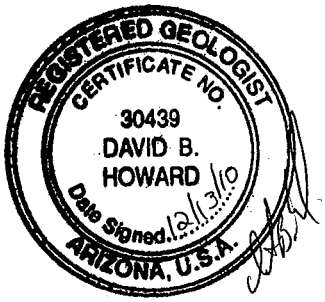
Semi-Annual
Groundwater Monitoring Report
December 2010
World Resources Company
Tolleson, Arizona 85353



Expires 9/30/2011

Prepared for

World Resources Company
8113 West Sherman Street
Tolleson, Arizona 85353-4025

Prepared by

Valley Land Partners
P.O. Box 5126
Peoria, AZ 85385
602-505-1100

Project No. VLP08-102

December 13, 2010

Valley Land
PARTNERS

December 13, 2010 Project No. VLP08-102

World Resources Company
8113 West Sherman Street
Tolleson, Arizona 85353-4025

Attention: Ms. Amanda Astorga

Re: Semi-Annual Groundwater Monitoring Report, December 2010, World Resources Company, Tolleson, Arizona

Dear Ms. Astorga:

Valley Land Partners, PLC (VLP) has prepared the following report titled *Semi-Annual Groundwater Monitoring Report, December 2010, World Resources Company, Tolleson, Arizona.* This report includes a description of the results of groundwater monitoring and analyses and a discussion of our findings. The report is based on the Groundwater Detection Monitoring Program (DMP) as required by the Arizona Department of Environmental Quality (ADEQ).

If you have any questions regarding the work performed or results obtained, please do not hesitate to contact us.

Sincerely,

Valley Land Partners, PLC

David B. Howard, P.E., R.G.
Arizona Professional Engineer (Environmental) #41029
Arizona Registered Geologist #30439

Enclosure: Semi-Annual Groundwater Monitoring Report, December 2010

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EXECUTIVE SUMMARY AND BACKGROUND

Valley Land Partners, PLC (VLP) has prepared this Semi-Annual Groundwater Monitoring Report for World Resources Company (WRC) located at 8113 West Sherman Street, Tolleson, Arizona (Property). VLP was contracted by WRC to conduct semi-annual groundwater monitoring and reporting at the Property. The investigation conducted by VLP and reported herein is based on the Groundwater Detection Monitoring Program implemented for the Property. VLP relied on the written *Groundwater Detection Monitoring Program (DMP)*, ©1997-2005, by WORLD RESOURCES COMPANY (all rights reserved). Historical Groundwater Analytical Results for the Property are depicted in the *Semi-Annual Groundwater Monitoring Report, December 2005, Tolleson, Arizona*, dated February 7, 2006, prepared by ARCADIS.

The DMP is required by the Code of Federal Regulations, Title 40, Part 264.91(a)(4) [40 CFR 264.91(a)(4)] and is described in the Resource Conservation and Recovery Act (RCRA) Facility Hazardous Permit Application Part B, dated May 1, 1997 (AZ HWMA RCRA PERMIT, EPA ID No. AZD980735500). As described in the DMP, subsequent to an initial 2-year phase of detection monitoring, an ongoing DMP will be implemented, in accordance with 40 CFR 264.98(h). The ongoing DMP involves those monitoring wells most appropriately located at and downgradient of the Point of Compliance (POC).

A VLP representative conducted groundwater monitoring at the Property on October 19, 2010. During this investigation three monitoring wells (MW-9, MW-10 and MW-11) contained sufficient groundwater for reliable samples. Laboratory analyses were performed on groundwater samples collected from MW-9, MW-10 and MW-11 as specified in the DMP. Groundwater sampling results are discussed in Section 3.0.

1.0 INTRODUCTION

This report presents groundwater monitoring data collected on October 19, 2010 at the Property. The groundwater investigation was conducted based on the DMP. The Property is located in the SW ¼, SW ¼, Section 11, Township 1 North, Range 1 East, Gila and Salt River Meridian and Base Line in Maricopa County, Arizona. The approximate elevation of the Property is 1,010 feet above mean sea level. The Property is located approximately 1.5 miles south of Interstate 10 and 0.2 miles east of 83rd Avenue in Tolleson, Arizona. The Property is bound to the north by Sherman Street. A Vicinity Map, depicting the Property, is included as Figure 1.

A total of 11 monitoring wells have been installed at the Property. Six monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5 and MW-8) have been abandoned. The remaining five monitoring wells are depicted on Figure 2, Site Location Map.

2.0 FIELD ACTIVITIES

Semi-annual groundwater monitoring was conducted at the Property on October 19, 2010. Monitoring activities included measuring groundwater elevations in the five groundwater monitoring wells on the Property. Depth to groundwater was gauged in monitoring wells MW-6, MW-7, MW-9, MW-10 and MW-11. Groundwater elevations increased an average of 0.84 feet since the April 2010 monitoring event. The water level indicator was decontaminated between well measurements utilizing a solution of biodegradable, phosphate-free Alconox®, rinse water and distilled water.

Water was encountered in monitoring well MW-6 at a depth of 82.23 feet. The bottom of casing in well MW-6 is approximately 85 feet below ground surface (bgs). Therefore, MW-6 contained approximately 2.8 feet of water. Water was encountered in monitoring well MW-7 at a depth of 85.13 feet. The bottom of the well casing in MW-7 is approximately 90 feet bgs. Therefore, MW-7 contained approximately 4.9 feet of

water. However, as depicted on Figure 2, ground-water elevations in wells MW-6 and MW-7 were not used to calculate the groundwater flow direction.

Depth to groundwater measurements and groundwater elevations are depicted in Table 1. Figure 2 depicts groundwater elevations and a potentiometric surface map. The groundwater flow direction observed during this monitoring event is generally toward the north-northwest. Historically, the general groundwater flow direction at the Property has been toward the north-northwest.

On October 19, 2010, subsequent to measuring static groundwater levels, VLP utilized a low-flow, adjustable, submersible, GRUNDFOS® 2-inch diameter pump to purge groundwater in wells MW-9, MW-10 and MW-11. Monitoring wells MW-6 and MW-7 were not sampled since there was an insufficient amount of groundwater.

Groundwater was pumped from wells MW-9, MW-10 and MW-11 at an approximate rate of 400 milliliters per minute (ml/min). VLP measured the water quality parameters pH, color, odor, specific conductance, turbidity and temperature during each purging event. Field Data Sheets are included in Appendix A. Subsequent to purging each well, groundwater samples were collected directly from the discharge tube. Groundwater samples were stored in laboratory supplied containers and placed in a cooler with ice.

One quality assurance/quality control (QA/QC) equipment blank and one blind duplicate groundwater sample were collected during the monitoring event. The equipment blank sample was collected by pumping distilled water through the sampling pump. The blind duplicate groundwater sample was collected from one of the three wells sampled and assigned a random number. The QA/QC samples were stored in laboratory supplied containers and placed in a cooler with ice. The groundwater samples and QA/QC samples were submitted chilled, under chain-of-custody procedures, to Trans West Analytical Services, LLC, dba XENCO Laboratories (XENCO) in Phoenix, Arizona for analyses. Based on the DMP, groundwater samples were analyzed for dissolved metals, total cyanide and other selected inorganic groundwater constituents. The laboratory filtered the samples for dissolved metals analyses.

The submersible pump was decontaminated between well sampling events utilizing a solution of biodegradable, phosphate-free Alconox®, rinse water and distilled water. VLP set up three 5-gallon buckets to perform decontamination. The pump was first set in a 5-gallon bucket with Alconox® solution and ran for approximately five minutes. The pump was then set in a 5-gallon bucket with rinse water and ran for approximately five minutes. And last, the pump was set in a 5-gallon bucket with distilled water and ran for approximately five minutes.

Monitoring well purge water and decontamination water was placed in 55-gallon drums supplied by WRC. It is our understanding WRC treated the purge water and decontamination water on site in their wastewater treatment unit.

3.0 GROUNDWATER SAMPLING RESULTS

Laboratory analytical results of groundwater samples collected during this investigation indicate that no dissolved metals exceeded their respective AWQS. Nitrate (as N) constituents exceeded the AWQS. The other General Chemistry Analytes and Total Cyanide did not exceed their respective AWQS. Nitrate (as N) was reported at concentrations of 11.6 mg/l, 11.0 mg/l and 15.2 mg/l in monitoring wells MW-9, MW-10 and MW-11, respectively. The AWQS for Nitrate (as N) is 10.0 mg/l. Elevated concentrations of Nitrate (as N) have been reported in previous investigations and were attributed to agricultural land in the general vicinity of the Property.

Analytical results for the MW-9, MW-10 and MW-11 groundwater samples plus the QA/QC samples are depicted in Table 2. A copy of the laboratory analytical report and chain-of-custody document is included in Appendix B.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

On October 19, 2010 XENCO received five sets of groundwater samples collected at the Property. The five sets of groundwater samples included one equipment blank (ID EQUIP. BLANK), one blind field duplicate (ID DUP.) (collected from well MW-9), one sample from well MW-9 (ID MW-9), one sample from well MW-10 (ID MW-10) and one sample from well MW-11 (ID MW-11). XENCO reported their analyses on December 2, 2010 (Analytical Report 394190). A copy of the XENCO report is included in Appendix B.

VLP reviewed the report for the following Quality Assurance/Quality Control parameters:

- Holding times and errors
- Blank results and contamination
- Laboratory control sample (LCS) analysis
- Field duplicates and other quality control (QC)
- Duplicate sample, matrix spike/matrix spike duplicate (MS/MSD) analysis

Holding times were met for each analyte. No analytes were reported above their respective Practical Quantitation Limit (PQL) for the Equipment Blank. No critical data qualifiers were reported by the laboratory.

The laboratory sample duplicate results were below 20 percent RPD (Relative Percent Difference as defined in the laboratory report). The blind field duplicate (ID DUP) (collected from well MW-9) laboratory sample results were below 20 percent RPD, as depicted on Table 2.

5.0 FINDINGS AND RECOMMENDATIONS

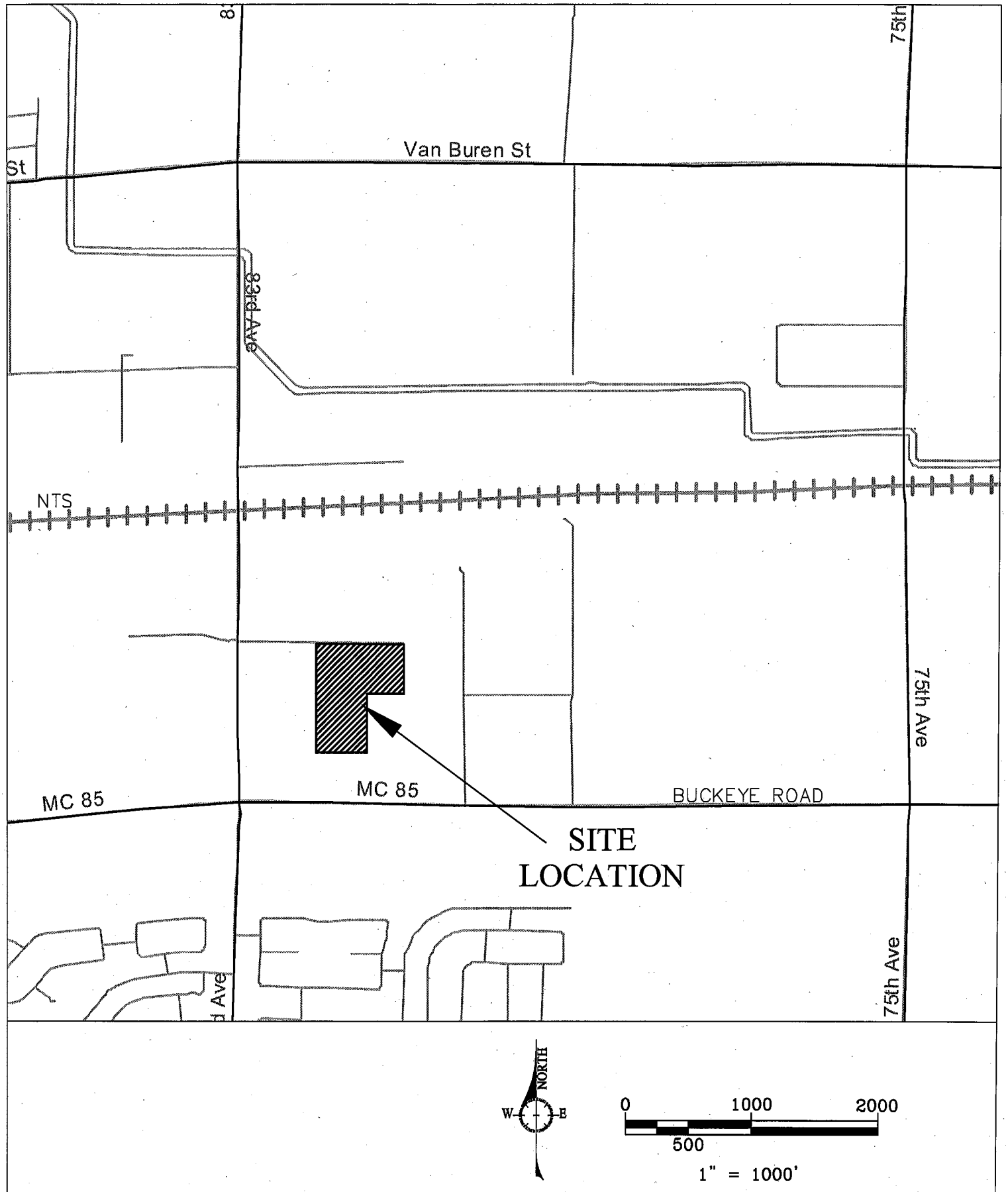
Laboratory analytical results of groundwater samples collected during this investigation indicate analytes did not exceed AWQS, with the exception of Nitrate (as N). Elevated concentrations of Nitrate (as N) have been reported in previous investigations and were attributed to fertilizers used on agricultural land in the general vicinity of the Property. On behalf of WRC, it is recommended to continue semi-annual groundwater monitoring at the Property.

