

**IPR SUMMARY REVIEW MEMORANDUM**

*Stella Murillo, Groundwater Permits and Wells Unit*

*November 12, 2014*

**APPLICANT:** Valley Utilities Water Company Inc.  
**APPLICATION NO:** Permit No. S-223850 Well No. 55-223850  
**APPLICATION TYPE:** Application for Permit to Drill or Operate a Non-Exempt Well Within An Active Management Area

**Summary of the facts:** Valley Utilities Water Company, Inc., filed an Application for "Permit to Drill or Operate a Non-Exempt Well Within An Active Management Area" (Section 45-599) on August 25, 2014. The claim of entitlement to withdraw groundwater is based upon their service area right no. 56-002047.0000. The new proposed well registration numbers and location of the well is as follows: (1) No.55-223850, in the SE¼, SW¼, SE¼, of Section 11, Township 2 North, Range 1 West of the GSRB&M. The request for the proposed annual volume is 718 acre-feet per annum. The well is located in the applicant's service area.

**Issues** The hydrologic study indicates that the five-year ten-foot drawdown has a radius of approximately 1,212 feet. No non-applicant owned wells of record are with the boundary.

**AMA Recommendations:** The Groundwater Permits and Well Unit recommends on behalf of the Phoenix AMA that the application should be approved for 718 acre-feet per annum.

IPR Committee Comments:

IPR Special Conditions:

IPR Committee Recommendations:

- Approved
- Denied
- Other (explanation) \_\_\_\_\_

  
\_\_\_\_\_  
IPR Chairperson

  
\_\_\_\_\_  
Date



PERMIT NO. S-223850

Depth: 900 ft.  
Casing Material: Steel  
Casing Diameter: 18 inches  
Maximum Pumping Capacity: 600 gallons per minute  
Maximum Annual Volume: 718 acre-feet  
Authorized Place of Use for Groundwater Withdrawn: As Authorized by Right No. 56-002047.0000  
Authorized Use of Groundwater: As Authorized by Right No. 56-002047.0000  
Latest Date for Completing Well: August 26, 2015

**Permit Conditions**

1. If the permitted well is not completed on or before August 26, 2015, the Permittee will be required to file a new application, and secure a new permit before proceeding with construction.
2. This permit is issued pursuant to A.R.S. § 45-599 and authorizes the permittee to construct a new well or a replacement well in a new location for the purpose of withdrawing groundwater for the use or uses set forth in the permit. This permit does not authorize the permittee to withdraw surface water from the well. If the permittee withdraws surface water from the well in any year, the permittee shall do so only pursuant to a decreed or appropriate surface water right and shall separately report in the annual report filed pursuant to A.R.S. § 45-632 the amount of groundwater and surface water withdrawn from the well.
3. The permittee shall monitor withdrawals of groundwater and shall report the total amount of groundwater withdrawn on an Annual Water Withdrawal and Use Report. The first annual reporting period shall be from the date of issuance of this permit through December 31, 2014. Subsequent annual reporting periods shall be from January 1 through December 31.
4. The proposed well shall be constructed in accordance with the minimum well construction standards, pursuant to A.A.C. R12-15-811.

PERMIT NO. S-223850

5. The issuance of the permit does not waive any federal, state, county or local government ordinances, regulations or permits for which the facility may have to comply.

WITNESS my hand and seal of office this 12<sup>th</sup> day  
of November, 2014.



---

Michael Johnson, Assistant Director

**JANICE K. BREWER**  
Governor



**MICHAEL J. LACEY**  
Director

**ARIZONA DEPARTMENT of WATER RESOURCES**  
3550 North Central Avenue, Second Floor  
Phoenix, Arizona 85012-2105  
602.771.8500  
[azwater.gov](http://azwater.gov)

November 12, 2014

Valley Utilities Water Company  
Attn: Robert Prince  
6808 N Dysart Road Suite 112  
Glendale, AZ 85307

RE: Non-Exempt Well Permit No. S-223850  
Well Registration No. 55-223850; File No. B (2-1) 11DCD

Dear Permittee:

Your permit for the construction and operation of the above-referenced well is enclosed. The authority to drill and operate this well is granted on the condition that all applicable provisions of the Groundwater Code are met. Once you have selected a contractor and notified the Department of your selection in writing, a drill card will be sent to your driller of choice.

In the event the location of the proposed well changes, you must notify the Department of the change in writing. A drill card with the correct proposed well location must be in the possession of the driller before drilling may commence.

Within 30 days of completion of the well, the well driller is required to furnish the Department with a complete and accurate log of the well. In addition, the well owner is required to submit a Completion Report (DWR 55-56) within 30 days of the installation of pump equipment. Forms may be obtained by contacting the Department of online at <http://www.azwater.gov>

Pursuant to the provisions of A.R.S. § 45-604, any person withdrawing groundwater from a well is required to use a water measuring device to record rates of withdrawal in order to provide or allow the computation of an annual volume of pumpage from the well. The total volume of pumpage from the well shall be reported on your Annual Water Withdrawal and Use Report for this calendar year. Subsequent annual reporting periods shall be from January 1 through December 31.

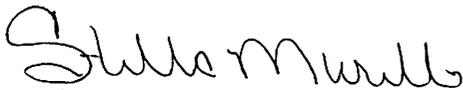
The Department has issued the authorization to drill and operate this well pursuant to A.R.S. §§ 45-598 and 45-599 of the Groundwater Code. The legal nature of the water withdrawn from the well may be the subject of court action in the future as part of a determination of surface water rights in your area. If there are court proceedings that could affect your well, you will be notified and be given the opportunity to participate.

Under A.R.S. § 45-593, the person to whom a well is registered must notify the Department of a change in ownership, physical characteristics or any other data about the well in order to keep the well registration records current and accurate. Forms may be obtained by contacting the Department of online at [www.azwater.gov](http://www.azwater.gov).

Your permit has been issued by this Department without a hearing. As such, it is an appealable agency action. You are entitled to appeal and your rights are described in the enclosed notice of right to appeal.

If you have any questions or require any administrative correction, please contact me at 602-771-8594.

