

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

**April 28, 2014 at 6 p.m.  
McQueen Park Activity Center  
510 N. Horne St., Gilbert, Arizona**

**FINAL MINUTES**

CAB members present: Pacer Udall, Mike Evans, Bruce Friedrich,

ADEQ Staff in attendance: Scott Goodwin, Project Manager; Wendy Flood, Community Involvement Coordinator

Members of the public present:, Andi Welsh, Town of Gilbert; Dean Schmaker; Patricia Jordan, Town of Gilbert; and

---

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

**1. Call to Order/ Introductions**

Mrs. Wendy Flood greeted all attendees. The meeting was then turned over to the Co-chair, Mr. Pacer Udall.

**2. Acceptance and/or changes to October 16, 2013 and February 25, 2013 minutes -**

The minutes were approved as written.

**3. Discussion regarding letter sent to the Town of Gilbert Environmental Committee CAB Co-Chair**

Mr. Udall summarized the letter sent, the presentation CAB members gave to the Committee with the open to increase awareness and community information attendance. He thanked the members of the Town and the committee present at the meeting. He offered to send out a copy to members.

**4. Presentation and Discussion of fourth quarter 2013 data, current status and activities at Cooper and Commerce and the WQARF Process.**

**See Presentation Below**

Mr. Goodwin covered the items presented in that attached presentation. He stated that ADEQ needs to evaluate if the SVE is economical to keep running. For the soil area, excavation may be considered or another treatment method.

Discussion was held regarding the proposed APP permit by the Town. Mr. Goodwin also discussed Town of Gilbert well R-1, and other Town wells pumping levels and other well specifics. SRP well that is west of the site is the biggest issue at the moment to try to protect. The SRP well is not pumping at the moment. Mr. Goodwin and the CAB also discussed the changes in groundwater flow over time.

Mr. Goodwin closed the presentation by going over the WQARF process, how Cooper and Commerce relates to the process and the timeline of the project.

#### **5. Call to the Public -**

Mr. Friedrich asked when Well 108 would be sampled next and asked for results at the next meeting.

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

The CAB decided to meet when the Remedial Investigation goes out for public comment.

#### **7. Adjournment**

Meeting adjournment

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

CAB Meeting

April 28, 2014

## Soil vapor extraction/ air sparge system

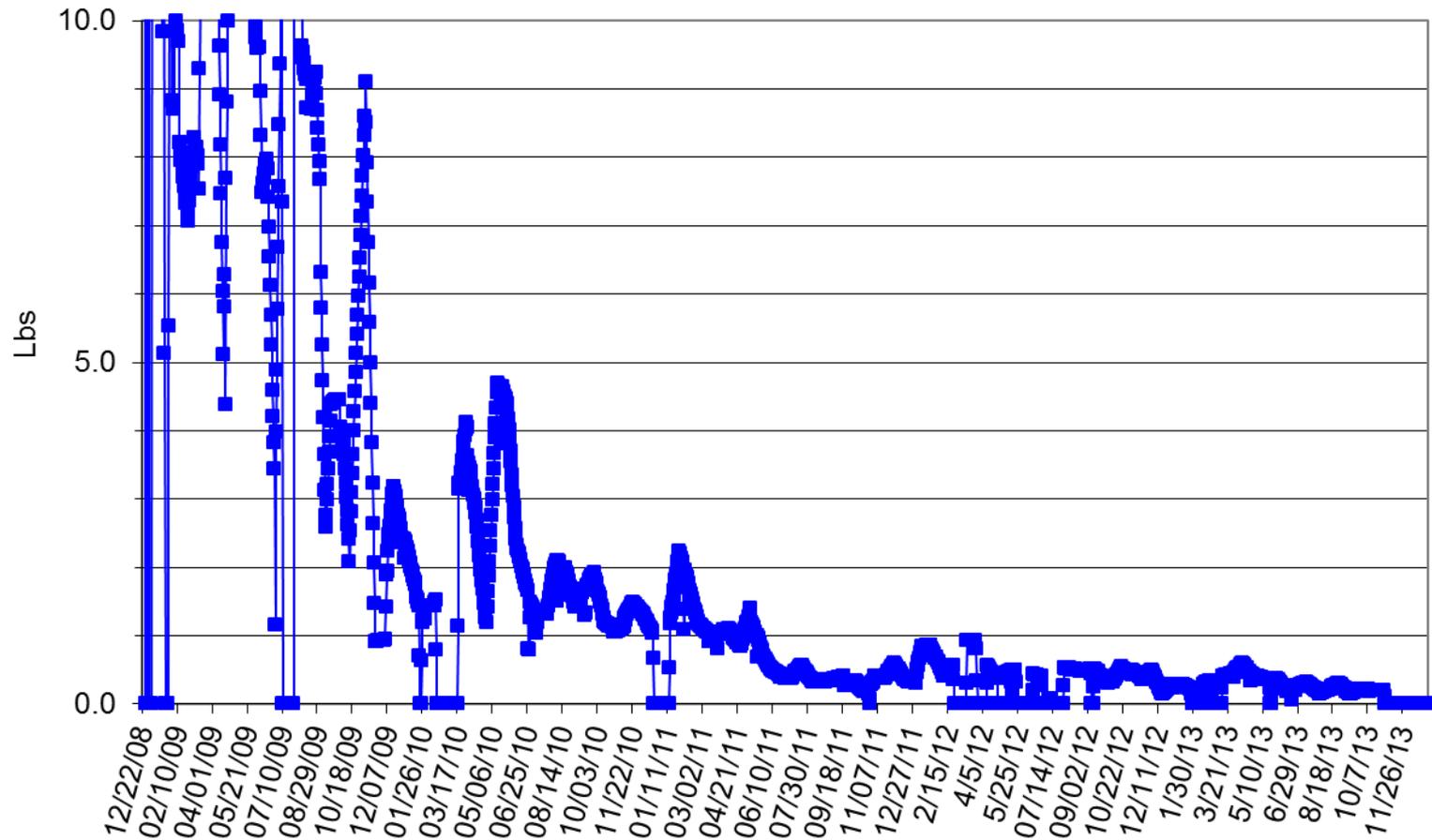
- The soil vapor extraction, air sparge (SVE/AS) system continues to operate at the site.
- During the fourth quarter of 2013, the system only ran during the month of October. The system was shut down for an extended rebound test from November through February 2014. At startup again in February, there was little increase in soil vapor concentrations indicating residual vapor in the subsurface will be difficult to recover.
- The SVE/AS system removed an average of 0.2 pounds of tetrachloroethene (PCE) per day.