6.0 CLOSURE

This report has been prepared for the exclusive use of World Resources Company. The findings presented in this report are based upon the field observations of our field personnel, points of investigation and results of laboratory tests performed by XENCO.

Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No warranty, expressed or implied, is intended. It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in site conditions could occur at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors.

Figures

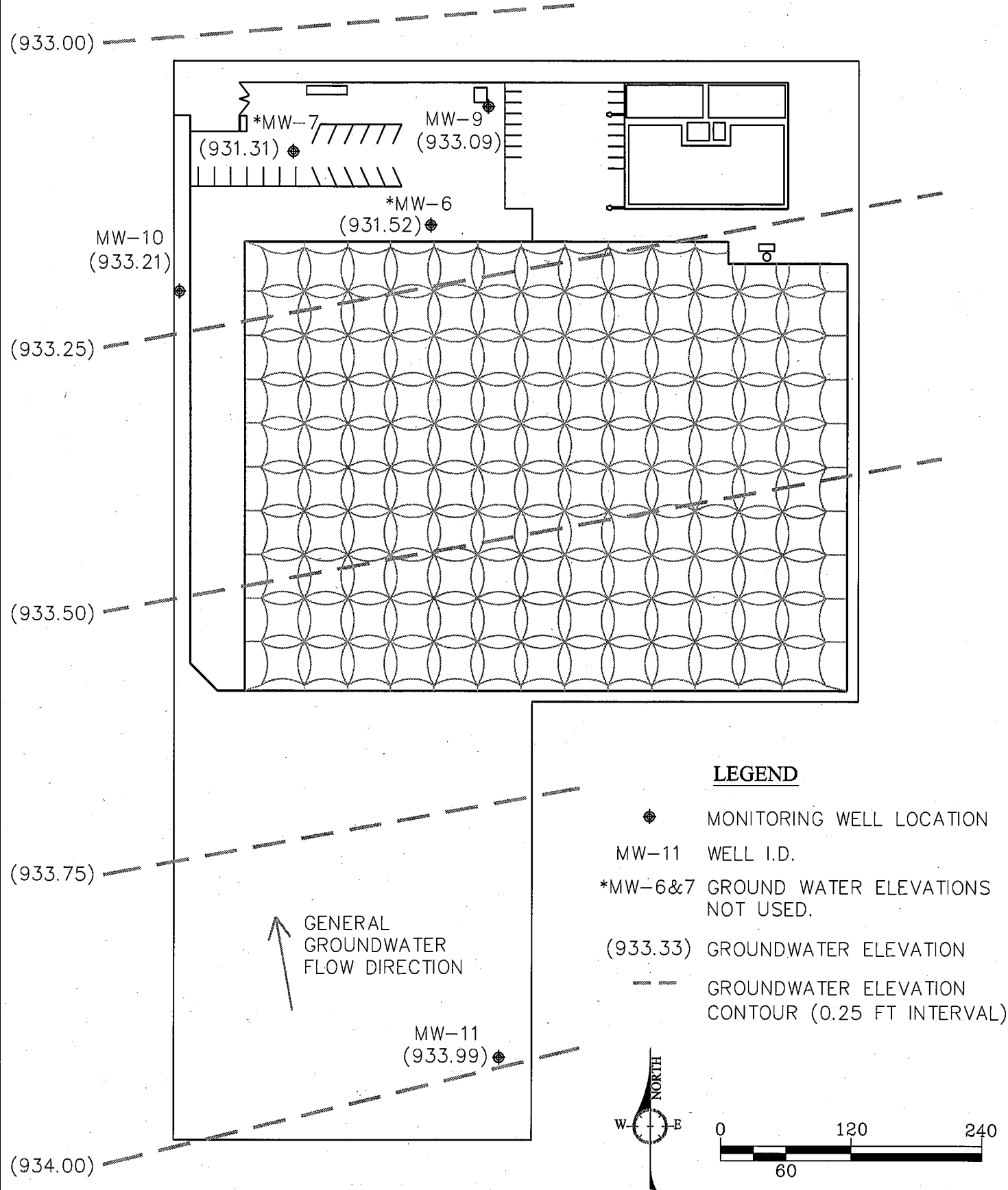


Valley Land PARTNERS
7025 W PONTIAC DRIVE
GLENDALE, ARIZONA, 85308
(623) 243-5599 (P) * (623) 243-7790 (F)

VICINITY MAP

WORLD RESOURCES COMPANY
8113 WEST SHERMAN STREET
PHOENIX, ARIZONA

FIGURE
1



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SITE LOCATION AND POTENTIOMETRIC SURFACE MAP (OCTOBER 19, 2010)

WORLD RESOURCES COMPANY
8113 WEST SHERMAN STREET
TOLLESON, ARIZONA

FIGURE
2

Tables

Table 1
Groundwater Monitoring Data
World Resources Company
Tolleson, Arizona

Monitoring Well I.D.	Wellhead Elevation MSL (ft)	Monitoring Date	Depth to Water (ft)	Ground-water Elevation MSL (ft)
MW-5	1,016.67	06/06/06	Dry	Dry
	Monitoring Well Abandoned 09/28/06			
MW-6	1,013.75	06/06/06	Dry	Dry
		12/06/06	Dry	Dry
Note: well casing bottom at 85 feet		06/26/07	84.84	Dry
		12/04/07	84.85	Dry
		04/08/08	84.89	Dry
		10/07/08	84.90	Dry
		04/14/09	84.86	Dry
		10/20/09	84.89	Dry
		04/20/10	83.87	929.88
		10/19/10	82.23	931.52
MW-7	1,016.44	06/06/06	89.13	Dry
		12/06/06	89.86	Dry
Note: well casing bottom at 90 feet		06/26/07	90.07	Dry
		12/04/07	Dry	Dry
		04/08/08	Dry	Dry
		10/07/08	Dry	Dry
		04/14/09	89.10	927.34
		10/20/09	89.63	Dry
		04/20/10	86.38	930.06
		10/19/10	85.13	931.31
MW-8	1,009.91	06/06/06	81.14	928.77
	Monitoring Well Abandoned 09/28/06			
MW-9	1,016.94	06/06/06	89.32	927.62
		12/06/06	91.30	925.64
		06/26/07	96.40	920.54
		12/04/07	95.08	921.86
		04/08/08	91.40	925.54
		10/07/08	92.11	924.83
		04/14/09	87.80	929.14
		10/20/09	91.14	925.80
		04/20/10	84.83	932.11
		10/19/10	83.85	933.09

Table 1
Groundwater Monitoring Data
World Resources Company
Tolleson, Arizona

Monitoring Well I.D.	Wellhead Elevation MSL (ft)	Monitoring Date	Depth to Water (ft)	Ground-water Elevation MSL (ft)
MW-10	1,013.24	06/06/06	85.50	927.74
		12/06/06	87.43	925.81
		06/26/07	92.49	920.75
		12/04/07	91.27	921.97
		04/08/08	87.48	925.76
		10/07/08	88.22	925.02
		04/14/09	83.96	929.28
		10/20/09	87.25	925.99
		04/20/10	80.99	932.25
		10/19/10	80.03	933.21
MW-11	1,010.74	06/06/06	82.01	928.73
		12/06/06	84.08	926.66
		06/26/07	88.84	921.90
		12/04/07	88.29	922.45
		04/08/08	83.92	926.82
		10/07/08	84.67	926.07
		04/14/09	80.52	930.22
		10/20/09	83.88	926.86
		04/20/10	77.33	933.41
		10/19/10	76.75	933.99

Monitoring well top of casing elevations surveyed by Malcolm Pirnie
MSL = Mean Sea Level
Broadbent & Associates, Inc. conducted monitoring June 2006 through December 2007
Valley Land Partners, PLC commenced monitoring April 2008

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-9)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	10/19/2010	405	380	522	399	<2.50	NP	1.5%
Fluoride	10/19/2010	1.08	1.04	1.26	1.10	<0.500	4.0	1.8%
Sulfate	10/19/2010	144	131	203	144	<3.00	NP	0.0%
Nitrate (as N)	10/19/2010	**11.6**	**11.0**	**15.2**	**11.5**	<0.100	10.0	0.9%
Nitrite (as N)	10/19/2010	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	10/19/2010	0.054	0.051	0.052	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	10/19/2010	1510	1480	1750	1520	27.0	NP	0.7%
Alkalinity, Bicarbonate (as $CaCO_3$)	10/19/2010	412	426	416	418	<20.0	NP	1.4%
Alkalinity, Carbonate (as $CaCO_3$)	10/19/2010	<20.0	<20.0	<20.0	<20.0	<20.0	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	10/19/2010	<20.0	<20.0	<20.0	<20.0	<20.0	NP	-
Alkalinity, Total (as $CaCO_3$)	10/19/2010	412	426	416	418	<20.0	NP	1.4%
Turbidity (units: NTU)	10/19/2010	0.117	0.119	2.62	0.122	<0.100	5.0	4.2%
Total Cyanide								
Cyanide, Total	10/19/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.200	-
Dissolved Metals								
Barium	10/19/2010	0.047	0.044	0.046	0.045	<0.010	2.0	4.3%
Beryllium	10/19/2010	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	-
Cadmium	10/19/2010	<0.003	<0.003	<0.003	<0.003	<0.003	0.005	-
Calcium	10/19/2010	61.7	57.8	79.4	58.7	<1.00	NP	5.0%
Chromium	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	10/19/2010	<0.100	<0.100	<0.100	<0.100	<0.100	NP	-
Magnesium	10/19/2010	36.4	31.9	49.1	34.7	<1.00	NP	4.8%
Manganese	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	10/19/2010	4.42	4.12	4.65	4.30	<2.00	NP	2.8%
Silver	10/19/2010	<0.005	<0.005	<0.005	<0.005	<0.005	NP	-
Sodium	10/19/2010	422	391	450	406	<2.00	NP	3.9%
Tin	10/19/2010	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	10/19/2010	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	10/19/2010	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.006	-
Arsenic	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Lead	10/19/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Mercury	10/19/2010	<0.00040	<0.00020	<0.00020	<0.00020	<0.00040	0.002	-
Selenium	10/19/2010	<0.025	<0.025	<0.025	<0.025	<0.025	0.050	-
Thallium	10/19/2010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.002	-

AWQS = Aquifer Water Quality Standard

RPD = Relative Percent Difference

NP=None Published

<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-11)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	4/20/2010	410	440	820	900	<2.5	NP	9.3%
Fluoride	4/20/2010	0.99	0.87	1.0	1.0	<0.50	4.0	0.0%
Sulfate	4/20/2010	130	120	210	270	<3.0	NP	25.0%
Nitrate (as N)	4/20/2010	**12**	**11**	**20**	**20**	<0.10	10.0	0.0%
Nitrite (as N)	4/20/2010	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	4/20/2010	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	4/20/2010	1500	1500	2400	2400	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	4/20/2010	410	410	390	380	<20	NP	2.6%
Alkalinity, Carbonate (as $CaCO_3$)	4/20/2010	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	4/20/2010	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	4/20/2010	410	410	390	380	<20	NP	2.6%
Turbidity (units: NTU)	4/20/2010	0.22	0.23	0.71	0.75	<0.10	5.0	-
Total Cyanide								
Cyanide, Total	4/20/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.200	-
Dissolved Metals								
Barium	4/20/2010	0.043	0.042	0.063	0.062	<0.010	2.0	1.6%
Beryllium	4/20/2010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.004	-
Cadmium	4/20/2010	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	4/20/2010	55	55	120	120	<1.0	NP	0.0%
Chromium	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	4/20/2010	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	4/20/2010	31	29	70	68	<1.0	NP	2.9%
Manganese	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	4/20/2010	3.8	3.9	5.1	5.1	<2.0	NP	0.0%
Silver	4/20/2010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	4/20/2010	420	410	590	580	<2.0	NP	1.7%
Tin	4/20/2010	<0.050	<0.050	<0.050	0.061	<0.050	NP	-
Zinc	4/20/2010	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	4/20/2010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Lead	4/20/2010	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Mercury	4/20/2010	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	4/20/2010	<0.025	<0.025	<0.025	<0.025	<0.025	0.050	-
Thallium	4/20/2010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