Sincerely,

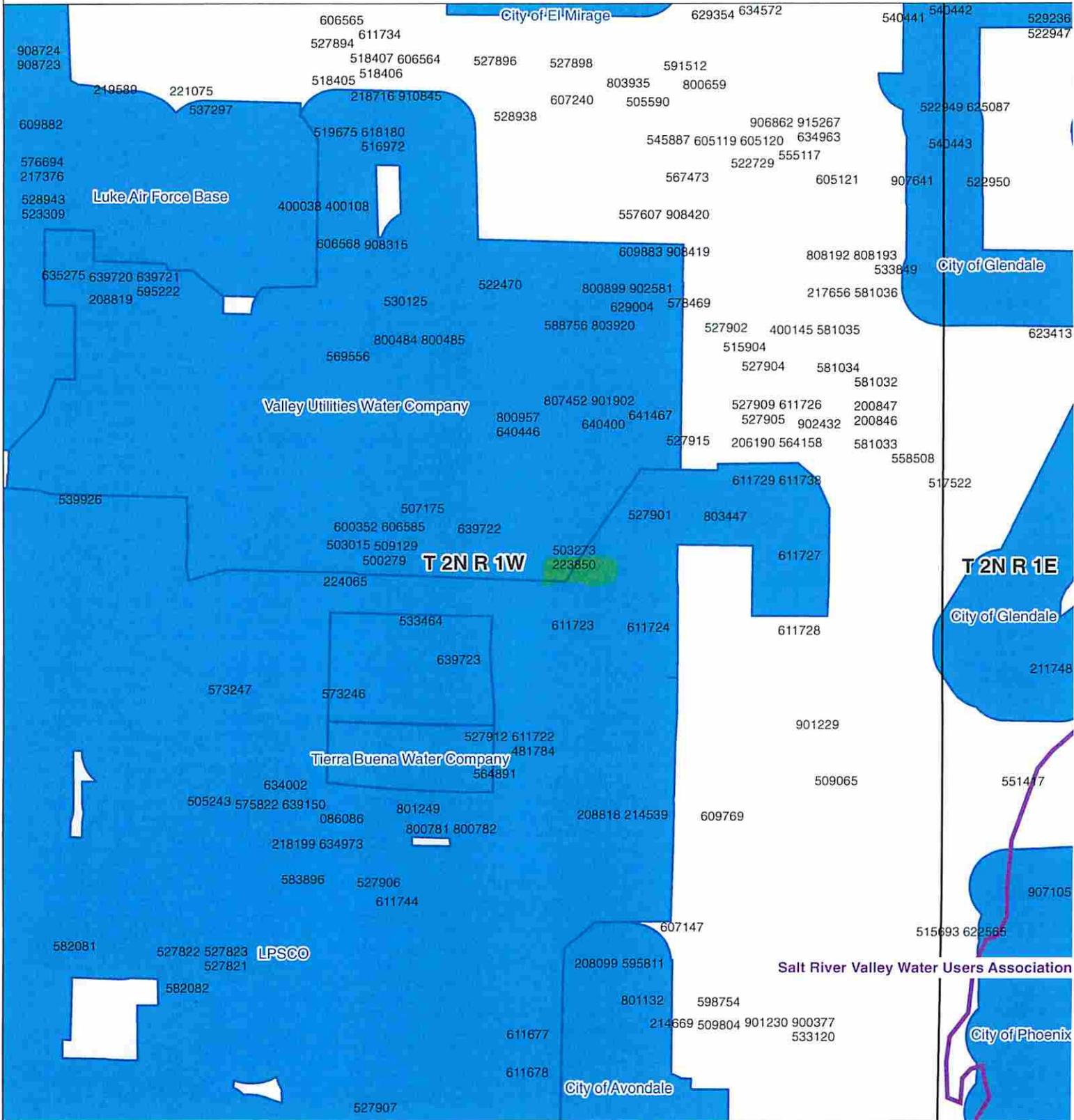
A handwritten signature in black ink that reads "Stella Murillo". The signature is written in a cursive style with a large initial "S".

Stella Murillo  
Groundwater Permitting and Wells Section

Enclosures

ARIZONA MUNICIPAL WATER PROVIDERS AND  
CERTIFICATES OF CONVENIENCE AND NECESSITY

55-223850



0 0.08 1.6 2.4 3.2

Miles

Scale 1:27,833

Map Printed: 11/12/2014 2:47:30 PM

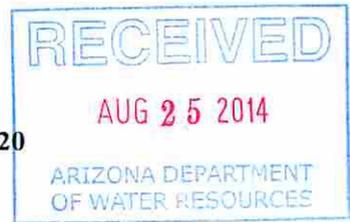
- Major Cities
- Counties
- Water Provider Labels
- Water Provider 2009
- Townships
- AMA Boundary
- Irrigation Districts



For more information about this map contact:  
Arizona Department of Water Resources  
Water Resources Information Central  
3550 North Central Ave  
Phoenix, AZ 85012  
Phone: (602) 771-8500 or 1-800-352-8488

Topographic map source: U.S. Geological Survey

STATE OF ARIZONA  
DEPARTMENT OF WATER RESOURCES  
WATER MANAGEMENT DIVISION  
MAIL TO: P.O. BOX 36020, PHOENIX, ARIZONA 85067-6020  
3550 North Central Avenue, Phoenix, Arizona 85012  
Phone (602) 771-8500 • Fax (602) 771-8690



**APPLICATION FOR A PERMIT TO DRILL OR OPERATE A NON-EXEMPT WELL WITHIN AN ACTIVE MANAGEMENT AREA PURSUANT TO A.R.S. § 45-599**

**I. INSTRUCTIONS:**

1. This application should be used to obtain a permit to:
  - (a) Drill a non-exempt well in conjunction with a new or existing General Industrial Use Permit Application, a Certificate of Grandfathered Right, a Service Area Right, or an Irrigation District Right.
  - (b) Convert an existing well to a non-exempt well, or increase the annual permitted volume to be withdrawn from the well.
2. Complete all appropriate items on this application, sign in the appropriate place and mail to P.O. Box 33589, Phoenix, Arizona 85067-3589 or hand deliver to 3550 North Central Avenue, Phoenix, Arizona 85012
3. Pursuant to A.R.S. § 45-599 and A.A.C. R12-15-104, the fee for this application is \$150.00 and the permit fee is \$30.00.

**II. GENERAL DATA:**

1. Applicant Valley Utilities Water Company, Inc.  
 Mailing Address 6808 N. Dysart Rd Suite 112  
Glendale AZ 85307  
 City State Zip Code  
 Contact Person Robert Prince  
 Telephone Number 623-935-1100

2. Name of Land Owner Robert Prince  
 Mailing Address same

FOR DEPARTMENT USE ONLY	
Application No. <u>S-223850</u>	
Registration No. <u>55-223850</u>	
File No. <u>B(2-1)11 DCB</u>	
Date Received <u>8-25-14</u>	
AMA <u>Phoenix</u>	
W/S <u>06</u> S/B <u>04</u>	

City State Zip Telephone Number

3. Applicant is:  Owner  Lessee
4. Proposed well is:  New well  Increase in Permitted Maximum Annual Volume for Existing Well  Replacement well in a new location.
5. Claim of entitlement to withdraw groundwater is based upon:
- Certificate of Grandfathered Right No: \_\_\_\_\_
- General Industrial Use Permit No. 59- \_\_\_\_\_
- Service Area Right No: 56-002047.0000
- Irrigation District Right No: \_\_\_\_\_

6. The principal use(s) of groundwater will be (be specific) Municipal Water Supply

7. Well location: SE 1/4 SW 1/4 SE 1/4 Section 11 Township 2N N/S Range 1W E/W  
10 Acre 40 Acre 160 Acre

8. Position location of the well: Latitude 33 ° 31 ' 21.5 " N Longitude 112 ° 19 ' 42.3 " W

9. Design Pump Capacity 600 gpm Depth 900 feet  
 Diameter 18 inches Type of casing Steel

10. Proposed annual volume of water 718 acre feet

11. Well is located in the West Salt River Valley subbasin of the Phoenix Active Management Area.



ARIZONA DEPARTMENT OF WATER RESOURCES

WATER MANAGEMENT DIVISION

3550 North Central Avenue, Phoenix, Arizona 85012

Phone (602) 771-8585 Fax (602) 771-8688

WELL CONSTRUCTION SUPPLEMENT (form DWR 55-90)

Well Registration Number 55-\_\_\_\_\_

1. Well Location:

SE 1/4 of the SW 1/4 of the SE 1/4, Sec. 11, Township 2N Range 1W.
10AC 40AC 160AC

2. Position Location of the Well:

Latitude 33 ° 31 ' 21.5 " Longitude 112 ° 19 ' 42.3 "

Datum: [X] NAD 83 [ ] NAD 27 • Other: \_\_\_\_\_

3. County Maricopa \_\_\_\_\_

4. Date construction to start: 01/01/2015 \_\_\_\_\_

5. Time period well will remain in use: 50 years \_\_\_\_\_

6. Is pump equipment to be installed? Yes If so, design pump capacity: 600 GPM.

7. Well construction plan:

a. Drilling method (mud rotary, hollow-stem auger, etc.) Reverse-Flood \_\_\_\_\_

b. Borehole diameters 30 inches from 0 feet to 39 feet.

22 inches from 39 feet to 920 feet.

c. Casing materials LCS blank casing, HSLA louvered screen \_\_\_\_\_

d. Method of well development (bail, air lift, surge, etc.) bail, air-lift and surge \_\_\_\_\_

e. Will surface or conductor casing extend above grade? Yes \_\_\_\_\_

8. Include a detailed construction diagram of the proposed well design. The diagram should verify consistency with minimum construction requirements specified in the Department's well construction rules found in Arizona Administrative Code (A.A.C.) R12-15-801 et seq. Specifically, the diagram should include borehole diameters; casing materials and diameters; perforation intervals; the expected water level; depth and thickness of the surface seal; proposed grouting materials; and the length that the surface or conductor casing will extend above grade, or vault details, if specified.

