

**Cooper and Commerce Water Quality Assurance Revolving Fund (WQARF) Site  
Community Advisory Board (CAB) Meeting**

**Thursday, November 18, 2010 at 6 p.m.  
McQueen Park Activity Center  
510 N. Horne St., Gilbert, Arizona**

**FINAL MINUTES**

OU #11-033

CAB Members present: Pacer Udall, and Bruce Friedrich

CAB Members absent: Bobbi Buchli, Nyangeny (Joe) Maniga, Michael Evans, Carrie Lewis, and Deanna Gnadt

ADEQ Staff in attendance: Scott Goodwin, Project Manager; and Felicia Calderon, Community Involvement Coordinator

Members of the public present: Jessica Tackett, Mesquite High School (H.S.); Alex Vutipadadorn, Mesquite H.S.; Kaci Carpenter, Mesquite H.S.; Linh Vo, Mesquite H.S.; Avery Robrock, Mesquite H.S.; Christina Auclair, Mesquite H.S.; and Tim Rinesmith, Town of Gilbert (TOG) Environmental Programs Task Force

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The following matters were discussed, considered, or decided at the meeting:

**1. Welcome and introductions**

Ms. Calderon greeted all attendees and announced that since no quorum was present among CAB members that CAB business would not be conducted. After introductions the meeting was turned over to the Co-Chair, Mr. Udall.

**2. Acceptance and/or changes to March 25, and July 15, 2010 Minutes**

This agenda item was tabled for the next CAB meeting, due to a lack of a quorum.

**3. Discussion of current status and activities at the Cooper and Commerce WQARF Site included: update on pump and treat system; sampling results from 2<sup>nd</sup> quarter 2010 groundwater monitoring, and future plans for the site- Scott Goodwin, Project Manager**

Mr. Goodwin initiated his presentation a discussion on current and future activities for Cooper and Commerce.

**See presentation attached**

Ms. Auclair inquired who is being disrupted by the remediation activity. Mr. Goodwin stated the Skyline Steel Inc. property was most impacted and their chief concern was storage capacity on the property.

Mr. Goodwin reviewed a brief history of the site's discovery and its contaminants of tetrachloroethene (PCE) and trichloroethene (TCE) with the students from Mesquite H.S.

Ms. Auclair questioned how much longer the pump and treat method would operate. Mr. Goodwin responded that this process could go on for decades and explained why. Mr. Goodwin added that there are other emerging technologies, but currently pump and treat is a widely accepted process.

Mr. Goodwin discussed with Mr. Friedrich and Ms. Auclair the carbon change out process associated with the pump and treat system.

Mr. Goodwin clarified that the Town's drinking water well has not been impacted by the contamination from the site. Mr. Goodwin also explained how groundwater monitoring wells were used to characterize the plume's location. Mr. Goodwin added that ADEQ initiated remediation activity at the site in 2006.

#### **4. Call to the Public**

Mr. Rinesmith, chair of the TOG Environmental Programs Task Force gave forthcoming details of meetings and updates from his organization. Mr. Rinesmith expressed interest in having a CAB member speak at a future Task Force meeting.

#### **5. Future Meeting and Agenda Discussion**

The next CAB meeting will be held at the McQueen Park Activity Center, 510 N. Horne St., Gilbert, Arizona, on Thursday, February 24, 2010 beginning at 6 p.m. Agenda items for the next meeting included: contaminant recovery results from remediation systems, sampling results from TOG groundwater monitoring wells, co-chair voting, CAB membership, CAB meeting frequency, discussion of CAB member presentation to TOG Environmental Programs Task Force.

#### **6. Adjournment**

Ms. Calderon adjourned the meeting.

