

October 13, 2010

Mr. Mark Riggle
Project Manager
Voluntary Cleanup Section
Texas Commission on Environmental Quality
Mail Code 221
12118 North IH 35, Building D
Austin, Texas 78753

Project No. 0113055

Subject: Third Quarter 2010 Monitoring Data Transmittal
Former Cameron Iron Works Facility, Houston, Texas
VCP No. 221



Dear Mr. Riggle:

On behalf of Cameron International Corporation (Cameron), Environmental Resources Management (ERM) is providing the Third Quarter 2010 ground water monitoring results for the Former Cameron Iron Works Facility (the facility) for your review and consideration.

This quarterly ground water sampling event was completed in August 2010 in accordance with the Texas Commission of Environmental Quality's (TCEQ) June 19, 2009 comments on the *First Half 2009 Monitoring Data Transmittal* (dated June 5, 2009).

All ground water analytical results collected during this sampling event were compared with the response action objectives outlined in the Response Action Plan (RAP), dated August 28, 2003. Table 1 lists the wells that require a response action and the proposed action for each well. The ground water analytical results are summarized in Table 2. Concentration versus time graphs for each monitoring location are provided in Attachment 2.

The laboratory reports and data usability summaries will be provided in the 2010 Annual Ground Water Monitoring Report and Field Activities Summary.

Conclusions and Recommendations

Elevated concentrations of constituents of concern were reported at wells selected for quarterly monitoring. Cameron proposes to undertake the following response actions to meet the requirements of the RAP in the next three months:

- MW-173 had reported detections of 1,1-dichloroethene (1,1-DCE) above the PCL prior to the Third Quarter 2010 event. A review of the most-recent data shows a decline in concentration, presumably associated with the new ground water extraction system installed to address the affected ground water in this area. MW-173 will continue to be monitored quarterly to assess the effectiveness of the remediation system;

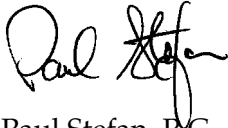
- COC concentrations in MW-122 during the third quarter 2010 continue to fluctuate. COC concentrations were reported below PCLs and MW-122 will remain on the semi-annual sampling schedule;
- The reported COC concentrations in MW-134 continue to fluctuate above and below their respective PCLs. MW-134 will remain a trigger well and on the quarterly sampling schedule;
- COC concentrations in MW-171 remain steady and below PCLs;
- COC concentrations in MW-74 and MW-125 continue a steadily decreasing trend;
- Concentrations of 1,1-DCE in MW-59 continue to exhibit an increasing trend. This affected ground water lies within the capture zone of the ground water extraction system;
- COC concentrations in MW-84 continue to increase suggesting that the extent of affected ground water in this area is expanding and needs to be addressed; and
- Monitoring/injection wells will continue to be monitored for the presence of permanganate and additional injections will be performed as necessary.

The semiannual ground water monitoring event will be conducted in October 2010.

Please contact Mr. Ted Fasting of Cameron International Corporation at (713) 513-3325 or me at (281) 600-1023 with any questions or comments.

Sincerely,

Environmental Resources Management Southwest, Inc.



Paul Stefan, P.G.

PAS/skd
Attachments

cc: Marsha Hill, Texas Commission on Environmental Quality, Region X II
Ted Fasting, Cameron International Corporation
Bruce Himmelreich, Cameron International Corporation (without attachments)
Bill Deffebach, Stablewood Property Owners Association
Robin Morse, Crain, Caton, and James, P.C.
James Elkins III, Houston Trust Company

Tables
Attachment 1

October 13, 2010
Project No. 0113055

Environmental Resources Management Southwest, Inc.
15810 Park Ten Place, Suite 300
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TABLE 1

Summary of Response Action Plan Implementation
Third Quarter 2010 Monitoring Data Transmittal

Former Cameron Iron Works Facility
Houston, Texas

Well	COCs elevated above MQL	COCs elevated above PCL	Need for Additional Notification (Yes or No)	In-situ Treatment (Yes or No)	Sampling Frequency
MW-59	1,1-dichloroethene	1,1-dichloroethene	no (a)	no (b)	Quarterly
MW-74	1,1-dichloroethene	1,1-dichloroethene	no (a)	no	Quarterly
MW-84	1,1-dichloroethane		no (a)	yes (c)	Quarterly
MW-84	1,1-dichloroethene	1,1-dichloroethene	no (a)	yes (c)	Quarterly
MW-84	Vinyl chloride	Vinyl chloride	no (a)	yes (c)	Quarterly
MW-125	1,1-dichloroethene	1,1-dichloroethene	no (a)	yes (c)	Quarterly
MW-134	1,1-dichloroethene	1,1-dichloroethene	no (a)	no	Quarterly

NOTES:

COCs = Chemicals of Concern

MQL = Method Quantitation Limit

PCL = Protective Concentration Level

(a) Properties in the vicinity of the affected ground water have been previously notified.

(b) MW-59 is within the capture zone of EW-1.

(c) Injection wells located in this area were injected with sodium permanganate in 2009. This area is being gauged regularly for the presence of permanganate. Additional permanganate will be injected as needed to reduce concentration levels to the PCL.