Pursuant to Arizona Revised Statutes (A.R.S.) § 45-594.B, all well construction, replacement, deepening and abandonment operations shall comply with the rules adopted pursuant to this section. Therefore, any existing well that is deepened or modified must be brought into compliance with minimum well construction standards specified above, if not already in compliance.

9. Proposed materials and method of abandonment if well is to be abandoned after project is completed (Minimum requirements per A.A.C. R12-15-816):

In accordance with ADWR rules.



**WELL SPACING-WELL IMPACT REPORT  
PROPOSED WELL NO. 8  
GLENDALE, ARIZONA**

**Prepared For:**

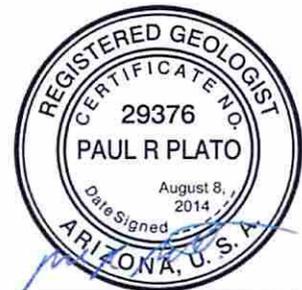
**Valley Utilities Water Company, Inc.  
6808 North Dysart Road, Suite 112  
Glendale, Arizona 85307**



**Prepared By**

**Clear Creek Associates, PLC  
6155 E. Indian School Rd., Suite 200  
Scottsdale, Arizona 85251**

**August 2014**



**Expires September 30, 2016**

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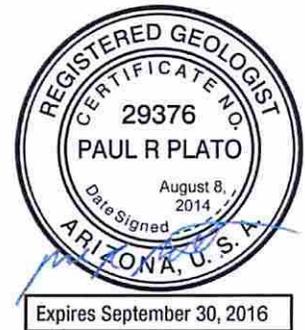
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**ATTACHMENT**

- THWELLS Input Data File



## 1.0 INTRODUCTION

### 1.1 BACKGROUND

Valley Utilities Water Company, Inc. (VUWCO) is planning to permit, install and operate a new production well within the Phoenix Active Management Area (AMA). The well, designated Well No. 8 will be located northwest of the intersection of 125<sup>th</sup> Avenue and Bethany Home Road, in Glendale, Arizona (Figure 1). Figure 2 shows the location of the proposed Well No. 8, which is located on land owned by Mr. Robert Prince, the President of VUWCO. The Proposed Well No. 8 is located in the SE  $\frac{1}{4}$  (10-acre) of the SW  $\frac{1}{4}$  (40-acre) of the SE  $\frac{1}{4}$  (160-acre) of Section 11, in Township 2 North, Range 1 West of the Gila and Salt River Baseline and Meridian (also referenced as B(2-1)11dcd). Approximate GPS coordinates of the proposed well location are 33° 31' 24.35" N; 112° 19' 43.48" W. Well No. 8 will have a designed pumping capacity of 600 gallons per minute (gpm). The preliminary well design drawing for Well No. 8 is presented on Figure 3.

### 1.2 PURPOSE AND SCOPE

This report has been prepared to satisfy the requirements of the Arizona Department of Water Resources (ADWR) Rule R12-15-830. That rule requires a hydrological study projecting the local groundwater level declines that result from the pumping of the proposed well. This report presents a determination of the extent of the 10-foot drawdown impact area attributable to pumping the proposed well continuously for a 5-year period. Characteristics of the local aquifer used in this analysis were based on the ADWR Salt River Valley (SRV) model (Freihoefer et.al. 2009). The calculation of the well impact area was based on the computer application THWELLS (version 4.01), which uses the Theis non-equilibrium formula to calculate drawdown (van der Heijde, 1996).

## 2.0 HYDROLOGIC SETTING

### 2.1 HYDROGEOLOGY

Laney and Hahn (1986) describe the general stratigraphy of the western part of the Salt River Valley (SRV), and defined the following stratigraphic units (from top to bottom).

- Upper Alluvial Unit (UAU)
- Middle Alluvial Unit (MAU)
- Lower Alluvial Unit (LAU)
- Red Unit
- Crystalline Rocks

The Well No. 8 site is located near the boundary of the Basin and Range and the Transition Zone Physiographic provinces. The Basin and Range Province is characterized by northwest-trending mountain ranges with deep intervening, alluvium-filled basins. The Transition Zone is characterized by highly deformed and metamorphosed rocks of Precambrian age with younger intrusive and volcanic rocks throughout.

ADWR developed a regional groundwater flow model of the SRV (Freihoefer et. al. 2009) that identified the average depths of the UAU, MAU, and LAU, along with their approximate hydrogeologic conditions on a section-by-section basis. The area lies near the contact between the Hieroglyphic Mountains and the West SRV groundwater basin, which consists of a deep alluvial basin bounded by bedrock ranges consisting primarily of granitic, metamorphic, and volcanic rocks (Brown and Pool, 1989). Alluvial material beneath the area is predominately unconsolidated to moderately consolidated and is underlain by granitic, volcanic, and metamorphic rocks. The elevation of the basin floor is approximately 1,500 feet above mean sea level (msl) and slopes to the south.

The Well No. 8 site is located near the Luke Salt Dome, a salt diapir located near Luke Air Force Base. This salt body has pushed up the through the alluvial sediments, resulting in a thinner aquifer, since the salt body is not considered transmissive for groundwater flow, and is mapped

as bedrock for the model. Figure 4 illustrates the depth to bedrock from the ADWR groundwater flow model (Freihoefer et. al. 2009). Based on these data, the Luke Salt Dome is centered approximately three quarters of a mile to the northeast of the well site.

## 2.2 AQUIFER COEFFICIENTS

The aquifer transmissivity (T) generally describes the ability of the penetrated aquifer to supply water to a pumping well. The T value is dependent upon the hydraulic conductivity (K) and the aquifer thickness (b), and is defined by the relationship  $T = Kb$ . Transmissivity is expressed in terms of gallons per day per foot (gpd/ft) or square feet per day (ft<sup>2</sup>/day). Hydraulic conductivity is expressed in units of gallons per day per square foot (gpd/ft<sup>2</sup>) or feet per day (ft/day).

The site for Well No. 8 lies in cell # 12308 of ADWR's updated SRV model. The anticipated well screen interval (600 to 900 feet bgs) will be entirely in the MAU. The model layer elevations for this cell are as follows:

Land Surface:	✓	1,066 feet above mean sea level (amsl)
Bottom UAU:	✓	800 feet amsl
Bottom MAU:	✓	144 feet amsl
Bottom LAU/Depth to Bedrock:	✓	-242 feet amsl

## 2.3 WELL IMPACT ANALYSIS PARAMETERS

It is anticipated that Well No. 8 will be drilled to a total depth of approximately 900 feet below land surface (bls), and constructed with a screened interval that extends from 600-900 feet (Figure 3). The static water level at the Well No. 8 site is estimated to be approximately 350 feet bls. The model data for cell # 12308 lists a K value of 11 ft/day (82.28 gpd/ft<sup>2</sup>) for the MAU layer (Freihoefer et.al. 2009). The specific yield for the MAU (Model Layer 2) is 0.07. Based on an aquifer thickness of 300 feet, the assumed transmissivity used in the well impact analysis is 24,684 gallons per day per foot (gpd/foot), or 3,300 cubic feet per foot per day (ft<sup>2</sup>/d)

ADWR guidelines for a well impact analysis require that when impermeable aquifer boundaries exist, such as bedrock, those boundaries must be considered. For analysis purposes, an impermeable boundary exists where the depth to bedrock is 400 feet bls or less. When a well site is located within five miles of an impermeable aquifer boundary, ADWR guidelines generally require that the well impact analysis take into account the effect the boundary (or boundaries) may have on aquifer drawdown due to the pumping of the well. Based on the well location, no impermeable boundaries are located within 5 miles of the site, and thus the analysis does not include any boundary effects.

### 3.0 IMPACT OF THE NEW WELL

#### 3.1 IMPACT ON THE AQUIFER

The total annual groundwater production from Well No. 8 will be approximately 718 acre feet per year (ac-ft/yr) based on a continuous pumping rate of 445 gpm. The anticipated maximum pumping capacity for Well No. 8 is 600 gpm. The impact analysis for Well No. 8 is based on an average pumping rate of 445 gpm, 24 hours per day, for a 5-year period.