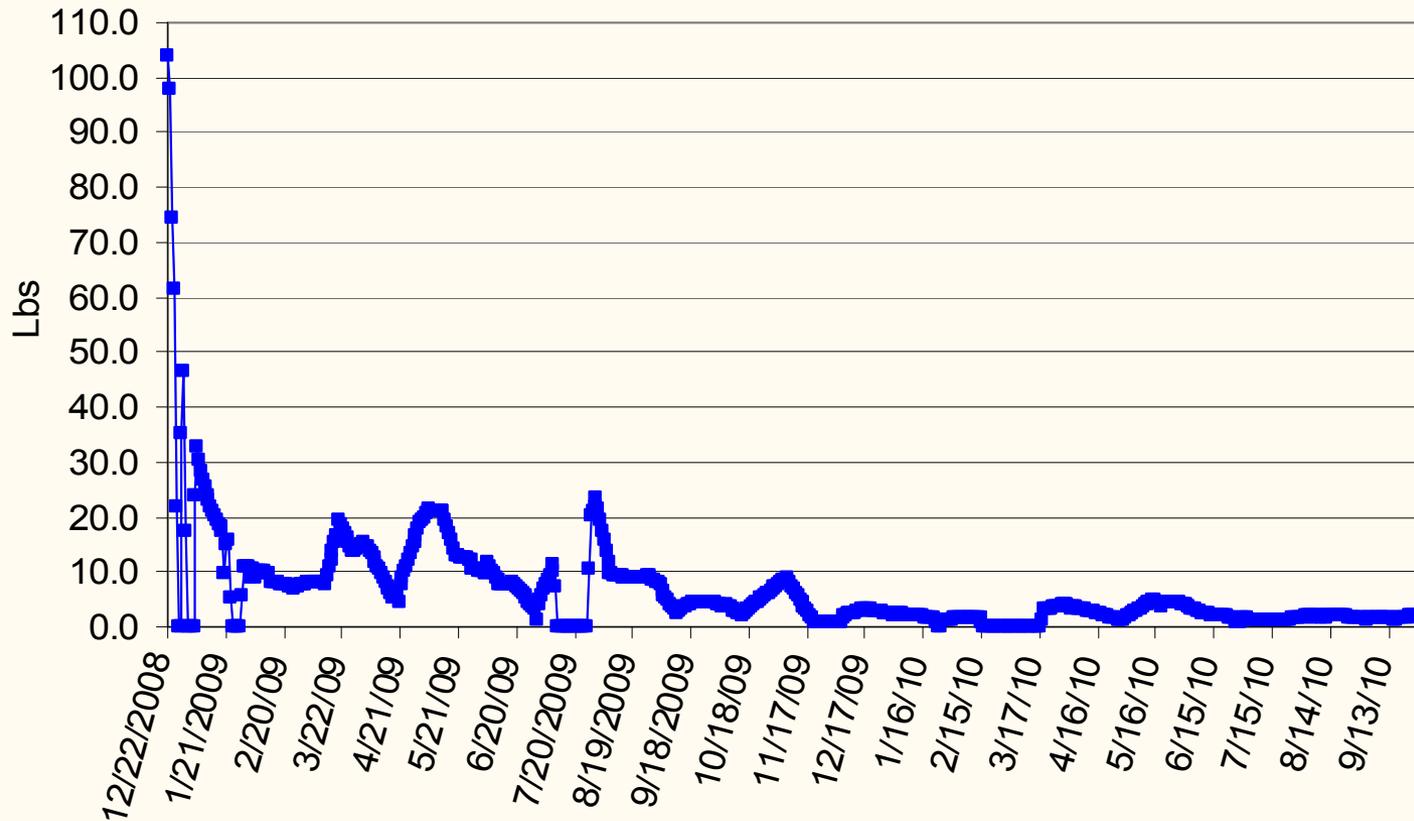


# Cooper and Commerce Water Quality Assurance Revolving Fund (WQARF) Site

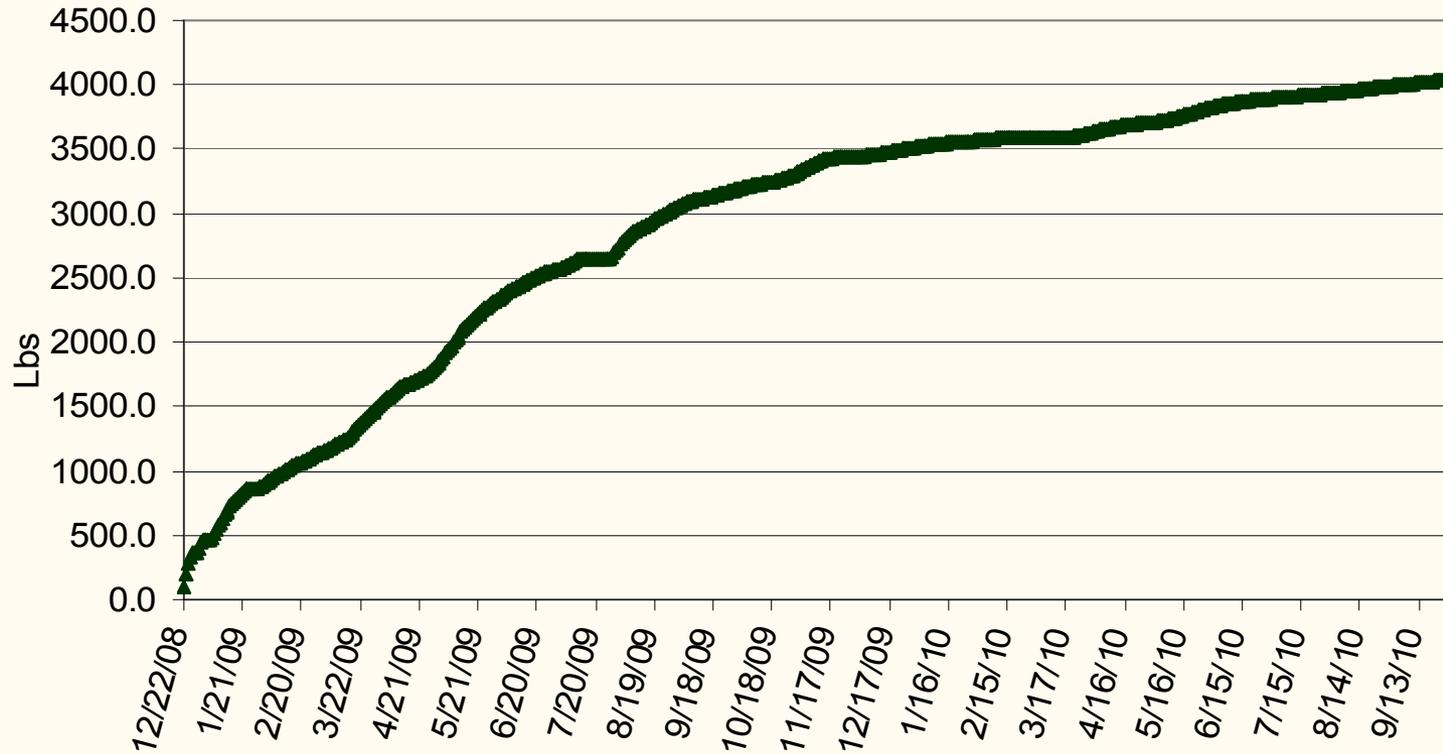
November 18, 2010

- The soil vapor system continues to operate normally at the site.
- The air sparge component of the system is currently not operating as water levels are monitored in the monitor wells at and near the site to determine the effectiveness of the extraction well.
- During the third quarter of 2010, the system removed an average of 1.6 pounds of tetrachloroethene (PCE) per day.

