



MEETING MINUTES

**Miracle Mile
Water Quality Assurance Revolving Fund (WQARF) Site
Community Advisory Board (CAB) Meeting**

**Wednesday, August 27, 2014
6 p.m. - 7:30 p.m.
Ellie Towne Flowing Wells Community Center
1660 W. Ruthrauff Rd.
Tucson, Arizona**

FINAL MINUTES

CAB Members Present: Gary Abrams, Allison Jones, Jan Randolph

CAB Members Absent: Fred Bass, Robert Brobeck, David Crockett, Henry Madrid, Karen Ramage

ADEQ Staff Present: Hazel Cox, Hydrologist; Wendy Flood and Caroline Oppleman, Community Involvement Coordinators (CICs); Gretchen Wagenseller, Project Manager

Members of the Public Present: Don Stanton, City of Tucson Environmental Services; Cathrine Estar

1. Call to Order/Introductions

The meeting began at 6:06 p.m. Ms. Jan Randolph called the meeting to order and initiated introductions.

2. Acceptance and/or Changes to December 11, 2013 Minutes

Item tabled due to lack of quorum. No other comments.

3. CAB Membership/Charter (Discussion/Vote)

Ms. Caroline Oppleman shared the updated draft CAB charter reflecting all current information and announced it was time for Co- Chair nominations and vote. Voting was tabled due to lack of quorum. The CAB discussed Karen Ramage's absences and difficulty in contacting her and Mr. Robert Brobeck intention to resign from the CAB. Ms. Oppleman encouraged the CAB to solicit and consider new member applications. Ms. Allison Jones inquired as to whether the CAB can reduce their size. Ms. Oppleman replied yes, the requirements are at least five and no more than twenty.

Ms. Gretchen Wagenseller offered the following suggestions : 1) revisiting historical CAB applications, and 2) providing site status presentations and handing out CAB applications at relevant homeowner's association/neighborhood association meetings arranged by CAB members. Ms. Randolph indicated her interest in proceeding in that direction.

4. Feasibility Study (FS) Progress (ADEQ Presentation)

Ms. Wagenseller reviewed the presentation slides, which presented an overview of the WQARF process, a description of the FS process, and plans to address data gaps. Ms. Wagenseller also described the FS

comparison criteria and target schedule. The CAB discussed presentation tools, e.g., hard copy maps versus PowerPoint projections.

Ms. Jones asked Ms. Wagenseller to refresh her memory on the remedial objectives for the site. Ms. Wagenseller shared for groundwater they are to restore, replace, or otherwise protect and provide for current and future potable use of the aquifer. The remedial objectives for soil were provided to Ms. Jones.

5. May 2014 Groundwater Monitoring Results (ADEQ Presentation)

Ms. Wagenseller reviewed the presentation slides, which presented the May 2014 regional and perched groundwater monitoring results, specifically, well water elevations, new monitoring well installation, and the levels, depth and extent of TCE and chromium in the groundwater, as well as flow direction.

Ms. Randolph asked what causes groundwater flow direction to change. Ms. Wagenseller explained that it usually has to do with well pumping in the vicinity.

6. Community Involvement Coordinator Transition/Housekeeping (ADEQ-led Discussion)

Ms. Oppleman introduced herself as the new designated CIC for the site and shared the following:

- Asked the CAB to inform her of any previous activities to make sure they are completed
- The information repository is now available online on the ADEQ website and at the ADEQ records center. Special accommodations can be made if need be.
- An updated, revised Community Involvement Plan (CIP) for the site is in progress.

The CAB discussed the history and current status of the information repositories and the rationale for the changes.

Ms. Randolph shared that there are issues with the ADEQ toll-free 800 number. Ms. Flood shared that Ms. Randolph had made her previously aware and that efforts are underway to address all issues, some of which already have been fixed.

7. Call to the Public

Ms. Cathrine Estar asked where the TCE and chromium came from. Ms. Wagenseller replied they came from the leaking chromium tanks from the former Spring Joint Specialists facility, and for the TCE, several industrial businesses.

Ms. Jones asked about whether the Spring Joint facility would be contributing funds for the cleanup. Ms. Flood and Ms. Wagenseller indicated that the ADEQ legal team is working to identify potentially responsible parties.

Mr. Don Stanton asked how far upgradient ADEQ is sampling for chromium and what is being found. Ms. Wagenseller replied and described the industrial nature of the area and the complexity in defining contaminated areas as well as sources. A discussion about ADEQ's preliminary investigation (PI) process began and was tabled due to the item not being on the agenda.

Mr. Abrams asked if Ms. Wagenseller is aware of the old chrome shop that was south of Prince. The information was previously shared with ADEQ's legal team, but as far as he knows there was no follow up.

8. Future Meeting/Agenda (Discussion)

Ms. Jones asked if there will there be new data to share before the FS comes out. Ms. Wagenseller replied that the new data would be contained within the FS, but that she could discuss it before the FS is completed.

The next tentatively scheduled CAB meeting will be held at the same location at a date to be determined, likely in the first quarter of 2015. Agenda topics to include:

- Acceptance and/or Changes to December 11, 2013 and August 27, 2014 Minutes
- CAB Membership (co-chair nominations, new member applications, terminations)
- CAB Charter
- Draft CIP
- ADEQ PI process overview/Pis in the Miracle Mile Area
- FS Status Update – new data and alternatives under consideration

9. Adjournment

The meeting adjourned at 7:30 p.m.