AWQS = Aquifer Water Quality Standard

RPD = Relative Percent Difference

NP=None Published

<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-10)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	10/20/2009	430	430	430	450	<2.5	NP	4.5%
Fluoride	10/20/2009	1.3	1.2	1.3	1.2	<0.50	4.0	0.0%
Sulfate	10/20/2009	180	170	170	170	<3.0	NP	0.0%
Nitrate (as N)	10/20/2009	**12**	**12**	**12**	**12**	<0.10	10.0	0.0%
Nitrite (as N)	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	10/20/2009	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	10/20/2009	1400	1400	1400	1400	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	10/20/2009	410	400	410	420	<20	NP	4.9%
Alkalinity, Carbonate (as $CaCO_3$)	10/20/2009	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	10/20/2009	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	10/20/2009	410	400	410	420	<20	NP	4.9%
Turbidity (units: NTU)	10/20/2009	0.17	0.28	0.17	0.28	0.11	5.0	-
Total Cyanide								
Cyanide, Total	10/20/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.200	-
Dissolved Metals								
Barium	10/20/2009	0.041	0.043	0.045	0.046	<0.020	2.0	6.7%
Beryllium	10/20/2009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	-
Cadmium	10/20/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.005	-
Calcium	10/20/2009	56	56	57	59	<2.0	NP	5.2%
Chromium	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	0.100	-
Copper	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	NP	-
Iron	10/20/2009	<0.20	<0.20	<0.20	<0.20	<0.20	NP	-
Magnesium	10/20/2009	33	30	32	32	<2.0	NP	6.5%
Manganese	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	NP	-
Nickel	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	0.100	-
Potassium	10/20/2009	5.7	5.9	6.5	6.4	<4.0	NP	8.1%
Silver	10/20/2009	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Sodium	10/20/2009	410	430	410	420	<4.0	NP	2.4%
Tin	10/20/2009	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Zinc	10/20/2009	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Antimony	10/20/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	10/20/2009	0.0042	0.0031	0.0047	<0.0030	<0.0030	0.050	3.3%
Lead	10/20/2009	<0.020	<0.020	<0.020	<0.020	<0.020	0.050	-
Mercury	10/20/2009	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	10/20/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.050	-
Thallium	10/20/2009	0.0008	0.0009	<0.0005	<0.0005	<0.0005	0.002	-

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<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-11)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	4/14/2009	410	420	450	430	<2.0	NP	4.5%
Fluoride	4/14/2009	1.2	1.2	1.3	1.3	<0.50	4.0	0.0%
Sulfate	4/14/2009	170	160	180	180	<3.0	NP	0.0%
Nitrate (as N)	4/14/2009	**12**	**11**	**12**	**12**	<0.10	10.0	0.0%
Nitrite (as N)	4/14/2009	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	4/14/2009	0.053	0.051	0.063	0.058	<0.050	NP	8.3%
Total Dissolved Solids (TDS)	4/14/2009	1500	1500	1600	1600	39	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	4/14/2009	410	420	420	420	<20	NP	0.0%
Alkalinity, Carbonate (as $CaCO_3$)	4/14/2009	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	4/14/2009	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	4/14/2009	410	420	420	420	<20	NP	0.0%
Turbidity (units: NTU)	4/14/2009	0.27	0.10	<0.10	0.27	<0.10	5.0	-
Total Cyanide								
Cyanide, Total	4/14/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.200	-
Dissolved Metals								
Barium	4/14/2009	0.045	0.045	0.050	0.050	<0.010	2.0	0.0%
Beryllium	4/14/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.004	-
Cadmium	4/14/2009	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	4/14/2009	58	60	67	69	<1.0	NP	2.9%
Chromium	4/14/2009	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	4/14/2009	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	4/14/2009	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	4/14/2009	35	34	40	41	<1.0	NP	2.5%
Manganese	4/14/2009	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	4/14/2009	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	4/14/2009	7.4	7.6	8.0	7.9	<2.0	NP	1.3%
Silver	4/14/2009	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	4/14/2009	380	430	490	440	<2.0	NP	10.8%
Tin	4/14/2009	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	4/14/2009	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	4/14/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	4/14/2009	0.0053	0.0044	0.0058	0.0057	<0.0030	0.050	1.7%
Lead	4/14/2009	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Mercury	4/14/2009	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	4/14/2009	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.050	-
Thallium	4/14/2009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

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Note: RPD formula correction on December 2006 report

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-9)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	10/7/2008	370	430	380	370	<2.0	NP	0.0%
Fluoride	10/7/2008	1.2	1.0	1.2	1.1	<0.50	4.0	8.7%
Sulfate	10/7/2008	160	160	150	150	<3.0	NP	6.5%
Nitrate (as N)	10/7/2008	**11**	**11**	**11**	**11**	<0.50	10.0	0.0%
Nitrite (as N)	10/7/2008	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	10/7/2008	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	10/7/2008	1400	1500	1500	1400	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	10/7/2008	440	420	420	440	<20	NP	0.0%
Alkalinity, Carbonate (as $CaCO_3$)	10/7/2008	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	10/7/2008	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	10/7/2008	440	420	420	440	<20	NP	0.0%
Turbidity (units: NTU)	10/7/2008	0.13	0.10	0.14	0.13	<0.10	5.0	0.0%
Total Cyanide								
Cyanide, Total	10/7/2008	<0.020	<0.020	<0.020	<0.020	<0.020	0.200	-
Dissolved Metals								
Barium	10/7/2008	0.046	0.044	0.048	0.044	<0.010	2.0	4.4%
Beryllium	10/7/2008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	-
Cadmium	10/7/2008	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	10/7/2008	57	63	62	60	<1.0	NP	5.1%
Chromium	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	10/7/2008	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	10/7/2008	33	33	35	34	<1.0	NP	3.0%
Manganese	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	10/7/2008	6.2	6.1	6.0	5.8	<2.0	NP	6.7%
Silver	10/7/2008	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	10/7/2008	450	500	430	460	<2.0	NP	2.2%
Tin	10/7/2008	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	10/7/2008	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	10/7/2008	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.006	-
Arsenic	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Lead	10/7/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Mercury	10/7/2008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	10/7/2008	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.050	-
Thallium	10/7/2008	<0.0010	<0.0010	0.0010	<0.0010	<0.0010	0.002	-

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Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-11)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	4/8/2008	370	390	420	400	<2.0	NP	4.9%
Fluoride	4/8/2008	1.2	1.1	1.3	1.3	<0.50	4.0	0.0%
Sulfate	4/8/2008	160	160	170	170	<3.0	NP	0.0%
Nitrate (as N)	4/8/2008	**11**	**11**	**12**	**12**	<0.50	10.0	0.0%
Nitrite (as N)	4/8/2008	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	4/8/2008	<0.050	<0.050	<0.050	<0.050	0.068	NP	-
Total Dissolved Solids (TDS)	4/8/2008	1400	1400	1500	1500	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	4/8/2008	410	410	400	200	<20	NP	66.7%
Alkalinity, Carbonate (as $CaCO_3$)	4/8/2008	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	4/8/2008	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	4/8/2008	410	410	400	200	<20	NP	66.7%
Turbidity (units: NTU)	4/8/2008	0.31	0.29	0.45	0.44	0.10	5.0	2.2%
Total Cyanide								
Cyanide, Total	4/8/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.200	-
Dissolved Metals								
Barium	4/8/2008	0.043	0.042	0.054	0.048	<0.010	2.0	11.8%
Beryllium	4/8/2008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	-
Cadmium	4/8/2008	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	4/8/2008	53	53	58	59	<1.0	NP	1.7%
Chromium	4/8/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	4/8/2008	<0.010	0.070	<0.010	<0.010	<0.010	NP	-
Iron	4/8/2008	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	4/8/2008	30	28	34	34	<1.0	NP	0.0%
Manganese	4/8/2008	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	4/8/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	4/8/2008	4.9	4.6	4.8	4.8	<2.0	NP	0.0%
Silver	4/8/2008	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NP	-
Sodium	4/8/2008	430	440	440	430	<2.0	NP	2.3%
Tin	4/8/2008	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	4/8/2008	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	4/8/2008	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	4/8/2008	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	-
Lead	4/8/2008	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	0.050	-
Mercury	4/8/2008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	4/8/2008	0.0028	0.0028	0.0030	0.0031	<0.0020	0.050	3.3%
Thallium	4/8/2008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

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Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-9)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	12/4/2007	350	300	350	340	<2.5	NP	2.9%
Fluoride	12/4/2007	1.1	1.0	1.1	1.0	<0.50	4.0	9.5%
Sulfate	12/4/2007	140	140	140	140	<3.0	NP	0.0%
Nitrate (as N)	12/4/2007	**11**	**11**	**11**	**11**	<0.50	10.0	0.0%
Nitrite (as N)	12/4/2007	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	12/4/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	12/4/2007	1400	1400	1300	1300	<10	NP	7.4%
Alkalinity, Bicarbonate (as $CaCO_3$)	12/4/2007	410	420	420	420	<20	NP	2.4%
Alkalinity, Carbonate (as $CaCO_3$)	12/4/2007	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	12/4/2007	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	12/4/2007	410	420	420	420	<20	NP	2.4%
Turbidity (units: NTU)	12/4/2007	0.63	0.13	0.35	0.66	<0.10	5.0	4.7%
Total Cyanide								
Cyanide, Total	12/4/2007	<0.010	<0.010	<0.010	<0.010	<0.010	0.200	-
Dissolved Metals								
Barium	12/4/2007	0.041	0.042	0.044	0.041	<0.010	2.0	0.0%
Beryllium	12/4/2007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	-
Cadmium	12/4/2007	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.005	-
Calcium	12/4/2007	56	59	62	56	<1.0	NP	0.0%
Chromium**	12/4/2007	0.0083	0.0086	0.0086	0.0087	0.0057	0.100	4.7%
Copper	12/4/2007	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	12/4/2007	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	12/4/2007	33	32	34	33	<1.0	NP	0.0%
Manganese	12/4/2007	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	12/4/2007	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	12/4/2007	4.7	5.0	5.2	4.8	<2.0	NP	2.1%
Silver	12/4/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NP	-
Sodium	12/4/2007	430	430	440	420	<2.0	NP	2.4%
Tin	12/4/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	12/4/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	12/4/2007	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	12/4/2007	<0.0030	<0.0060	<0.0030	<0.0030	<0.0060	0.050	-
Lead	12/4/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.050	-
Mercury	12/4/2007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	12/4/2007	<0.0020	<0.0020	<0.0020	0.0020	<0.0020	0.050	-
Thallium	12/4/2007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

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**Chromium results vary ≤0.003 mg/l from the Equipment Blank

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Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-11)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	6/26/2007	380	400	370	370	<2.5	NP	0.0%
Fluoride	6/26/2007	1.3	1.2	1.3	1.3	<0.50	4.0	0.0%
Sulfate	6/26/2007	160	150	160	160	<3.0	NP	0.0%
Nitrate (as N)	6/26/2007	**11**	**11**	**11**	**11**	<0.50	10.0	0.0%
Nitrite (as N)	6/26/2007	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	6/26/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	6/26/2007	1400	1400	1400	1400	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	6/26/2007	420	410	410	410	<20	NP	0.0%
Alkalinity, Carbonate (as $CaCO_3$)	6/26/2007	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	6/26/2007	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	6/26/2007	420	410	410	410	<20	NP	0.0%
Turbidity (units: NTU)	6/26/2007	0.25	0.12	0.21	0.11	0.12	5.0	62.5%
Total Cyanide								
Cyanide, Total	6/26/2007	<0.010	<0.010	<0.010	<0.010	<0.010	0.200	-
Dissolved Metals								
Barium	6/26/2007	0.039	0.041	0.042	0.044	<0.010	2.0	4.7%
Beryllium	6/26/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.004	-
Cadmium	6/26/2007	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	6/26/2007	53	56	54	56	<1.0	NP	3.6%
Chromium	6/26/2007	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	6/26/2007	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	6/26/2007	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	6/26/2007	31	30	31	32	<1.0	NP	3.2%
Manganese	6/26/2007	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	6/26/2007	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	6/26/2007	5.4	5.6	5.3	5.8	<2.0	NP	9.0%
Silver	6/26/2007	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	6/26/2007	390	390	380	410	<2.0	NP	7.6%
Tin	6/26/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	6/26/2007	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	6/26/2007	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	6/26/2007	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	0.050	-
Lead	6/26/2007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.050	-
Mercury	6/26/2007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	6/26/2007	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.050	-
Thallium	6/26/2007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