TABLE 2

Summary of Ground Water Data for Trigger Wells
Third Quarter 2010 Monitoring Data Transmittal

Former Cameron Iron Works Facility
Houston, Texas

Constituent	MQL	Critical PCLs (a)	Location:	MW-59	MW-74	MW-84	MW-122
			Depth: (b)	25	27	31	28
			Date:	8/10/2010	8/10/2010	8/10/2010	8/10/2010
1,1-Dichloroethane	0.0050	4.9		0.0026 J	ND (0.0050)	0.046	ND (0.0050)
1,1-Dichloroethene	0.0050	0.0070		0.053	0.0077	0.28	0.0016 J
1,2-Dichloroethane	0.0050	0.0050		ND (0.0050)	ND (0.0050)	0.00054 J	ND (0.0050)
cis-1,2-Dichloroethene	0.0050	0.070		ND (0.0050)	ND (0.0050)	0.0012 J	0.0006 J
Tetrachloroethene	0.0050	0.0050		ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
Trichloroethene	0.0050	0.0050		ND (0.0050)	ND (0.0050)	0.00098 J	0.0043 J
Vinyl Chloride	0.0020	0.0020		ND (0.0020)	ND (0.0020)	0.0069	ND (0.0020)

Constituent	MQL	Critical PCLs (a)	Location:	MW-125	MW-134	MW-171	MW-173
			Depth: (b)	36	25	25	35
			Date:	8/10/2010	8/10/2010	8/10/2010	8/10/2010
1,1-Dichloroethane	0.0050	4.9		ND (0.0050)	0.0018 J	0.002 J	ND (0.0050)
1,1-Dichloroethene	0.0050	0.0070		0.010	0.012	0.0025 J	0.00063 J
1,2-Dichloroethane	0.0050	0.0050		ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
cis-1,2-Dichloroethene	0.0050	0.070		ND (0.0050)	ND (0.0050)	0.0009 J	ND (0.0050)
Tetrachloroethene	0.0050	0.0050		ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
Trichloroethene	0.0050	0.0050		ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
Vinyl Chloride	0.0020	0.0020		ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)

NOTES:

The reported concentrations are in mg/L.

0.023 = exceedance of TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Ground Water critical PCLs.

Bold values exceed the MQL.

ND (0.0050) = *Not Detected* at the method quantitation limit given in parentheses.

MQL = Method Quantitation Limit.

(a) TCEQ Texas Risk Reduction Program (TRRP) Tier 1 Residential Class 2 Ground Water PCLs, Table 3, table for TRRP Rule dated April 2008.

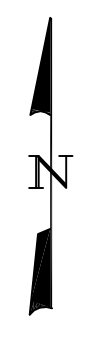
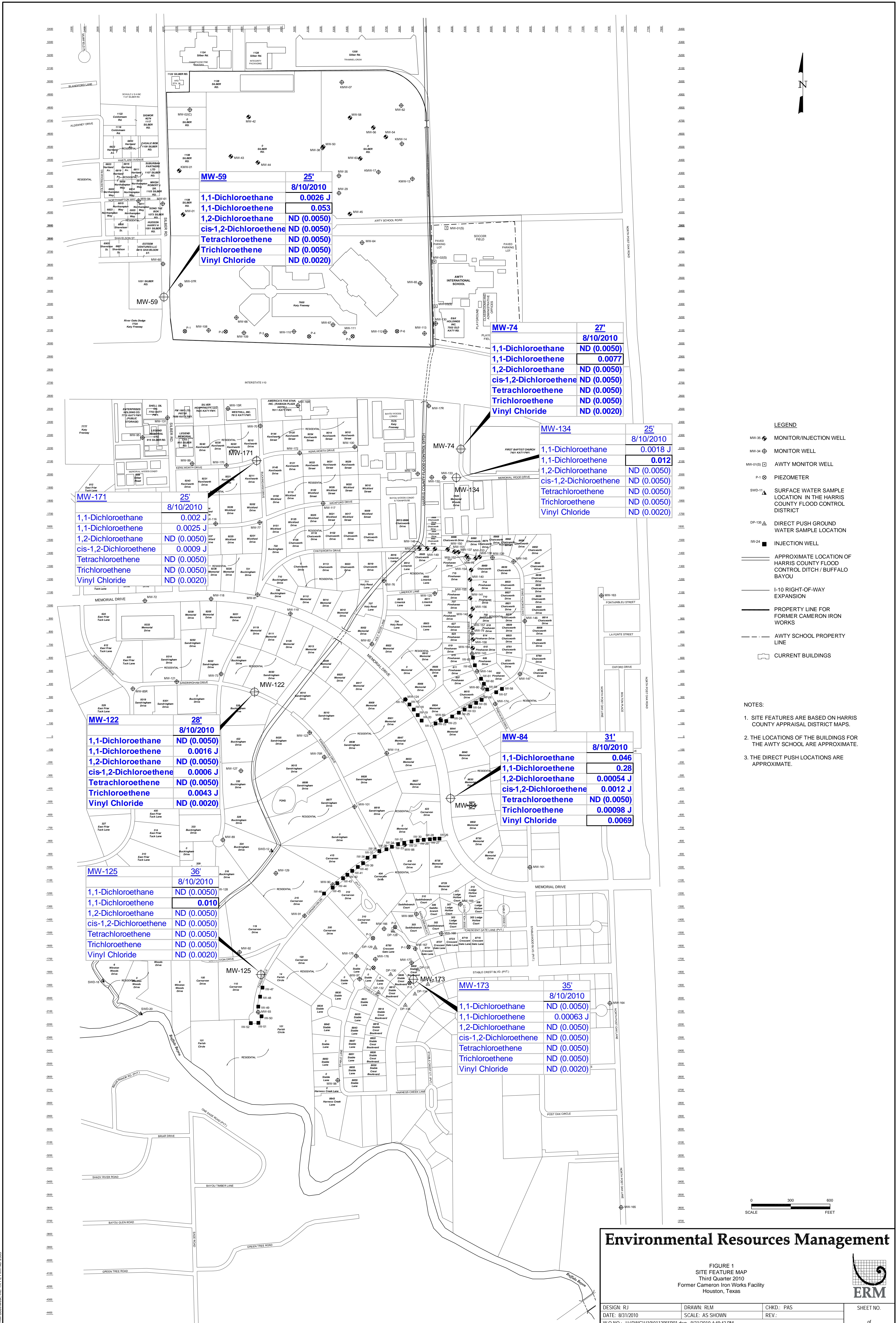
(b) The sample depths are reported in feet below ground surface.

