

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

**December 8, 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, Carrie Lewis,

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

Members of the public present: Patricia Jordan, Town of Gilbert; Kirk Craig, ADEQ Consultant

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. Mike Evans.

2. Acceptance and/or changes to April 28, 2014 minutes -

Tabled till next meeting.

3. Presentation and Discussion of current status and activities at the Cooper and Commerce WQARF site – Scott Goodwin, ADEQ

See Presentation Below

Mr. Scott Goodwin presented information regarding the soil vapor extraction and pump and treat systems.

4. Review and solicit Public comments on the Draft Remedial Investigation Report(RI)

Mr. Goodwin continued by summarizing and showing maps covering information in the remedial investigation. Mr. Goodwin explained how well inventories are done for the purpose of the RI.

Mr. Goodwin then discussed the various data gaps at the site with CAB and answered questions about groundwater depth in relation to well depth and contamination location including the western and northwestern extent. He also covered plans to address the gaps for fiscal year 15.

Ms. Flood asked the CAB and there were no comments on the RI but felt it accurately reflected the conditions and all the data gaps discussed seemed reasonable for the path forward.

An audience member asked if arsenic was considered. Mr. Goodwin stated there is a bit of naturally occurred and it does not look like the site added any arsenic. It has been found but not at any considerable levels. It will be considered when looking at cleanup standards and goal if needed. Groundwater contamination is more of a solvent issue, soil is more metals.

Audience member asked if there were any effects to gardens, Mr. Goodwin stated there was not.

5. Solicitation of Remedial Objectives

Mr. Goodwin covered and reviewed remedial objectives. Discussion was held regarding water standards, surrounding wells and water resources. Mr. Evans commented that he wants to see the groundwater (lower aquifer) cleaned so that it can be used for drinking water.

Mr. Goodwin discussed that there is not a threat from the soil at the site, vapors have been investigated and will be in the future. Most of the soil has already been cleaned up. The CAB commented that they wanted to see the soil at the site to non-residential standards. Mr. Goodwin stated there could be restrictions added for surrounding parcels in response to a question. Soil currently used for residential (off-site) is protected for residential use.

An objective was offered by Mr. Goodwin for the upper aquifer referencing Town of Gilbert R-1, to protect the upper aquifer for current use and if and when for the future to drinking water; the CAB agreed.

6. Call to the Public -

None

7. Future Meeting and Agenda Discussion

The CAB decided to meet in February (or when the RO report is ready for comment) and then later in the fall. Site update, ground monitoring and RI/RO report will be covered.