AWQS = Aquifer Water Quality Standard

RPD = Relative Percent Difference

NP=None Published

<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-11)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	12/8/2006	360	370	400	400	<2.5	NP	0.0%
Fluoride	12/8/2006	1.2	1.1	1.4	1.4	<0.50	4.0	0.0%
Sulfate	12/8/2006	170	170	190	180	<3.0	NP	5.4%
Nitrate (as N)	12/8/2006	**13**	**12**	**13**	**13**	<0.50	10.0	0.0%
Nitrite (as N)	12/8/2006	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	12/8/2006	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Total Dissolved Solids (TDS)	12/8/2006	1600	1700	1700	1300	<10	NP	26.7%
Alkalinity, Bicarbonate (as $CaCO_3$)	12/8/2006	400	400	400	400	<20	NP	0.0%
Alkalinity, Carbonate (as $CaCO_3$)	12/8/2006	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	12/8/2006	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	12/8/2006	400	400	400	400	<20	NP	0.0%
Turbidity (units: NTU)	12/8/2006	1.3	**10**	1.9	2.1	0.08	5.0	10.0%
Total Cyanide								
Cyanide, Total	12/8/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.200	-
Dissolved Metals								
Barium	12/8/2006	0.040	0.042	0.046	0.047	<0.010	2.0	2.2%
Beryllium	12/8/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.004	-
Cadmium	12/8/2006	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	12/8/2006	51	57	57	58	<1.0	NP	1.7%
Chromium	12/8/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	12/8/2006	0.016	<0.010	0.015	0.014	<0.010	NP	-
Iron	12/8/2006	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	12/8/2006	30	31	33	34	<1.0	NP	3.0%
Manganese	12/8/2006	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	12/8/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	12/8/2006	6.2	6.7	6.5	6.7	<2.0	NP	3.0%
Silver	12/8/2006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	12/8/2006	410	420	420	430	<2.0	NP	2.4%
Tin	12/8/2006	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	12/8/2006	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	12/8/2006	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.006	-
Arsenic	12/8/2006	0.0082	0.0075	0.0094	0.0093	<0.0010	0.050	1.1%
Lead	12/8/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.050	-
Mercury	12/8/2006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	12/8/2006	0.0068	0.0059	0.0055	0.0057	<0.0020	0.050	-
Thallium	12/8/2006	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-

AWQS = Aquifer Water Quality Standard

RPD = Relative Percent Difference

NP=None Published

<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report (June 2006 RPD values changed but no exceedances)

Table 2
Analytical Results for Inorganics in Groundwater (units are mg/l, except as noted)
World Resources Company
Tolleson, Arizona

Analyte	Date	MW-9	MW-10	MW-11	Duplicate (MW-10)	Equipment Blank	AWQS	Field Duplicate RPD
General Chemistry								
Chloride	6/6/2006	360	380	390	370	<2.5	NP	2.7%
Fluoride	6/6/2006	1.3	1.2	1.5	1.2	<0.50	4.0	0.0%
Sulfate	6/6/2006	170	170	170	170	<3.0	NP	0.0%
Nitrate (as N)	6/6/2006	**15**	**14**	**12**	**14**	<0.50	10.0	0.0%
Nitrite (as N)	6/6/2006	<0.020	<0.020	<0.020	<0.020	<0.020	1.0	-
Phosphorus, Total (as P)	6/6/2006	<0.050	0.13	0.078	0.12	<0.050	NP	8.0%
Total Dissolved Solids (TDS)	6/6/2006	1300	1300	1300	1300	<10	NP	0.0%
Alkalinity, Bicarbonate (as $CaCO_3$)	6/6/2006	420	420	400	400	<20	NP	4.9%
Alkalinity, Carbonate (as $CaCO_3$)	6/6/2006	<20	<20	<20	<20	<20	NP	-
Alkalinity, Hydroxide (as $CaCO_3$)	6/6/2006	<20	<20	<20	<20	<20	NP	-
Alkalinity, Total (as $CaCO_3$)	6/6/2006	420	420	400	400	<20	NP	4.9%
Turbidity (units: NTU)	6/6/2006	ND	1.7	1.6	1.4	ND	5.0	19.4%
Total Cyanide								
Cyanide, Total	6/6/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.200	-
Dissolved Metals								
Barium	6/6/2006	0.041	0.042	0.046	0.040	<0.010	2.0	4.9%
Beryllium	6/6/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.004	-
Cadmium	6/6/2006	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.005	-
Calcium	6/6/2006	58	56	56	55	<1.0	NP	1.8%
Chromium	6/6/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Copper	6/6/2006	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Iron	6/6/2006	<0.10	<0.10	<0.10	<0.10	<0.10	NP	-
Magnesium	6/6/2006	33	30	33	30	<1.0	NP	0.0%
Manganese	6/6/2006	<0.010	<0.010	<0.010	<0.010	<0.010	NP	-
Nickel	6/6/2006	<0.010	<0.010	<0.010	<0.010	<0.010	0.100	-
Potassium	6/6/2006	6.7	6.4	6.1	6.3	<2.0	NP	1.6%
Silver	6/6/2006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NP	-
Sodium	6/6/2006	460	460	430	470	<2.0	NP	2.2%
Tin	6/6/2006	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Zinc	6/6/2006	<0.050	<0.050	<0.050	<0.050	<0.050	NP	-
Antimony	6/6/2006	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.006	-
Arsenic	6/6/2006	0.0063	0.0050	0.0070	0.0057	<0.0040	0.050	13.1%
Lead	6/6/2006	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.050	-
Mercury	6/6/2006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.002	-
Selenium	6/6/2006	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.050	-
Thallium	6/6/2006	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.002	-

AWQS = Aquifer Water Quality Standard

RPD = Relative Percent Difference

NP=None Published

<0.020 = Less Than The Practical Quantitation Limit

Bold = Exceeds AWQS

Note: RPD formula correction on December 2006 report (June 2006 RPD values changed but no exceedances)

Appendix A

Field Data Sheets

Valley Land
PARTNERS

DAILY REPORT
Page 1 of 1

Project: WRC Monitoring Project No.: VLP 08-102
Field Representative(s): DH Day: Tues. Date: 10/19/10
Time Onsite: From: _____ To: _____; From: _____ To: _____; From: _____ To: _____

___ Signed HASP ___ Safety Glasses ___ Hard Hat ___ Steel Toe Boots ___ Safety Vest
___ UST Emergency System Shut-off Switches Located ___ Proper Gloves
___ Proper Level of Barricading ___ Other PPE (describe)_____

Weather: _____

Equipment In Use: _____

Visitors: Jim 602-525-3034

TIME:	WORK DESCRIPTION:	
7:05	Dave on site. Sign in, Badge	
	Start measuring depths to water	
	WELL	DEPTH (ft.)
7:20	MW-11	76.75
	MW-7	85.13
	MW-6	82.23
	MW-9	83.85
	MW-10	80.03

Signature: _____

Valley Land PARTNERS

Date 10/19/10

Field Data Sheet

Project No.	**VLP08-102**	**Personnel**	**DH**
Site Name	**WRC**	**Site Location**	
Site/Well No.	MW-9	**Sample ID**	MW-9
Weather		**Duplicate ID**	DUP.

MW TD		**MW TOC Elev.**	
MW DTW	83.85	**Casing Diam.**	**4 inches**
Purge Rate	**400 ml/min.**	**Water Level Elev.**	
Purge Method	**Low Flow**		

Pump Time Start	9:10	**Pump Time Stop**	9:50
Sample Time Start	9:40	**Sample Time Stop**	9:50

Time	Appearance Color/Odor	D.O.	pH	EC mS/cm or uS/cm	Temp. (°C)	Turb.	SAL.
9:20	Clear/None	3.42	5.23	2.59	25.2	1	0.12
9:25	"	3.43	5.23	2.59	25.3	0	0.12
9:30	"	6.87	5.21	2.60	25.7	1	0.12
9:35	"	6.84	5.21	2.60	25.8	0	0.12
9:38	"	6.87	5.20	2.60	25.8	1	0.12

Sample Container Description

Constituents	No. Bottles	Preservative
Dissolved Metals (see COC): **500 ml poly**	1	HNO_3
Alk, Cl, TDS, SO_4, NO_3, F, Turb.: **1-Liter poly**	1	None
Phosphate, Backup NO_3: **500 ml poly**	1	H_2SO_4
Cyanide: **500 ml poly**	1	NaOH

Valley Land PARTNERS

Date 10/19/10

Field Data Sheet

Project No.	**VLP08-102**	**Personnel**	**DH**
Site Name	**WRC**	**Site Location**	
Site/Well No.	MW-10	**Sample ID**	MW-10
Weather		**Duplicate ID**	

MW TD		**MW TOC Elev.**	
MW DTW	80.03	**Casing Diam.**	**4 inches**
Purge Rate	**400 ml/min.**	**Water Level Elev.**	
Purge Method	**Low Flow**		

Pump Time Start	11:10	**Pump Time Stop**	11:49
Sample Time Start	11:40	**Sample Time Stop**	11:49

Time	Appearance Color/Odor	D.O.	pH	EC mS/cm or uS/cm	Temp. (°C)	Turb.	SAL.
11:20	Clear/None	7.30	5.20	2.60	26.4	Ø	0.12
11:26	"	—	5.20	2.61	27.0	Ø	0.12
11:32	"	8.27	5.20	2.60	27.4	1	0.12
11:40	"	—	5.19	2.60	27.7	1	0.12

Sample Container Description

Constituents	No. Bottles	Preservative
Dissolved Metals (see COC): **500 ml poly**	1	HNO_3
Alk, Cl, TDS, SO_4, NO_3, F, Turb.: **1-Liter poly**	1	None
Phosphate, Backup NO_3: **500 ml poly**	1	H_2SO_4
Cyanide: **500 ml poly**	1	NaOH

Valley Land PARTNERS

Date 10/19/10

Field Data Sheet

Project No.	**VLP08-102**	**Personnel**	**DH**
Site Name	**WRC**	**Site Location**	
Site/Well No.	MW-11	**Sample ID**	MW-11
Weather		**Duplicate ID**	

MW TD		**MW TOC Elev.**	
MW DTW	76.75	**Casing Diam.**	**4 inches**
Purge Rate	**400 ml/min.**	**Water Level Elev.**	
Purge Method	**Low Flow**		

Pump Time Start	12:25	**Pump Time Stop**	13:02
Sample Time Start	12:55	**Sample Time Stop**	13:02

Time	Appearance Color/Odor	D.O.	pH	EC (mS/cm or uS/cm)	Temp. (°C)	Turb.	SAC.
12:35	Clear/None	8.36	5.21	3.25	26.9	1	0.16
12:41	"	9.02	5.20	3.17	27.2	1	0.15
12:46	"	—	5.19	3.14	27.3	2	0.15
12:52	"	8.99	5.18	3.13	28.3	5	0.15

Sample Container Description

Constituents	No. Bottles	Preservative
Dissolved Metals (see COC): **500 ml poly**	1	HNO_3
Alk, Cl, TDS, SO_4, NO_3, F, Turb.: **1-Liter poly**	1	None
Phosphate, Backup NO_3: **500 ml poly**	1	H_2SO_4
Cyanide: **500 ml poly**	1	NaOH

Appendix B

Laboratory Report and Chain of Custody Documentation

Analytical Report 394190

for

Valley Land

Project Manager: David Howard

WRC Monitoring

VLP 08-102

02-DEC-10

XENCO Laboratories
Trans West Analytical Services, LLC

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

3725 E. Atlanta Ave, Phoenix, AZ 85040
Ph: (602) 437-0330

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)
Xenco-Boca Raton (EPA Lab Code: FL01273):
Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)
North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)

Xenco Phoenix (EPA Lab Code: AZ00901):
Arizona(AZ0757), California(06244CA), Texas(104704435-10-2), Nevada(NAC-445A), DoD(65816)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

02-DEC-10

Project Manager: **David Howard**
Valley Land
8113 W. Sherman St
Tolleson, AZ 85353

Reference: XENCO Report No: **394190**
WRC Monitoring
Project Address:

David Howard:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 394190. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 394190 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Skip Harden, Jr.
Project Manager

CASE NARRATIVE

XENCO Laboratories
Trans West Analytical Services, LLC

Client Name: Valley Land
Project Name: WRC Monitoring

Project ID: VLP 08-102 | *Report Date:* 02-DEC-10
Work Order Number: 394190 | *Date Received:* 10/19/2010

Sample receipt non conformances and Comments:

Dissolved filtration for 200.7, 200.8 and 245.1 is specified to be performed in the field within 15 minutes of sampling; sample was received unfiltered. The samples were filtered and preserved at the lab.