J = Estimated data, the reported sample concentration is approximated due to exceedance of QC requirements.

Figures
Attachment 2

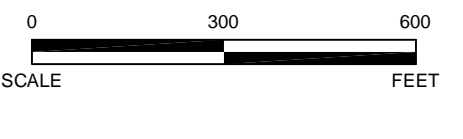
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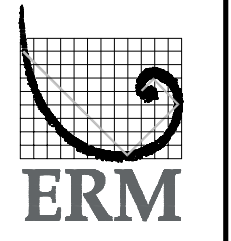
- LEGEND**
- MW-36 ◉ MONITOR/INJECTION WELL
 - MW-34 ◉ MONITOR WELL
 - MW-0165 ◉ MW MONITOR WELL
 - P-1 ◉ PIEZOMETER
 - SWD-11 ◉ SURFACE WATER SAMPLE LOCATION IN THE HARRIS COUNTY FLOOD CONTROL DISTRICT
 - DP-136 ◉ DIRECT PUSH GROUND WATER SAMPLE LOCATION
 - IW-24 ◉ INJECTION WELL
 - APPROXIMATE LOCATION OF HARRIS COUNTY FLOOD CONTROL DITCH / BUFFALO BAYOU
 - I-10 RIGHT-OF-WAY EXPANSION
 - PROPERTY LINE FOR FORMER CAMERON IRON WORKS
 - AWTY SCHOOL PROPERTY LINE
 - ▭ CURRENT BUILDINGS

- NOTES:**
1. SITE FEATURES ARE BASED ON HARRIS COUNTY APPRAISAL DISTRICT MAPS.
 2. THE LOCATIONS OF THE BUILDINGS FOR THE AWTY SCHOOL ARE APPROXIMATE.
 3. THE DIRECT PUSH LOCATIONS ARE APPROXIMATE.



Environmental Resources Management

FIGURE 1
SITE FEATURE MAP
Third Quarter 2010
Former Cameron Iron Works Facility
Houston, Texas