8. Adjournment

Meeting

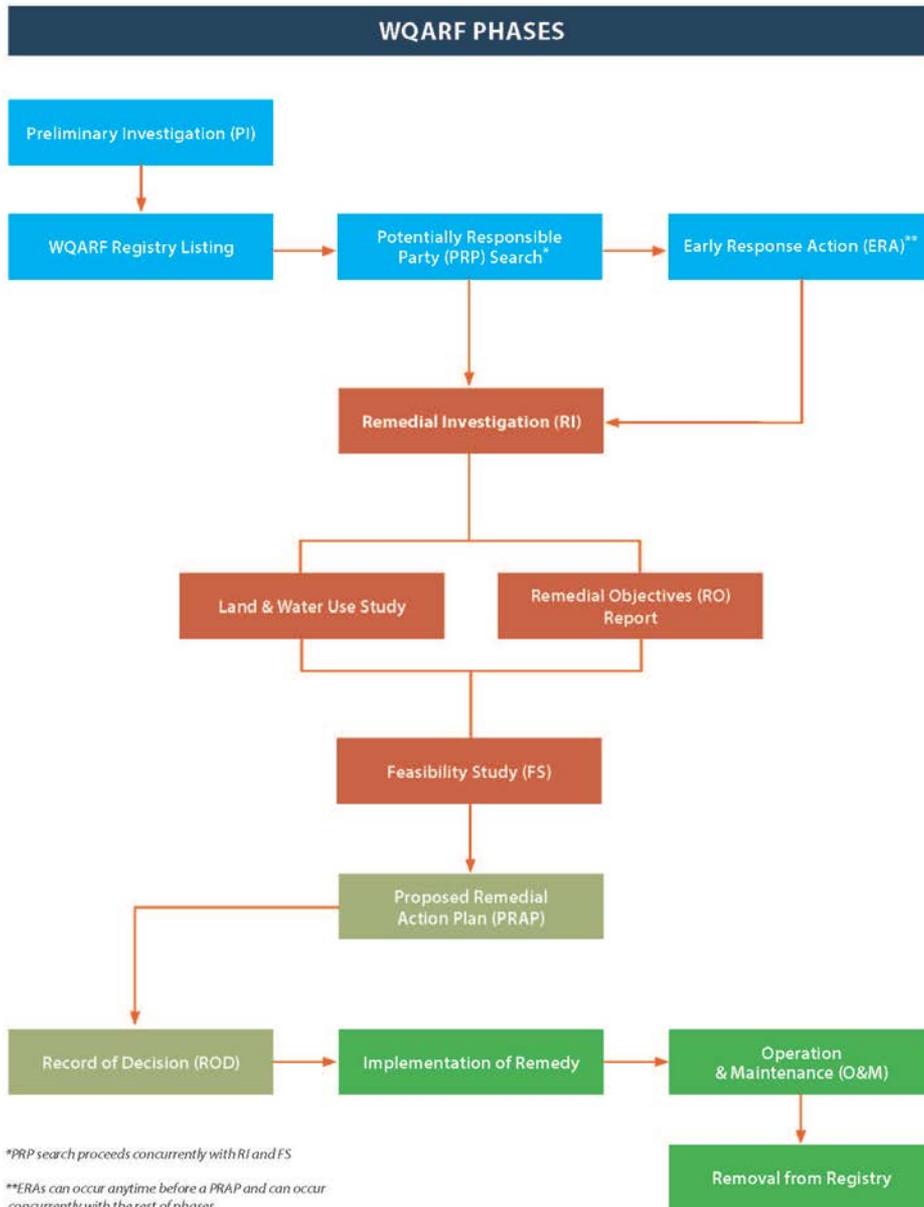


Cooper and Commerce Water Quality Assurance Revolving Fund (WQARF) Site

CAB Meeting

December 8, 2014

WQARF PROCESS



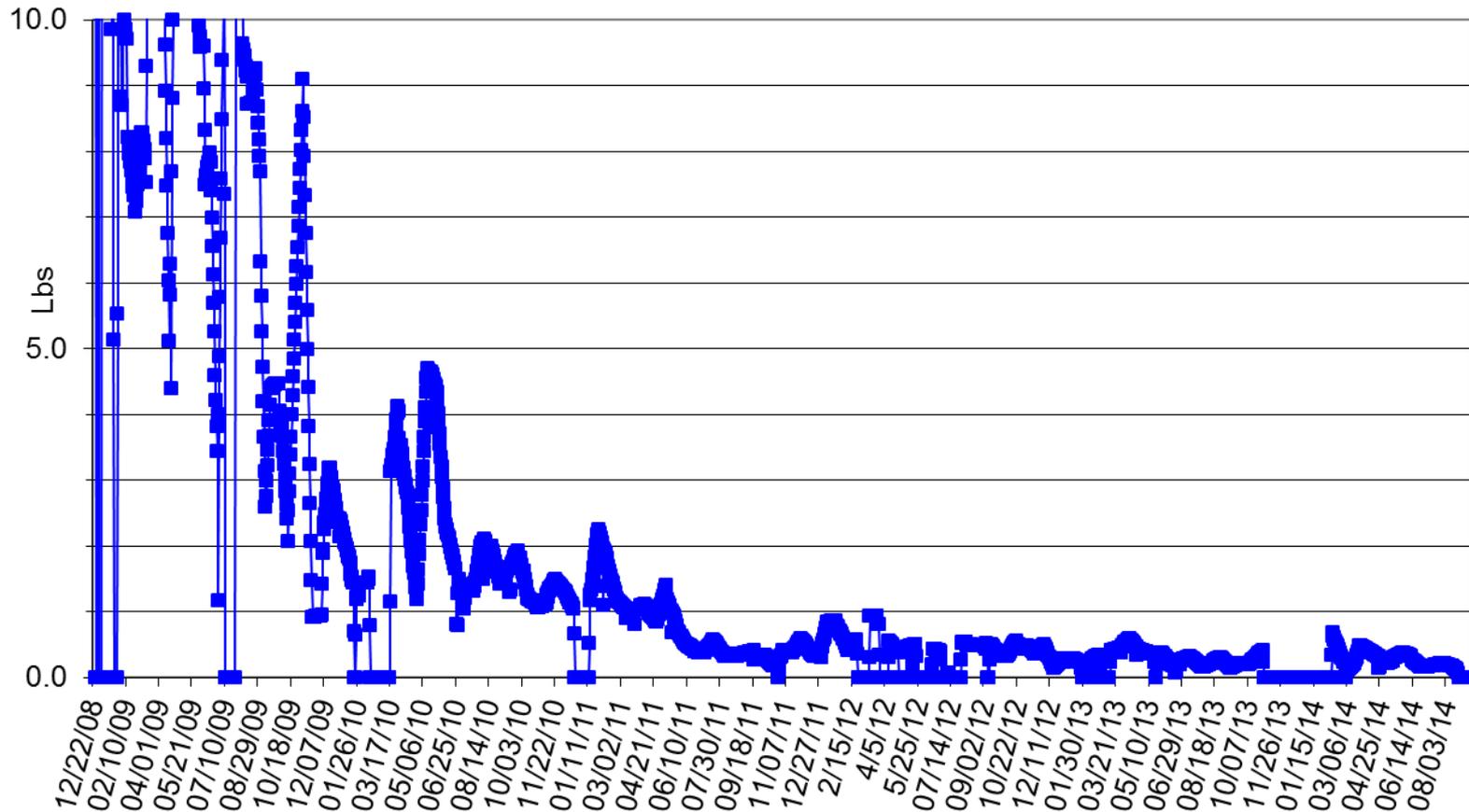
Soil vapor extraction/ air sparge system

- The soil vapor extraction, air sparge (SVE/AS) system was shut down during the third quarter of 2014.
- Volatile organic compound (VOC) recovery has been minimal since a rebound test was conducted. For the rebound test, the system is shut down for an extended period during late 2013 through Early 2014 . At startup again in February 2014, there was little increase in soil vapor concentrations indicating residual vapor in the subsurface will be difficult to recover.
- At the time of shutdown, the SVE/AS system was removing an average of 0.1 pounds of tetrachloroethene (PCE) per day.

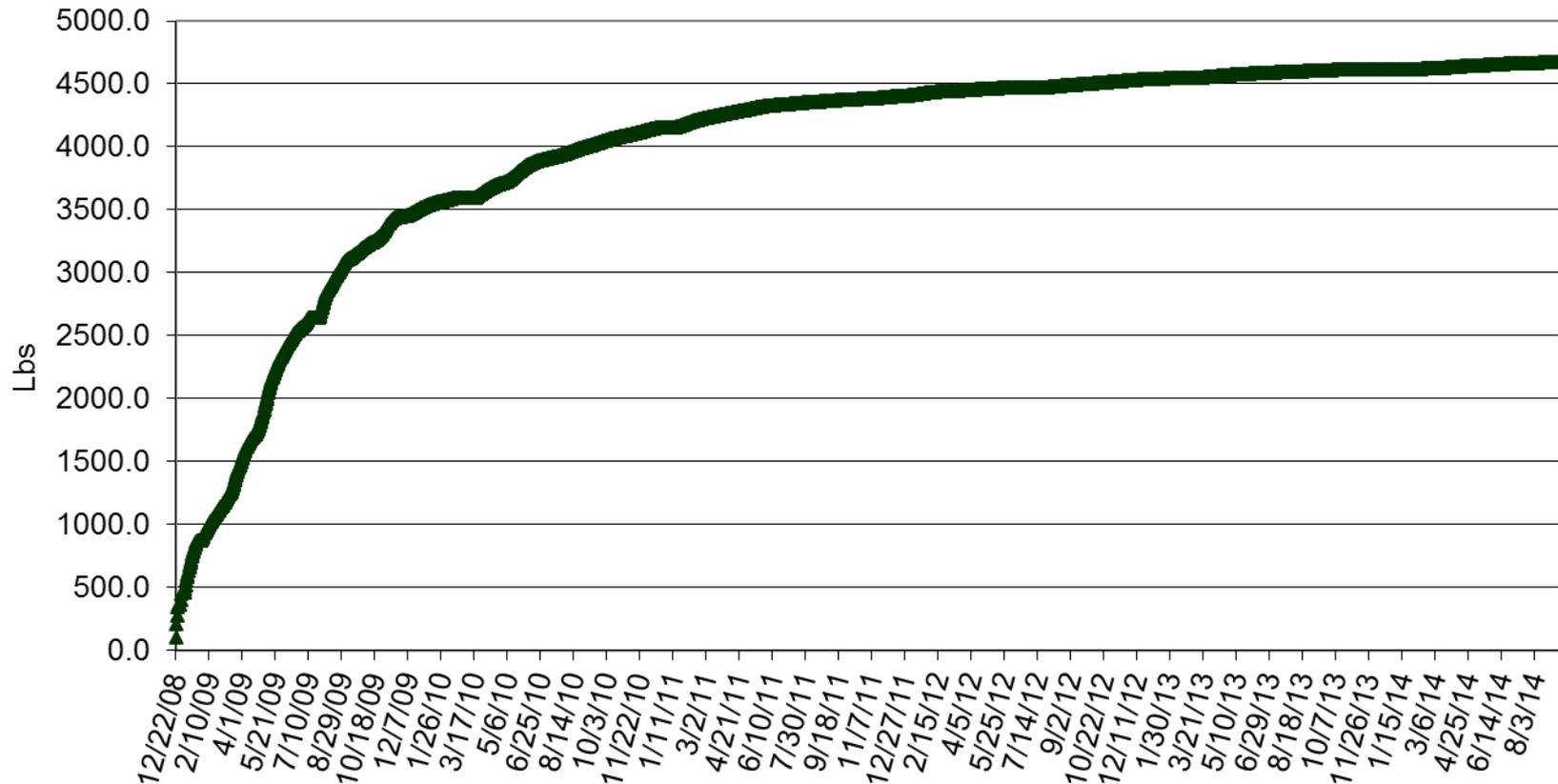
Soil vapor extraction/ air sparge system

- Through the third quarter of 2013, the system has removed approximately 4,665 pounds of PCE, or approximately 346 gallons, since operations began in December 2008.
- ADEQ moved to a best value procurement system at the beginning of fiscal year 2015 and a new contractor, Geosyntec, was assigned to the site. Geosyntec will evaluate the need for further remedial actions for the soils at the site in fiscal year 2015.