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-829185 Metals, Dissolved, by EPA 200.7
The analyte of concern, Chromium, recovered outside of method acceptance criteria in the Continuing Calibration Verification on 10/25/2010. Chromium was analyzed on 10/28/2010; sample and sample QC data was manually entered into the 10/25/2010 LIMS batch.

576886-1-BLK 10/29/2010 9:20:52
576886-1-CRDL 10/29/2010 9:26:21
576886-1-BKS 10/29/2010 9:31:49
576886-1-BSD 10/29/2010 9:36:57
393719-001 10/29/2010 9:42:07
393719-001 S 10/29/2010 9:47:36
393719-001 SD 10/29/2010 9:52:46

The analyte of concern, Sodium, recovered outside of method acceptance criteria in the Continuing Calibration Verification on 10/25/2010. Sodium was analyzed on 10/28/2010; sample and sample QC data was manually entered into the 10/25/2010 LIMS batch.

394190-001 10/29/2010 10:08:19
394190-002 10/29/2010 10:13:48
394190-002 S 10/29/2010 10:19:19
394190-002 SD 10/29/2010 10:24:33
394190-003 10/29/2010 10:29:47
394190-004 10/29/2010 10:35:19
394190-005 10/29/2010 10:40:52

Flagging Criteria

Arizona Flags

All method blanks, laboratory spikes, and/or matrix spikes met quality control objectives for the parameters associated with this Work Order except as detailed below or on the Data Qualifier page of this report. Data Qualifiers used in this report are in accordance with ADEQ Arizona Data Qualifiers, Revision 3.0 9/20/2007. Data qualifiers (flags) contained within this analytical report have been issued to explain a quality control deficiency, and do not affect the quality (validity) of the data unless noted otherwise in the case narrative.

D1 Sample required dilution due to matrix.

D2 Sample required dilution due to high concentration of target analyte.

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The associated blank spike recovery was acceptable.

N1 See case narrative.

XENCO Laboratories
Trans West Analytical Services, LLC

Sample Cross Reference 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Equip Blank	W	Oct-19-10 08:00		394190-001
MW-9	W	Oct-19-10 09:40		394190-002
MW-10	W	Oct-19-10 11:40		394190-003
MW-11	W	Oct-19-10 12:55		394190-004
Dup	W	Oct-19-10 12:00		394190-005

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Equip Blank** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-001** Date Collected: **Oct-19-10 08:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Alkalinity by SM 2320B

Analyst: RLH Tech: RLH
Seq Number: 828784

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Alkalinity, Bicarbonate (as CaCO3)	ALKCACO3	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Carbonate (as CaCO3)	ALKCARB	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, hydroxide (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Total (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1

Analytical Method: Anions by EPA 300.0 Prep Method: E300P

Analyst: RLH Date Prep: Oct-29-10 18:29 Tech: RLH
Seq Number: 829989

Dilution Analysis:
Seq#: 829989 Date Analyzed: 10/29/10 18:47

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<2.50	2.50	mg/L	10/29/10 18:29		1
Fluoride	16984-48-8	<0.500	0.500	mg/L	10/29/10 18:29		1
Sulfate	14808-79-8	<3.00	3.00	mg/L	10/29/10 18:29		1

Analytical Method: Cyanide By Quikchem 10-204-00-1-X Prep Method: QUIKCHEM102C

Analyst: REH Date Prep: Oct-22-10 13:43 Tech: BRH
Seq Number: 828783

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Cyanide, Total	57-12-5	<0.0050	0.0050	mg/L	10/22/10 13:43		1

Analytical Method: Nitrite by SM 4500-NO2B

Analyst: KMD Tech: KMD
Seq Number: 828244

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrite as N	7727-37-9	<0.020	0.020	mg/L	10/19/10 17:48		1

Analytical Method: Nitrogen, Nitrate by EPA 353.2 Prep Method: E353.2P

Analyst: KMD Date Prep: Nov-01-10 16:34 Tech: KMD
Seq Number: 830012

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrate	7727-37-9	<0.100	0.100	mg/L	11/01/10 16:34		1

Project: Phoenix XENCO - Master Project

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Equip Blank** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-001** Date Collected: **Oct-19-10 08:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Phosphorus, Total by EPA 365.4 Prep Method: E365.4_P
Analyst: KMD Date Prep: Nov-05-10 15:56 Tech: KMD
Seq Number: 830976

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total Phosphorus (as P)	7723-14-0	<0.050	0.050	mg/L	11/05/10 15:56		1

Analytical Method: Total Dissolved Solids by SM 2540C
Analyst: RLH Tech: RLH
Seq Number: 829128

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total dissolved solids	TDS	27.0	10.0	mg/L	10/25/10 05:30		1

Analytical Method: Turbidity by EPA 180.1
Analyst: MDD Tech: MDD
Seq Number: 829572

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Turbidity		<0.100	0.100	NTU	10/20/10 10:33		1

Analytical Method: Mercury, Dissolved, by EPA 245.1 Prep Method: E245.1P
Analyst: MGR Date Prep: Nov-01-10 12:45 Tech: MGR
Seq Number: 830167

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00040	0.00040	mg/L	11/02/10 13:20	D1	2

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Equip Blank** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-001** Date Collected: **Oct-19-10 08:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Metals, Dissolved, by EPA 200.7 Prep Method: E200.7P
Analyst: MDD Date Prep: Oct-25-10 10:30 Tech: SGO
Seq Number: 829185

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.010	0.010	mg/L	10/25/10 23:08		1
Barium	7440-39-3	<0.010	0.010	mg/L	10/25/10 23:08		1
Beryllium	7440-41-7	<0.002	0.002	mg/L	10/25/10 23:08		1
Cadmium	7440-43-9	<0.003	0.003	mg/L	10/25/10 23:08		1
Calcium	7440-70-2	<1.00	1.00	mg/L	10/25/10 23:08		1
Chromium	7440-47-3	<0.010	0.010	mg/L	10/25/10 23:08		1
Copper	7440-50-8	<0.010	0.010	mg/L	10/25/10 23:08		1
Iron	7439-89-6	<0.100	0.100	mg/L	10/25/10 23:08		1
Lead	7439-92-1	<0.010	0.010	mg/L	10/25/10 23:08		1
Magnesium	7439-95-4	<1.00	1.00	mg/L	10/25/10 23:08		1
Manganese	7439-96-5	<0.010	0.010	mg/L	10/25/10 23:08		1
Nickel	7440-02-0	<0.010	0.010	mg/L	10/25/10 23:08		1
Potassium	7440-09-7	<2.00	2.00	mg/L	10/25/10 23:08		1
Selenium	7782-49-2	<0.025	0.025	mg/L	10/25/10 23:08		1
Silver	7440-22-4	<0.005	0.005	mg/L	10/25/10 23:08		1
Sodium	7440-23-5	<2.00	2.00	mg/L	10/25/10 23:08	N1	1
Tin	7440-31-5	<0.050	0.050	mg/L	10/25/10 23:08		1
Zinc	7440-66-6	<0.050	0.050	mg/L	10/25/10 23:08		1
Hardness	471-34-1	<6.61	6.61	mg/L	10/25/10 23:08		1

Analytical Method: Metals, Dissolved, by EPA 200.8 Prep Method: E200.8P
Analyst: BJK Date Prep: Oct-28-10 03:00 Tech: SGO
Seq Number: 829633

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Antimony	7440-36-0	<0.00200	0.00200	mg/L	10/28/10 21:20		1
Thallium	7440-28-0	<0.00050	0.00050	mg/L	10/28/10 21:20		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-9** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-002** Date Collected: **Oct-19-10 09:40**
Date Received: **Oct-19-10 14:58**

Analytical Method: Alkalinity by SM 2320B

Analyst: RLH Tech: RLH
Seq Number: 828784

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Alkalinity, Bicarbonate (as CaCO3)	ALKCACO3	412	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Carbonate (as CaCO3)	ALKCARB	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, hydroxide (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Total (as CaCO3)		412	20.0	mg/L	10/22/10 10:00		1

Analytical Method: Anions by EPA 300.0 Prep Method: E300P

Analyst: RLH Date Prep: Oct-29-10 19:06 Tech: RLH
Seq Number: 829989

Dilution Analysis:
Seq#: 829989 Date Analyzed: 10/29/10 19:24

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	405	25.0	mg/L	10/29/10 19:24	D2	10
Fluoride	16984-48-8	1.08	0.500	mg/L	10/29/10 19:06		1
Sulfate	14808-79-8	144	30.0	mg/L	10/29/10 19:24	D2	10

Analytical Method: Cyanide By Quikchem 10-204-00-1-X Prep Method: QUIKCHEM102C

Analyst: REH Date Prep: Oct-22-10 13:44 Tech: BRH
Seq Number: 828783

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Cyanide, Total	57-12-5	<0.0050	0.0050	mg/L	10/22/10 13:44		1

Analytical Method: Nitrite by SM 4500-NO2B

Analyst: KMD Tech: KMD
Seq Number: 828244

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrite as N	7727-37-9	<0.020	0.020	mg/L	10/19/10 17:49		1

Analytical Method: Nitrogen, Nitrate by EPA 353.2 Prep Method: E353.2P

Analyst: KMD Date Prep: Nov-01-10 16:31 Tech: KMD
Seq Number: 830012

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrate	7727-37-9	11.6	0.100	mg/L	11/01/10 16:31		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-9**	Matrix: **Water**	% Moisture:
Lab Sample Id: **394190-002**	Date Collected: **Oct-19-10 09:40**	
	Date Received: **Oct-19-10 14:58**	

Analytical Method: Phosphorus, Total by EPA 365.4 — Prep Method: E365.4_P

Analyst: KMD — Date Prep: Nov-05-10 15:57 — Tech: KMD

Seq Number: 830976

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total Phosphorus (as P)	7723-14-0	0.054	0.050	mg/L	11/05/10 15:57		1

Analytical Method: Total Dissolved Solids by SM 2540C

Analyst: RLH — Tech: RLH

Seq Number: 829128

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total dissolved solids	TDS	1510	10.0	mg/L	10/25/10 05:30		1

Analytical Method: Turbidity by EPA 180.1

Analyst: MDD — Tech: MDD

Seq Number: 829572

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Turbidity		0.117	0.100	NTU	10/20/10 10:33		1

Analytical Method: Mercury, Dissolved, by EPA 245.1 — Prep Method: E245.1P

Analyst: MGR — Date Prep: Nov-01-10 12:45 — Tech: MGR

Seq Number: 830167

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00040	0.00040	mg/L	11/02/10 13:21	D1	2

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-9** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-002** Date Collected: **Oct-19-10 09:40**
Date Received: **Oct-19-10 14:58**

Analytical Method: Metals, Dissolved, by EPA 200.7 Prep Method: E200.7P
Analyst: MDD Date Prep: Oct-25-10 10:30 Tech: SGO
Seq Number: 829185

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.010	0.010	mg/L	10/25/10 23:13		1
Barium	7440-39-3	0.047	0.010	mg/L	10/25/10 23:13		1
Beryllium	7440-41-7	<0.002	0.002	mg/L	10/25/10 23:13		1
Cadmium	7440-43-9	<0.003	0.003	mg/L	10/25/10 23:13		1
Calcium	7440-70-2	61.7	1.00	mg/L	10/25/10 23:13		1
Chromium	7440-47-3	<0.010	0.010	mg/L	10/25/10 23:13		1
Copper	7440-50-8	<0.010	0.010	mg/L	10/25/10 23:13		1
Iron	7439-89-6	<0.100	0.100	mg/L	10/25/10 23:13		1
Lead	7439-92-1	<0.010	0.010	mg/L	10/25/10 23:13		1
Magnesium	7439-95-4	36.4	1.00	mg/L	10/25/10 23:13		1
Manganese	7439-96-5	<0.010	0.010	mg/L	10/25/10 23:13		1
Nickel	7440-02-0	<0.010	0.010	mg/L	10/25/10 23:13		1
Potassium	7440-09-7	4.42	2.00	mg/L	10/25/10 23:13		1
Selenium	7782-49-2	<0.025	0.025	mg/L	10/25/10 23:13		1
Silver	7440-22-4	<0.005	0.005	mg/L	10/25/10 23:13		1
Sodium	7440-23-5	422	2.00	mg/L	10/25/10 23:13	N1M3	1
Tin	7440-31-5	<0.050	0.050	mg/L	10/25/10 23:13		1
Zinc	7440-66-6	<0.050	0.050	mg/L	10/25/10 23:13		1
Hardness	471-34-1	304	6.61	mg/L	10/25/10 23:13		1