The computer application THWELLS, which uses the Theis (1935) non-equilibrium formula to calculate drawdown (van der Heijde, 1996), was used to estimate the impact of the new well on surrounding wells after a 5-year period of continuous pumping. The following criteria were used to calculate the impact of the proposed groundwater withdrawal (718 ac-ft/yr) on the underlying source aquifer:

- The transmissivity (T) is approximately 24,684 gpd/ft (3,300 ft<sup>2</sup>/day) based on the parameters indicated by the SRV model.
- The estimated aquifer thickness (b) is based on the screen interval of 300 feet.
- The hydraulic conductivity (K) value is estimated at 82.28 gpd/ft<sup>2</sup> (11 ft/day), based on the relationship  $T=Kb$ .
- The specific yield of the source aquifer is 0.07 from the SRV model (Freihoefer and others, 2009).
- Because the site is more than five miles from the boundary of the aquifer, no image wells were incorporated into the analysis.

The THWELLS calculated 5-year drawdown is also presented on Figure 5. The configuration of the 5-year 10-foot drawdown impact takes into account the pumping well. The radius of the area with a hydrologic impact (water-level drawdown) of 10 feet after pumping continuously for a 5-year period is presented on Figure 5, and is estimated as 1,312 feet. The locations of neighboring wells in the study area are also shown on Figure 1. A summary of registered wells in the vicinity

of Well No. 8 is presented in Table 1 and the input data used for THWELLS are included as an attachment.

The closest registered well not owned by VUWCO is well 55-611723, owned by RP Water LLC, which has been identified on a Google Earth image shown below. This well is accurately located on Figure 5.

### Actual Location of Well 55-611723



Based on the coordinates of the proposed Well No. 8 (574533, 917926), the well is located 1,323 feet from the proposed Well No. 8. The estimated 10-foot drawdown radius is 1,312 feet, and is displayed on Figure 5. This well is thus outside of the 10-foot drawdown radius, based on this analysis.

#### 4.0 SUMMARY AND CONCLUSIONS

The analyses presented herein indicates that groundwater production of approximately 718 ac-ft/yr (445 gpm, continuous flow) from the new Well No. 8 will not adversely impact any existing wells of record. Four wells are within the 10-foot drawdown contour, but each is owned by the “Applicant”. Based on the drawdown analyses and the legal locations of other neighboring wells, as indicated in the ADWR database, no other existing wells receiving water from the regional aquifer will be impacted greater than 10 feet after 5 years of continuous pumping at Well No. 8.

## 5.0 REFERENCES

1. Brown, J.G. and Pool, D.R., 1989. Hydrogeology of the Western Part of the Salt River Valley Area, Maricopa County, Arizona: U.S. Geological Survey Water Resources Investigation Report 88-4202, 5 plates.
2. Corell, S.W. and Corkhill, E.F., 1994. A Regional Groundwater Flow Model of the Salt River Valley – Phase II, Phoenix Active Management Area Numerical Model, Calibration, and Recommendations. ADWR Hydrology Division, Modeling Report No. 8, March 1994, 92 p.
3. Freeze, R. Allan and Cherry, John A. 1979. Groundwater, pp. 330-331
4. Freihoefer, A., Mason, D., Jahnke, P., Dubas, L., and Hutchinson, K. 2009. Regional Groundwater Flow Model of the Salt River Valley Phoenix Active Management Area, Model Update and Calibration. ADWR Modeling Report No. 19
5. Theis, C.V., 1935. The relation between the lowering of piezometric surface and the rate and duration of discharge of a well using ground-water storage. Trans. Am. Geophys. Union, v. 16, p. 519-524.
6. Van der Heijde, P.K.M., 1996. Calculating Drawdown Resulting from Multiple Discharge or Recharge Wells in an Isotropic Homogeneous Aquifer with Regional Flow. International Ground Water Modeling Center – BAS 04, Ver. 4.01, November 1996, 13 p.

## FIGURES

**Explanation**

**VUWC Wells**

- Existing VUWC Wells
- ⊕ Proposed Well
- VUWC Property
- VUWC Service Area

Proposed Well No. 8 is located at 574533, 917926 using NAD 83 State Plane Arizona Central Zone