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



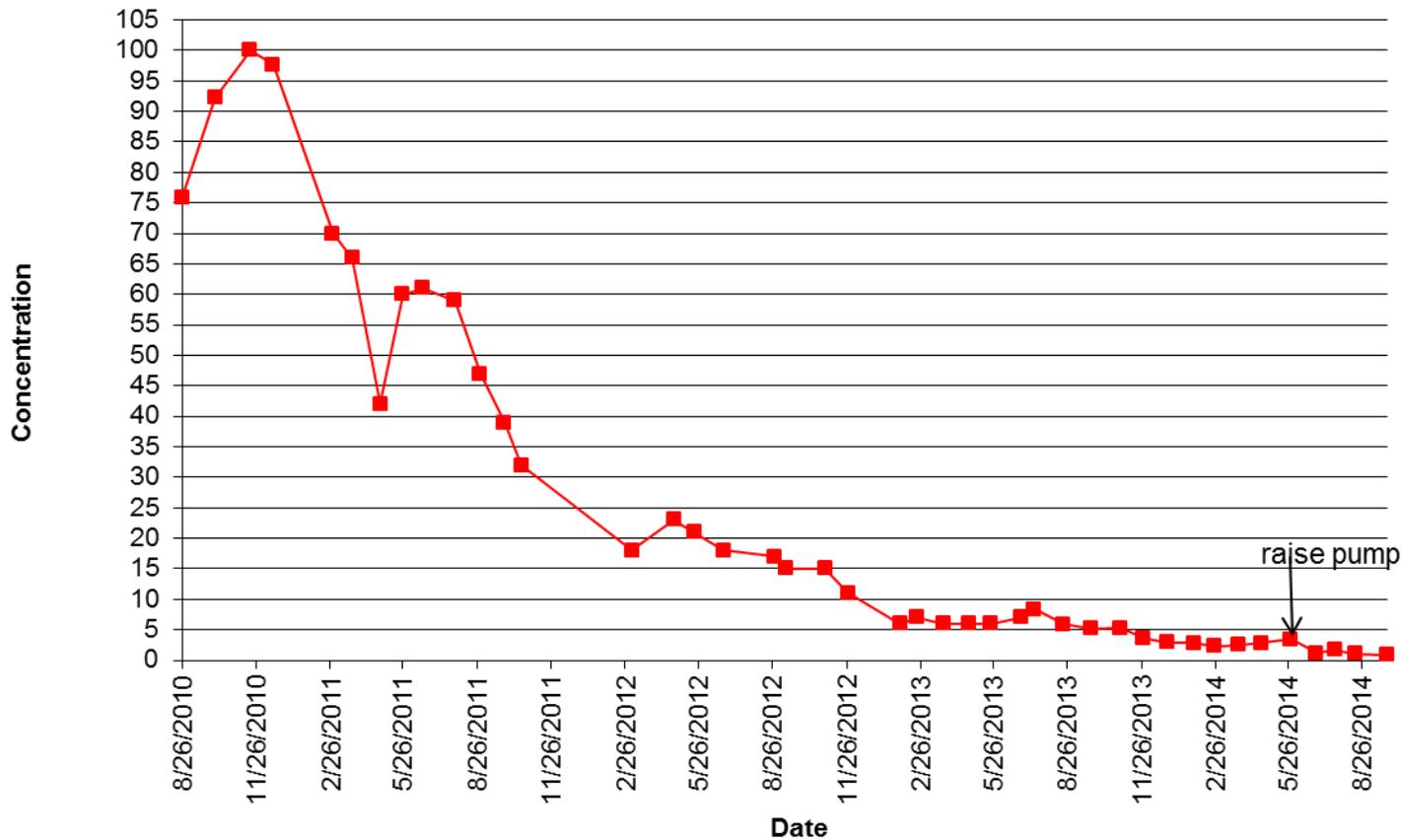
**Cooper and Commerce AS/SVE System
Cumulative PCE/TCE Recovery (lbs)**



- The groundwater pump and treat (P&T) system was also shut down at the conclusion of the third quarter of 2014.
- PCE influent concentrations from the extraction well, EW-101, averaged 1.2 parts per billion (ppb) over the third quarter. The Aquifer Water Quality Standard (AWQS) for PCE is 5 ppb.
- During the quarter, the groundwater P&T system operated at an average of 122 gallons per minute (gpm).
- 15,670,487 gallons were treated during the quarter. Over 193 million gallons treated since operations began in 2010.

- During the third quarter of 2014, the P&T system recovered approximately 0.3 pounds of PCE.
- Since operations began in August 2010, the P&T system has recovered approximately 41 pounds of PCE.
- Geosyntec will also evaluate the need to run the P&T system in FY 2015.