*This meeting was recorded on a digital device as a record of the proceedings. To listen to a recording, or for additional information about the content of this meeting, contact:
ADEQ: Caroline Oppleman at 602-771-6890.*



Miracle Mile WQARF Site
Community Advisory Board Meeting
August 27, 2014

Feasibility Study Progress

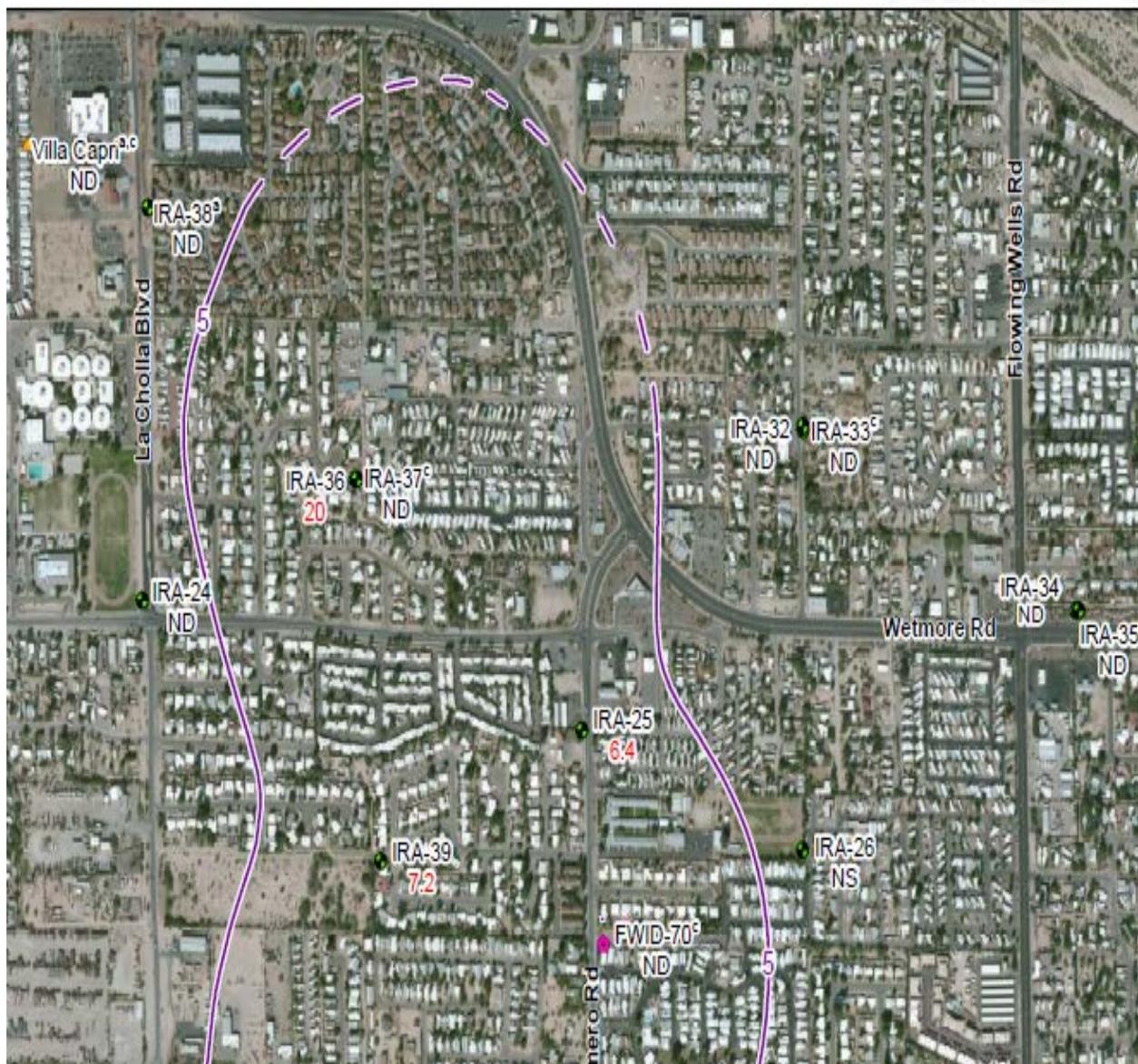


- WQARF Process
- Identify remedies that address the Remedial Objectives
- Remedy evaluation by set comparison criteria
- Select a proposed remedy
- Results are summarized in a Preliminary Remedial Action Plan (PRAP)
 - Public Comment period

- Addressing “Data Gaps”:
 - any missing data that impairs ADEQ’s ability to perform/complete the FS



