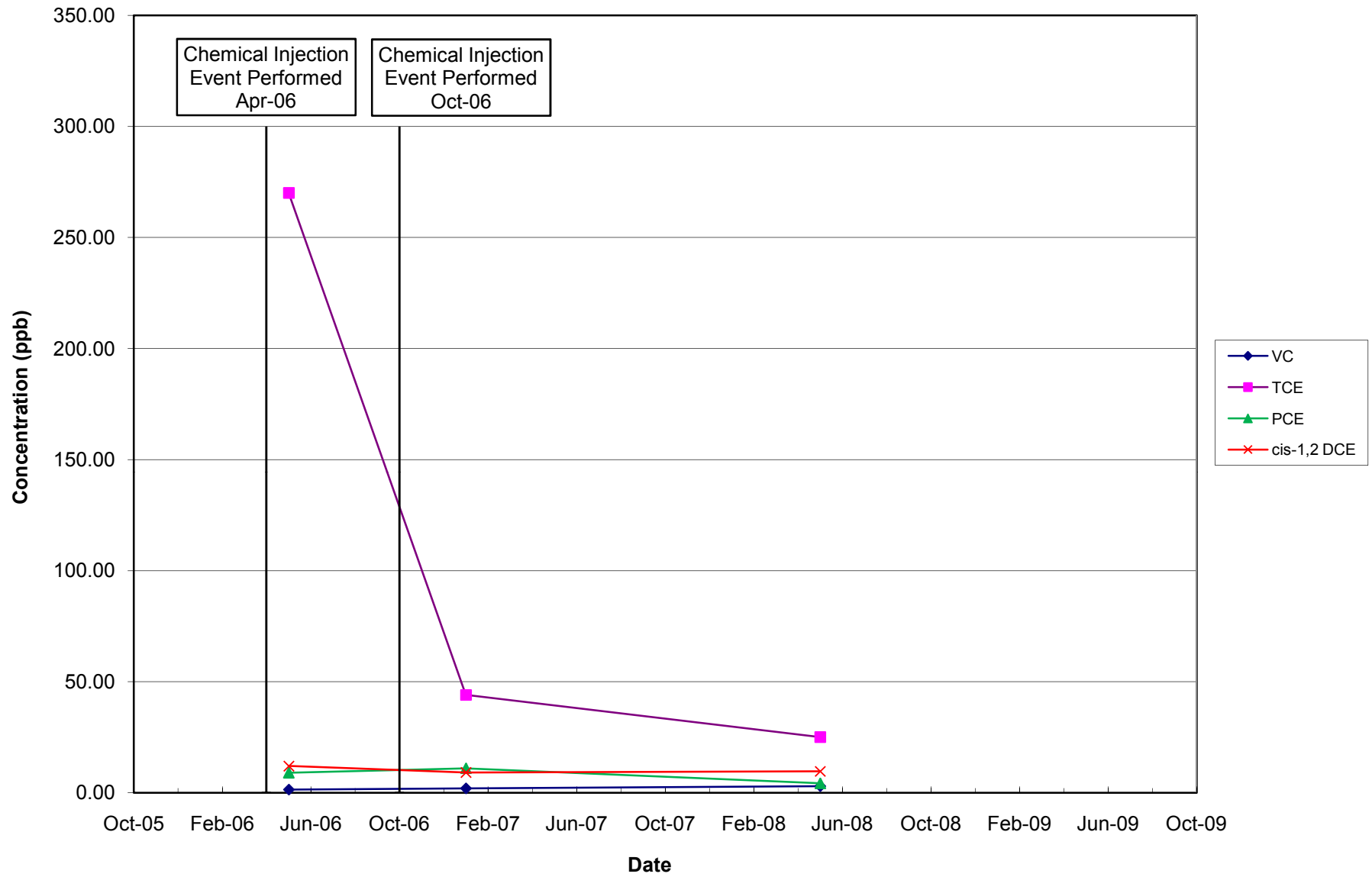
Well MW 11