Influent PCE Concentration in ppb

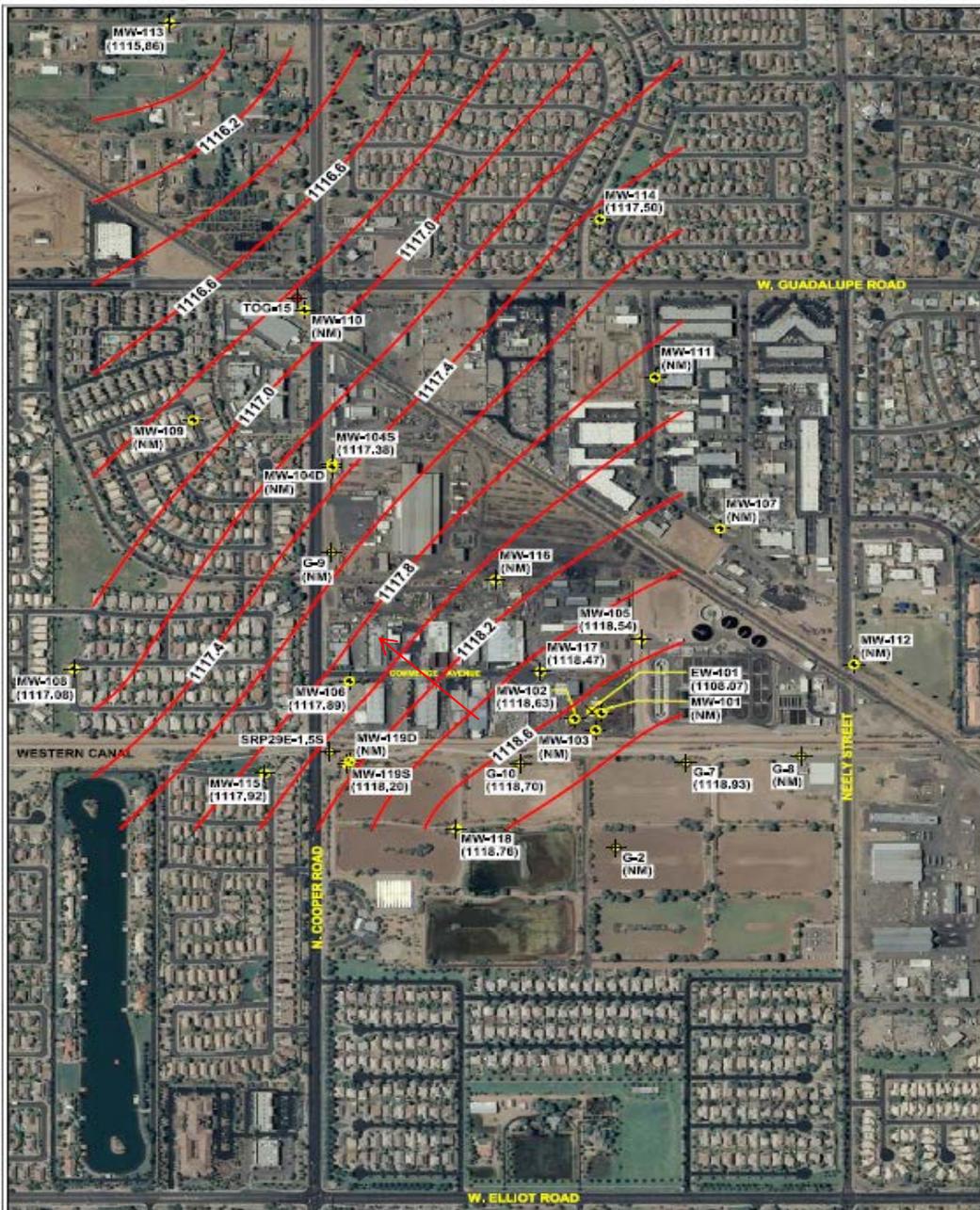


- During April 2014, ADEQ conducted a full round of groundwater sampling from the monitoring well network.
- PCE concentrations in the on-site wells remained similar to fourth quarter 2013 concentrations. PCE concentrations in on-site monitor wells continue to decline and range from <0.5 to 8 ppb.
- The concentration of PCE in G-10 during the first quarter of 2014 was 0.9 ppb, and continuing to decline. PCE concentrations in other wells remained stable with highest concentrations present in G-9 at 45 ppb.

- PCE concentration in MW-119D during the April 2014, sampling was 7.2 ppb. Concentrations since installation in the 4th quarter of 2013 have ranged from 4.2 to 7.3 ppb.
- Concentrations of chloroform have reached a much more reasonable concentration of 5.4 ppb, declining from the initial detection of 320 ppb.

Draft Remedial Investigation

- 2nd quarter 2014 continues to indicate flow in a northwesterly direction.
- Water levels continue to decline. Declined approximately 0.5 feet since 4th quarter 2013.