TCE Plume Data Gap –Northern



Soil Gas Evaluation Area



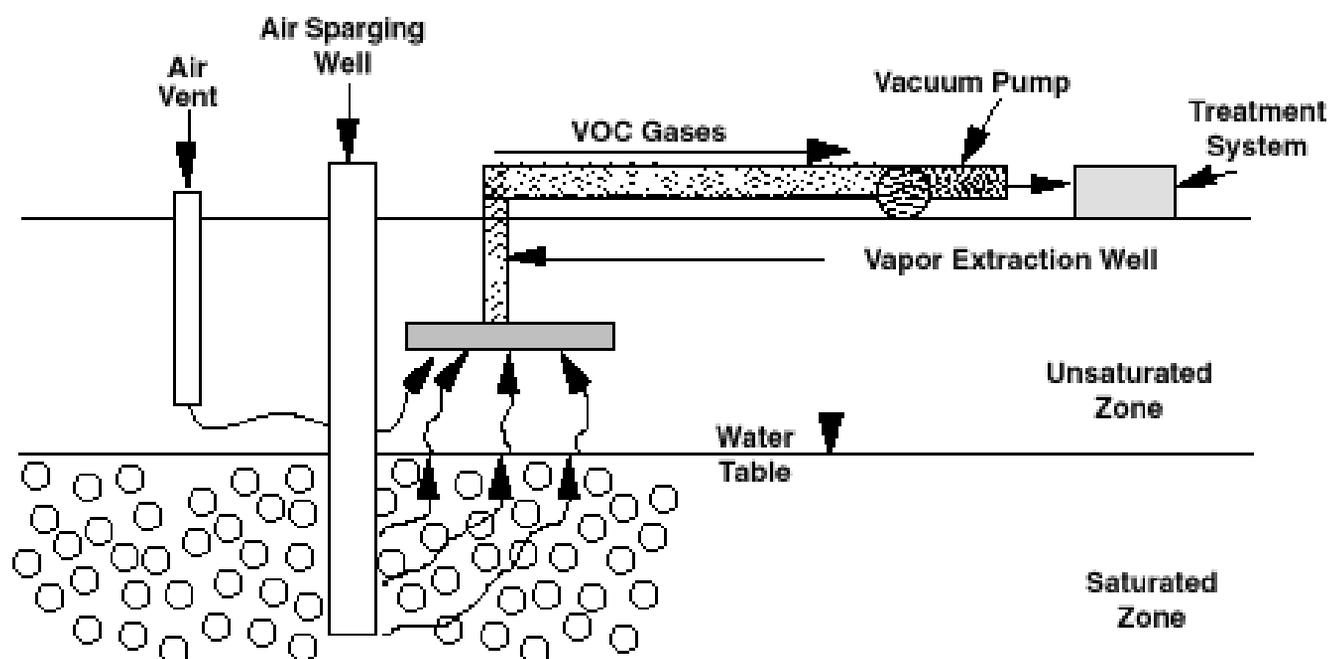
Figure 2

Pilot Test Soil Vapor Extraction/Air Sparging



Source: For Digital Globe, GeoEye, GeoEye, and the US Government

Soil Vapor Extraction/Air Sparging System



- Must be able to achieve Remedial Objectives.
- Protectiveness of public health.
- Consistency with water providers needs and land use of local government.
- Practicability and reliability.
- Short-term and long-term effectiveness.
- Cost and cost-benefit.

- Target completion draft FS Report FY 15
- ADEQ hiring a new contractor to perform the FS

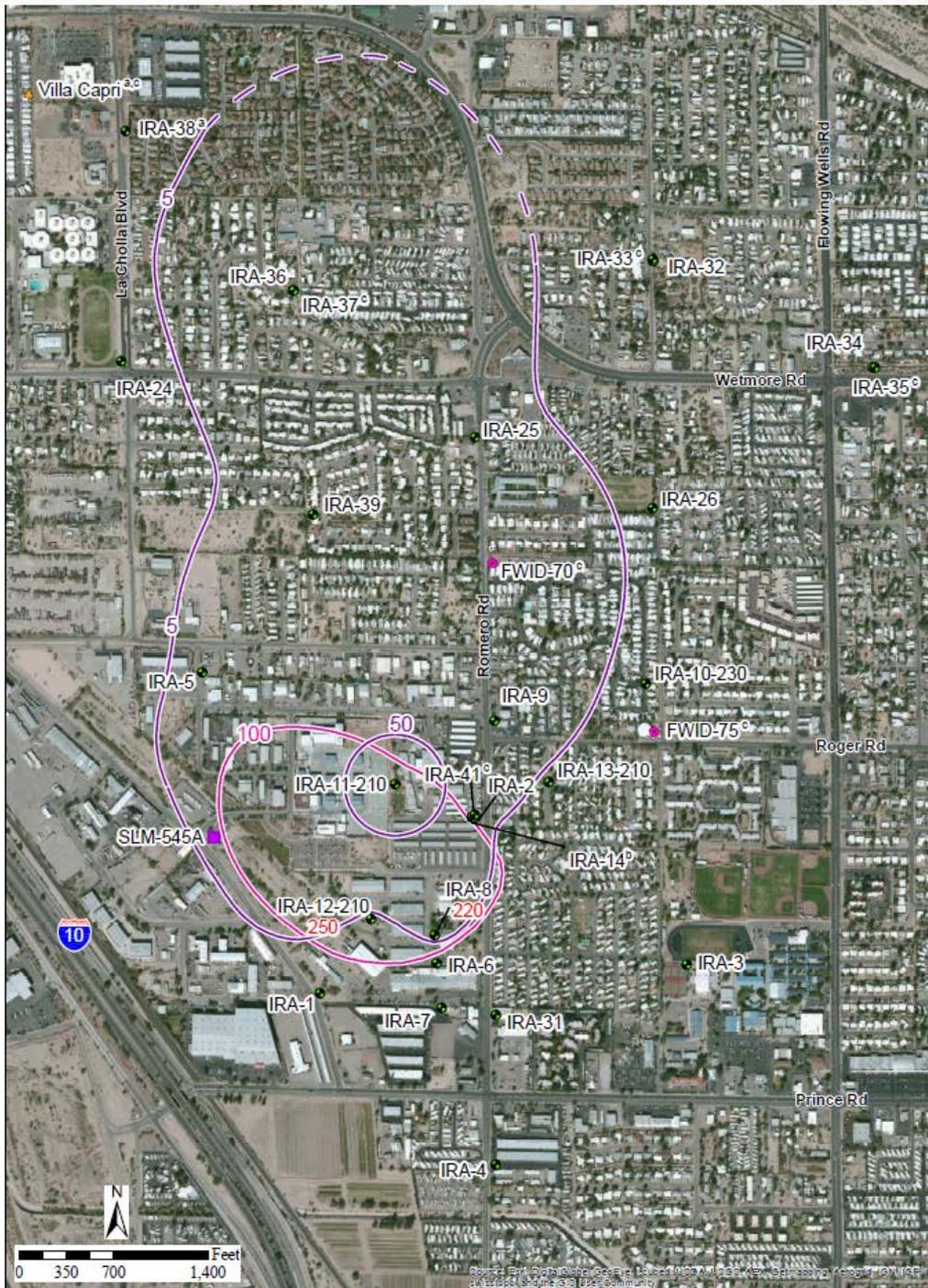


Miracle Mile WQARF Site
Community Advisory Board Meeting
August 27, 2014

April/May 2014 Groundwater
Monitoring Results



Site-Wide Groundwater Sampling



Legend

- Active FWID Well
- City Of Tucson Well
- ▲ Private Well
- Regional Well
- TCE Contour (µg/L)
- Total Chromium Contour (µg/L)