**CLEAR CREEK ASSOCIATES**

6155 East Indian School Road  
Suite 200  
Scottsdale, Arizona 85251  
(480) 659-7131

**Figure 2**

**Location Map**

**Well No. 8 - B(2-1)11DCD**  
**Valley Utilities Water Co.**

July 2014



Valley Utilities Water Company  
Glendale, Arizona

**Explanation**  
**VUWC Wells**

- Existing VUWC Wells
- ⊕ Proposed Well
- ▭ VUWC Service Area
- ▭ Township



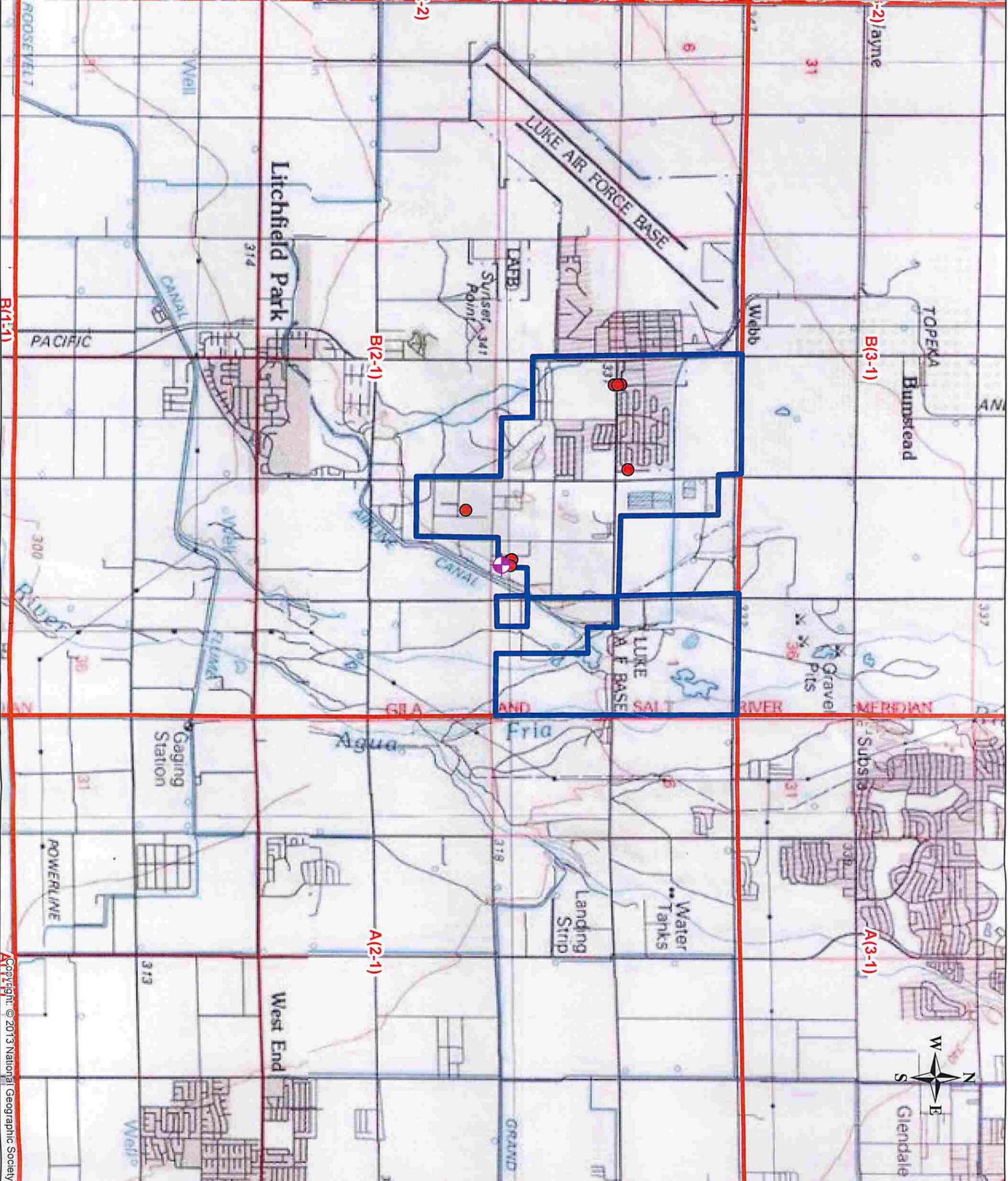
**CLEAR CREEK ASSOCIATES**

6155 East Indian School Road  
Suite 200  
Scottsdale, Arizona 85251  
(480) 659-7131

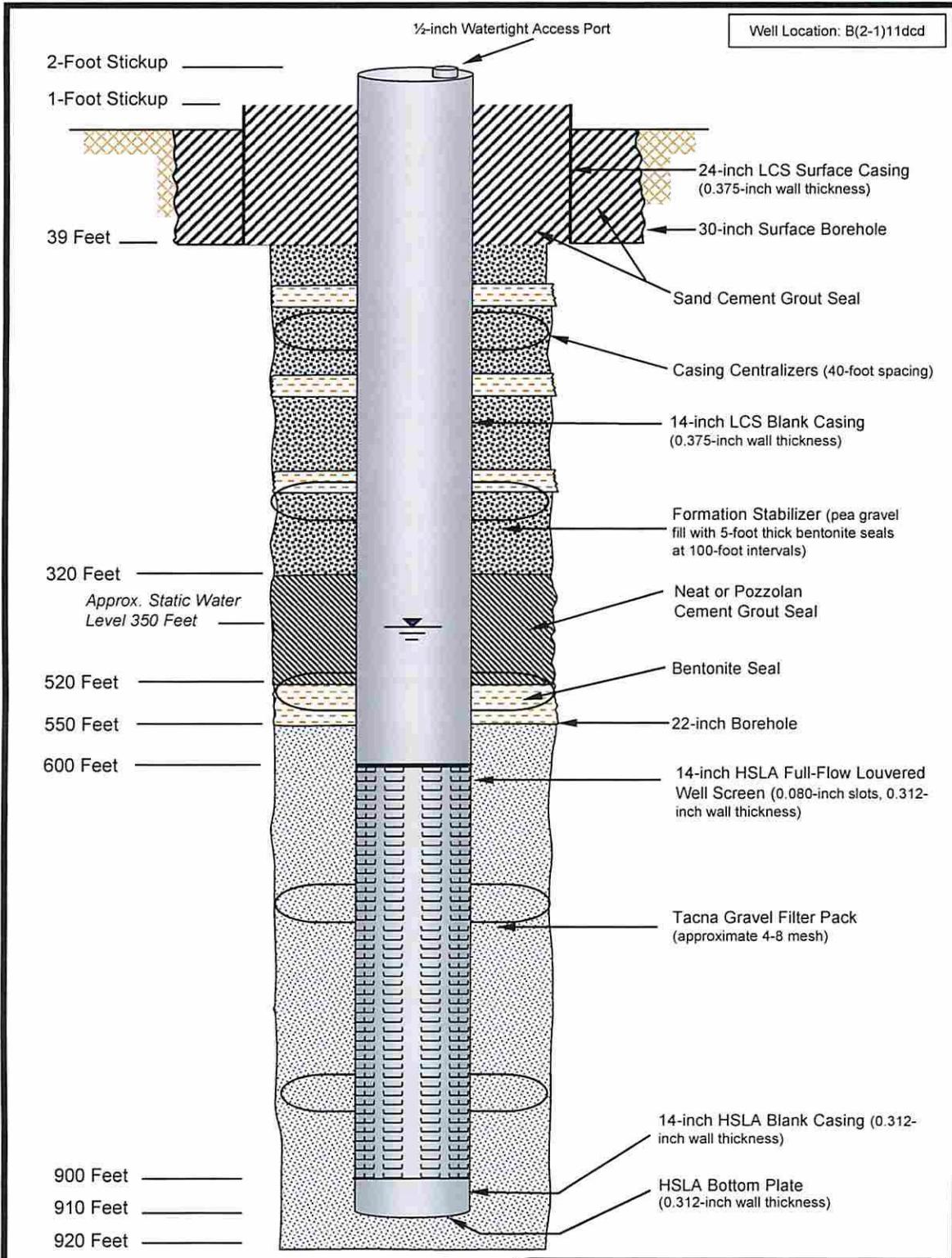
**Figure 1**

**Vicinity Map**  
**Well No. 8 - B(2-1)11dcd**  
**Valley Utilities Water Co.**

July 2014



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Not To Scale

Notes: LCS = low carbon steel  
 HSLA = high strength low alloy steel  
 Casing diameters are nominal.

**FIGURE 3**  
**PRELIMINARY WELL DESIGN**  
 Valley Utilities Water Co.  
 Glendale, Arizona





## TABLES

TABLE 1  
Well Inventory List  
Valley Utilities Water Co.  
Glendale, AZ

ADWR REGISTRY	CADASTRAL	OWNER NAME	WELL TYPE	WELL DEPTH	CASING DEPTH	CASING DIAMETER
625087	A02001006BCC	GLENDALE, CITY OF	NON-EXEMPT	483	483	16
618079	A02001007ADC	GLENDALE, CITY OF,	NON-EXEMPT	250	0	0
623413	A02001007BAD	JOHN F LONG FAMILY REVOCABLE LIVING TRUST	NON-EXEMPT	586	0	0
217517	A02001018AAA	CITY OF GLENDALE	NON-EXEMPT	2066	631	23
482310	A02001018AAA	CITY OF GLENDALE	EXEMPT	285	285	6
606047	A02001018AAA	ALHAMBRA CO.,	NON-EXEMPT	470	470	20
806145	A02001018AAA	CITY OF GLENDALE	NON-EXEMPT	444	444	20
606065	A02001018DAA	GLENDALE, CITY OF,	NON-EXEMPT	390	390	20
639362	A02001018DAA	CITY OF GLENDALE	EXEMPT	200	200	6
639361	A02001018DDD	ALHAMBRA CO.,	EXEMPT	200	200	1
515693	A02001019BBC	JOHNSON-STEWART CO	NON-EXEMPT	0	0	0
622565	A02001019BBC	JOHNSON-STEWART CO	NON-EXEMPT	0	390	16
806217	A02001019DAB	MORLEN HOMES LTD,	EXEMPT	193	0	20
626462	A03001031000	SOLANA PROPERTIES,	NON-EXEMPT	0	0	0
626463	A03001031000	SOLANA PROPERTIES,	NON-EXEMPT	0	0	0
617058	A03001031ACA	PEORIA, CITY OF,	NON-EXEMPT	956	956	20
535869	A03001031BBC	CITY OF PEORIA	NON-EXEMPT	1512	1425	30
807423	A03001031CBB	DIAMOND KEY HOMES	EXEMPT	100	0	8
634963	B02001001000	MASON, H W	EXEMPT	350	350	8
217842	B02001001BAB	MARICOPA COUNTY	EXEMPT	360	360	6
634572	B02001001BAB	MARICOPA COUNTY	EXEMPT	300	300	6
629354	B02001001BBA	MARICOPA COUNTY	EXEMPT	300	160	8
514423	B02001001BBB	MARICOPA COUNTY	EXEMPT	380	380	10
518426	B02001001BBB	MARICOPA COUNTY	EXEMPT	340	340	8
803781	B02001001BBB	MARICOPA COUNTY	EXEMPT	350	350	8
800659	B02001001BC0	QUASS, I D	NON-EXEMPT	371	371	12
591512	B02001001BCB	AMERICAN SAND & ROCK	EXEMPT			
522729	B02001001CAB	UNITED METRO MATERIALS INC	NON-EXEMPT	807	807	16
605119	B02001001CAB	UNITED METRO MATERIALS INC	NON-EXEMPT	450	400	16
605120	B02001001CAB	UNITED METRO MATERIALS INC	NON-EXEMPT	858	0	12
567473	B02001001CBC	MUZZ INVESTMENTS, L.L.C.	EXEMPT	350	350	8
557607	B02001001CCB	LUKE AIR FORCE BASE,	NON-EXEMPT	970	560	14
609883	B02001001CCC	LUKE AFB,	NON-EXEMPT	596	599	8
605121	B02001001DBC	ARIZ MUNICIPAL CORP,	NON-EXEMPT	700	0	10
808192	B02001001DCD	ACCESS 101 LLC	EXEMPT			
808193	B02001001DCD	ACCESS 101 LLC	EXEMPT			
527897	B02001002ABA	GOODYEAR TIRE,	EXEMPT	306	0	20
527898	B02001002ACA	GOODYEAR TIRE,	EXEMPT	538	0	20
607240	B02001002ACD	ROOSEVELT IRR DIST,	NON-EXEMPT	750	750	24
803935	B02001002AD0	PHOENIX VEGETABLE,	EXEMPT	370	370	6
505590	B02001002ADD	RIVERA, O R	EXEMPT	0	0	0
527942	B02001002BAA	GOODYEAR TIRE,	EXEMPT	555	0	20
611736	B02001002BAA	EL PASO NATURAL GAS CO.	NON-EXEMPT	720	720	20