Analytical Method: Metals, Dissolved, by EPA 200.8 Prep Method: E200.8P
Analyst: BJK Date Prep: Oct-28-10 03:00 Tech: SGO
Seq Number: 829633

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Antimony	7440-36-0	<0.00200	0.00200	mg/L	10/28/10 21:35		1
Thallium	7440-28-0	<0.00050	0.00050	mg/L	10/28/10 21:35		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-10** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-003** Date Collected: **Oct-19-10 11:40**
Date Received: **Oct-19-10 14:58**

Analytical Method: Alkalinity by SM 2320B

Analyst: RLH Tech: RLH
Seq Number: 828784

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Alkalinity, Bicarbonate (as CaCO3)	ALKCACO3	426	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Carbonate (as CaCO3)	ALKCARB	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, hydroxide (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Total (as CaCO3)		426	20.0	mg/L	10/22/10 10:00		1

Analytical Method: Anions by EPA 300.0 Prep Method: E300P

Analyst: RLH Date Prep: Oct-29-10 20:20 Tech: RLH
Seq Number: 829989

Dilution Analysis:
Seq#: 829989 Date Analyzed: 10/29/10 20:39

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	380	25.0	mg/L	10/29/10 20:39	D2	10
Fluoride	16984-48-8	1.04	0.500	mg/L	10/29/10 20:20		1
Sulfate	14808-79-8	131	30.0	mg/L	10/29/10 20:39	D2	10

Analytical Method: Cyanide By Quikchem 10-204-00-1-X Prep Method: QUIKCHEM102C

Analyst: REH Date Prep: Oct-22-10 13:46 Tech: BRH
Seq Number: 828783

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Cyanide, Total	57-12-5	<0.0050	0.0050	mg/L	10/22/10 13:46		1

Analytical Method: Nitrite by SM 4500-NO2B

Analyst: KMD Tech: KMD
Seq Number: 828244

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrite as N	7727-37-9	<0.020	0.020	mg/L	10/19/10 17:49		1

Analytical Method: Nitrogen, Nitrate by EPA 353.2 Prep Method: E353.2P

Analyst: KMD Date Prep: Nov-01-10 16:32 Tech: KMD
Seq Number: 830012

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrate	7727-37-9	11.0	0.100	mg/L	11/01/10 16:32		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-10**	Matrix: **Water**	% Moisture:
Lab Sample Id: **394190-003**	Date Collected: **Oct-19-10 11:40**	
	Date Received: **Oct-19-10 14:58**	

Analytical Method: Phosphorus, Total by EPA 365.4 Prep Method: E365.4_P

Analyst: KMD Date Prep: Nov-05-10 15:59 Tech: KMD
Seq Number: 830976

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total Phosphorus (as P)	7723-14-0	0.051	0.050	mg/L	11/05/10 15:59		1

Analytical Method: Total Dissolved Solids by SM 2540C

Analyst: RLH Tech: RLH
Seq Number: 829128

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total dissolved solids	TDS	1480	10.0	mg/L	10/25/10 05:30		1

Analytical Method: Turbidity by EPA 180.1

Analyst: MDD Tech: MDD
Seq Number: 829572

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Turbidity		0.119	0.100	NTU	10/20/10 10:33		1

Analytical Method: Mercury, Dissolved, by EPA 245.1 Prep Method: E245.1P

Analyst: MGR Date Prep: Nov-01-10 12:45 Tech: MGR
Seq Number: 830167

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00020	0.00020	mg/L	11/02/10 13:26		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-10** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-003** Date Collected: **Oct-19-10 11:40**
Date Received: **Oct-19-10 14:58**

Analytical Method: Metals, Dissolved, by EPA 200.7 Prep Method: E200.7P

Analyst: MDD Date Prep: Oct-25-10 10:30 Tech: SGO
Seq Number: 829185

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.010	0.010	mg/L	10/25/10 23:30		1
Barium	7440-39-3	0.044	0.010	mg/L	10/25/10 23:30		1
Beryllium	7440-41-7	<0.002	0.002	mg/L	10/25/10 23:30		1
Cadmium	7440-43-9	<0.003	0.003	mg/L	10/25/10 23:30		1
Calcium	7440-70-2	57.8	1.00	mg/L	10/25/10 23:30		1
Chromium	7440-47-3	<0.010	0.010	mg/L	10/25/10 23:30		1
Copper	7440-50-8	<0.010	0.010	mg/L	10/25/10 23:30		1
Iron	7439-89-6	<0.100	0.100	mg/L	10/25/10 23:30		1
Lead	7439-92-1	<0.010	0.010	mg/L	10/25/10 23:30		1
Magnesium	7439-95-4	31.9	1.00	mg/L	10/25/10 23:30		1
Manganese	7439-96-5	<0.010	0.010	mg/L	10/25/10 23:30		1
Nickel	7440-02-0	<0.010	0.010	mg/L	10/25/10 23:30		1
Potassium	7440-09-7	4.12	2.00	mg/L	10/25/10 23:30		1
Selenium	7782-49-2	<0.025	0.025	mg/L	10/25/10 23:30		1
Silver	7440-22-4	<0.005	0.005	mg/L	10/25/10 23:30		1
Sodium	7440-23-5	391	2.00	mg/L	10/25/10 23:30	N1	1
Tin	7440-31-5	<0.050	0.050	mg/L	10/25/10 23:30		1
Zinc	7440-66-6	<0.050	0.050	mg/L	10/25/10 23:30		1
Hardness	471-34-1	276	6.61	mg/L	10/25/10 23:30		1

Analytical Method: Metals, Dissolved, by EPA 200.8 Prep Method: E200.8P

Analyst: BJK Date Prep: Oct-28-10 03:00 Tech: SGO
Seq Number: 829633

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Antimony	7440-36-0	<0.00200	0.00200	mg/L	10/28/10 21:40		1
Thallium	7440-28-0	<0.00050	0.00050	mg/L	10/28/10 21:40		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-11**	Matrix: **Water**	% Moisture:
Lab Sample Id: **394190-004**	Date Collected: **Oct-19-10 12:55**	
	Date Received: **Oct-19-10 14:58**	

Analytical Method: Alkalinity by SM 2320B

Analyst: RLH
Seq Number: 828784
Tech: RLH

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Alkalinity, Bicarbonate (as CaCO3)	ALKCACO3	416	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Carbonate (as CaCO3)	ALKCARB	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, hydroxide (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Total (as CaCO3)		416	20.0	mg/L	10/22/10 10:00		1

Analytical Method: Anions by EPA 300.0
Prep Method: E300P

Analyst: RLH
Seq Number: 829989
Date Prep: Oct-29-10 20:58
Tech: RLH

Dilution Analysis:
Seq#: 829989 Date Analyzed: 10/29/10 21:16
Seq#: 829989 Date Analyzed: 10/30/10 05:38

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	522	50.0	mg/L	10/30/10 05:38	D2	20
Fluoride	16984-48-8	1.26	0.500	mg/L	10/29/10 20:58		1
Sulfate	14808-79-8	203	30.0	mg/L	10/29/10 21:16	D2	10

Analytical Method: Cyanide By Quikchem 10-204-00-1-X
Prep Method: QUIKCHEM102C

Analyst: REH
Seq Number: 828783
Date Prep: Oct-22-10 13:47
Tech: BRH

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Cyanide, Total	57-12-5	<0.0050	0.0050	mg/L	10/22/10 13:47		1

Analytical Method: Nitrite by SM 4500-NO2B

Analyst: KMD
Seq Number: 828244
Tech: KMD

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrite as N	7727-37-9	<0.020	0.020	mg/L	10/19/10 17:49		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-11** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-004** Date Collected: **Oct-19-10 12:55**
Date Received: **Oct-19-10 14:58**

Analytical Method: Nitrogen, Nitrate by EPA 353.2 Prep Method: E353.2P
Analyst: KMD Date Prep: Nov-01-10 16:40 Tech: KMD
Seq Number: 830012

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrate	7727-37-9	15.2	0.100	mg/L	11/01/10 16:40		1

Analytical Method: Phosphorus, Total by EPA 365.4 Prep Method: E365.4_P
Analyst: KMD Date Prep: Nov-05-10 16:03 Tech: KMD
Seq Number: 830976

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total Phosphorus (as P)	7723-14-0	0.052	0.050	mg/L	11/05/10 16:03		1

Analytical Method: Total Dissolved Solids by SM 2540C
Analyst: RLH Tech: RLH
Seq Number: 829128

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total dissolved solids	TDS	1750	10.0	mg/L	10/25/10 05:30		1

Analytical Method: Turbidity by EPA 180.1
Analyst: MDD Tech: MDD
Seq Number: 829572

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Turbidity		2.62	0.100	NTU	10/20/10 10:33		1

Analytical Method: Mercury, Dissolved, by EPA 245.1 Prep Method: E245.1P
Analyst: MGR Date Prep: Nov-01-10 12:45 Tech: MGR
Seq Number: 830167

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00020	0.00020	mg/L	11/02/10 13:28		1

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Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **MW-11** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-004** Date Collected: **Oct-19-10 12:55**
Date Received: **Oct-19-10 14:58**

Analytical Method: Metals, Dissolved, by EPA 200.7 Prep Method: E200.7P
Analyst: MDD Date Prep: Oct-25-10 10:30 Tech: SGO
Seq Number: 829185

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.010	0.010	mg/L	10/25/10 23:35		1
Barium	7440-39-3	0.046	0.010	mg/L	10/25/10 23:35		1
Beryllium	7440-41-7	<0.002	0.002	mg/L	10/25/10 23:35		1
Cadmium	7440-43-9	<0.003	0.003	mg/L	10/25/10 23:35		1
Calcium	7440-70-2	79.4	1.00	mg/L	10/25/10 23:35		1
Chromium	7440-47-3	<0.010	0.010	mg/L	10/25/10 23:35		1
Copper	7440-50-8	<0.010	0.010	mg/L	10/25/10 23:35		1
Iron	7439-89-6	<0.100	0.100	mg/L	10/25/10 23:35		1
Lead	7439-92-1	<0.010	0.010	mg/L	10/25/10 23:35		1
Magnesium	7439-95-4	49.1	1.00	mg/L	10/25/10 23:35		1
Manganese	7439-96-5	<0.010	0.010	mg/L	10/25/10 23:35		1
Nickel	7440-02-0	<0.010	0.010	mg/L	10/25/10 23:35		1
Potassium	7440-09-7	4.65	2.00	mg/L	10/25/10 23:35		1
Selenium	7782-49-2	<0.025	0.025	mg/L	10/25/10 23:35		1
Silver	7440-22-4	<0.005	0.005	mg/L	10/25/10 23:35		1
Sodium	7440-23-5	450	2.00	mg/L	10/25/10 23:35	N1	1
Tin	7440-31-5	<0.050	0.050	mg/L	10/25/10 23:35		1
Zinc	7440-66-6	<0.050	0.050	mg/L	10/25/10 23:35		1
Hardness	471-34-1	400	6.61	mg/L	10/25/10 23:35		1

Analytical Method: Metals, Dissolved, by EPA 200.8 Prep Method: E200.8P
Analyst: BJK Date Prep: Oct-28-10 03:00 Tech: SGO
Seq Number: 829633

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Antimony	7440-36-0	<0.00200	0.00200	mg/L	10/28/10 21:45		1
Thallium	7440-28-0	<0.00050	0.00050	mg/L	10/28/10 21:45		1

Project: Phoenix XENCO - Master Project

XENCO Laboratories
Trans West Analytical Services, LLC

Certificate of Analytical Results 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Dup** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-005** Date Collected: **Oct-19-10 12:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Alkalinity by SM 2320B

Analyst: RLH Tech: RLH
Seq Number: 828784

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Alkalinity, Bicarbonate (as CaCO3)	ALKCACO3	418	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Carbonate (as CaCO3)	ALKCARB	<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, hydroxide (as CaCO3)		<20.0	20.0	mg/L	10/22/10 10:00		1
Alkalinity, Total (as CaCO3)		418	20.0	mg/L	10/22/10 10:00		1

Analytical Method: Anions by EPA 300.0 Prep Method: E300P

Analyst: RLH Date Prep: Oct-29-10 21:35 Tech: RLH
Seq Number: 829989

Dilution Analysis:
Seq#: 829989 Date Analyzed: 10/29/10 21:53

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	399	25.0	mg/L	10/29/10 21:53	D2	10
Fluoride	16984-48-8	1.10	0.500	mg/L	10/29/10 21:35		1
Sulfate	14808-79-8	144	30.0	mg/L	10/29/10 21:53	D2	10

Analytical Method: Cyanide By Quikchem 10-204-00-1-X Prep Method: QUIKCHEM102C

Analyst: REH Date Prep: Oct-22-10 13:49 Tech: BRH
Seq Number: 828783

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Cyanide, Total	57-12-5	<0.0050	0.0050	mg/L	10/22/10 13:49		1