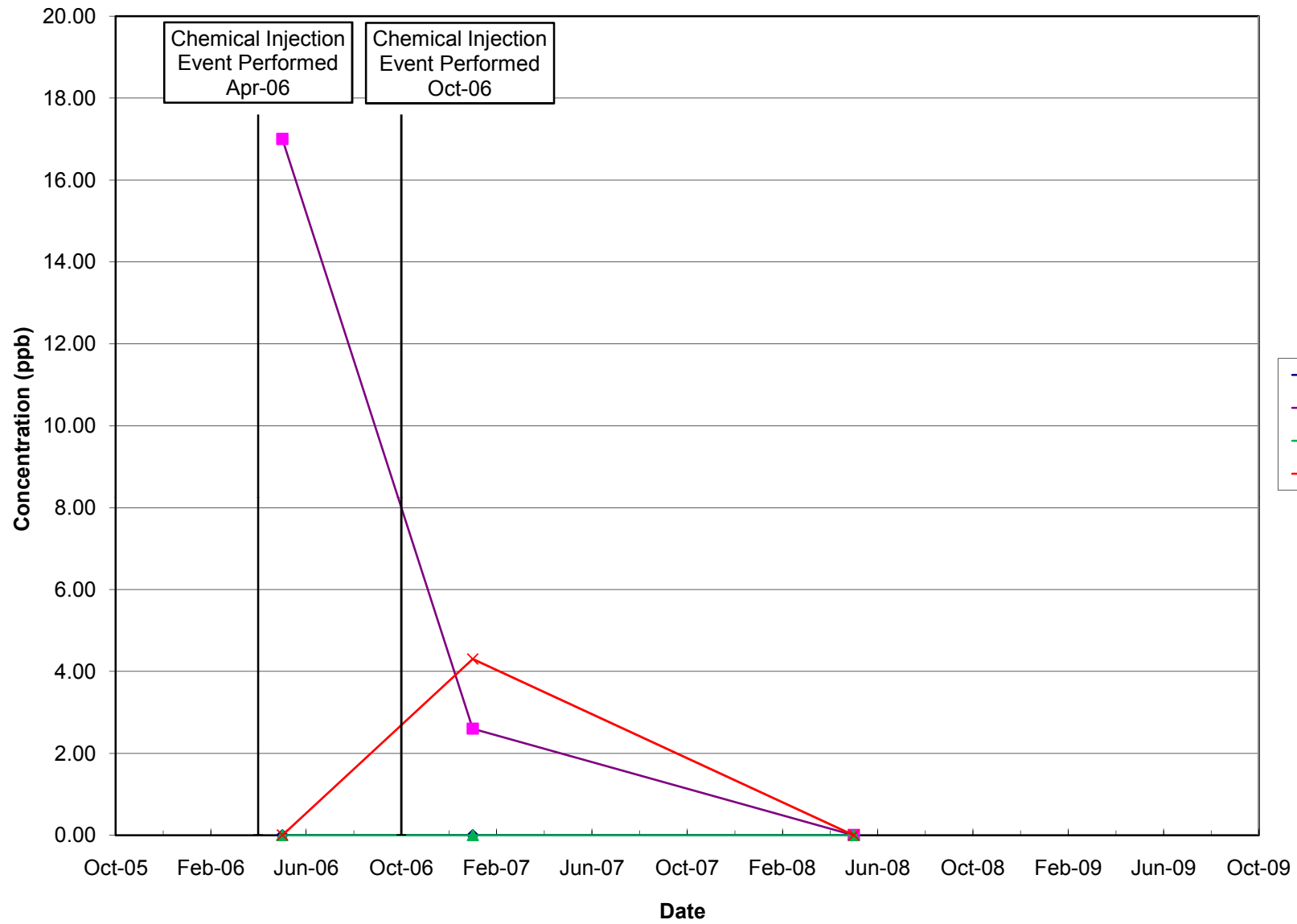
Well MW 12



Well MW 13



Well MW 14



Well MW 15