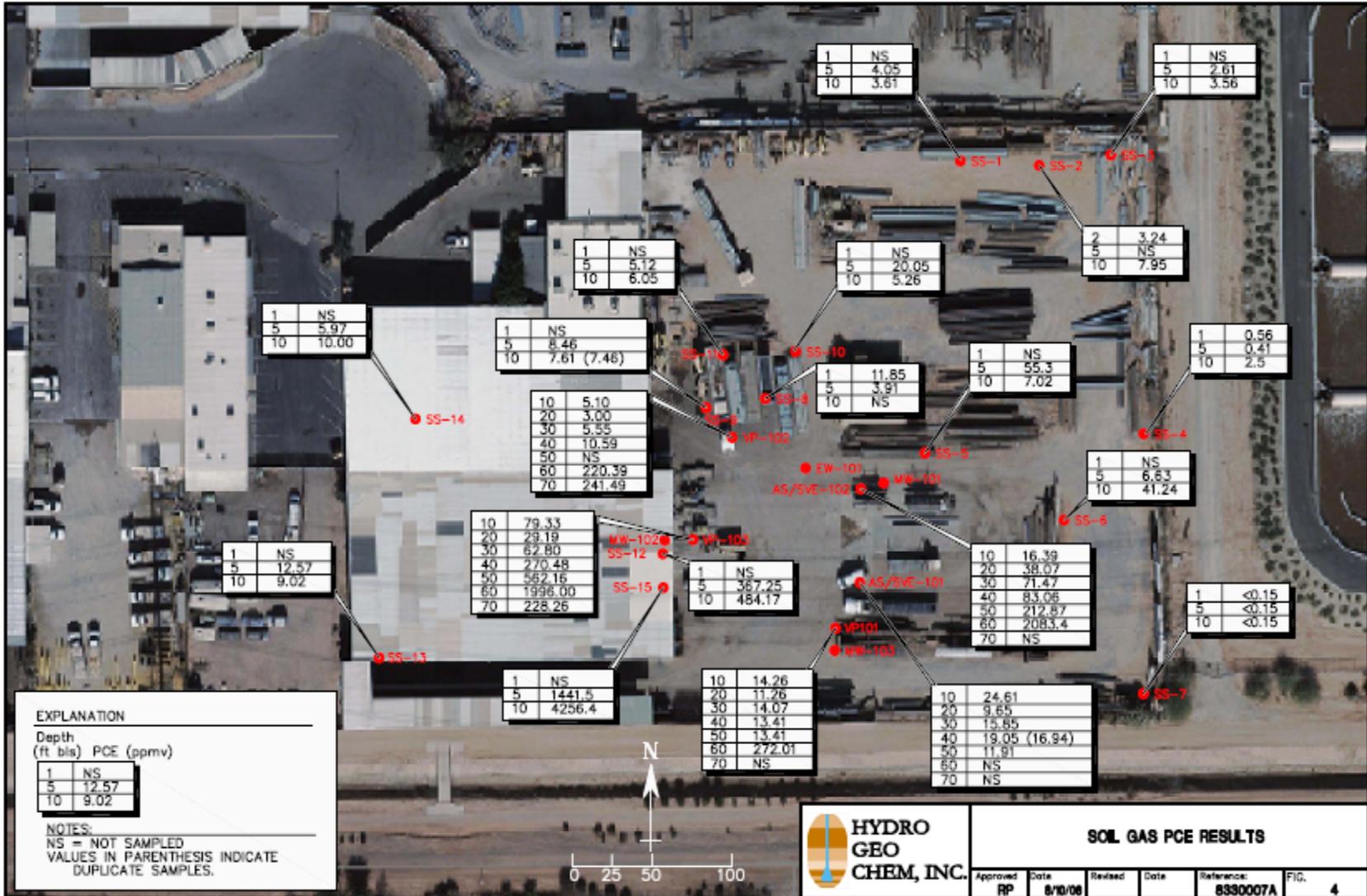
**Cooper and Commerce AS/SVE System  
Daily PCE/TCE Recovery (lbs/day)**



**Cooper and Commerce AS/SVE System  
Cumulative PCE/TCE Recovery (lbs)**



- During the week of November 15, 2010 ADEQ started the installation of an additional soil vapor extraction well, SVE-105.
- SVE-105 was installed near the west side of the property where sampling conducted in 2006 detected PCE at depths of 5 and 10 feet below land surface.
- Soil samples collected from this location in 2006 detected PCE at concentrations ranging from 300 to 1,900 parts per million or milligrams per kilogram (mg/kg). These concentrations are well above the minimum groundwater protection level of 0.8 mg/kg and the non-residential soil remediation level of 13 mg/kg. Soil vapor samples collected at the same depths were some of the highest detected at the property during the 2006 sampling.