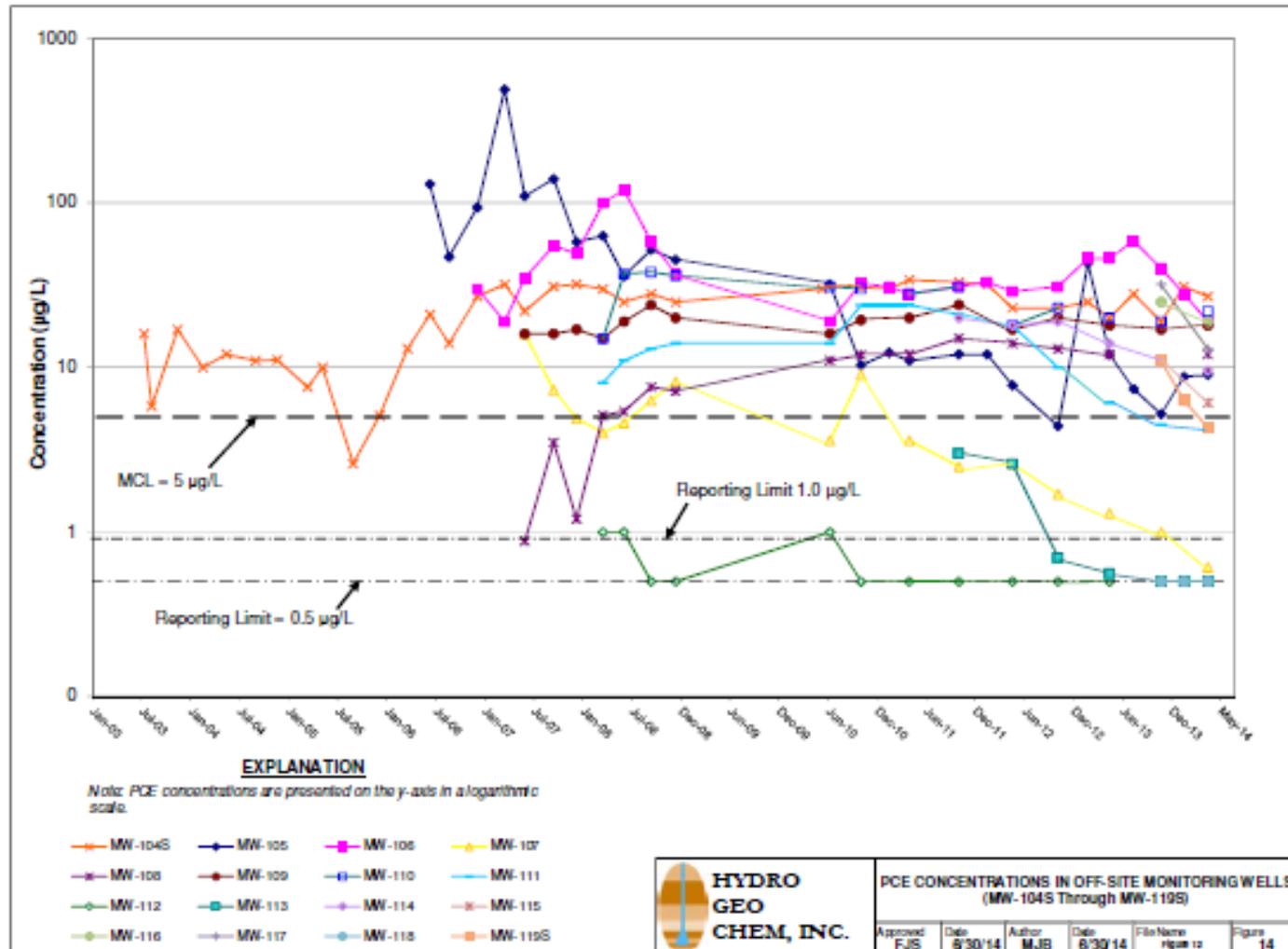
Legend

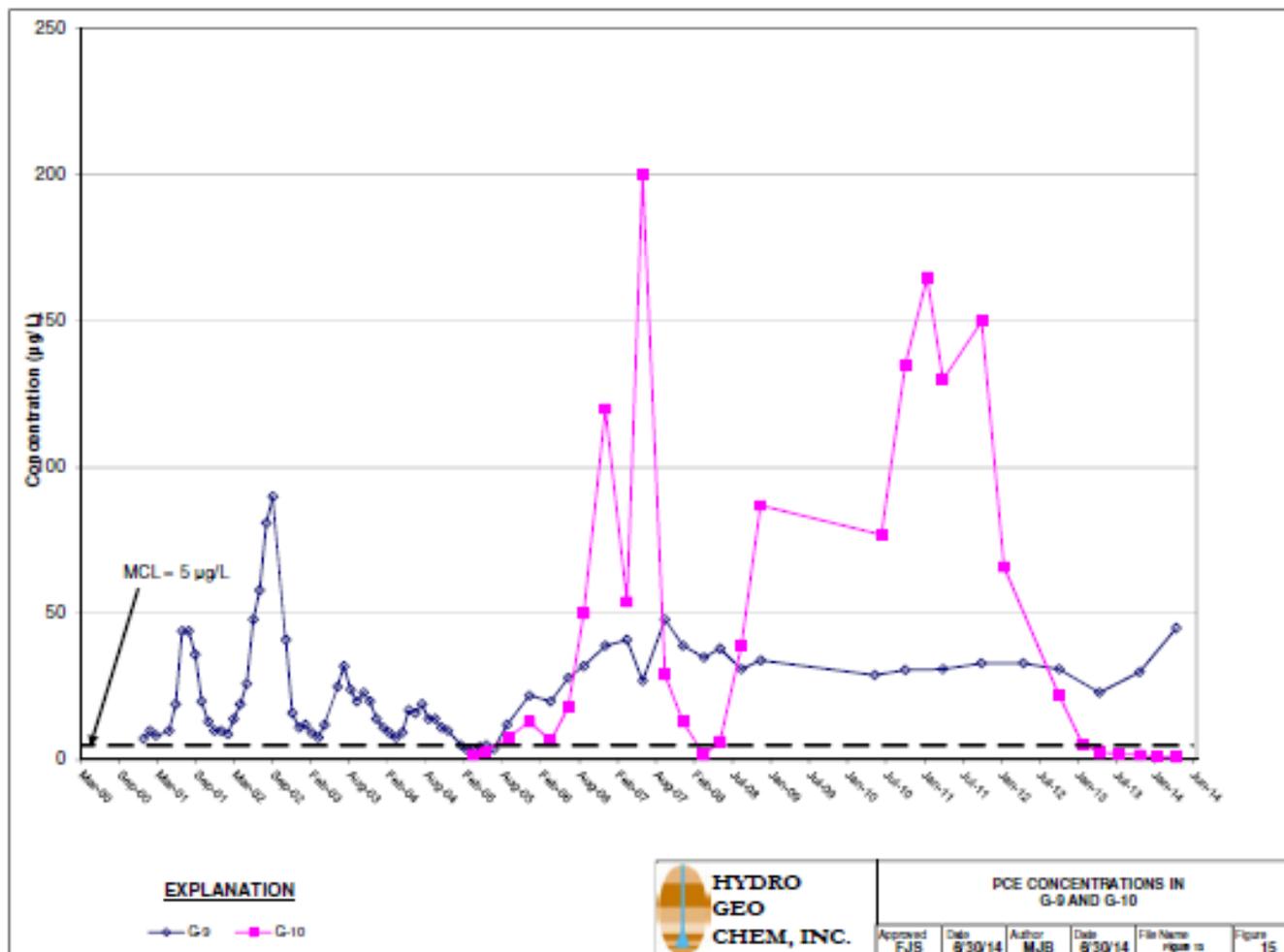
- MW-102 (1118.63) Monitor Well and Groundwater Elevation (1 arm)
- G-7 Well With Dedicated Pump (Not Currently Pumping)
- TOG-15 Well With Dedicated Pump (Currently Pumping)
- Extraction Well (SR-101 Well Pump Operating at Time of Measurement)
- SRV-101
- Groundwater Contour (10 arms)