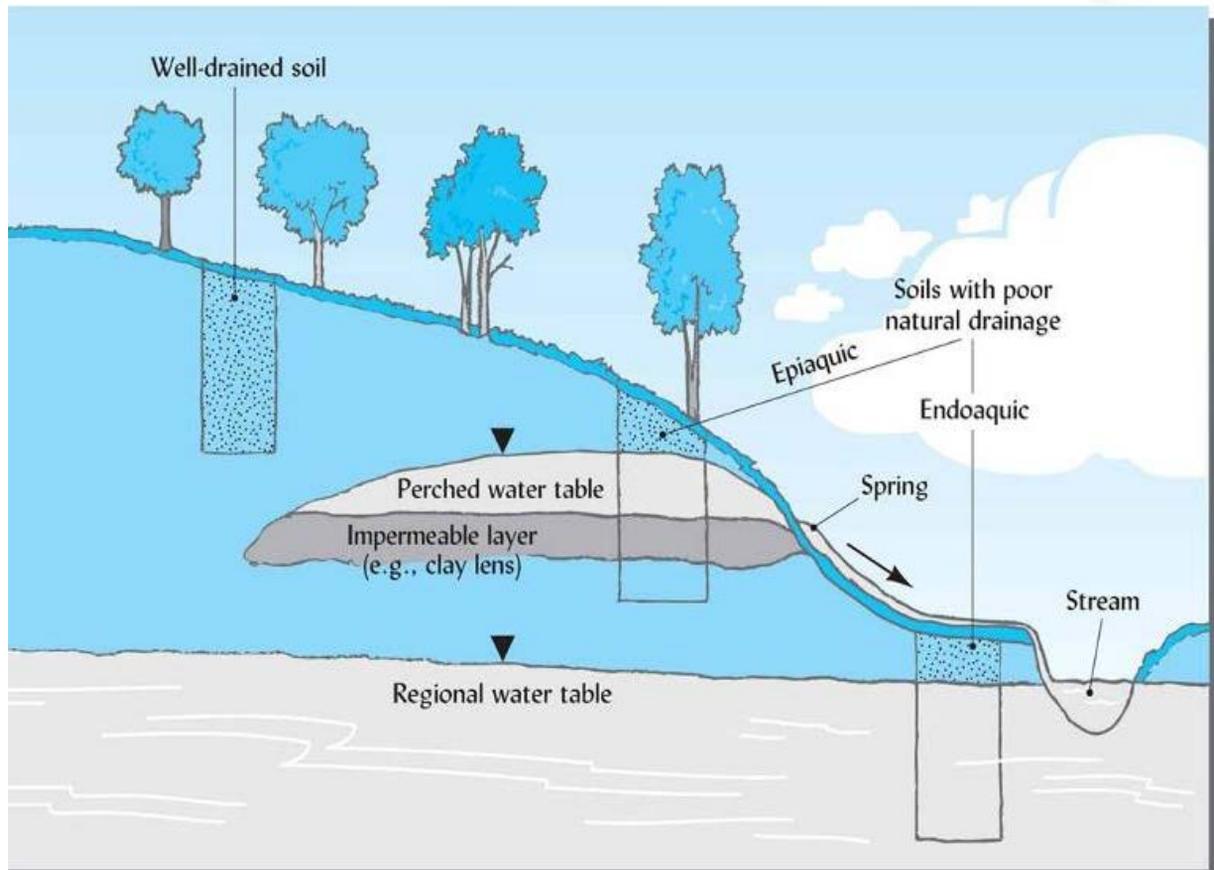
Notes: µg/L = Micrograms per liter ND = Non-detect NS = No sample AWQS = Aquifer Water Quality Standards
 Dashed where Inferred
 a = Several samples were taken of the well, highest detection is shown.
 b = Not included due to possible anomalous data.
 c = Not included in contouring data; Only wells screened 130-240 feet below ground surface were used for contouring.

Figure A
April - May 2014 Regional TCE & Chromium Contour Map
Miracle Mile WQARF Site
Tucson, Arizona

- Site-wide groundwater sampling was performed in May 2014
- Definitions:
 - Plume = area of groundwater containing contaminant level above Aquifer Water Quality Standard (AWQS).
 - Contaminant of concern (COC) = contaminant level above AWQS

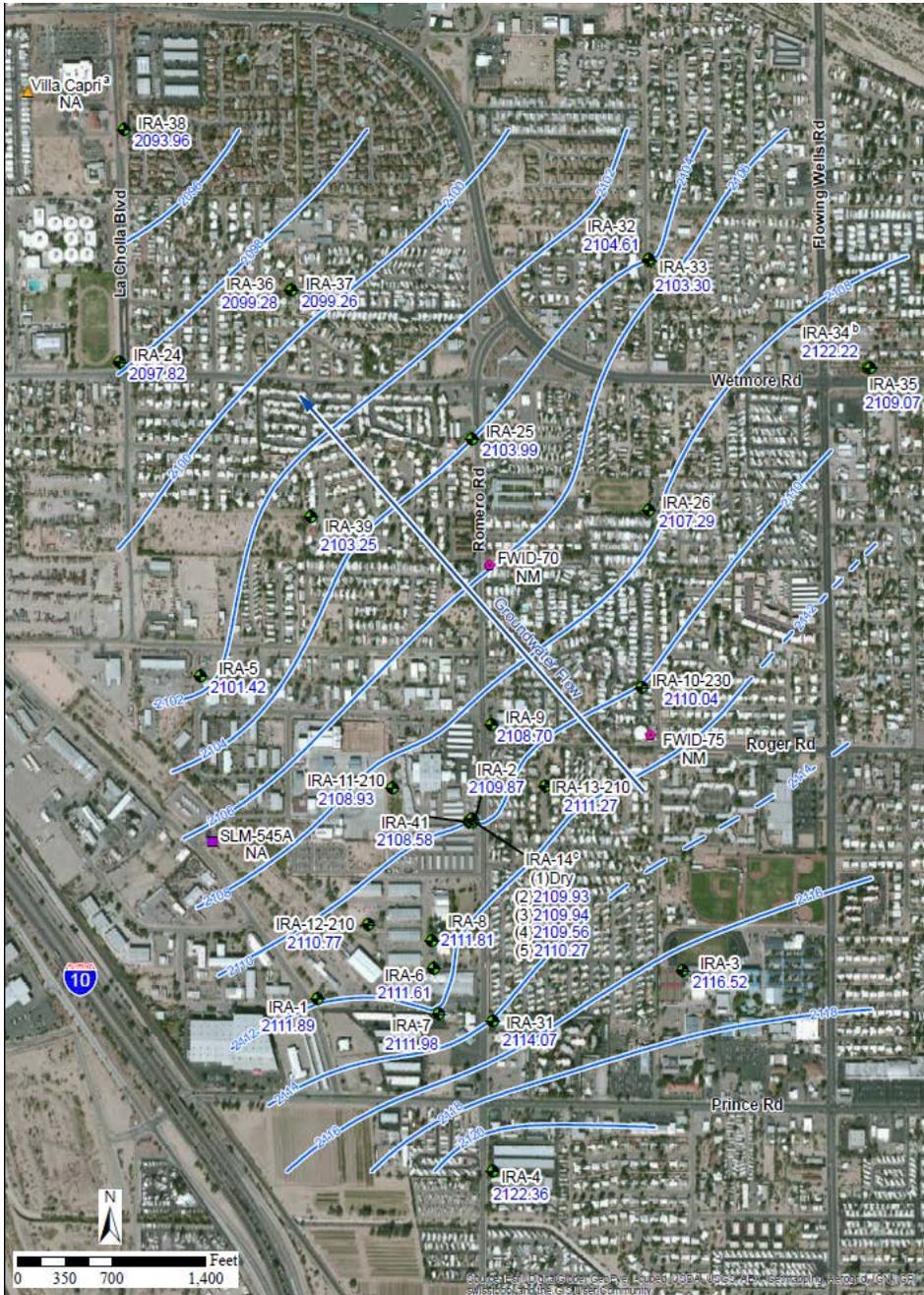
- Final Remedy must address COCs:
 - Trichloroethene (TCE) AWQS = 5 micrograms/liter ($\mu\text{g}/\text{l}$)
 - Chromium (Cr) AWQS = 100 $\mu\text{g}/\text{l}$
- Final Remedy must address COCs:
 - Trichloroethene (TCE) AWQS = 5 micrograms/liter ($\mu\text{g}/\text{l}$)
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Hydrogeology Terms