Analytical Method: Nitrite by SM 4500-NO2B

Analyst: KMD Tech: KMD
Seq Number: 828244

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrite as N	7727-37-9	<0.020	0.020	mg/L	10/19/10 17:51		1

Analytical Method: Nitrogen, Nitrate by EPA 353.2 Prep Method: E353.2P

Analyst: KMD Date Prep: Nov-01-10 16:41 Tech: KMD
Seq Number: 830012

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Nitrate	7727-37-9	11.5	0.100	mg/L	11/01/10 16:41		1

Project: Phoenix XENCO - Master Project

XENCO Laboratories
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Certificate of Analytical Results 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Dup** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-005** Date Collected: **Oct-19-10 12:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Phosphorus, Total by EPA 365.4 Prep Method: E365.4_P
Analyst: KMD Date Prep: Nov-05-10 16:05 Tech: KMD
Seq Number: 830976

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total Phosphorus (as P)	7723-14-0	<0.050	0.050	mg/L	11/05/10 16:05		1

Analytical Method: Total Dissolved Solids by SM 2540C
Analyst: RLH Tech: RLH
Seq Number: 829128

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Total dissolved solids	TDS	1520	10.0	mg/L	10/25/10 05:30		1

Analytical Method: Turbidity by EPA 180.1
Analyst: MDD Tech: MDD
Seq Number: 829572

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Turbidity		0.122	0.100	NTU	10/20/10 10:33		1

Analytical Method: Mercury, Dissolved, by EPA 245.1 Prep Method: E245.1P
Analyst: MGR Date Prep: Nov-01-10 12:45 Tech: MGR
Seq Number: 830167

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Mercury	7439-97-6	<0.00020	0.00020	mg/L	11/02/10 13:29		1

Project: Phoenix XENCO - Master Project

XENCO Laboratories
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Certificate of Analytical Results 394190

Valley Land, Tolleson, AZ

WRC Monitoring

Sample Id: **Dup** Matrix: **Water** % Moisture:
Lab Sample Id: **394190-005** Date Collected: **Oct-19-10 12:00**
Date Received: **Oct-19-10 14:58**

Analytical Method: Metals, Dissolved, by EPA 200.7 Prep Method: E200.7P
Analyst: MDD Date Prep: Oct-25-10 10:30 Tech: SGO
Seq Number: 829185

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Arsenic	7440-38-2	<0.010	0.010	mg/L	10/25/10 23:41		1
Barium	7440-39-3	0.045	0.010	mg/L	10/25/10 23:41		1
Beryllium	7440-41-7	<0.002	0.002	mg/L	10/25/10 23:41		1
Cadmium	7440-43-9	<0.003	0.003	mg/L	10/25/10 23:41		1
Calcium	7440-70-2	58.7	1.00	mg/L	10/25/10 23:41		1
Chromium	7440-47-3	<0.010	0.010	mg/L	10/25/10 23:41		1
Copper	7440-50-8	<0.010	0.010	mg/L	10/25/10 23:41		1
Iron	7439-89-6	<0.100	0.100	mg/L	10/25/10 23:41		1
Lead	7439-92-1	<0.010	0.010	mg/L	10/25/10 23:41		1
Magnesium	7439-95-4	34.7	1.00	mg/L	10/25/10 23:41		1
Manganese	7439-96-5	<0.010	0.010	mg/L	10/25/10 23:41		1
Nickel	7440-02-0	<0.010	0.010	mg/L	10/25/10 23:41		1
Potassium	7440-09-7	4.30	2.00	mg/L	10/25/10 23:41		1
Selenium	7782-49-2	<0.025	0.025	mg/L	10/25/10 23:41		1
Silver	7440-22-4	<0.005	0.005	mg/L	10/25/10 23:41		1
Sodium	7440-23-5	406	2.00	mg/L	10/25/10 23:41	N1	1
Tin	7440-31-5	<0.050	0.050	mg/L	10/25/10 23:41		1
Zinc	7440-66-6	<0.050	0.050	mg/L	10/25/10 23:41		1
Hardness	471-34-1	289	6.61	mg/L	10/25/10 23:41		1

Analytical Method: Metals, Dissolved, by EPA 200.8 Prep Method: E200.8P
Analyst: BJK Date Prep: Oct-28-10 03:00 Tech: SGO
Seq Number: 829633

Parameter	Cas Number	Result	PQL	Units	Analysis Date	Flag	Dil
Antimony	7440-36-0	<0.00200	0.00200	mg/L	10/28/10 21:50		1
Thallium	7440-28-0	<0.00050	0.00050	mg/L	10/28/10 21:50		1

Project: Phoenix XENCO - Master Project

Project Name: WRC Monitoring

Work Order #: 394190

Lab Batch #: 828784 **Project ID:** VLP 08-102
Date Analyzed: 10/22/2010 10:00 **Date Prepared:** 10/22/2010 **Analyst:** RLH
QC- Sample ID: 393878-013 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Alkalinity by SM 2320B Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	<20.0	<20.0	NC	20	

Lab Batch #: 829128
Date Analyzed: 10/25/2010 05:30 **Date Prepared:** 10/25/2010 **Analyst:** RLH
QC- Sample ID: 394189-002 D **Batch #:** 1 **Matrix:** Ground Water
Reporting Units: mg/L

Total Dissolved Solids by SM 2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	14000	14200	1	10	

Lab Batch #: 829128
Date Analyzed: 10/25/2010 05:30 **Date Prepared:** 10/25/2010 **Analyst:** RLH
QC- Sample ID: 394189-004 D **Batch #:** 1 **Matrix:** Ground Water
Reporting Units: mg/L

Total Dissolved Solids by SM 2540C Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	14300	14000	2	10	

Lab Batch #: 829572
Date Analyzed: 10/20/2010 10:33 **Date Prepared:** 10/20/2010 **Analyst:** MDD
QC- Sample ID: 394190-004 D **Batch #:** 1 **Matrix:** Water
Reporting Units: NTU

Turbidity by EPA 180.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Turbidity	2.62	2.84	8	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

XENCO Laboratories

BS / BSD Recoveries

Project Name: WRC Monitoring

Work Order #: 394190 **Project ID:** V

Analyst: RLH **Date Prepared:** 10/22/2010 **Date Analyzed:** 1(

Lab Batch ID: 828784 **Sample:** 828784-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Alkalinity by SM 2320B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Alkalinity, Total (as CaCO3)	<20.0	167	170	102	167	166	99	2

Analyst: REH **Date Prepared:** 10/22/2010 **Date Analyzed:** 1(

Lab Batch ID: 828783 **Sample:** 576794-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Cyanide By Quikchem 10-204-00-1-X Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Cyanide, Total	<0.0050	0.2500	0.2734	109	0.25	0.2831	113	3

Analyst: MGR **Date Prepared:** 11/01/2010 **Date Analyzed:** 11

Lab Batch ID: 830167 **Sample:** 577565-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Mercury, Dissolved, by EPA 245.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Mercury	<0.00020	0.00100	0.00093	93	0.001	0.00087	87	7

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: WRC Monitoring

Work Order #: 394190 **Project ID:** V

Analyst: BJK **Date Prepared:** 10/28/2010 **Date Analyzed:** 1(

Lab Batch ID: 829633 **Sample:** 577206-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE							
Metals, Dissolved, by EPA 200.8 **Analytes**	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**
Antimony	<0.00200	0.50000	0.52650	105	0.5	0.52470	105	0
Thallium	<0.00050	0.50000	0.49470	99	0.5	0.49930	100	1

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: WRC Monitoring

Work Order #: 394190 **Project ID:** V

Analyst: MDD **Date Prepared:** 10/25/2010 **Date Analyzed:** 1(

Lab Batch ID: 829185 **Sample:** 576886-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Metals, Dissolved, by EPA 200.7 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Arsenic	<0.010	0.500	0.503	101	0.5	0.487	97	3
Barium	<0.010	1.00	1.05	105	1	1.02	102	3
Beryllium	<0.002	0.500	0.509	102	0.5	0.492	98	3
Cadmium	<0.003	0.500	0.534	107	0.5	0.518	104	3
Calcium	<1.00	25.5	26.5	104	25.5	25.6	100	3
Chromium	<0.010	0.500	0.538	108	0.5	0.526	105	2
Copper	<0.010	0.500	0.500	100	0.5	0.486	97	3
Iron	<0.100	0.500	0.523	105	0.5	0.504	101	4
Lead	<0.010	0.500	0.527	105	0.5	0.511	102	3
Magnesium	<1.00	25.5	27.3	107	25.5	26.3	103	4
Manganese	<0.010	0.500	0.522	104	0.5	0.509	102	3
Nickel	<0.010	0.500	0.519	104	0.5	0.504	101	3
Potassium	<2.00	25.0	27.2	109	25	26.1	104	4
Selenium	<0.025	0.500	0.535	107	0.5	0.519	104	3
Silver	<0.005	0.075	0.078	104	0.075	0.076	101	3
Sodium	<2.00	25.0	26.8	107	25	25.8	103	4
Tin	<0.050	0.500	0.513	103	0.5	0.498	100	3
Zinc	<0.050	0.500	0.545	109	0.5	0.527	105	3

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: WRC Monitoring

Work Order #: 394190 **Project ID:** V

Analyst: RLH **Date Prepared:** 10/29/2010 **Date Analyzed:** 1(

Lab Batch ID: 829989 **Sample:** 577600-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Anions by EPA 300.0 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Chloride	<2.50	25.0	23.3	93	25	23.4	94	0
Fluoride	<0.500	5.00	4.96	99	5	4.96	99	0
Sulfate	<3.00	30.0	29.7	99	30	29.9	100	1

Analyst: KMD **Date Prepared:** 10/19/2010 **Date Analyzed:** 1(

Lab Batch ID: 828244 **Sample:** 828244-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Nitrite by SM 4500-NO2B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Nitrite as N	<0.020	0.100	0.098	98	0.1	0.099	99	1

Analyst: KMD **Date Prepared:** 11/01/2010 **Date Analyzed:** 11

Lab Batch ID: 830012 **Sample:** 577615-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE

Nitrogen, Nitrate by EPA 353.2 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %
Nitrate+Nitrite	<0.100	5.00	4.95	99	5	4.94	99	0

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

BS / BSD Recoveries

Project Name: WRC Monitoring

Work Order #: 394190 **Project ID:** V

Analyst: KMD **Date Prepared:** 11/05/2010 **Date Analyzed:** 11

Lab Batch ID: 830976 **Sample:** 578134-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

Phosphorus, Total by EPA 365.4	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE							
Analytes	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**
Total Phosphorus (as P)	<0.050	0.500	0.502	100	0.5	0.536	107	7

Analyst: RLH **Date Prepared:** 10/25/2010 **Date Analyzed:** 1(

Lab Batch ID: 829128 **Sample:** 829128-1-BKS **Batch #:** 1 **Matrix:** W

Units: mg/L

Total Dissolved Solids by SM 2540C	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVE							
Analytes	**Blank Sample Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Spike Added [E]**	**Blank Spike Duplicate Result [F]**	**Blk. Spk Dup. %R [G]**	**RPD %**
Total dissolved solids	<10.0	1000	1010	101	1000	1010	101	0

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

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Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 828783 **QC- Sample ID:** 394178-001 S **Batch #:** 1 **Matrix:** Ground Water
Date Analyzed: 10/22/2010 **Date Prepared:** 10/22/2010 **Analyst:** REH
Reporting Units: mg/L

Cyanide By Quikchem 10-204-00-1-X Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Cyanide, Total	<0.0050	0.2500	0.2760	110	0.2500	0.2697	108	2

Lab Batch ID: 830167 **QC- Sample ID:** 394593-001 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 11/02/2010 **Date Prepared:** 11/01/2010 **Analyst:** MGR
Reporting Units: mg/L

Mercury, Dissolved, by EPA 245.1 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Mercury	<0.00020	0.00100	.000987	99	0.00100	.00095	95	4

Lab Batch ID: 829633 **QC- Sample ID:** 394190-001 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 10/28/2010 **Date Prepared:** 10/28/2010 **Analyst:** BJK
Reporting Units: mg/L

Metals, Dissolved, by EPA 200.8 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Antimony	<0.00200	0.50000	0.57880	116	0.50000	0.59380	119	3
Thallium	<0.00050	0.50000	0.54560	109	0.50000	0.56650	113	4

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories
Trans West Analytical Services, LLC

Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 829185 **QC- Sample ID:** 393719-001 S **Batch #:** 1 **Matrix:** Surface Water