**Well Inventory List**  
**Valley Utilities Water Co.**  
 Glendale, AZ

ADWR REGISTRY	CADASTRAL	OWNER NAME	WELL TYPE	WELL DEPTH	CASING DEPTH	CASING DIAMETER
527900	B02001002BBA	GOODYEAR TIRE,	EXEMPT	694	0	20
527895	B02001002BBB	GOODYEAR TIRE,	EXEMPT	605	0	20
611735	B02001002BBB	EL PASO NATURAL GAS CO.	NON-EXEMPT	866	866	20
527894	B02001002BBC	GOODYEAR TIRE,	EXEMPT	71	0	20
611734	B02001002BBC	EL PASO NATURAL GAS CO.	NON-EXEMPT	772	770	20
606564	B02001002BCA	GLENDALE SALT DEVELOPMENT LLC	NON-EXEMPT	817	817	4
221717	B02001002BCB	GLENDALE SALT DEVELOPMENT LLC	NON-EXEMPT	635	610	11
222508	B02001002BCB	GLENDALE SALT DEVELOPMENT LLC	NON-EXEMPT	615	610	11
504431	B02001002BCB	CAL GAS CORP.	EXEMPT	0	0	0
527896	B02001002BDA	GOODYEAR TIRE,	EXEMPT	170	0	20
519675	B02001002CBB	MORTON SALT, INC.	NON-EXEMPT	824	821	12
618180	B02001002CBB	GLENDALE SALT DEVELOPMENT LLC	NON-EXEMPT	650	659	20
553284	B02001003AAA	MORTON INTERNATIONAL,	NON-EXEMPT	700	700	20
606565	B02001003AAD	FIRST AM TITILE INS,	NON-EXEMPT	852	852	16
219157	B02001003ABB	DYSART/NORTHERN LLC	NON-EXEMPT			
606566	B02001003ABB	DYSART/NORTHERN LLC	NON-EXEMPT	920	857	20
606567	B02001003ABB	DYSART/NORTHERN LLC	EXEMPT	500	500	8
587821	B02001003BAB	RONALD E. GASS F-16 LLC	NON-EXEMPT	800	800	16
601890	B02001003BAB	F-16, LLC	NON-EXEMPT	845	845	11
219589	B02001003BCD	LUKE AIR FORCE BASE	NON-EXEMPT			
606568	B02001003DDD	VALLEY UTILITIES WATER CO INC	EXEMPT	600	600	8
507977	B02001004BCB	LUKE AFB,	NON-EXEMPT	910	490	16
609882	B02001004DAA	LUKE AFB,	NON-EXEMPT	460	460	16
507978	B02001004DCB	LUKE AFB,	NON-EXEMPT	1050	1020	16
806667	B02001008ADA	LUKE AFB,	EXEMPT	415	0	4
806562	B02001008ADD	LUKE AFB,	EXEMPT	565	565	16
510325	B02001009BBC	AIR FORCE,	NON-EXEMPT	910	890	16
609884	B02001009BCB	LUKE AFB,	NON-EXEMPT	1200	1200	18
507979	B02001009BDD	LUKE AFB,	NON-EXEMPT	910	0	28
208819	B02001010BAB	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	715	695	16
639720	B02001010BAB	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	650	650	12
639721	B02001010BAB	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	650	650	10
635275	B02001010BBB	G C H INVESTMENTS,	EXEMPT	780	771	16
640446	B02001011000	BURGENER, C W	EXEMPT	0	0	8
800957	B02001011000	MARTHA ROBARGE	EXEMPT	600	600	8
629004	B02001011AA0	GLENDALE AVE WEST,	EXEMPT	0	0	0
200127	B02001011AAA	ADVANTAGE STORAGE LLC	EXEMPT			
200208	B02001011AAA	BRONILEIO (LEO) R VALDEZ	EXEMPT			
218562	B02001011AAA	JONES PLAZA LLC	EXEMPT	600	600	5
578584	B02001011AAA	JONES PLAZA LLC	EXEMPT	345	345	6
611538	B02001011AAA	BRONILEIO (LEO) R VALDEZ	EXEMPT	320	320	6
800899	B02001011AAA	WESTERN HILLS BAPTIST CHURCH	EXEMPT	337	337	6
902581	B02001011AAA	SAWB LLC	EXEMPT	395	395	5

Well Inventory List  
Valley Utilities Water Co.

Glendale, AZ

ADWR REGISTRY	CADASTRAL	OWNER NAME	WELL TYPE	WELL DEPTH	CASING DEPTH	CASING DIAMETER
588756	B02001011AAC	WILLIAM WELSCH	EXEMPT	235	230	6
803920	B02001011AAC	GLENDALE AVE WEST,	EXEMPT	332	0	7
807452	B02001011ADC	KEVIN L ROSS	EXEMPT	515	515	8
901902	B02001011ADC	CROWN CHARTER SCHOOLS INC.	EXEMPT	500	500	7
640400	B02001011ADD	TOLBERT,E V	EXEMPT	515	499	8
641467	B02001011ADD	MAXWELL,G E	EXEMPT	515	515	8
800484	B02001011B00	HEGEL,J J	NON-EXEMPT	600	416	8
800485	B02001011B00	HEGEL,J J	NON-EXEMPT	600	416	8
600352	B02001011CC0	VINBERG, DONALD,J	NON-EXEMPT	430	430	8
606585	B02001011CC0	HERBERT, JAMES,M	NON-EXEMPT	431	422	8
507175	B02001011CCA	MANGHAM,J	EXEMPT	450	453	8
500279	B02001011CCC	MOORE,D	EXEMPT	100	0	0
503015	B02001011CCC	MOORE,D	EXEMPT	0	0	0
509129	B02001011CCD	RONALD JARRELL	EXEMPT	680	531	7
639722	B02001011CD0	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	840	840	12
580082	B02001011DCC	VALLEY UTILITIES WATER CO INC	NON-EXEMPT			
584895	B02001011DCC	TOWN OF BUCKEYE	NON-EXEMPT	800	390	12
216455	B02001011DCD	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	810	740	20
503273	B02001011DCD	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	885	811	24
527901	B02001011DDA	GOODYEAR TIRE,	EXEMPT	140	0	26
481739	B02001011DDC	CHI CONSTRUCTION COMPANY	NON-EXEMPT			26
217656	B02001012ABA	LG & M HOLDINGS LLC	EXEMPT	700	700	5
400145	B02001012ABC	CITY OF GLENDALE	EXEMPT			
578465	B02001012BBB	CITY OF GLENDALE	NON-EXEMPT			
578466	B02001012BBB	CITY OF GLENDALE	NON-EXEMPT			
578467	B02001012BBB	CITY OF GLENDALE	NON-EXEMPT			
578468	B02001012BBB	CITY OF GLENDALE	NON-EXEMPT			
578469	B02001012BBB	CITY OF GLENDALE	NON-EXEMPT			
527902	B02001012BBD	GOODYEAR TIRE,	EXEMPT	186	0	26
527903	B02001012BCC	GOODYEAR TIRE,	EXEMPT	49	0	26
611725	B02001012BCG	R P WATER LLC	NON-EXEMPT	962	0	16
527904	B02001012BDB	GOODYEAR TIRE,	EXEMPT	773	0	20
527905	B02001012BDC	GOODYEAR TIRE,	EXEMPT	59	0	16
527909	B02001012BDD	GOODYEAR TIRE,	EXEMPT	454	0	20
611726	B02001012BDD	R P WATER LLC	NON-EXEMPT	1015	1007	16
206190	B02001012CAA	R P WATER LLC	NON-EXEMPT	1015	1007	16
564158	B02001012CAA	M.R. TANNER MINING, INC	NON-EXEMPT	475	466	16
611729	B02001012CAD	M.R. TANNER MINING, INC	NON-EXEMPT	1140	1094	12
611738	B02001012CAD	LIBERTY WATER	NON-EXEMPT	992	992	20
527915	B02001012CBB	GOODYEAR TIRE,	EXEMPT	161	0	0
803447	B02001012CCA	HAAZ ACQUISITION CO LLC	NON-EXEMPT	0	0	0
611727	B02001012CDD	LIBERTY WATER	NON-EXEMPT	1000	1000	16