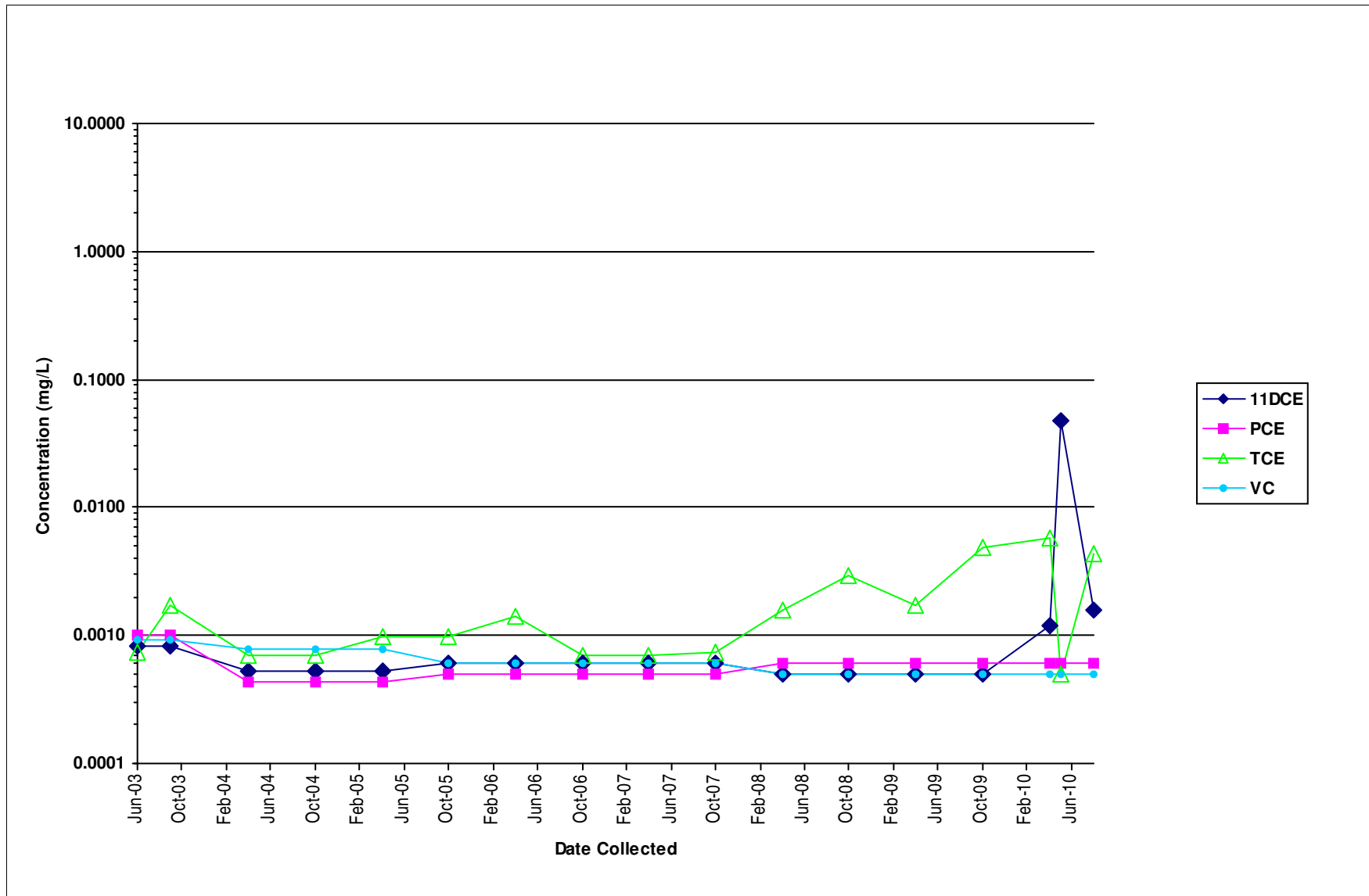


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Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