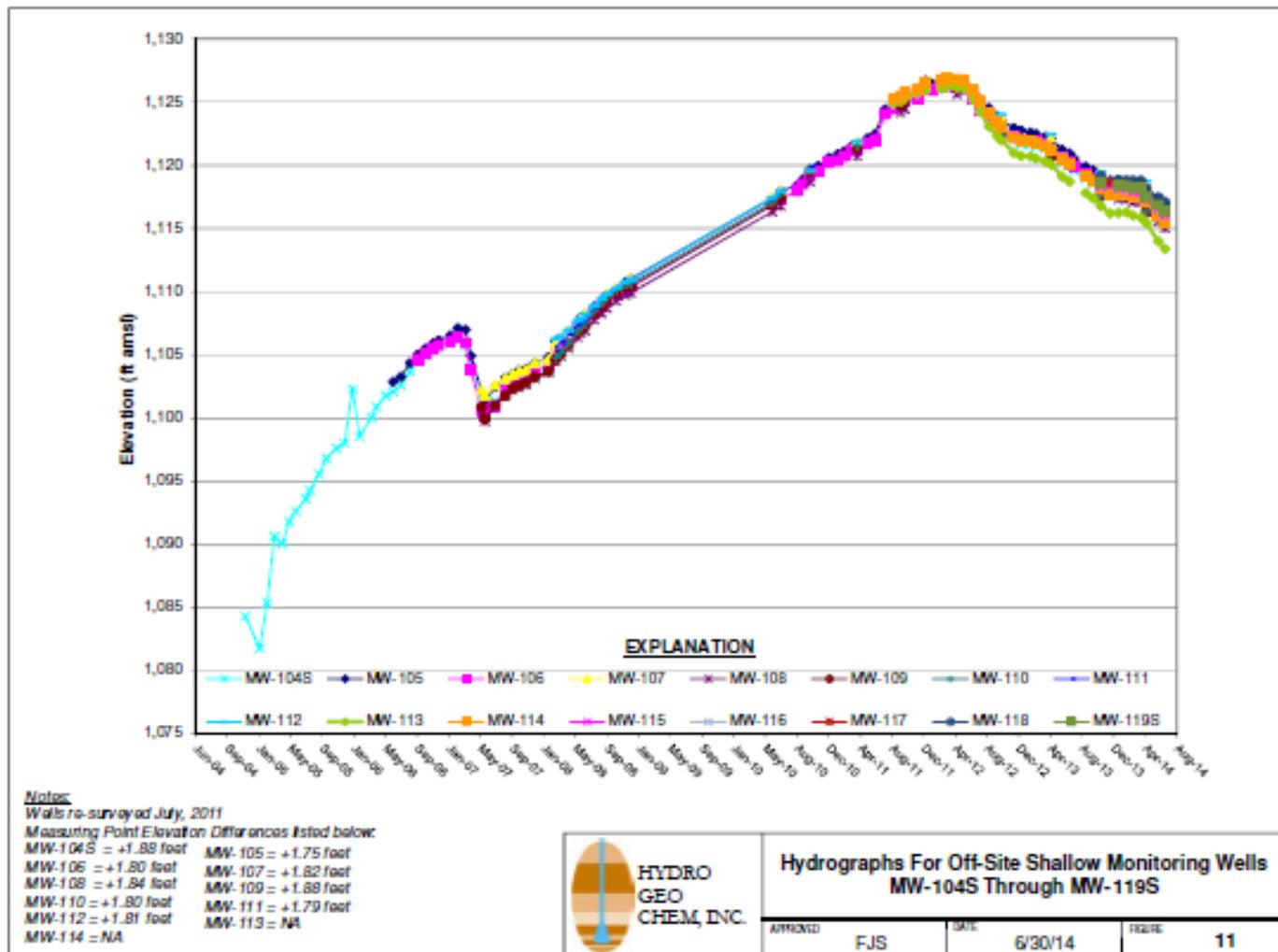
HYDRO GEO

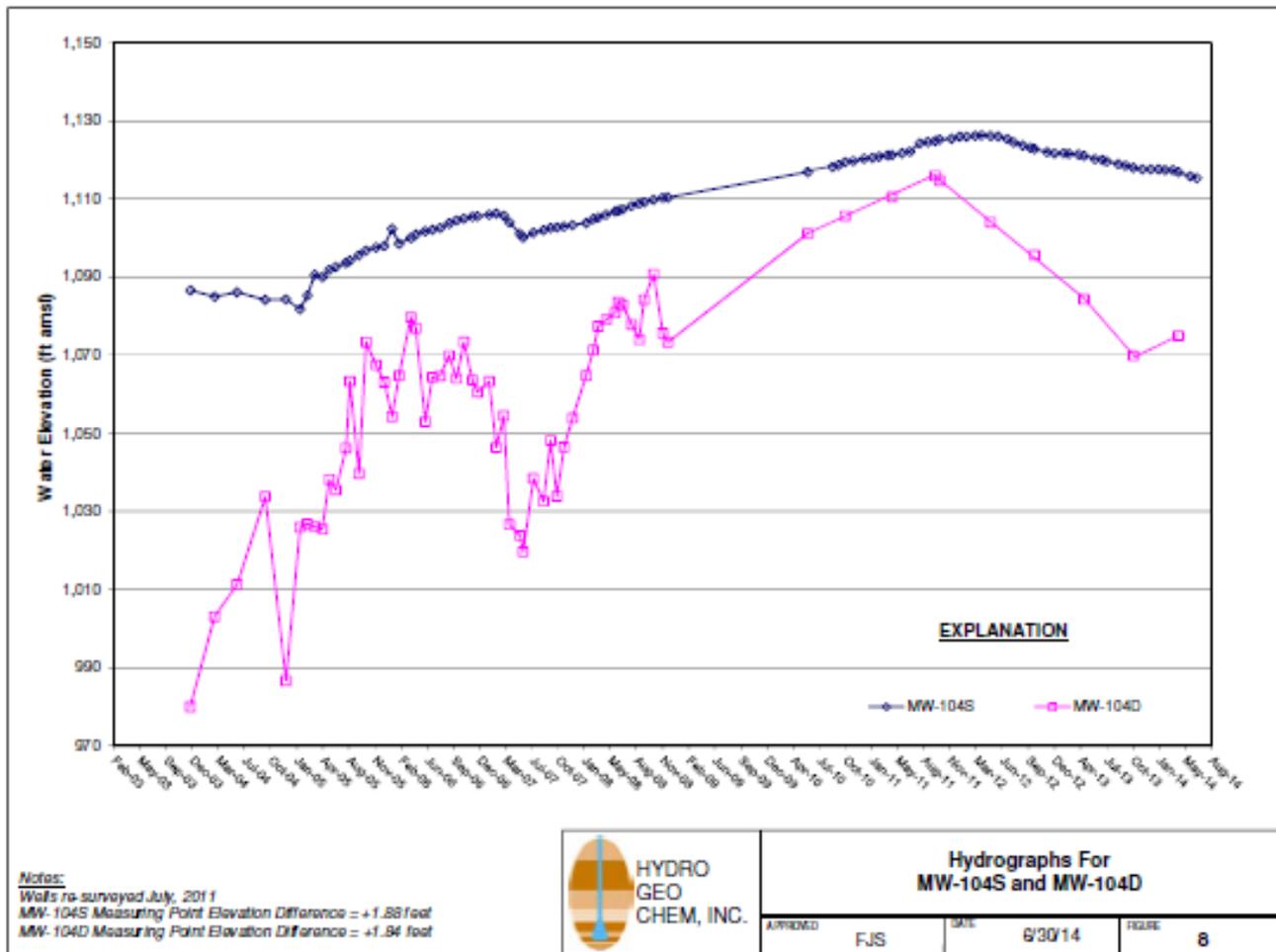
Note: Wells G-9 and EW-101 not used for contouring. Contour Interval: 0.2 Feet. Well measurements taken March 26, 2014.