Well Inventory List  
Valley Utilities Water Co.

Glendale, AZ

ADWR REGISTRY	CADASTRAL	OWNER NAME	WELL TYPE	WELL DEPTH	CASING DEPTH	CASING DIAMETE
558508	B02001012DAB	LENDALE 115 LLC	NON-EXEMPT	500	500	14
517522	B02001012DAD	IDEAL ROCK PRODUCTS,	NON-EXEMPT	0	0	0
611728	B02001013BAD	R P WATER LLC	NON-EXEMPT	1002	1002	16
609769	B02001013CCA	HAAZ ACQUISITION CO LLC	NON-EXEMPT	414	414	16
509065	B02001013DBC	ABC ENTERPRISES,	NON-EXEMPT	406	406	8
611724	B02001014AAD	R P WATER LLC	NON-EXEMPT	1000	982	16
611723	B02001014ABD	R P WATER LLC	NON-EXEMPT	753	753	20
533464	B02001014BBD	WALKER, SAMMIE,	EXEMPT	400	401	6
639723	B02001014BDB	VALLEY UTILITIES WATER CO INC	NON-EXEMPT	429	425	9
564891	B02001014CAD	TIERRA BUENA WATER CO	NON-EXEMPT	680	680	12
801249	B02001014CCA	TIERRA BUENA WATER CO	EXEMPT	500	450	8
800781	B02001014CD0	WILLIAMSON, J D	EXEMPT	435	405	8
800782	B02001014CD0	WILLIAMSON, J D	EXEMPT	250	250	6
481784	B02001014DBB	SUNCOR DEVELOPMENT COMPANY	NON-EXEMPT			
527912	B02001014DBB	GOODYEAR TIRE,	EXEMPT	48	0	16
611722	B02001014DBB	SUNCOR DEVELOPMENT COMPANY	NON-EXEMPT	720	0	20
208818	B02001014DDA	LITCHFIELD PARK SERVICE COMPANY	NON-EXEMPT			
214539	B02001014DDA	LITCHFIELD PARK SERVICE COMPANY	NON-EXEMPT	1010	670	17
634002	B02001015D00	DAVENPORT, R W	EXEMPT	330	210	8
505243	B02001015DCB	LOGAN & DOUG PROCTOR	EXEMPT	300	300	8
086086	B02001015DDA	MARSHALL, J T	EXEMPT	0	0	0
575822	B02001015DDB	DR LOUIS ALBELDA	EXEMPT	320	320	6
639150	B02001015DDB	CRAIG ALBELDA	EXEMPT	269	178	6
634973	B02001015DDD	LAUMAN, G W	EXEMPT	500	0	8
611721	B02001021CCB	WIGWAM JOINT VENTURE LP	NON-EXEMPT	1990	1990	20
583896	B02001022AAB	KABUTO ARIZONA PROPERTIES	NON-EXEMPT			
582081	B02001022BCB	KABUTO ARIZONA PROPERTIES	NON-EXEMPT	1367	1152	16
582082	B02001022BDD	KABUTO ARIZONA PROPERTIES	NON-EXEMPT			
208099	B02001023ADA	CITY OF AVONDALE	NON-EXEMPT	810	810	16
801132	B02001023ADD	PHOENIX & SKEET CLUB,	EXEMPT	0	0	0
611744	B02001023BB0	SOUTHWEST NEXT SEC CAMELBACK & DYSART LLC	EXEMPT	0	0	0
215455	B02001023BBA	LITCHFIELD PARK SERVICE COMPANY	NON-EXEMPT			
527906	B02001023BBB	GOODYEAR TIRE,	EXEMPT	334	0	8
611677	B02001023DBB	LITCHFIELD PK SER CO,	NON-EXEMPT	850	850	16
611678	B02001023DBC	LITCHFIELD PK SER CO,	NON-EXEMPT	685	685	20
607147	B02001024BBC	ROOSEVELT IRRIGATION DISTRICT	NON-EXEMPT	1200	910	20
214669	B02001024BCC		NON-EXEMPT			
598754	B02001024BCD	CEMEX CONSTRUCTION MATERIALS	EXEMPT	400	400	8
085370	B02001024BDC	BLUE CIRCLE ARIZ INC,	NON-EXEMPT	435	415	8
508281	B02001024BDC	BLUE CIRCLE ARIZ INC,	NON-EXEMPT	435	415	8
509804	B02001024BDC	BLUE CIRCLE ARIZ INC,	NON-EXEMPT	0	0	0
212428	B02001024CBC	ROOSEVELT IRRIGATION DISTRICT	NON-EXEMPT			
566159	B03001033ACC	HENRY & ROBBIE THOMPSON	EXEMPT	550	550	8

TABLE 1  
Well Inventory List  
Valley Utilities Water Co.

Glendale, AZ

ADWR REGISTRY	CADASTRAL	OWNER NAME	WELL TYPE	WELL DEPTH	CASING DEPTH	CASING DIAMETER
915786	B03001033ACC	LORALEES LANDHOLDINGS LLC	EXEMPT			
599021	B03001033DBB	OLIVE AVENUE HOMEOWNERS	NON-EXEMPT	600	580	8
618162	B03001033DBB	OLIVE AVENUE HOMEOWNERS	EXEMPT	596	0	8
517993	B03001034ADA	WESTSIDE INDUSTRIAL INVESTMENTS	NON-EXEMPT	800	800	10
516887	B03001034ADB	DYSART & OLIVE PRTSIP,	NON-EXEMPT	0	0	0
610630	B03001034DBB	JOHN F LONG FAMILY REVOCABLE LIVING TRUST U/A/D 2/26/2008	NON-EXEMPT	1250	1250	20
528467	B03001035ACD	CONTECH CONST PROD,	EXEMPT	560	560	12
807147	B03001035DAA	JDL & COMPANY,	NON-EXEMPT	520	0	12
552334	B03001035DBA	ELLIOTT HOMES	NON-EXEMPT	0	0	0
214517	B03001036ADC	RINKER MATERIALS	NON-EXEMPT	1200	1085	16
604162	B03001036BBC	UNITED METRO MATERIALS INC	NON-EXEMPT	900	900	20

**ATTACHMENT**



Well Spacing-Well Impact Investigation  
Valley Utilities Water Company, Inc. Well No. 8  
Glendale, Arizona

August 2014

358002

\*\*\*\*\* THWELLS - version 4.01  
\*\*\*\*\* PAGE 1

CALCULATION OF DRAWDOWN IN A HOMOGENEOUS, ISOTROPIC, CONFINED,  
LEAKY  
CONFINED OR UNCONFINED AQUIFER WITH MULTIPLE PRODUCTION AND  
INJECTION  
WELLS AND UNIFORM REGIONAL FLOW