## Soil vapor extraction/ air sparge system

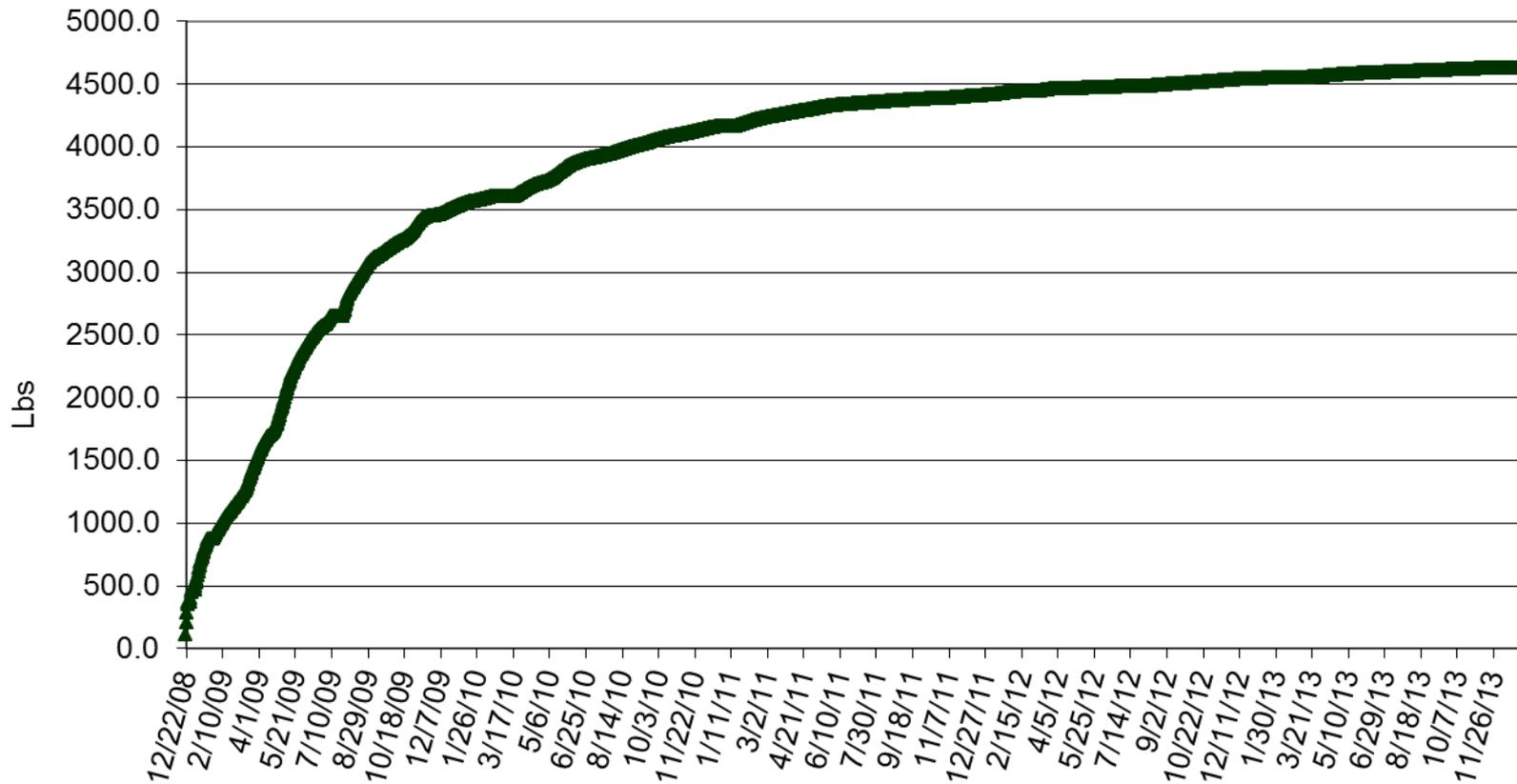
- Through the fourth quarter of 2013, the system has removed approximately 4,614 pounds of PCE or approximately 342 gallons since operations began in December 2008.
- Additional methods to remediate the deep soils (60-70 feet below land surface) in the area of the dry well will be explored further in fiscal year 2015.