Date Analyzed: 10/25/2010 **Date Prepared:** 10/25/2010 **Analyst:** MDD

Reporting Units: mg/L

Metals, Dissolved, by EPA 200.7 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Arsenic	<0.010	0.500	0.497	99	0.500	0.489	98	2
Barium	0.110	1.00	1.13	102	1.00	1.11	100	2
Beryllium	<0.002	0.500	0.499	100	0.500	0.488	98	2
Cadmium	<0.003	0.500	0.523	105	0.500	0.515	103	2
Calcium	37.6	25.5	62.0	96	25.5	61.0	92	2
Chromium	<0.010	0.500	0.521	104	0.500	0.520	104	0
Copper	<0.010	0.500	0.496	99	0.500	0.487	97	2
Iron	0.061	0.500	0.593	106	0.500	0.601	108	1
Lead	<0.010	0.500	0.518	104	0.500	0.508	102	2
Magnesium	3.89	25.5	30.1	103	25.5	29.4	100	2
Manganese	0.007	0.500	0.517	102	0.500	0.510	101	1
Nickel	<0.010	0.500	0.508	102	0.500	0.499	100	2
Potassium	5.57	25.0	32.3	107	25.0	31.7	105	2
Selenium	<0.025	0.500	0.525	105	0.500	0.516	103	2
Silver	<0.005	0.075	0.077	103	0.075	0.075	100	3
Sodium	9.41	25.0	35.2	103	25.0	34.4	100	2
Tin	<0.050	0.500	0.500	100	0.500	0.491	98	2
Zinc	<0.050	0.500	0.529	106	0.500	0.519	104	2

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories
Trans West Analytical Services, LLC

Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 829185 **QC- Sample ID:** 394190-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/25/2010 **Date Prepared:** 10/25/2010 **Analyst:** MDD

Reporting Units: mg/L

Metals, Dissolved, by EPA 200.7 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Arsenic	0.005	0.500	0.530	105	0.500	0.521	103	2
Barium	0.047	1.00	1.10	105	1.00	1.08	103	2
Beryllium	<0.002	0.500	0.508	102	0.500	0.500	100	2
Cadmium	<0.003	0.500	0.554	111	0.500	0.545	109	2
Calcium	61.7	25.5	82.0	80	25.5	82.2	80	0
Chromium	<0.010	0.500	0.491	98	0.500	0.497	99	1
Copper	0.002	0.500	0.537	107	0.500	0.534	106	1
Iron	<0.100	0.500	0.527	105	0.500	0.520	104	1
Lead	<0.010	0.500	0.537	107	0.500	0.525	105	2
Magnesium	36.4	25.5	59.6	91	25.5	59.6	91	0
Manganese	0.001	0.500	0.523	104	0.500	0.514	103	2
Nickel	0.004	0.500	0.540	107	0.500	0.531	105	2
Potassium	4.42	25.0	32.9	114	25.0	33.0	114	0
Selenium	<0.025	0.500	0.542	108	0.500	0.533	107	2
Silver	<0.005	0.075	0.080	107	0.075	0.079	105	1
Sodium	422	25.0	406	0	25.0	410	0	NC
Tin	<0.050	0.500	0.506	101	0.500	0.498	100	2
Zinc	0.010	0.500	0.551	108	0.500	0.545	107	1

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories
Trans West Analytical Services, LLC

Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 829989 **QC- Sample ID:** 394049-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/29/2010 **Date Prepared:** 10/29/2010 **Analyst:** RLH

Reporting Units: mg/L

Anions by EPA 300.0 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Chloride	<2.50	25.0	23.6	94	25.0	24.0	96	2
Fluoride	<0.500	5.00	4.84	97	5.00	4.96	99	2
Sulfate	<3.00	30.0	29.4	98	30.0	30.0	100	2

Lab Batch ID: 829989 **QC- Sample ID:** 394597-029 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 10/29/2010 **Date Prepared:** 10/29/2010 **Analyst:** RLH

Reporting Units: mg/L

Anions by EPA 300.0 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Chloride	<2.50	25.0	23.7	95	25.0	24.0	96	1
Fluoride	<0.500	5.00	4.94	99	5.00	5.02	100	2
Sulfate	<3.00	30.0	29.4	98	30.0	30.2	101	3

Lab Batch ID: 828244 **QC- Sample ID:** 394189-001 S **Batch #:** 1 **Matrix:** Ground Water

Date Analyzed: 10/20/2010 **Date Prepared:** 10/20/2010 **Analyst:** KMD

Reporting Units: mg/L

Nitrite by SM 4500-NO2B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Nitrite as N	0.136	0.200	0.308	86	0.200	0.314	89	2

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories
Trans West Analytical Services, LLC

Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 828244 **QC- Sample ID:** 394189-002 S **Batch #:** 1 **Matrix:** Ground Water
Date Analyzed: 10/19/2010 **Date Prepared:** 10/19/2010 **Analyst:** KMD
Reporting Units: mg/L

Nitrite by SM 4500-NO2B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Nitrite as N	0.028	0.100	0.103	75	0.100	0.103	75	0

Lab Batch ID: 830012 **QC- Sample ID:** 394190-001 S **Batch #:** 1 **Matrix:** Water
Date Analyzed: 11/01/2010 **Date Prepared:** 11/01/2010 **Analyst:** KMD
Reporting Units: mg/L

Nitrogen, Nitrate by EPA 353.2 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Nitrate+Nitrite	<0.200	5.00	4.90	98	5.00	4.90	98	0

Lab Batch ID: 830012 **QC- Sample ID:** 394415-001 S **Batch #:** 1 **Matrix:** Aqueous
Date Analyzed: 11/01/2010 **Date Prepared:** 11/01/2010 **Analyst:** KMD
Reporting Units: mg/L

Nitrogen, Nitrate by EPA 353.2 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Nitrate+Nitrite	1.45	5.00	6.28	97	5.00	6.32	97	1

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories
Trans West Analytical Services, LLC

Form 3 - MS / MSD Recoveries

Project Name: WRC Monitoring

Work Order # : 394190 **Project ID:** VLP 08-102

Lab Batch ID: 830976 **QC- Sample ID:** 395075-005 S **Batch #:** 1 **Matrix:** Surface Water

Date Analyzed: 11/05/2010 **Date Prepared:** 11/05/2010 **Analyst:** KMD

Reporting Units: mg/L

Phosphorus, Total by EPA 365.4 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Total Phosphorus (as P)	0.070	0.500	0.525	91	0.500	0.525	91	0

Lab Batch ID: 830976 **QC- Sample ID:** 395451-001 S **Batch #:** 1 **Matrix:** Surface Water

Date Analyzed: 11/05/2010 **Date Prepared:** 11/05/2010 **Analyst:** KMD

Reporting Units: mg/L

Phosphorus, Total by EPA 365.4 Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY							
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %
Total Phosphorus (as P)	0.385	0.500	0.813	86	0.500	0.872	97	7

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Columbia Analytical Services

Water Chain of Custody

Work Order No: 394190

www.caslab.com •• 3725 E. Atlanta Ave. • Phoenix, AZ 85040 • Ph: (602) 437-0330 •• 3860 S. Palo Verde Rd., Suite 301 • Tucson, AZ 85714 • Ph: (520) 573-1061

Page 1 of ____

Project Manager:	DAVID HOWARD	Bill to: (if different)		Phone:	
Company Name:	VALLEY LAND PARTNERS	Company Name:	WORLD RESOURCES CO.	Special Deliverable Requirements:	
Address:	P.O. BOX 5126	Address:		Extra surcharges may apply	
City, State, ZIP:	PEORIA, AZ 85385	City, State, ZIP:	TOLLESON, AZ	☐ Level III ☐ Report to MDL	
Phone:	602-505-1100	Email:	dhoward@vlpartners.net	☐ Level IV ☐ _____	

Special Requirements:
- ☐ Non Compliant
- ☐ pdf ☐ EDD
- ☐ DWAR ☐ NELAP
- ☐ Project Specific QAPP

Project Name:	WRC Monitoring
Project Number:	VLP 08-102
P.O. Number:	
Sampler's Name:	DAVID HOWARD

SAMPLE RECEIPT

Temperature (C):	4.4	Temp Blank Present:	Y		
Received Intact:	(Yes)	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	(N/A)	Total Containers:	
Sample Custody Seals:	Yes	No	(N/A)		

ANALYSIS REQUEST (PLEASE CHECK METHOD NUMBER)

TAT:
- ☒ Routine
- ☐ Rush - Prelim
- ☐ Rush - Final

Prelim Due Date:

Final Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	Container Count	Volatile Organics 624 8260B ☐	524.2 ☐	Acrylonitrile 624 8260B ☐	2-CEVE ☐	Acrolein ☐	Semi-Volatile Organics 625 8270C ☐	Organochlorine Pesticides 608 8081A ☐	Oil & Grease (1664-HEM) ☐	TPH (1664-HEM-SGT) ☐	Metals (See Below) Total ☐ Hardness ☐	Ca Hardness ☐	Metals (See Below) Dissolved ☒ TCLP ☐	Total ☐ Dissolved ☐	Hexavalent Cr ☐ Trivalent Cr ☐	Total Cyanide ☒ Amenable (Free) Cyanide ☐	CBOD ☐ BOD ☐	pH ☐ Cond. ☐ Alk ☒ TDS ☒ TSS ☒	Cl ☒ SO4 ☒ F ☒ Ortho-P ☐ TSS-low ☐	NO2 ☒ NO2+NO3 ☐ NO3 (300.0) ☐ NO3 (353.2) ☒	TKN ☐ NH3 ☐ COD ☐ Total-P ☒	Collert ☐ E. Coli (CFU/MPN) ☐ HPC ☐ Fecal (CFU/MPN) ☐	Turb	Comments
EQUIP. BLANK	W	10-19-10	8:00	1	4												X			X		X	X	X	X	X	X	
MW-9	↓	↓	9:40	2	4												X			X		X	X	X	X	X	X	
MW-10			11:40	3	4												X			X		X	X	X	X	X	X	
MW-11			12:55	4	4												X			X		X	X	X	X	X	X	
DUP.			12:00	5	4												X			X		X	X	X	X	X	X	

Total — Circle Method(s) and Metal(s) to be analyzed

200.7 / 6010B: 8RCRA 13PPM Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Tl Sn V Zn

200.8 / 6020: Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Other: 245.1 / 7470A: Hg

Dissolved / TCLP — Circle Method(s) and Metal(s) to be analyzed

200.7 / 6010B: 8RCRA 13PPM Al Sb (As) (Ba) (Be) B (Cd) (Ca) (Cr) Co (Cu) (Fe) (Pb) (Mg) (Mn) Mo (Ni) (K) (Se) (Ag) SiO2 (Na) Tl (Sn) V (Zn)

200.8 / 6020: (Sb) As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag (Tl) U Other: 245.1 / 7470A: (Hg)

Relinquished by: (Signature)	(Print Name)	Received by: (Signature)	(Print Name)	Date/Time
1	DAVID B. HOWARD		TRACEY MITCHELL	10-19-10 1458
2				
3				

System Name: PWS #:

Date and Time samples arrived at reporting lab: Phoenix / Tucson

Revised: 8/8/2009

Container type: MISC

XENCO Laboratories

Sample Receipt Checklist

Client Name: Valley Land Partners — Date and Time Received: 10/19/10 1458

Work Order Number: 394190 — Checked by: TM

Checklist completed by: Leslie May Date: 10/19/10 — Logged In by: _____ Date: _____

Matrix: WW 10-18 Courier Name: (Client) Xenco _____ — Reviewed by: _____ Date: _____

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	Not Present ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Samples received same day of collection?	Yes ☑	No ☐	Temp: 4.4 Wet Ice Present ☑
Where was the temperature reading taken at?	Sample ☐	Temp Blank ☑	Other:
VOA Water – VOA vials have zero headspace?	Yes ☐	No ☐	N/A ☑
Water – Microbiological bottles have ≤ 2.5 cm headspace?	Yes ☐	No ☐	N/A ☑
Water – All sample pH's acceptable upon receipt?	Yes ☑	No ☐	N/A ☐ Checked by: TM

If **No**, list all samples and bottle types that are not acceptable in Additional Comments section. Also state any correction actions.

Sulfide Water – Bottles have zero headspace?	Yes ☐	No ☐	N/A ☑ (zero headspace ≤ than neck of bottle)
Dissolved Water Analytes – Field Filtered?	Yes ☐	No ☐	N/A ☐
Are samples received deemed acceptable?	Yes ☐	No ☐	If **No** then complete section below

PC Notified Date: _____ Init: _____ PC Init: _____

Client Notified Date: _____ Init: _____ L/M ☐ Date: _____ L/M ☐ Date: _____

Contact Name: _____ Action to take: Analyze ☐ Cancel ☐ Hold ☐ Other:

Changes/Comments made on original COC? Yes ☐ N/A ☐ Init: _____ Date: _____

Changes made in LIMS? Yes ☐ N/A ☐ Init: _____ Date: _____

Additional Comments: _____