-----  
-----  
Well No 7 at 445 gpm  
-----  
-----

\*\*\*\*\* INPUT DATA  
\*\*\*\*\*

UNCONFINED AQUIFER - THEIS EQUATION WITH JACOB'S  
CORRECTION

WATER TABLE CORRECTION APPLIED; DRAWDOWNS EXCEED 10% OF  
SATURATED THICKNESS

AQUIFER THICKNESS = 300 [ft]  
TRANSMISSIVITY = 24684  
[gpd/ft]

STORAGE COEFFICIENT = .07

REGIONAL FLOW GRADIENT  
(positive--downwards--in flow direction) = 0

REGIONAL FLOW DIRECTION  
(horizontal angle in degrees  
counter-clockwise from positive x-axis) = 0

REGIONAL FLOW OFFSET AT ORIGIN  
(positive in downwards direction) = 0 [ft]

WATER TABLE CORRECTION APPLIED; DRAWDOWNS EXCEED 10% OF  
SATURATED THICKNESS

\*\*\*\*\*  
THWELLS - PAGE 2

PUMPING/INJECTION WELL DATA

WELL NO. 1

X-COORDINATE = 574533 [ft]  
Y-COORDINATE = 917926 [ft]  
PUMPING/INJECTION RATE = 645120 [gpd]  
TIME SINCE START PUMPING/INJECTION = 1825 [day]

-----

TIME SINCE START PUMPING/INJECTION [day]	X-COORDINATE [ft]	Y-COORDINATE [ft]	PUMPING/INJECTION RATE [gpd]
0.0	574533	917926	645120
1.0	574533	917926	645120
2.0	574533	917926	645120
3.0	574533	917926	645120
4.0	574533	917926	645120
5.0	574533	917926	645120
6.0	574533	917926	645120
7.0	574533	917926	645120
8.0	574533	917926	645120
9.0	574533	917926	645120
10.0	574533	917926	645120
11.0	574533	917926	645120
12.0	574533	917926	645120
13.0	574533	917926	645120
14.0	574533	917926	645120
15.0	574533	917926	645120
16.0	574533	917926	645120
17.0	574533	917926	645120
18.0	574533	917926	645120
19.0	574533	917926	645120
20.0	574533	917926	645120
21.0	574533	917926	645120
22.0	574533	917926	645120
23.0	574533	917926	645120
24.0	574533	917926	645120
25.0	574533	917926	645120
26.0	574533	917926	645120
27.0	574533	917926	645120
28.0	574533	917926	645120
29.0	574533	917926	645120
30.0	574533	917926	645120
31.0	574533	917926	645120
32.0	574533	917926	645120
33.0	574533	917926	645120
34.0	574533	917926	645120
35.0	574533	917926	645120
36.0	574533	917926	645120
37.0	574533	917926	645120
38.0	574533	917926	645120
39.0	574533	917926	645120
40.0	574533	917926	645120
41.0	574533	917926	645120
42.0	574533	917926	645120
43.0	574533	917926	645120
44.0	574533	917926	645120
45.0	574533	917926	645120
46.0	574533	917926	645120
47.0	574533	917926	645120
48.0	574533	917926	645120
49.0	574533	917926	645120
50.0	574533	917926	645120
51.0	574533	917926	645120
52.0	574533	917926	645120
53.0	574533	917926	645120
54.0	574533	917926	645120
55.0	574533	917926	645120
56.0	574533	917926	645120
57.0	574533	917926	645120
58.0	574533	917926	645120
59.0	574533	917926	645120
60.0	574533	917926	645120
61.0	574533	917926	645120
62.0	574533	917926	645120
63.0	574533	917926	645120
64.0	574533	917926	645120
65.0	574533	917926	645120
66.0	574533	917926	645120
67.0	574533	917926	645120
68.0	574533	917926	645120
69.0	574533	917926	645120
70.0	574533	917926	645120
71.0	574533	917926	645120
72.0	574533	917926	645120
73.0	574533	917926	645120
74.0	574533	917926	645120
75.0	574533	917926	645120
76.0	574533	917926	645120
77.0	574533	917926	645120
78.0	574533	917926	645120
79.0	574533	917926	645120
80.0	574533	917926	645120
81.0	574533	917926	645120
82.0	574533	917926	645120
83.0	574533	917926	645120
84.0	574533	917926	645120
85.0	574533	917926	645120
86.0	574533	917926	645120
87.0	574533	917926	645120
88.0	574533	917926	645120
89.0	574533	917926	645120
90.0	574533	917926	645120
91.0	574533	917926	645120
92.0	574533	917926	645120
93.0	574533	917926	645120
94.0	574533	917926	645120
95.0	574533	917926	645120
96.0	574533	917926	645120
97.0	574533	917926	645120
98.0	574533	917926	645120
99.0	574533	917926	645120
100.0	574533	917926	645120

914726.00	2.022	1.961	1.902	1.845
914926.00	2.043	1.981	1.921	1.863
915126.00	2.063	2.000	1.939	1.880
915326.00	2.082	2.018	1.956	1.896
915526.00	2.099	2.035	1.972	1.911

Y [ft]	<- X [ft] ->			
	583733	583933	584133	584333
923726.00	1.683	1.637	1.593	1.549
923926.00	1.654	1.609	1.566	1.523
924126.00	1.624	1.581	1.539	1.497
924326.00	1.595	1.553	1.511	1.471
924526.00	1.565	1.524	1.484	1.445
924726.00	1.536	1.496	1.457	1.418
924926.00	1.506	1.467	1.429	1.392
925126.00	1.476	1.439	1.402	1.365
925326.00	1.447	1.410	1.374	1.339
925526.00	1.417	1.382	1.347	1.312
925726.00	1.388	1.353	1.319	1.286
925926.00	1.358	1.325	1.292	1.260
926126.00	1.329	1.297	1.265	1.234
926326.00	1.300	1.269	1.238	1.208
926526.00	1.272	1.241	1.211	1.182
926726.00	1.243	1.214	1.185	1.156
926926.00	1.215	1.186	1.158	1.131
927126.00	1.187	1.159	1.132	1.105
927326.00	1.159	1.133	1.106	1.080
927526.00	1.132	1.106	1.081	1.055
927726.00	1.105	1.080	1.055	1.031

Arizona Department of Water Resources

3550 N Central Ave.  
Phoenix AZ 85012

Customer:

VALLEY UTILITIES COMPANY INC.  
6808 N DYSART ROAD SUITE 112  
GLENDALE, AZ 85307

Receipt #: 15-35351  
Office: MAIN OFFICE  
Receipt Date: 08/26/2014  
Sale Type: IN\_PERSON  
Cashier: WRSAM

Item No.	Index	AOBJ	Description	Ref ID	Qty	Unit Price	Ext Price
70610	15245	4439-TT	Application for permit to drill non-exempt well in an active management area	E223850	1	180.00	180.00
<b>RECEIPT TOTAL:</b>							<b>180.00</b>

Payment type: CHECK

Amount Paid: \$180.00

Payment Received Date: 08/26/2014

Notes: FROM TTA.

Check # 10854

Arizona Department of Water Resources

3550 N Central Ave.  
Phoenix AZ 85012

Customer:

VALLEY UTILITIES COMPANY INC.  
6808 N DYSART ROAD SUITE 112  
GLENDALE, AZ 85307

Receipt #: 15-35351  
Office: MAIN OFFICE  
Receipt Date: 08/26/2014  
Sale Type: IN\_PERSON  
Cashier: WRSAM

Item No.	Index	AOBJ	Description	Ref ID	Qty	Unit Price	Ext Price
70610	15245	4439-TT	Application for permit to drill non-exempt well in an active management area	E223850	1	180.00	180.00
<b>RECEIPT TOTAL:</b>							<b>180.00</b>

Payment type: CHECK

Amount Paid: \$180.00

Payment Received Date: 08/26/2014

Notes: FROM TTA.

Check # 10854