# Soil vapor extraction/ air sparge system

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



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

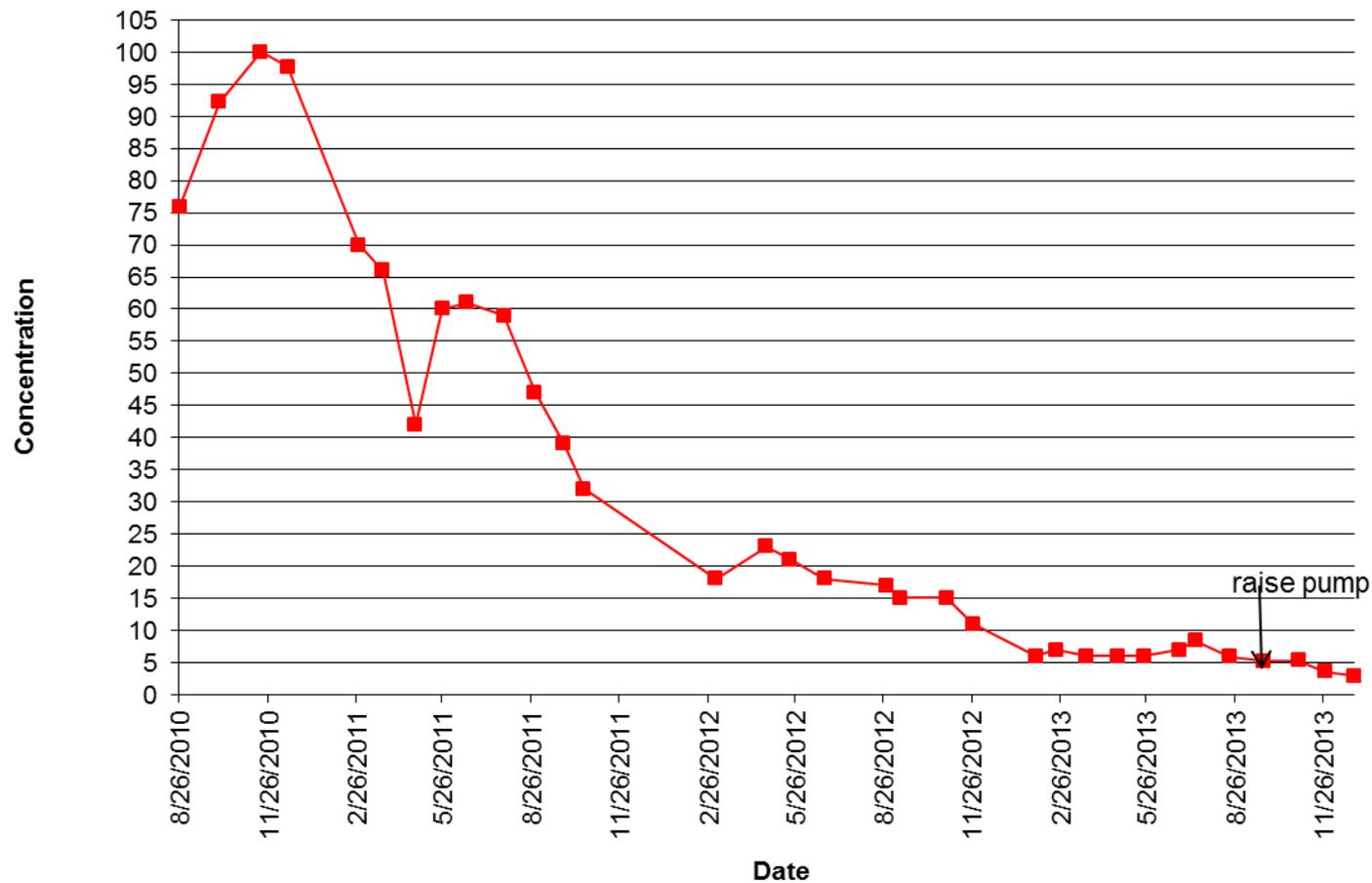


During the fourth quarter of 2013:

- The groundwater pump and treat (P&T) system operated at an average of 124 gallons per minute (gpm).
- 15,395,887 gallons were treated during the quarter. Over 151 million gallons treated since operations began in 2010.
- PCE influent concentrations from the extraction well, EW-101, averaged 4 parts per billion (ppb) over the quarter. The Aquifer Water Quality Standard (AWQS) for PCE is 5 ppb.
- Based on data collected from MW-102 since April 2012, in December 2013 the pump in EW-101 was raised 30 feet, to a depth of 145 feet, in an attempt to capture higher concentrations.

- During the fourth quarter of 2013, the P&T system recovered approximately 0.7 pounds of PCE.
- Since operations began in August 2010, the P&T system has recovered approximately 39 pounds of PCE.

### Influent PCE Concentration in ppb



- During October 2013, ADEQ conducted a full round of groundwater sampling from the monitoring well network.
- PCE concentrations in the on-site wells remained similar to first quarter 2013 concentrations. PCE concentrations in on-site monitor wells continue to decline and range from 0.64 to 13 ppb.
- The concentration of PCE in G-10 during the fourth quarter of 2013 was 1.6 ppb, continuing to decline. PCE concentrations in other wells remained stable with highest concentrations present in MW-106 at 40 ppb.

- Five new shallow wells and one deep well installed in third quarter of 2013.
- MW-119D sample detected PCE at a concentration of 4.2 ppb and chloroform at a concentration of 320 ppb. The AWQS for chloroform, expressed as total trihalomethanes, is 100 ppb. (1st quarter 2014 sample detected PCE at a concentration of 7.3 ppb and chloroform at 23 ppb.)
- Soil vapor samples were collected from a depth of 10 feet during the installation of MW-115 through MW-117. No concentrations exceeded EPA's 2012 residential soil vapor screening levels for indoor air.



## Summary Table for Soil Vapor Screening Levels

Location	PCE Concentration	TCE Concentration	PCE Residential SVSL	TCE Residential SVSL
			313	14
MW-115	<3.39	<2.69		
MW-116	<17.0	<13.4		
MW-117	72.7	5.37		

Soil vapor screening level (SVSL) =  

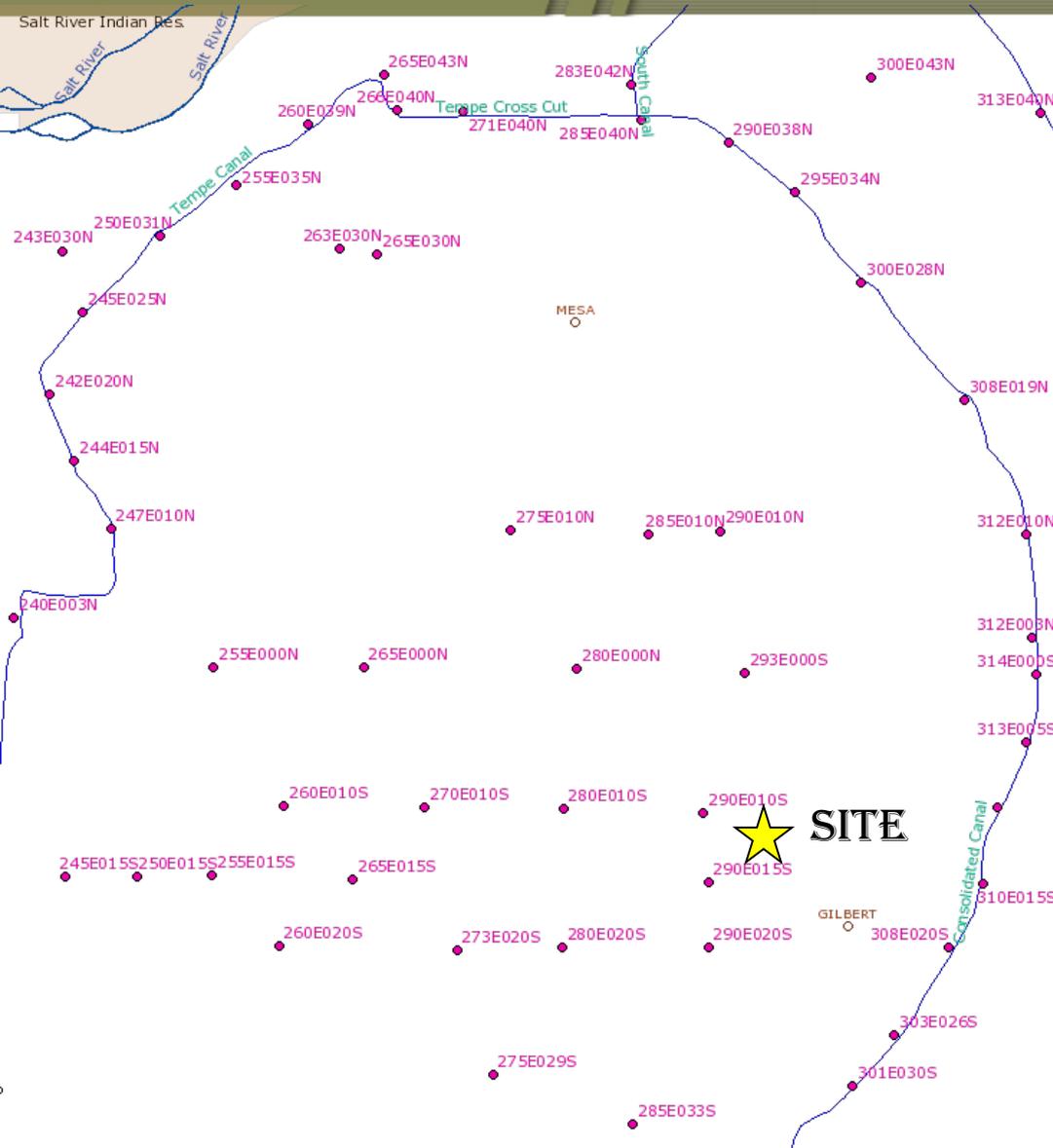
$$\frac{\text{The allowed indoor air level (from EPA Regional Screening Levels)}}{\text{The attenuation factor}}$$