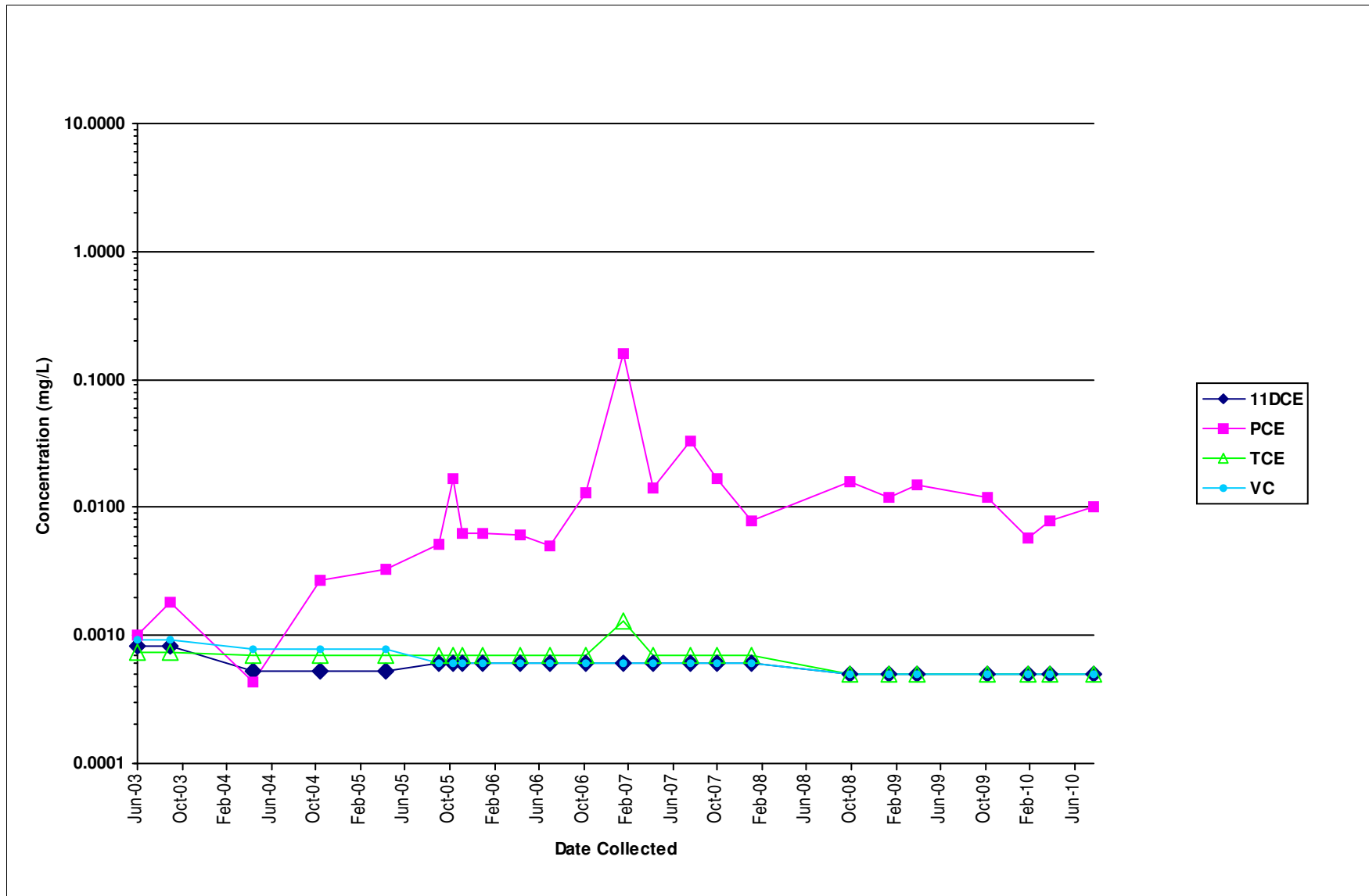
Client Sample ID: MW-122



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

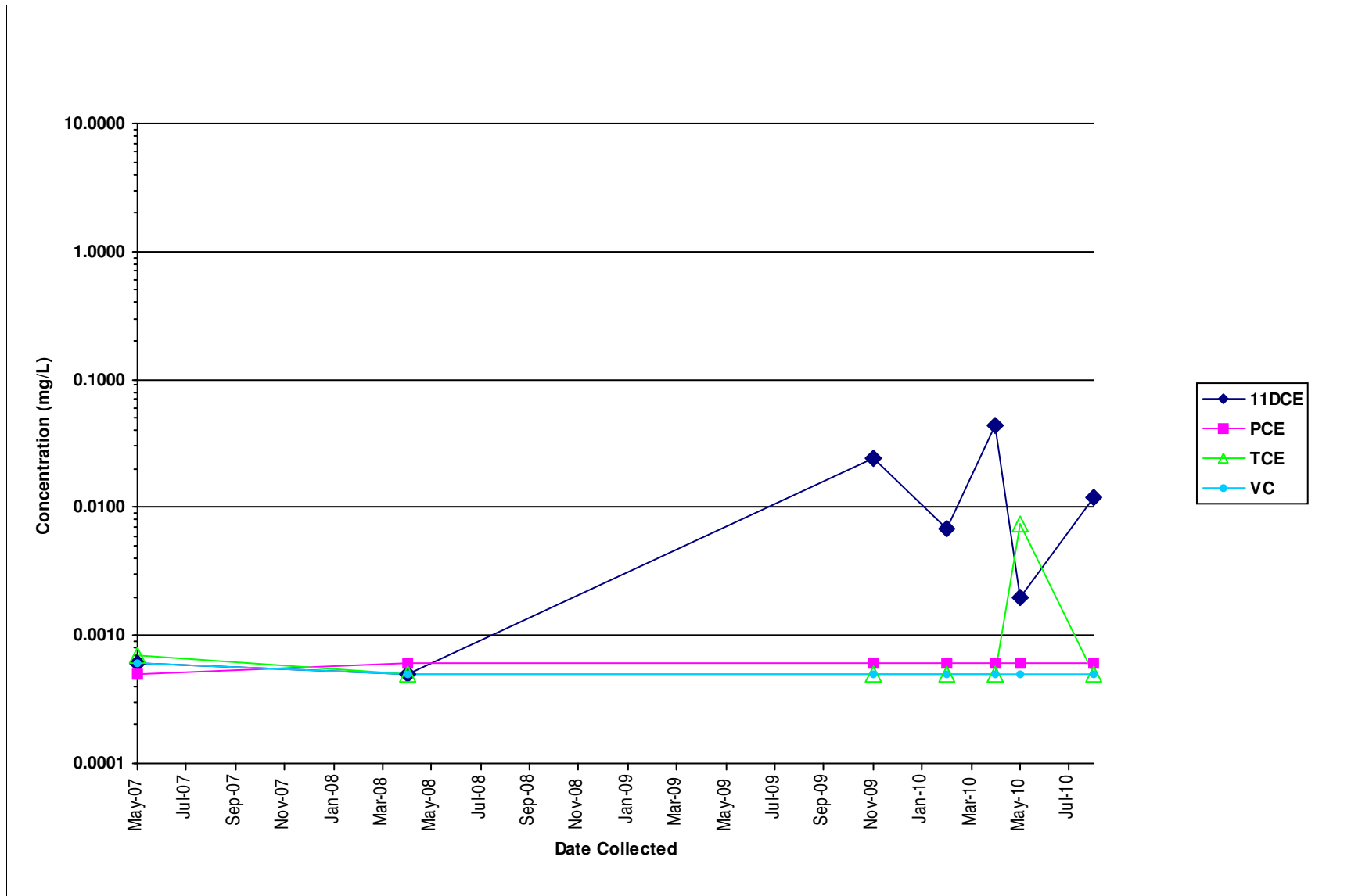
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Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