1	NS
5	5.97
10	10.00

1	NS
5	5.12
10	6.05

1	NS
5	8.46
10	7.61 (7.46)

10	5.10
20	3.00
30	5.55
40	10.59
50	NS
60	220.39
70	241.49

10	79.33
20	29.19
30	62.80
40	270.48
50	562.16
60	1998.00
70	228.26

1	NS
5	12.57
10	9.02

1	NS
5	1441.5
10	4256.4

10	14.26
20	11.26
30	14.07
40	13.41
50	13.41
60	272.01
70	NS

1	NS
5	4.05
10	3.61

1	NS
5	20.05
10	5.26

1	11.85
5	3.91
10	NS

10	16.39
20	38.07
30	71.47
40	83.06
50	212.87
60	2083.4
70	NS

10	24.61
20	9.65
30	15.85
40	19.05 (16.94)
50	11.91
60	NS
70	NS

1	NS
5	2.61
10	3.56

2	3.24
5	NS
10	7.95

1	0.56
5	0.41
10	2.5

1	NS
5	6.83
10	41.24

1	<0.15
5	<0.15
10	<0.15

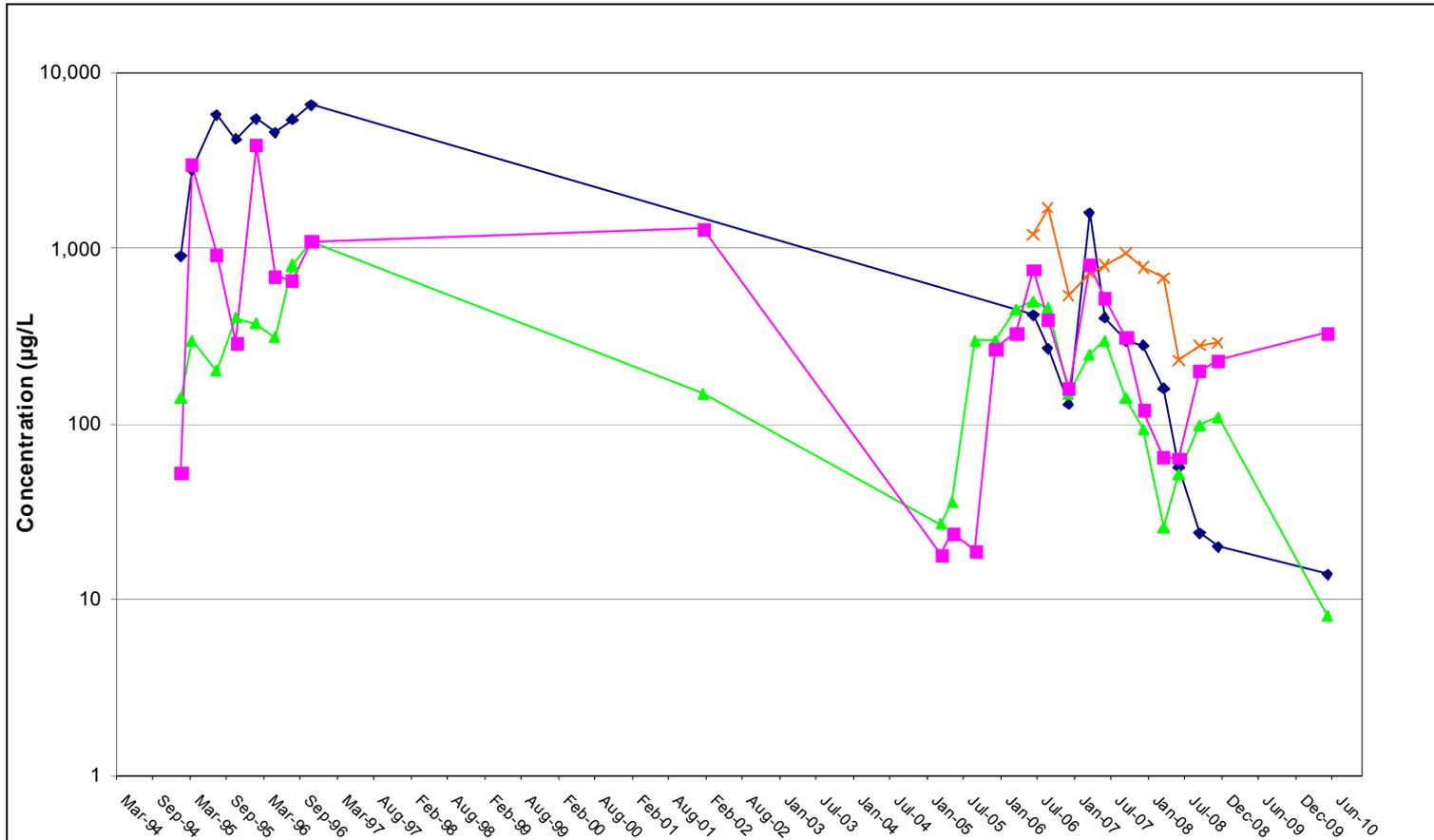
- The pump and treatment system at the site became operational August 2, 2010 and commenced continuous operations on August 25, 2010.
- Samples of the influent, the water from EW-101, are collected and analyzed twice per month for the first two months of operation and then will be collected monthly.
- Samples of the effluent, after treatment by the first carbon vessel, are collected at the same frequency.
- Extraction well EW-101 is open to the aquifer from a depth of 125 feet to 185 feet below land surface. The initial samples of the influent from EW-101 are detecting PCE at a concentration averaging 81 parts per billion. Samples of the effluent are non detect for all volatile organic compounds.