Attenuation factor from EPA 2012 guidance = 0.03

# 4th Quarter 2013 Groundwater Sampling

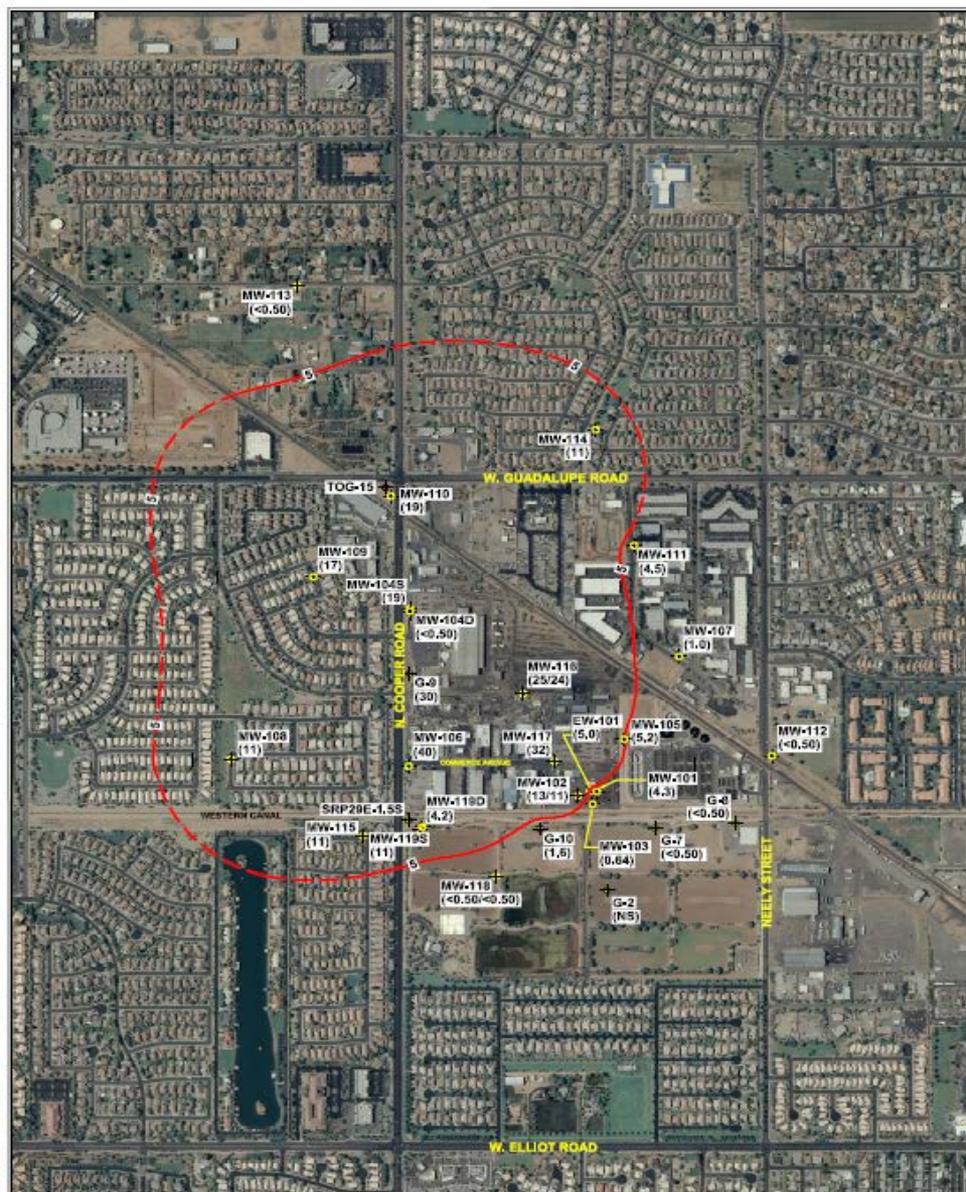
- 4<sup>th</sup> quarter continues to indicate flow in a northwesterly direction.
- Water levels continue to decline. Declined approximately 4 feet since 1<sup>st</sup> quarter 2013.



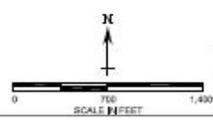


- In November 2012, SRP announced their intent to return to maximum pumping.
- SRP is pumping from wells along the Tempe, Consolidated and Eastern canals located 5 to 6 miles north of the site. As many as 22 wells with individual wells pumping 2,000 to 5,000 gpm.

# 4th Quarter 2013 Groundwater Sampling



- Legend**
- MW-102 (13) Well for MW and PCE Conc. Level In (µg/L)
  - G-1 Well With Dedicated Pump (Not Currently Pumping)
  - TOG-15 Well With Dedicated Pump (Currently Pumping)
  - EW-101 Extraction Well
  - Red line PCE Conc. Contour In (µg/L) (shown in where listed)
  - (NS) Not Sampled
  - <0.50 Below Detected Limits