Regional Groundwater Well Water Elevations—2014

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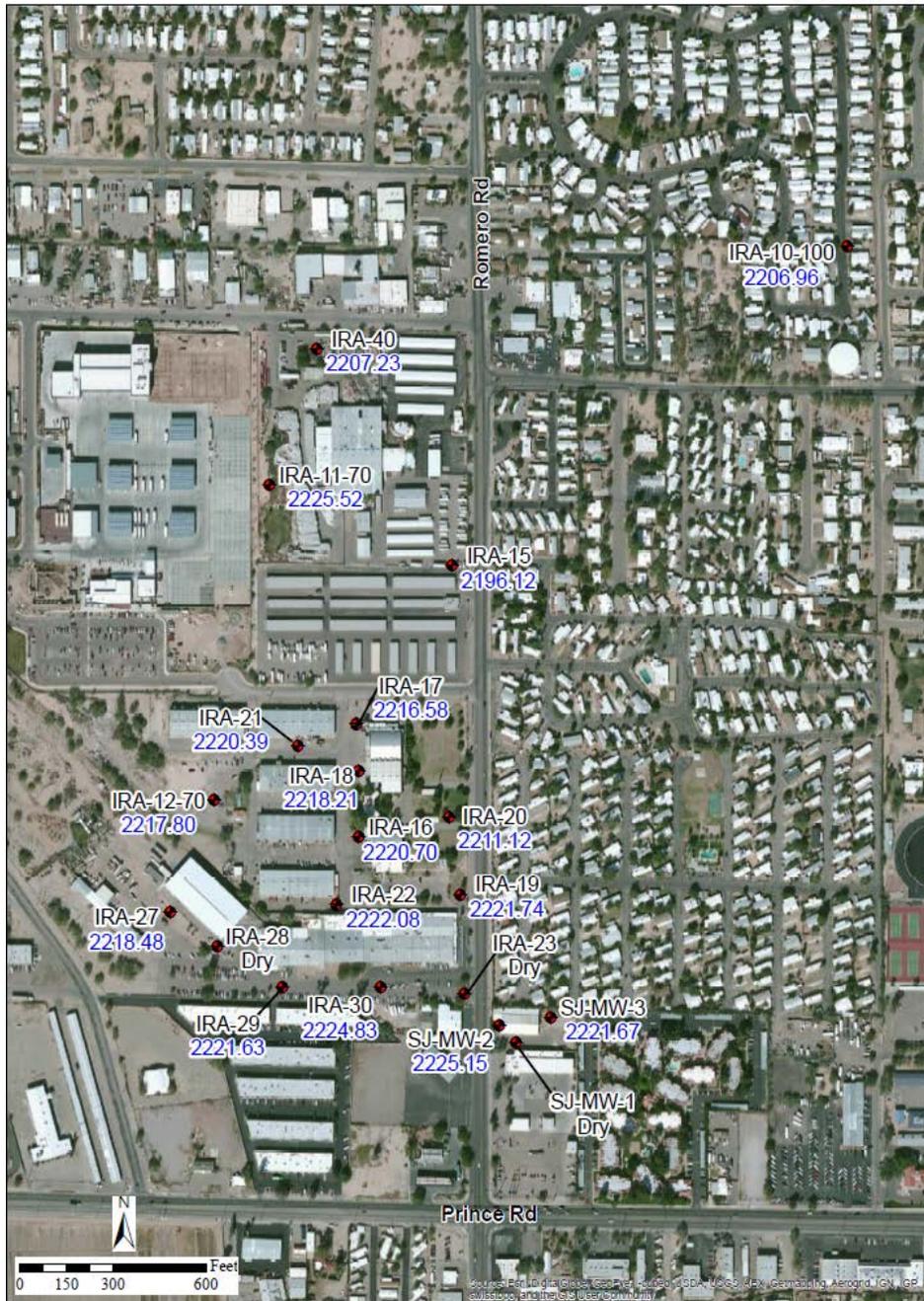
Legend

- Active FWID Well
- City Of Tucson Well
- ▲ Private Well
- ◆ Regional Well
- Groundwater Elevation Contour (feet above msl)
- 2111.98 Groundwater Elevation (feet above msl)
- Groundwater Flow Direction

Notes: msl = Mean sea level NA = Not applicable NM = Not measured
 a = Unknown well elevation and screen interval.
 b = Was not used for contouring as a result of possible anomalous data.
 c = For contouring purposes, the groundwater elevation used for IRA-14 was the uppermost interval with water, IRA-14(2)

Figure 3
May 2014 Regional Wells
Groundwater Elevations
Miracle Mile WQARF Site
Tucson, Arizona