- During the third quarter of 2010, the pump and treat system operated at a rate of approximately 100 gallons per minute, and averaged 142,000 gallons per day.
- Using the above concentration and number of gallons pumped, it is estimated the pump and treat system removed about 3.5 pounds of PCE during the third quarter of 2010.



- During May and June 2010, ADEQ conducted a round of groundwater sampling at the site. During the second quarter of 2010, PCE concentrations increased more than 10 percent from the fourth quarter 2008 sample results in wells MW-102, MW-104S, and MW-108. PCE concentrations decreased in all other wells.
- The groundwater flow direction remained to the west-southwest.

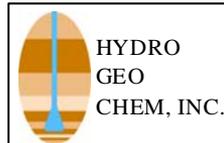




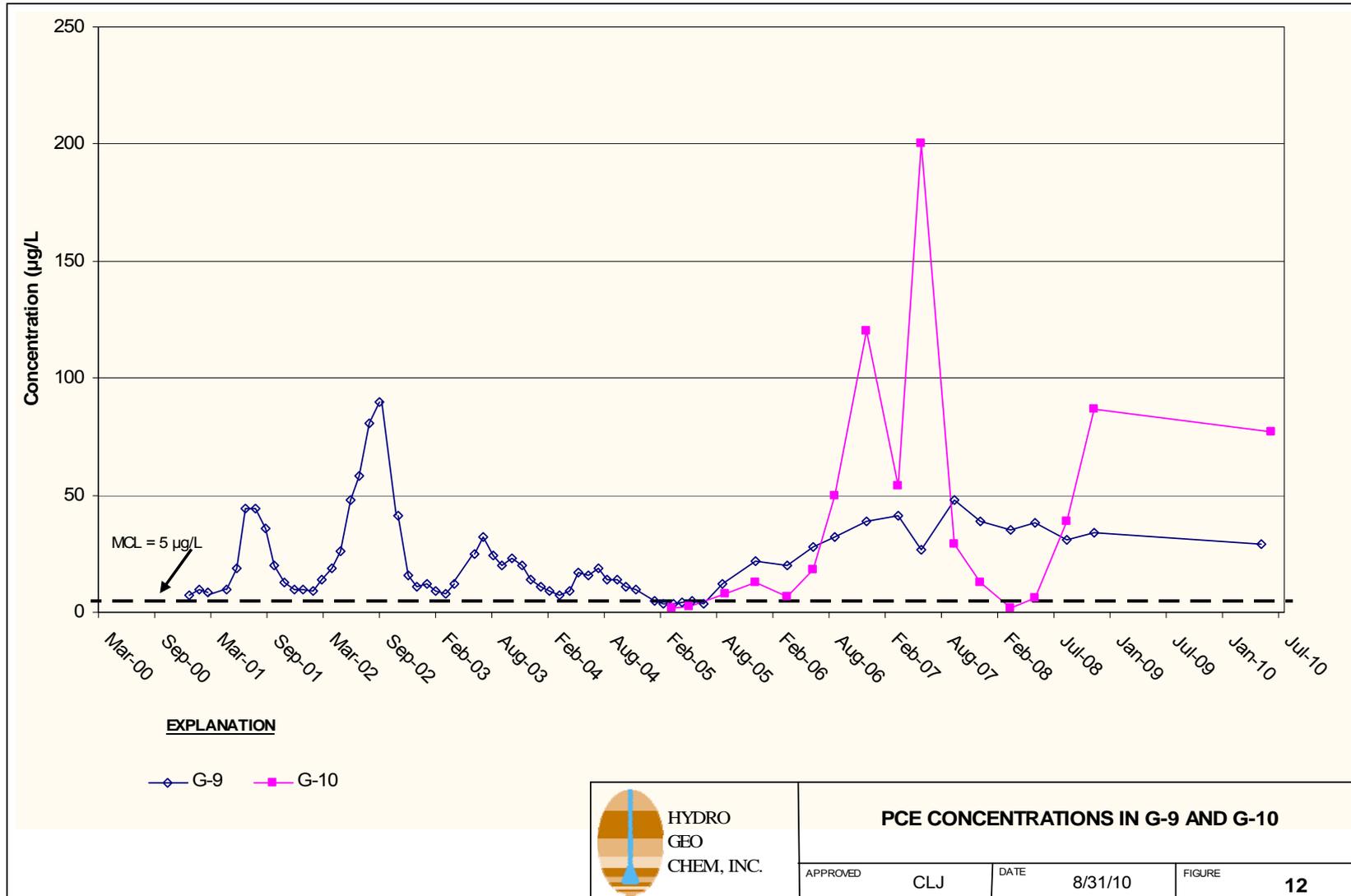
**EXPLANATION**

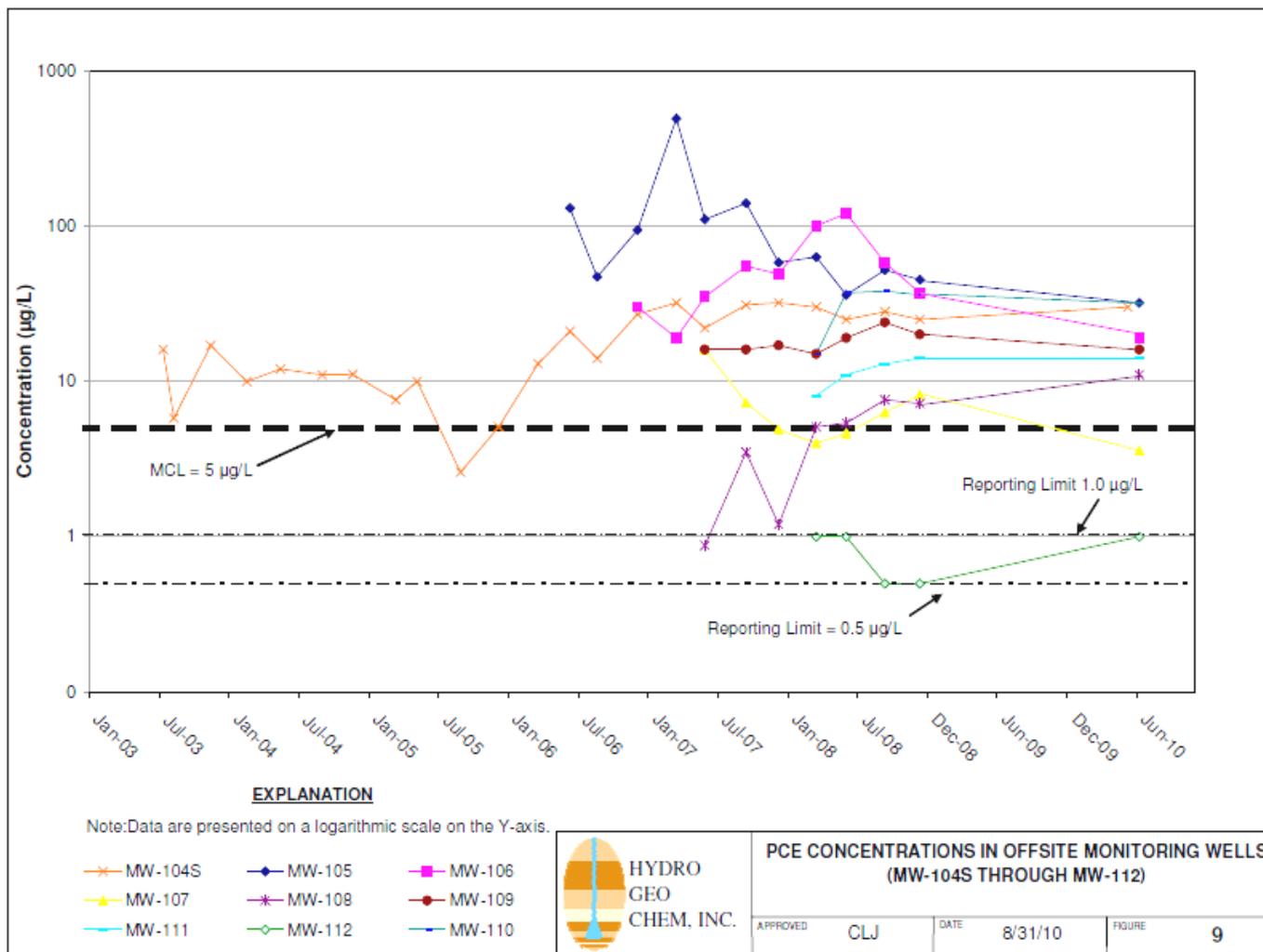
Note: due to higher PCE concentrations, data are presented on a logarithmic scale on the Y-axis.

- ◆ MW-101
- ▲ MW-103
- × EW-101
- MW-102



**PCE CONCENTRATIONS IN ON-SITE MONITORING WELLS  
(MW-101 THROUGH MW-103 & EW-101)**







- During fiscal year 2011, ADEQ plans to collect monthly water level measurements from the wells near the extraction well, and collect water levels from the entire monitor well network twice. Hydro Geo Chem will evaluate and begin to prepare a report on the effectiveness of the extraction well in January 2011.
- Groundwater samples will be collected from monitor wells near the site four times during the fiscal year and all other wells will be sampled twice during the fiscal year.
- Samples will be collected as needed to meet the reporting requirements for the Salt River Project, the Town of Gilbert, Arizona Pollutant Discharge Elimination System (AZPDES) permit and Arizona Department of Water Resources permit to Withdraw Poor Quality Groundwater.
- Conduct regular sampling to monitor carbon usage in both the liquid and vapor phase treatment systems.

Questions?

## Contact Information

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