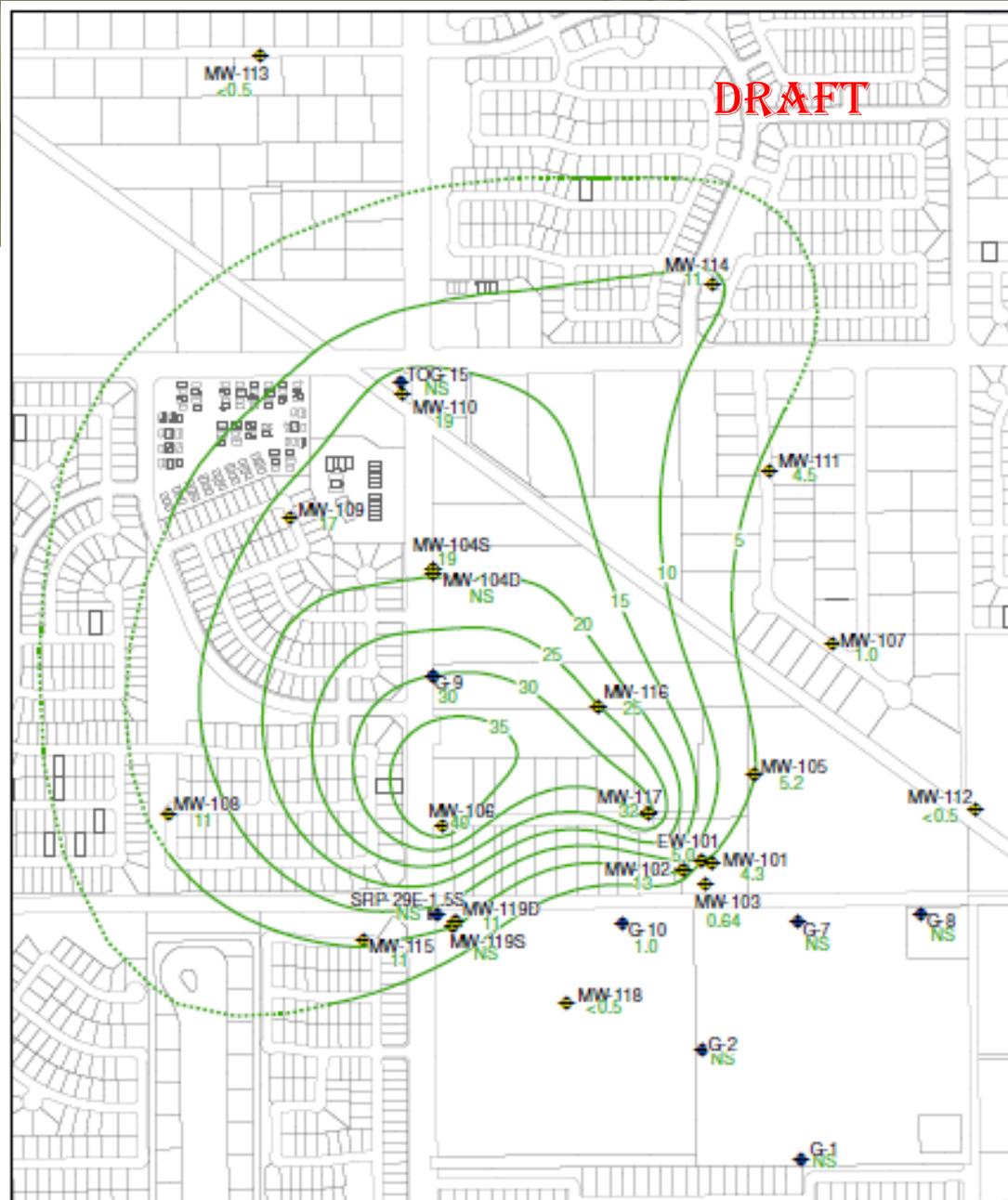
**HYDRO  
GEO  
CHEM, INC.**

PCE CONCENTRATIONS IN GROUNDWATER  
BASED ON OCTOBER 2013 EVENT TEST RESULTS  
COOPER AND COMMERCE WQAR SITE

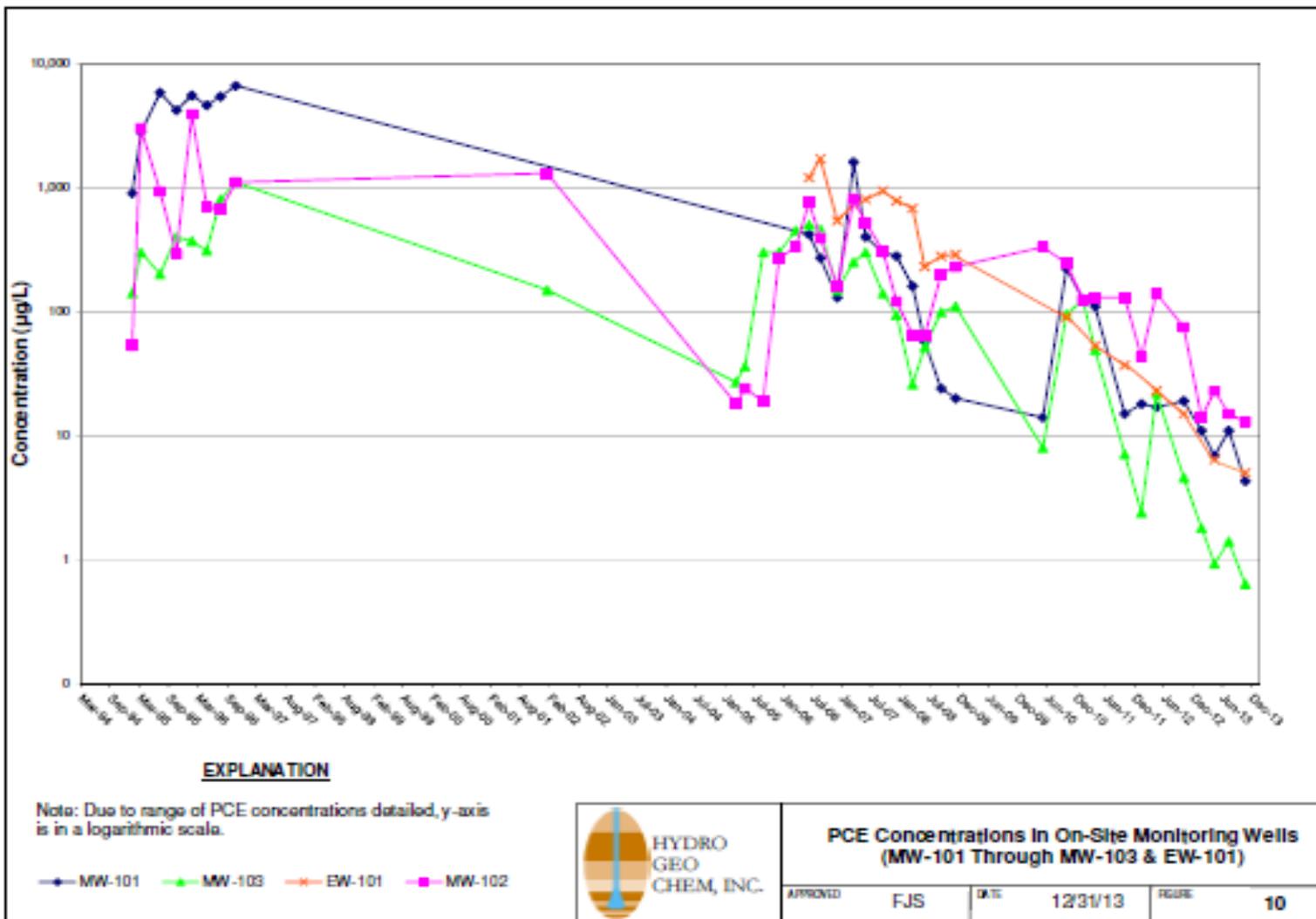
Prepared By	Date	Drawn By	Date	Proj. Name	Page
PJS	11/20/13	JMA	11/20/13	2010022066A	2