Perched Groundwater Well Elevations—2014



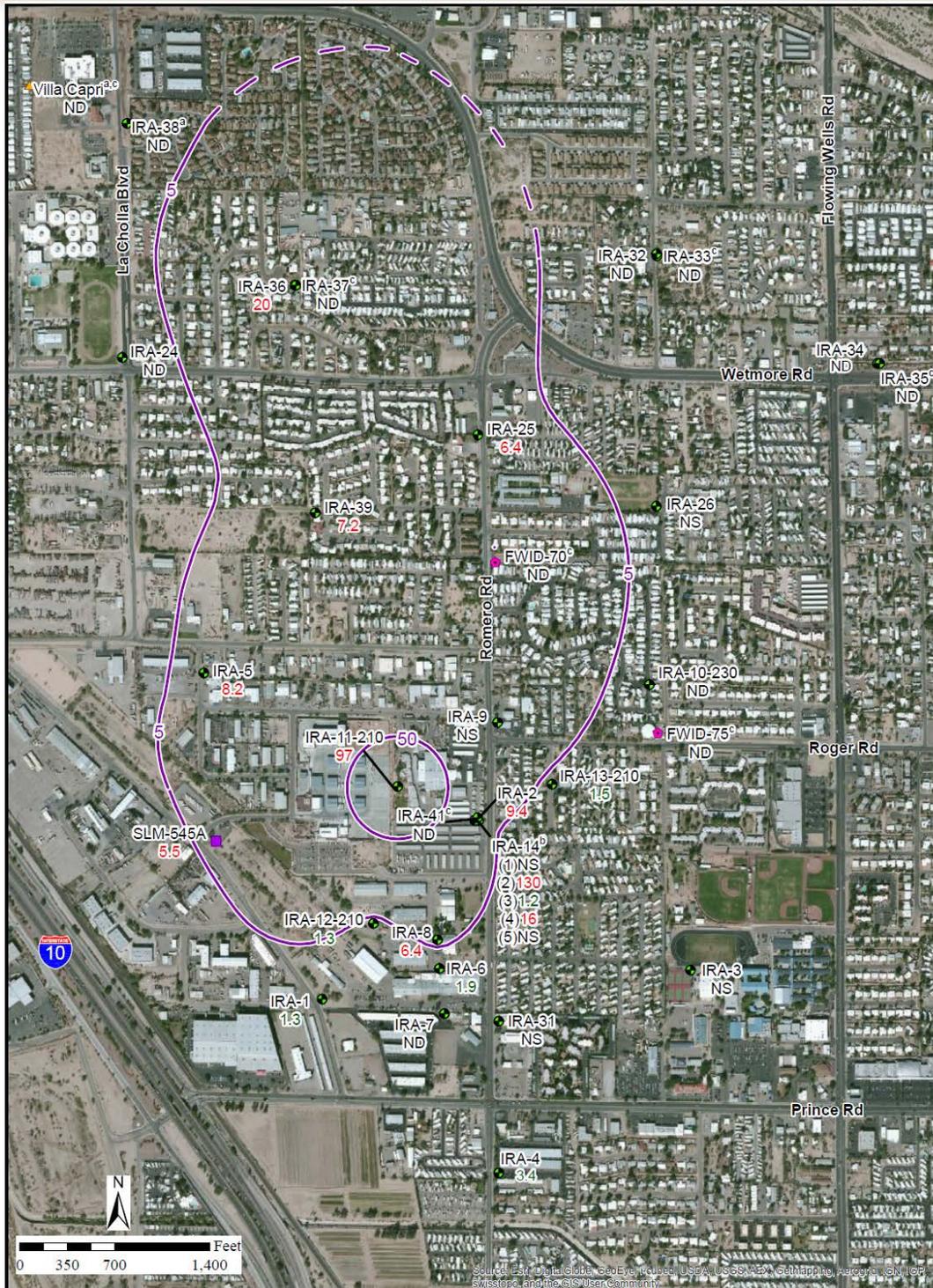
Legend

- ◆ Perched Well
- 2221.67 Groundwater Elevation (feet above msl)

Note: msl = Mean sea level

Figure 2
May - June 2014 Perched Wells
Groundwater Elevations
Miracle Mile WQARF Site
Tucson, Arizona