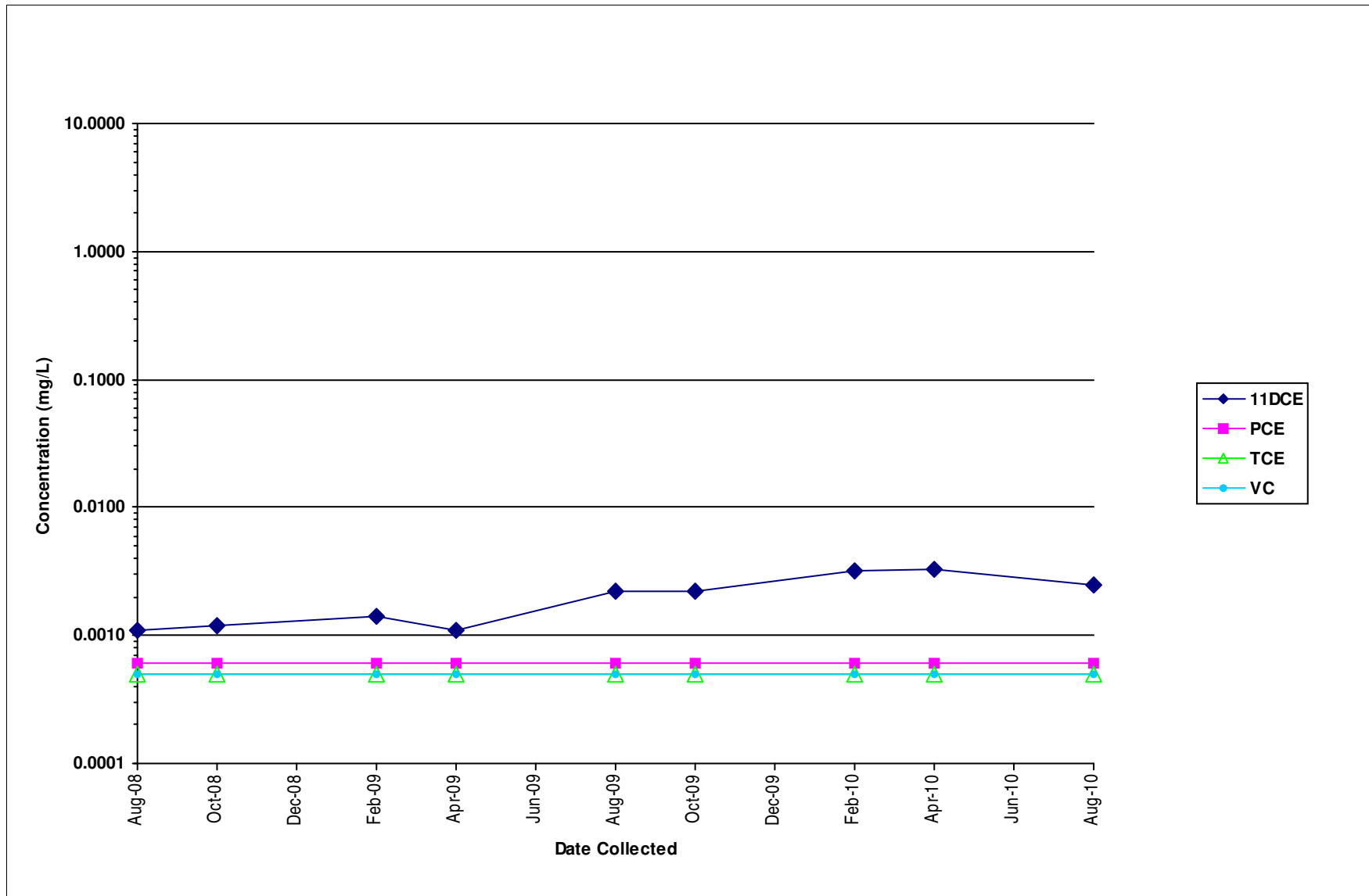
Client Sample ID: MW-134



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

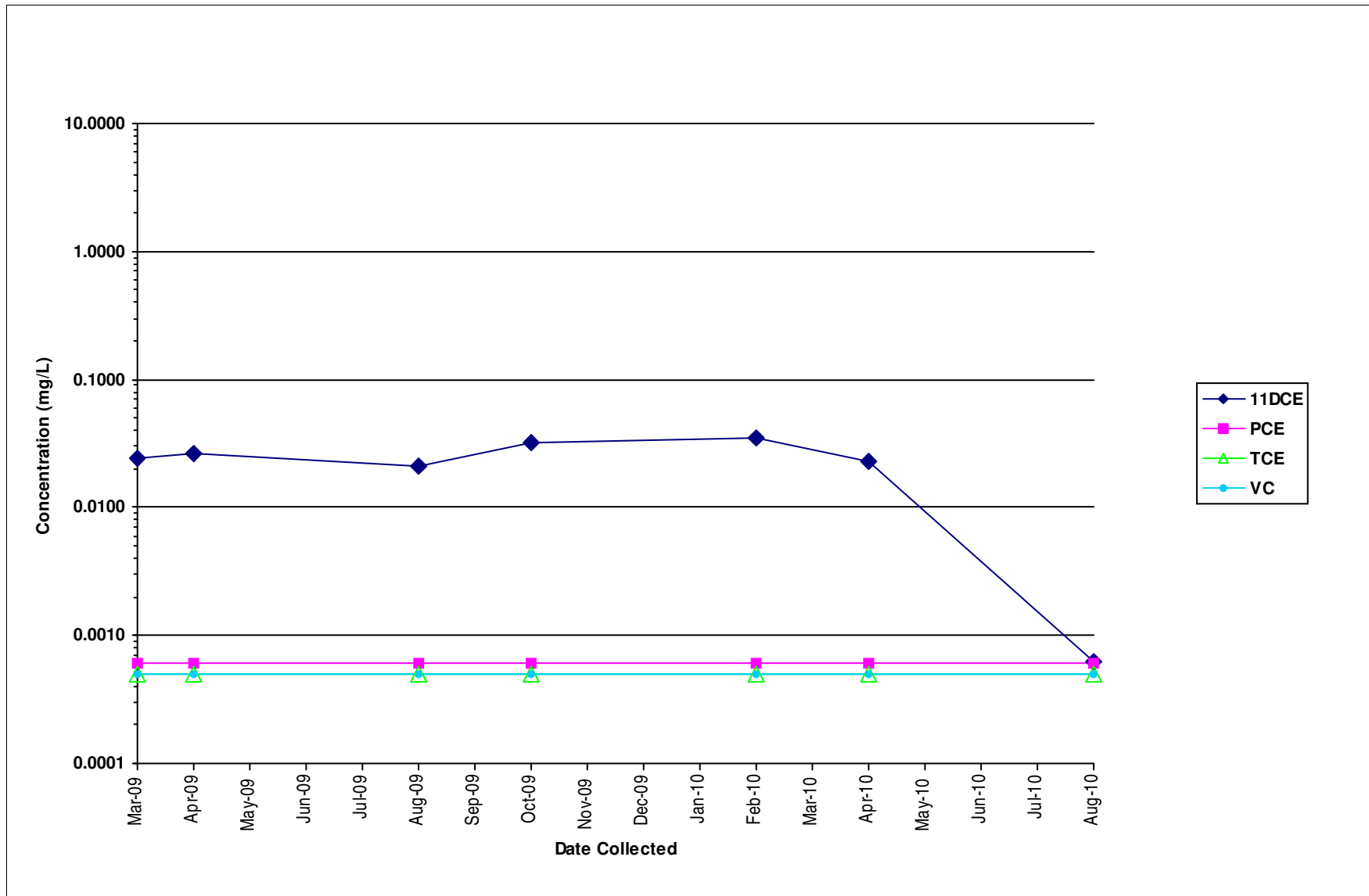
Client Sample ID: MW-171