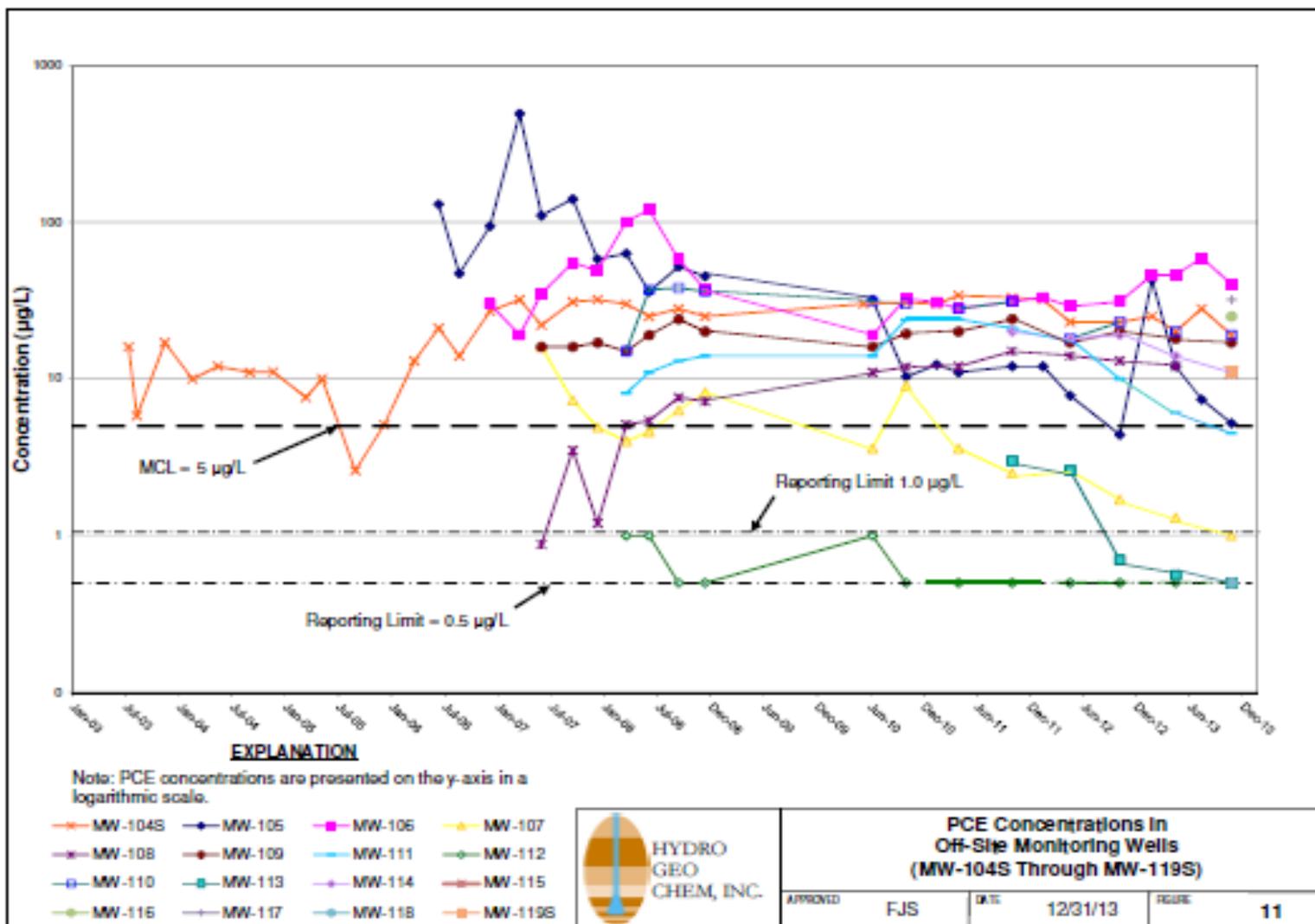
DRAFT

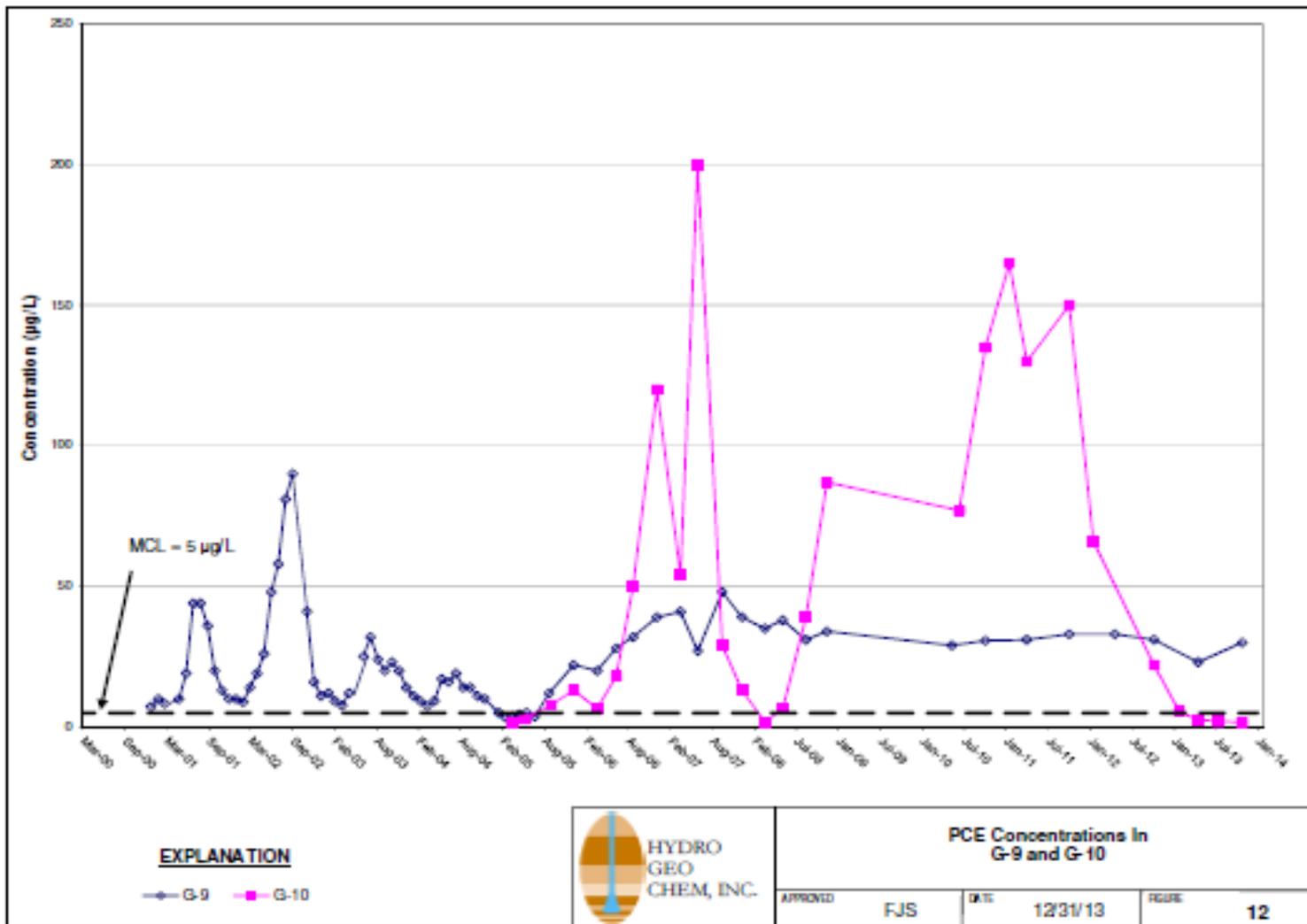
# 4th Quarter 2013 Groundwater Sampling

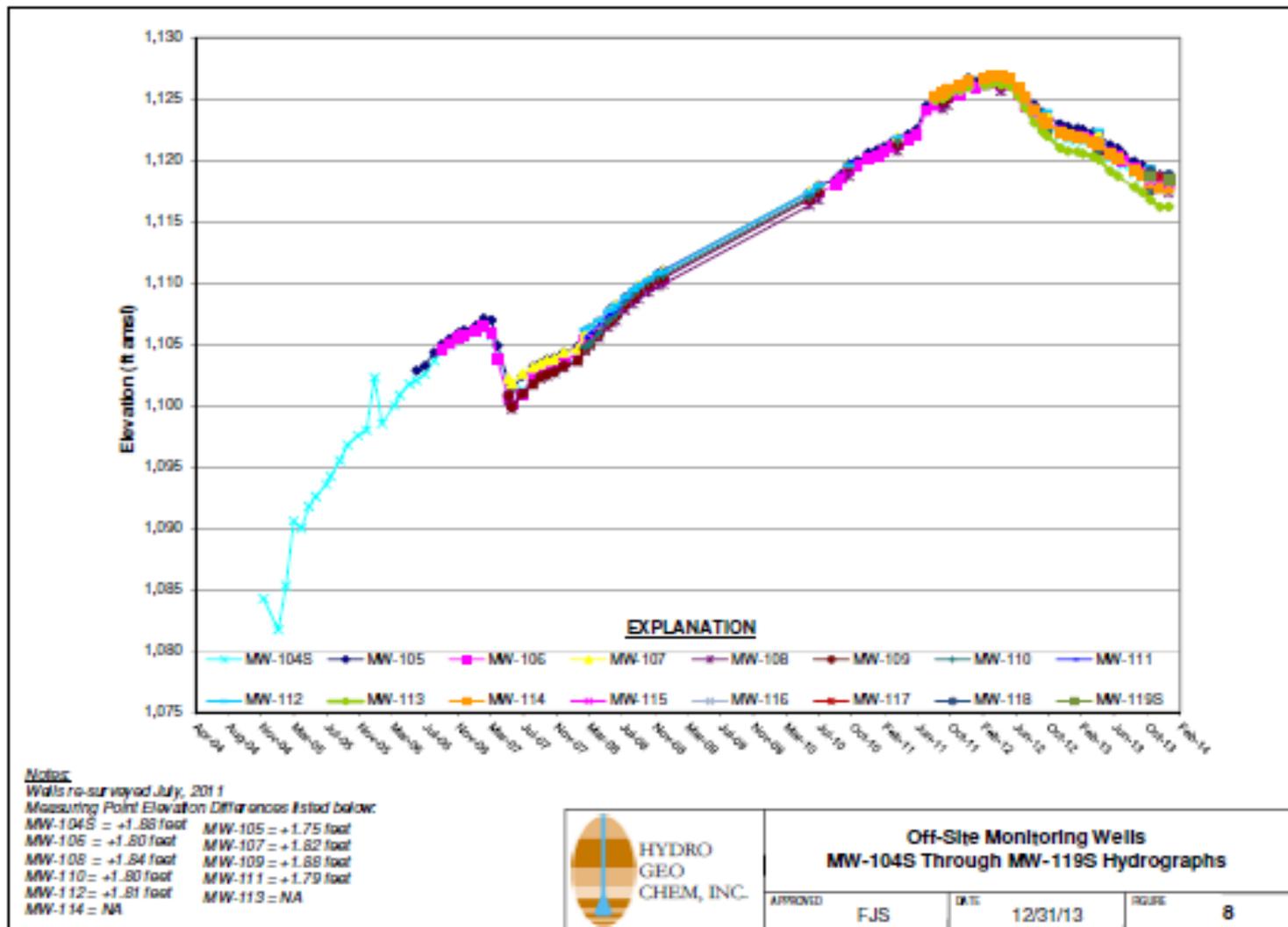


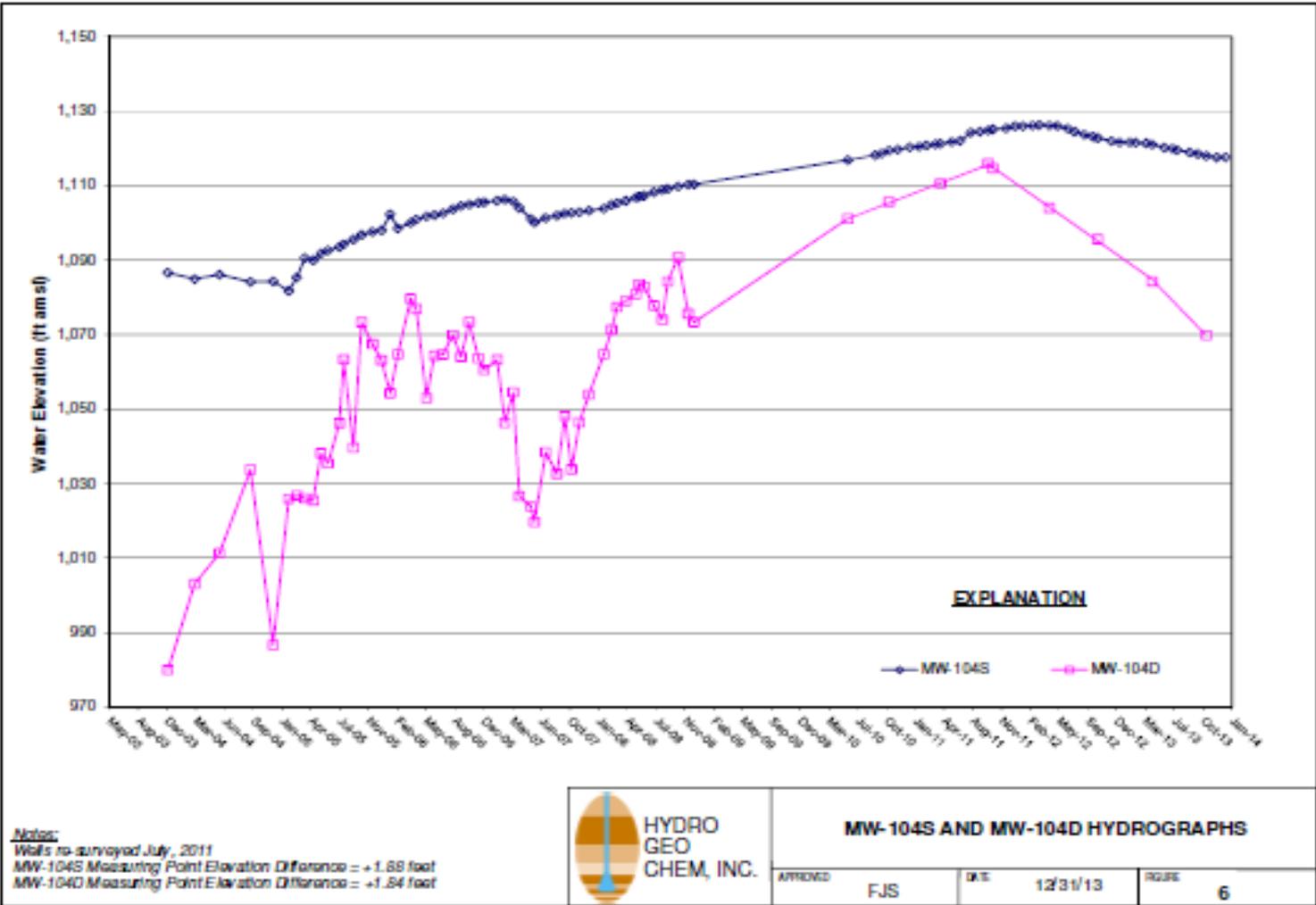
MW-109 Well ID and PCE Concentration (µg/L)	0 50 100 