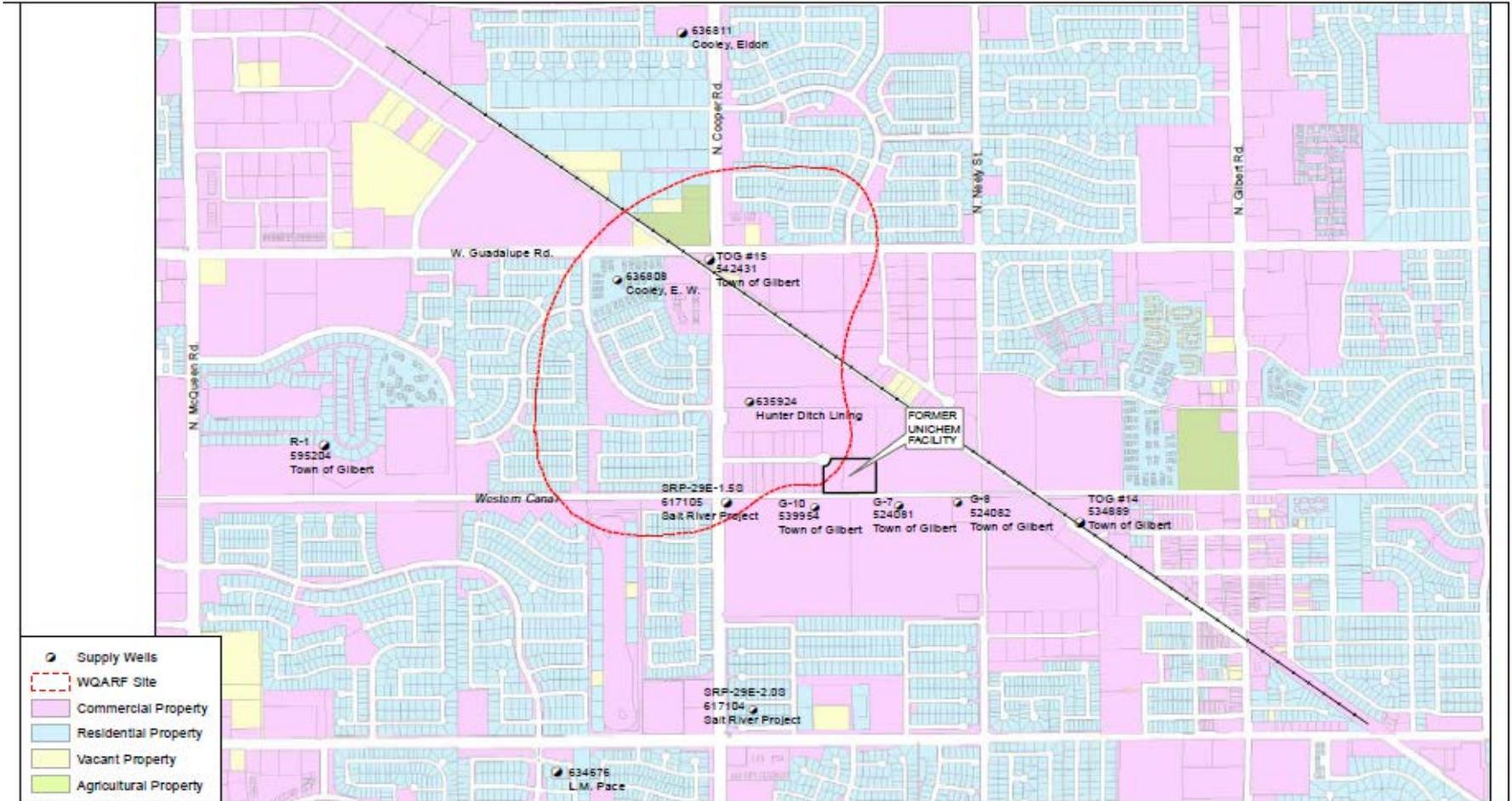
GROUNDWATER ELEVATIONS
MARCH 2014
COOPER AND COMMERCE WHARF SITE



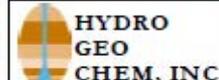






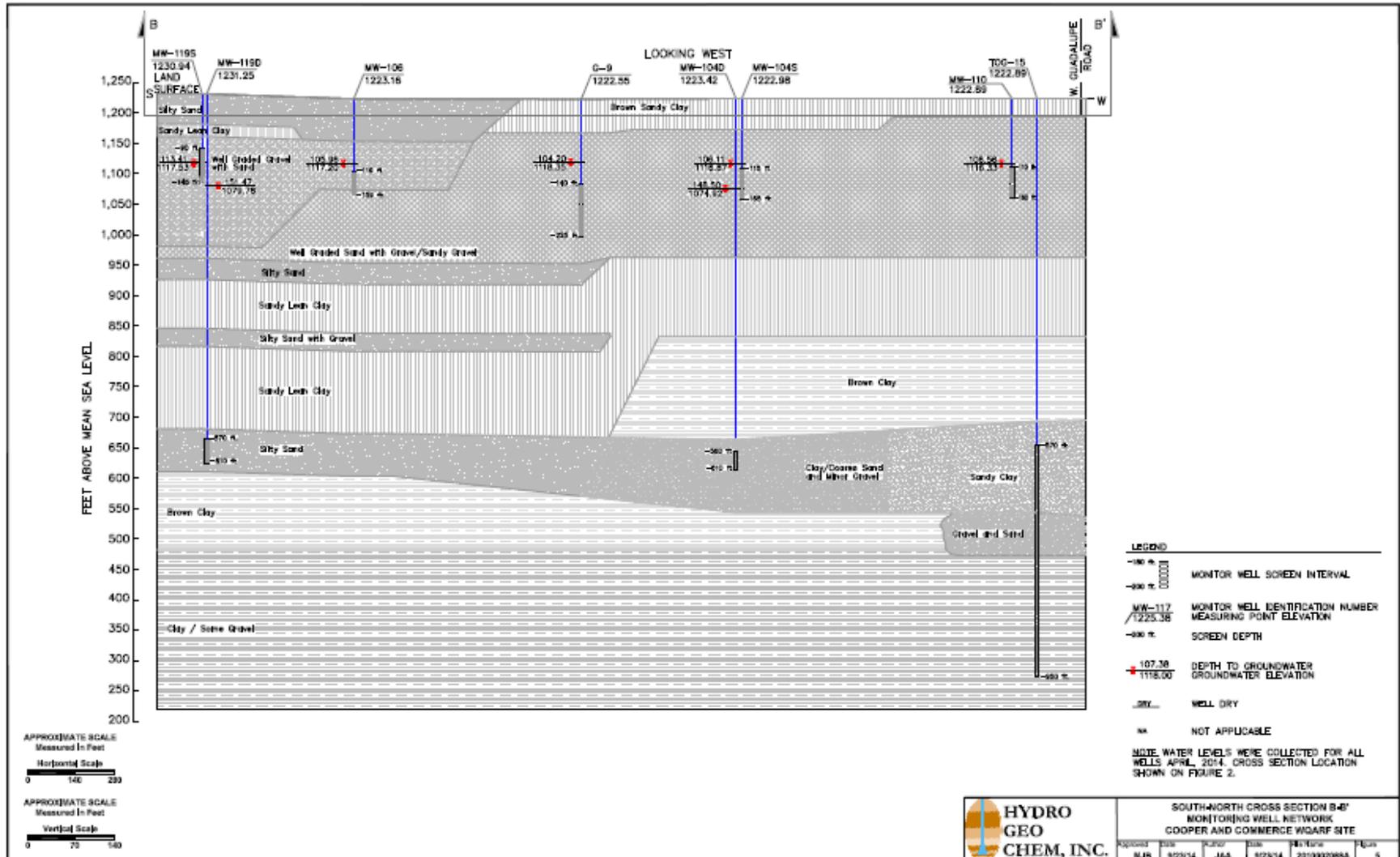


Spatial Reference: NAD 1983 (NAD83) State Plane Arizona Central FIPS 0203 Feet Intl