TCE—Regional Groundwater— 2014



Legend

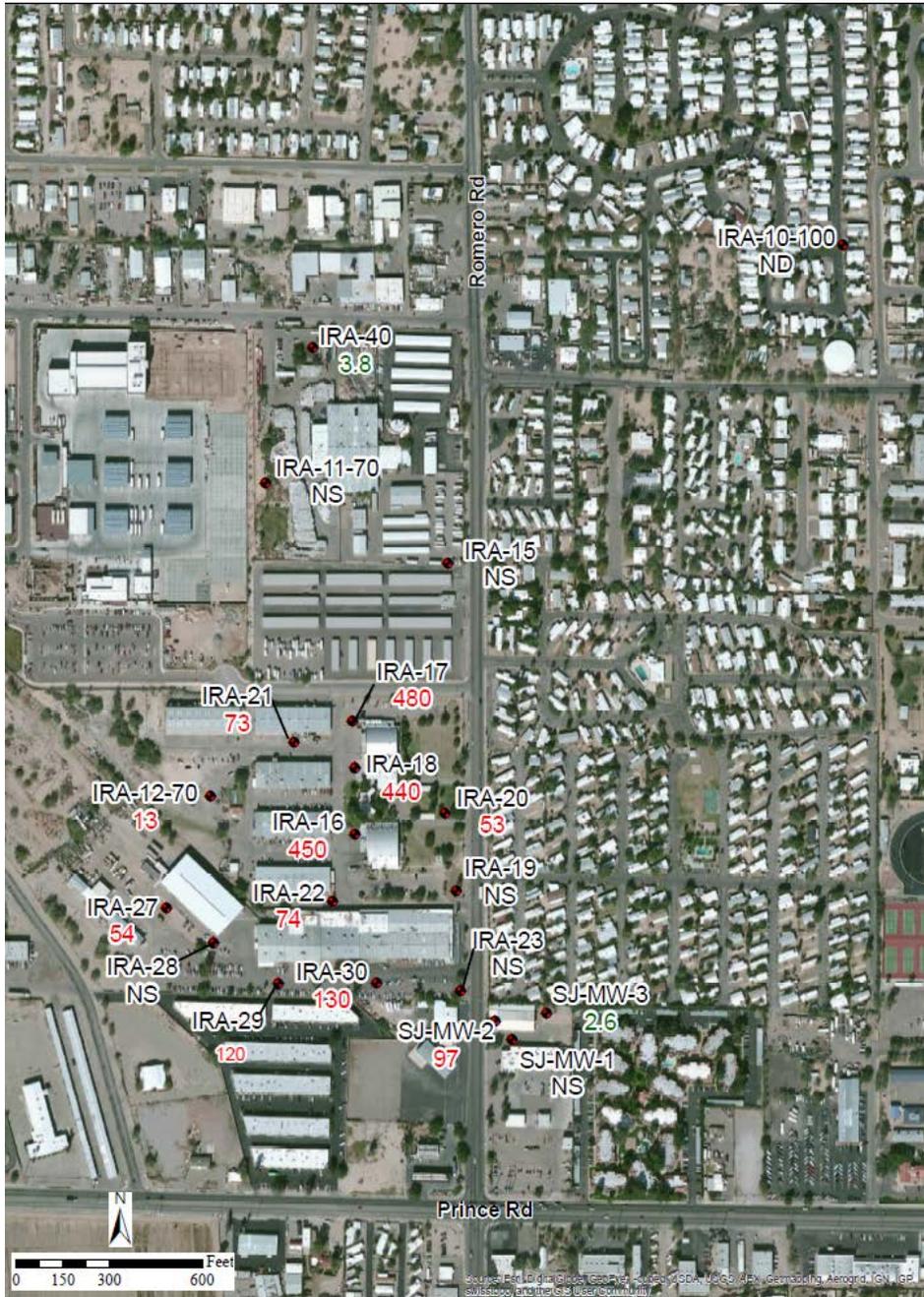
- Active FWID Well
- City Of Tucson Well
- ▲ Private Well
- ◆ Regional Well
- TCE Contour (µg/L)
- 5.0 TCE Concentration above AWQS (µg/L)
- 1.3 TCE Concentration (µg/L) above detection limit and below AWQS

Notes: µg/L = Micrograms per liter TCE = Trichloroethene NS = No sample ND = Non-detect
 AWQS = Aquifer Water Quality Standards Dashed where inferred
 a = Several samples were taken of the well, highest result is depicted.
 b = IRA-14 was not contoured due to possible anomalous data.
 c = Not included in contouring data; Only wells screened 130-240 feet below ground surface were used for contouring.

Figure 5
April-May 2014 Regional TCE
Concentration Contour Map
Miracle Mile WQARF Site
Tucson, Arizona

TCE—Perched Groundwater— 2014

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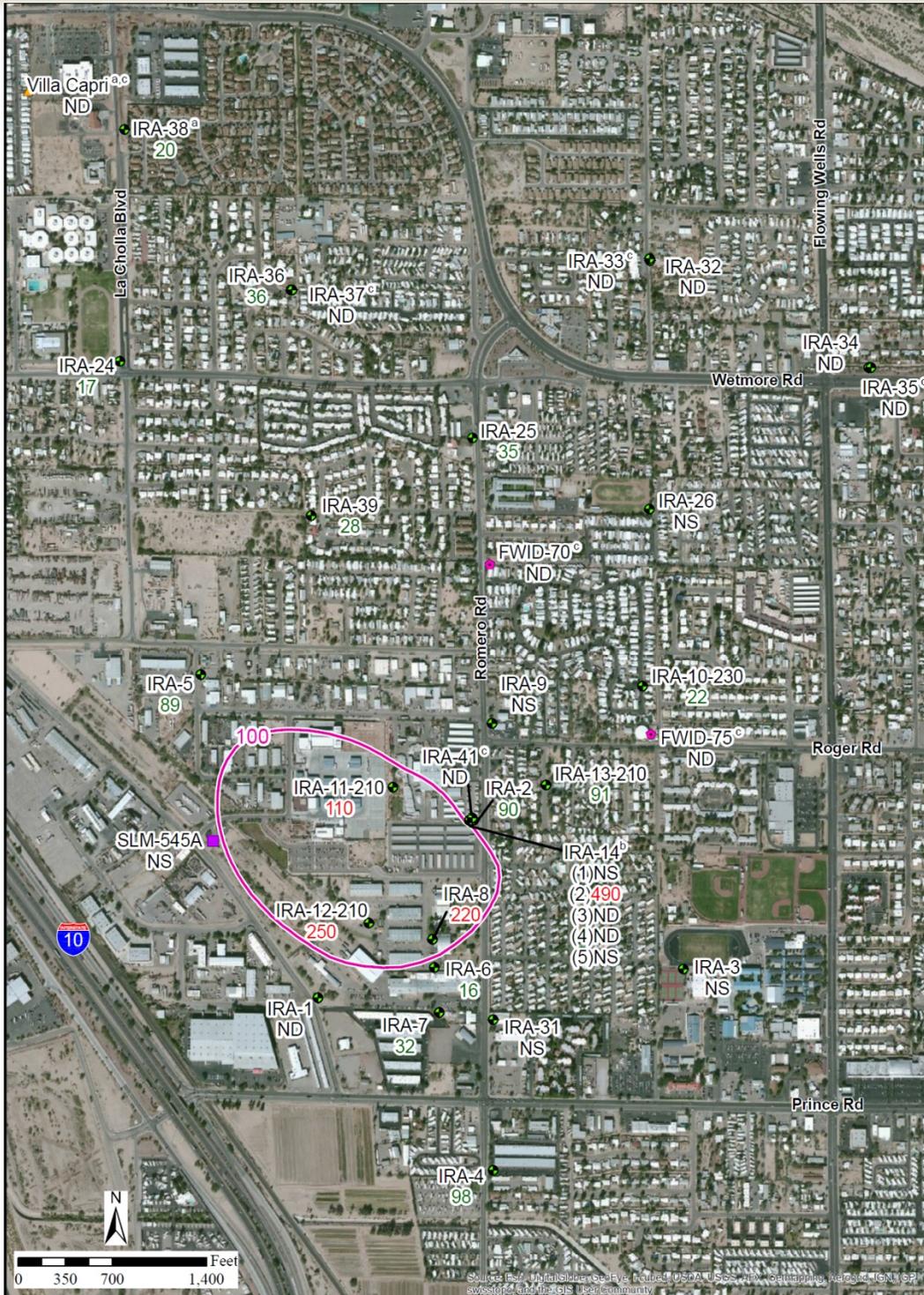
Legend