Foot		PCE CONCENTRATION CONTOUR MAP COOPER & COMMERCE WHARF SITE GILBERT, ARIZONA		
			Approved MJB	Date 03/18/14	File 201000208G.mxd

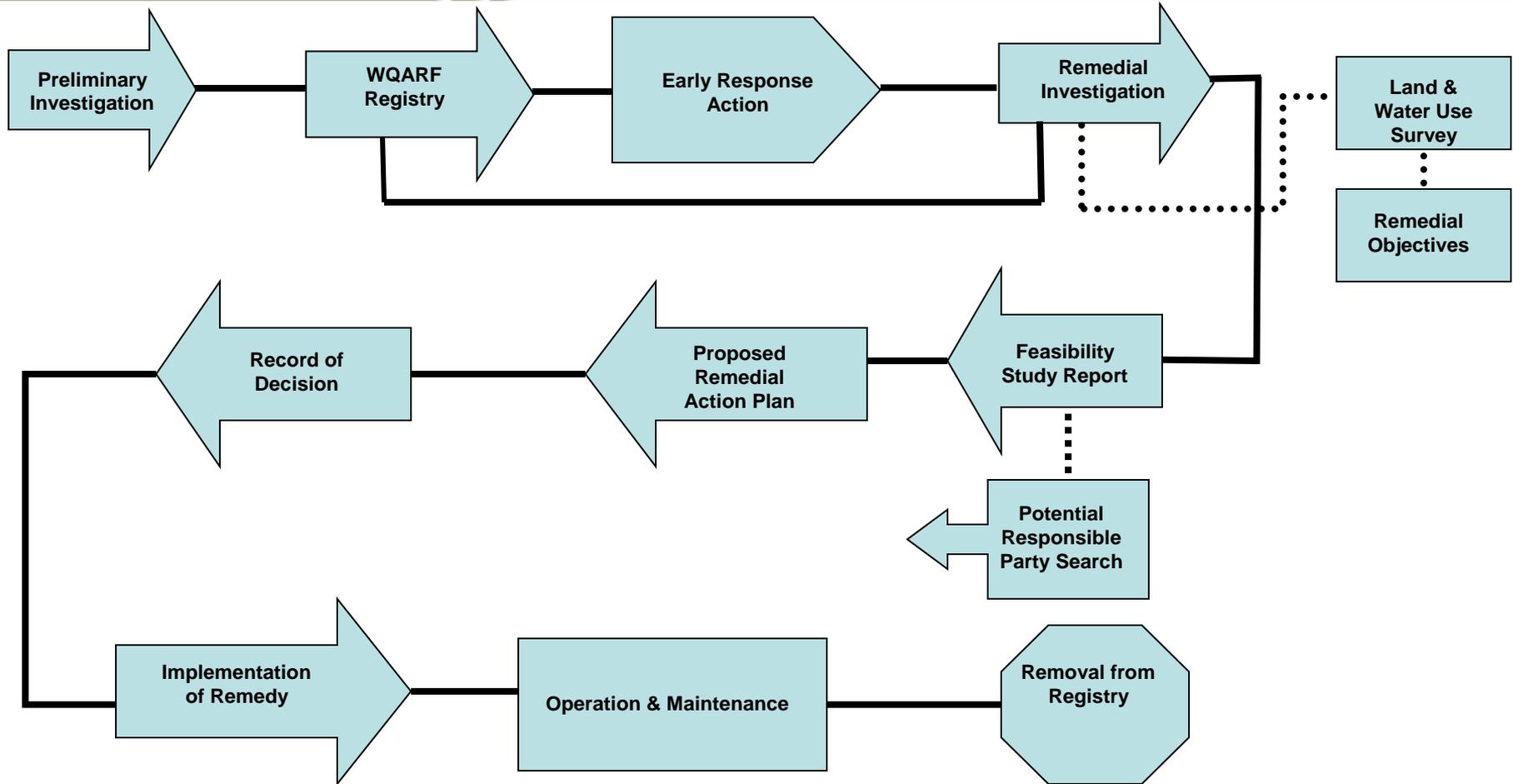












**WQARF PROCESS**

Questions?

## Contact Information

Scott Goodwin, Project Manager  
Remedial Projects Section

[sdg@azdeq.gov](mailto:sdg@azdeq.gov)

(602) 771-4452, 1800-234-5677 ext 771-4452

Wendy Flood, Community Involvement Coordinator  
Remedial Projects Section

[wv1@azdeq.gov](mailto:wv1@azdeq.gov)

(602) 771-4410, 1800-234-5677 ext 771-4410