LAND USE & WATER SUPPLY WELLS
IN THE SITE VICINITY
COOPER COMMERCE SITE
GILBERT, ARIZONA

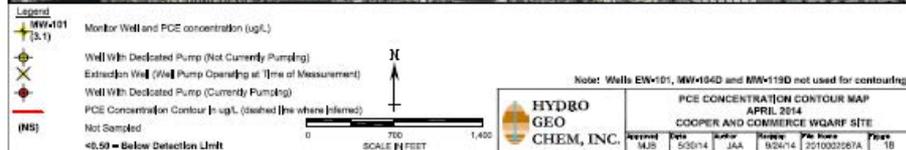
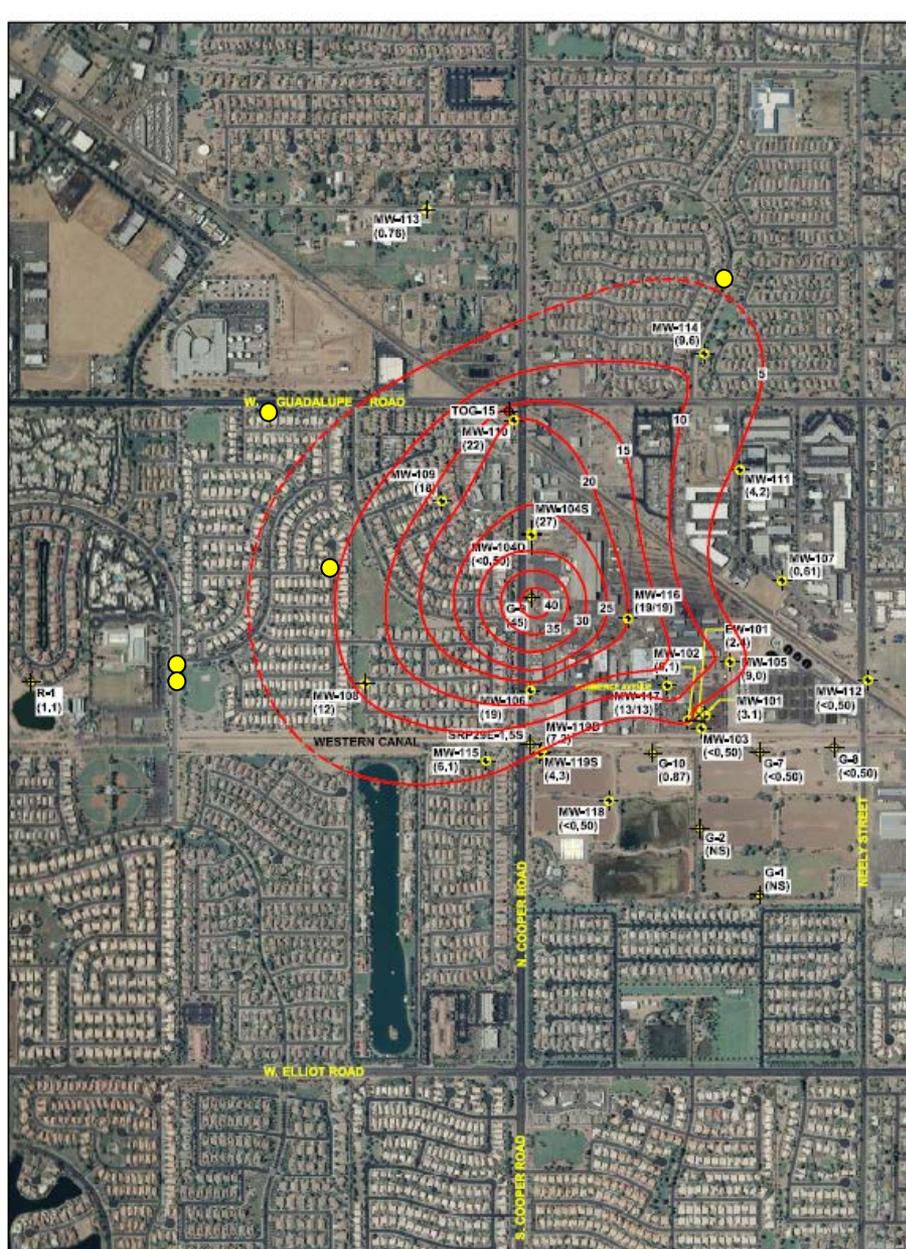
Approved MJB	Date 04/29/14	File 201000209G_2	Figure 24
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- PCE concentrations above AWQS in monitor wells on western side and northeast of plume.
- Vertical extent of plume in upper portion of the aquifer from 165 to 280 feet still unknown.
- Extent of PCE in deeper aquifer near MW-119D is unknown. SRP well 29E-1.5S screened in both aquifers, may be a conduit between upper and lower aquifers.

FY15 plans to close data gaps in FS stage

- If possible, discrete sampling from Town of Gilbert G-9 screened from 140-225 feet.
- Four shallow wells drilled on edges of plume.
- Addition intermediate depth well constructed with a similar screen to Town Of Gilbert (TOG) R-1, screened from 180 -290 feet.



- Geosyntec will construct groundwater fate and transport model that will assist in predicting the lateral and vertical fate and transport of site chemicals and their potential impact on TOG R-1.
- Two complete rounds of groundwater sampling planned.
- Geosyntec will begin to evaluate potential remedial alternatives for the site. Remedial alternatives will consider a range of technologies for source control at specific properties and for addressing areas of the larger groundwater plume that exceed certain risk-based criteria.

RI Comments

When you are called on, please state the following:

Name

Organization/Company

Address

Phone and/or e-mail

Summarize your Comment

If you wish to comment in writing, please remember, all comments must be received by 5:00pm on December 22, 2014.

- Remedial Objectives (ROs), under R18-16-406(I)(4), are established for the current and reasonably foreseeable uses of land and beneficial uses of waters of the state.
- ROs are the clean-up goals determined for a specific site.
- ROs will be framed as uses of a resource to be protected, when the use needs to be available and how long a specific use might be needed by the affected public.
- ROs must be determined with input and discussion with land owners, local governments, water providers, and the public including the CAB members for the site.

Example Soil ROs from another WQARF site.

- **To restore soil conditions to the remediation standards for residential and non-residential use specified in A.A.C. R18-7-203 (specifically background remediation standards prescribed in R18-7-204, predetermined remediation standards prescribed in R18-7-205, or site specific remediation standards prescribed in R18-7-206) that are applicable to the hazardous substances identified. This action is needed for the present time and for as long as the level of contamination in the soil threatens its use as a residential or non-residential property.**

Example groundwater ROs from another WQARF site.

- **The remedial objective for regional groundwater at the site is to protect for the use of the groundwater supply by the City of Phoenix and SRP. This action is currently needed for irrigation use and will be needed if/when the groundwater use changes to municipal/drinking water uses. This action will be needed for as long as the level of contamination in the groundwater threatens the use of the regional groundwater for irrigation and municipal/drinking water uses.**

Example RO comments:

“ I would like to see the ground water at the site cleaned so it can be used for drinking water when its needed.”

“ I would like to see the soils at the site to be cleaned up so the property could be used for residential purposes.”

When you are called on, please state the following:

Name

Organization/Company

Address

Phone and/or e-mail

Summarize your Comment

If you wish to comment in writing, please remember, all comments must be received by 5:00pm on December 22, 2014.

Questions?

Contact Information

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