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

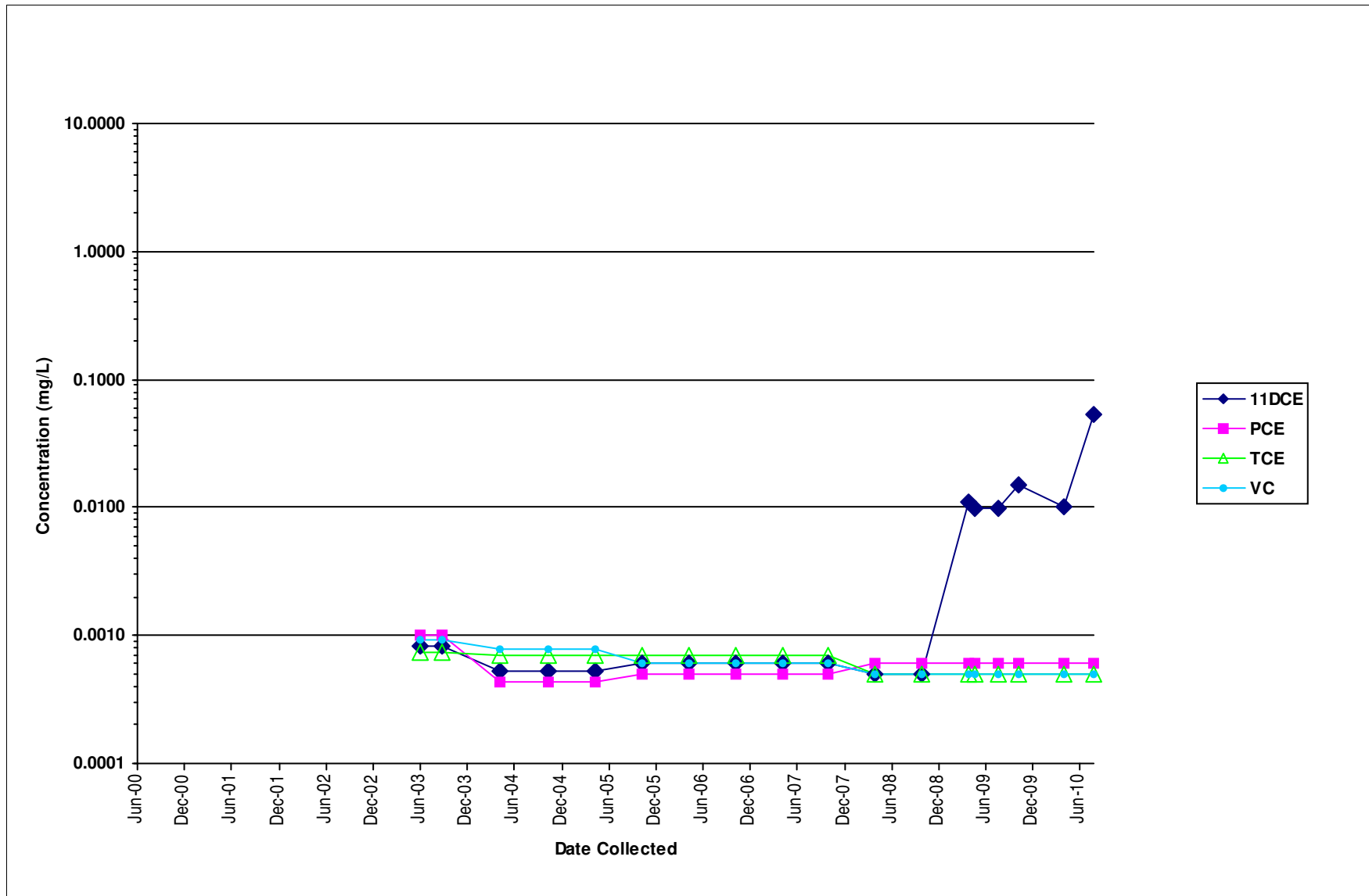
Client Sample ID: MW-173



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

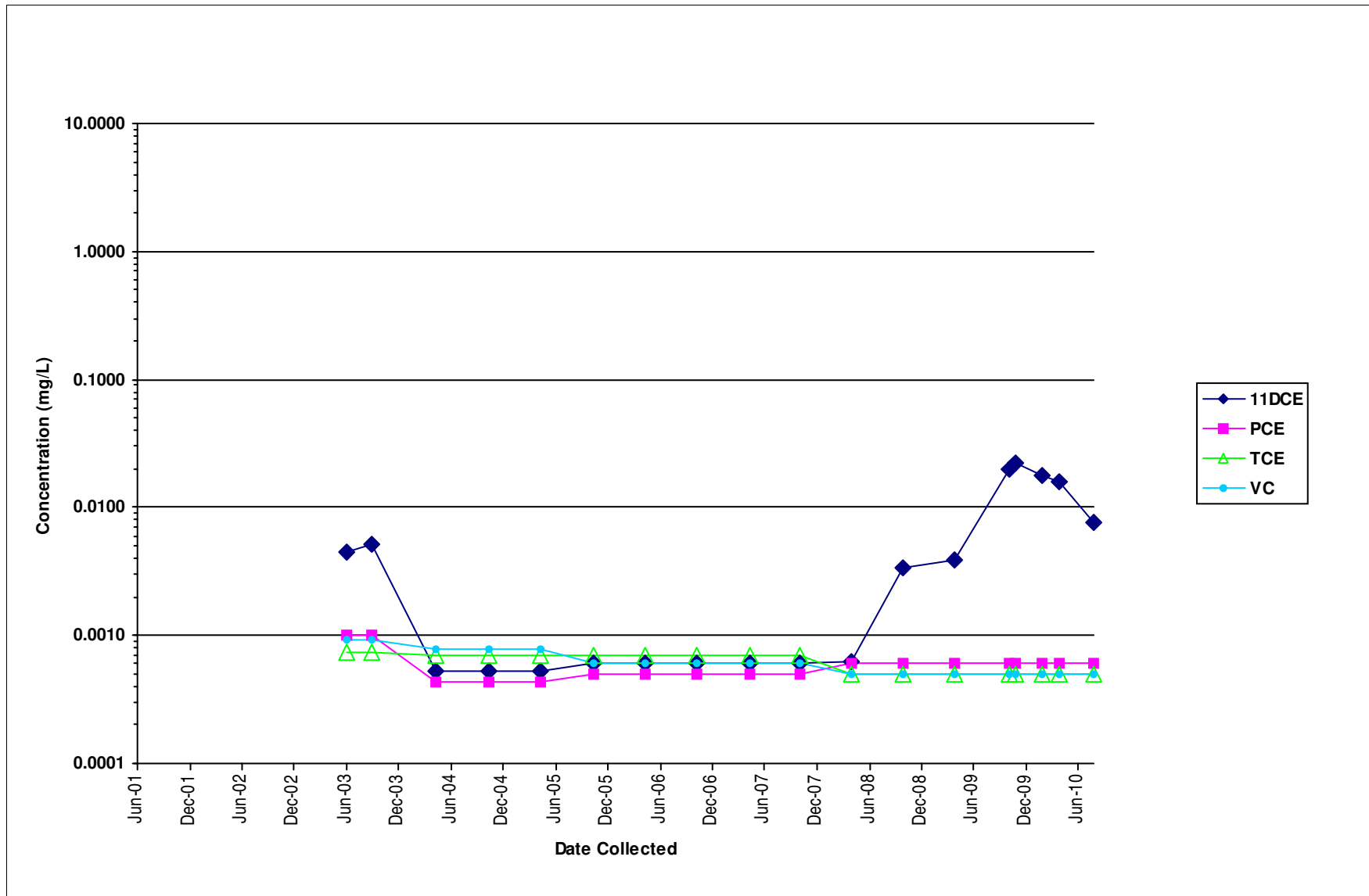
Client Sample ID: MW-59



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

Client Sample ID: MW-74



Ground Water Progress Graph

Former Cameron Iron Works Facility
Houston, Texas

Client Sample ID: MW-84