- Perched Well
- 5.0 TCE Concentration above AWQS (µg/L)
- 1.0 TCE Concentration (µg/L) above detection limit and below AWQS

Notes: µg/L = micrograms per liter
 TCE = Trichloroethene
 ND = Non-detect
 NS = No Sample
 AWQS = Aquifer Water Quality Standards

Figure 4
 May-June 2014 Perched TCE
 Concentration Map
 Miracle Mile WQARF Site
 Tucson, Arizona

Chromium—Regional Groundwater—2014

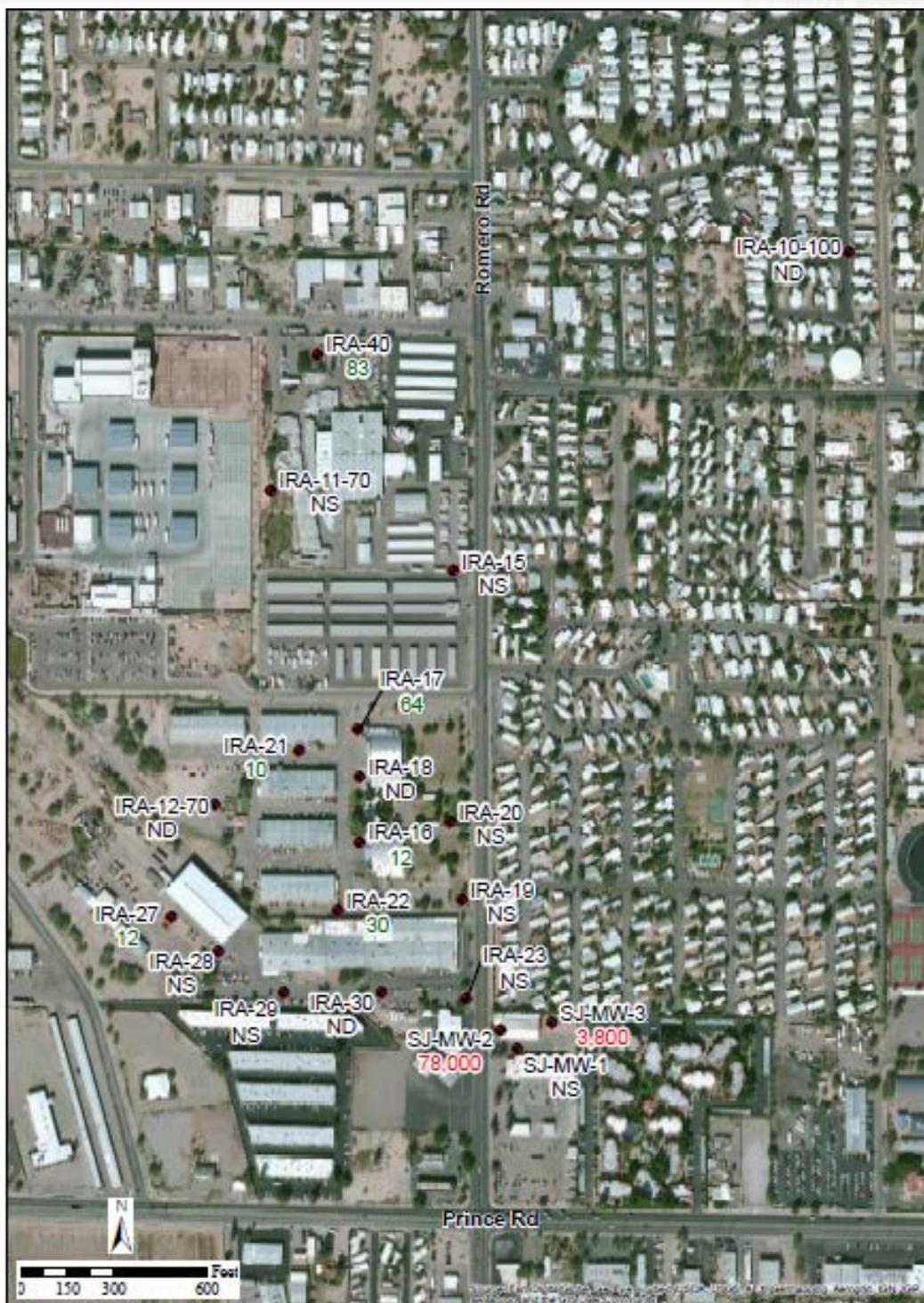


Legend

- Active FWID Well
 - City Of Tucson Well
 - ▲ Private Well
 - Regional Well
 - Total Chromium Contour (µg/L)
 - 100 Total Chromium Concentration above AWQS (µg/L)
 - 1.3 Total Chromium Concentration (µg/L) above detection limit and below AWQS
- Notes: µg/L = Micrograms per liter ND = Non-detect NS = No sample AWQS = Aquifer Water Quality Standards
 Dashed where inferred
 a = Several samples were taken of the well, highest detection is shown.
 b = Not included due to possible anomalous data.
 c = Not included in contouring data; Only wells screened 130-240 feet below ground surface were used for contouring.

Figure 7
April - May 2014 Regional Total Chromium Concentration Contour Map
Miracle Mile WQARF Site
Tucson, Arizona

Chromium—Perched Groundwater—2014



Legend

- Perched Well
- 12 Total Chromium Concentration (µg/L) above detection limit and below AWQS
- 100 Total Chromium Concentration above AWQS (µg/L)

Notes: AWQS = Aquifer Water Quality Standards
µg/L = Micrograms per liter
ND = Non-detect
NS = No sample

Figure 6
May - June 2014 Perched Total
Chromium Concentration Map
Miracle Mile WQARF Site
Tucson, Arizona