WEST YOST ASSOCIATES
Consulting Engineers

February 25, 2015

Project No.: 484-13-14-02.002
SENT VIA: EMAIL

Mr. Derek C. Lee
Environmental Compliance
East Bay Municipal Utility District
375 11th Street
Oakland California 94607

SUBJECT: East Bay Municipal Utility District Bayside Groundwater Project, 2014 Annual Report, Order No. R2-2007-0038

Dear Mr. Lee:

West Yost Associates (West Yost) has prepared this 2014 Annual Report (Report) on behalf of the East Bay Municipal Utility District (EBMUD) for the Bayside Groundwater Project (Project) in Alameda County. West Yost has prepared this Report in accordance with the Self Monitoring and Reporting Program (SMRP) Order No. R2-2007-0038, which was adopted by the San Francisco Regional Water Quality Control Board (Regional Board) on May 9, 2007, as Attachment A to Regional Board Order No. R2-2007-0038, the Waste Discharge Requirements (Permit) for the Project.

The Project consists of the Bayside Well and a number of monitoring wells constructed near and in the vicinity of the Bayside Well. Depth to groundwater was monitored in the Bayside Well and associated monitoring wells during 2014. Groundwater samples were collected from December 12 to December 17, 2014, for analytical testing. Groundwater elevations and analytical results are provided in this Report, along with results from previous years, in accordance with the SMRP, for evaluation of long-term trends.

This letter report covers the following specific topics:

- Project Overview
- Regulatory Requirements
- Injection and Recovery Activities
- Sampling and Analysis Activities
- Groundwater Elevations and Flow Directions
- Groundwater Quality Results
- Conclusions

PROJECT OVERVIEW

The Project is located in a predominantly industrial area within unincorporated portions of the City of San Lorenzo and the City of San Leandro. The Bayside Well is located at 2600 Grant Avenue in San Lorenzo. The Project area is bounded by residential communities to the north and east, and the San Francisco Bay about a half-mile to the west.

The Bayside Well is an Aquifer Storage and Recovery (ASR) well designed and constructed for injection of water and aquifer storage during wet years and, later, for recovery as a source of supplemental drinking water supply for EBMUD during dry years. When it occurs, treated drinking water from EBMUD's distribution system is injected into the South East Bay Plain Groundwater Basin (SEBPB). As detailed later in this Report, injection has not occurred since 2011.

The Bayside Well was constructed with 18-inch diameter steel casing and is screened from 520 feet below ground surface (bgs) to 650 feet bgs. The monitoring well network consists of 17 monitoring wells constructed at various depths (Figure 1). Well construction details are summarized in Table 1. Additional background information on the Project is provided in the Permit.

REGULATORY REQUIREMENTS

The SMRP (Attachment A of the Permit) requires groundwater level monitoring in 13 of the Project monitoring wells (MW-1, MW-2S, MW-2I, MW-3, MW-4, MW-5S, MW-5I, MW-5D, MW-6, MW-7, MW-9D, MW-10I, and MW-10D).[1] After the first year of monitoring, groundwater level monitoring in 11 of the 13 wells listed above is required to be performed on an hourly basis. For wells MW-4 and MW-6, groundwater level monitoring is required to be performed quarterly only.

The SMRP also requires EBMUD to implement a phased approach for monitoring groundwater quality in a subset of the Project monitoring wells. Each phase is successive and depends on certain triggers, generally related to the location of the injected water front (i.e., leading edge of the injected water). The SMRP specifies the following phased approach consisting of four groups of monitoring wells:

- Initial monitoring in Group 1 wells (Bayside Well, MW-2S, MW-2I, MW-4, and MW-10D[2]) is required to start three months prior to the start of Project operations and to continue on an annual basis until Group 2 monitoring is triggered.
- Monitoring of Group 2 wells (Bayside Well, MW-2S, MW-2I, MW-4, and MW-6) would begin once the injected water front reaches MW-4 and would continue on an annual basis until Group 3 monitoring is triggered.
- Monitoring of Group 3 wells (Group 2 wells plus MW-5D and MW-7) would begin once the injected water front reaches MW-6 and would continue on an annual basis until Group 4 monitoring is triggered.
- Monitoring of Group 4 wells (Group 3 wells plus MW-10D) would begin with the detection of injected water at MW-5D or MW-7, or 15 years after initiating Project operations, whichever is earlier.

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[1] EBMUD uses slightly different well names than those used in the Permit. For example, "MW-2I" is used instead of "MW-2D" and "MW-9D" instead of "MW-9." EBMUD's well naming convention is used in this Report.

[2] Group 1 monitoring included limited monitoring at MW-10D. Specifically, the SMRP requires monitoring of MW-10D only once in the beginning of the Group 1 monitoring phase.

Water quality parameters required to be measured are listed in Table 4 of the SMRP and include pH, chlorine residual, Total Dissolved Solids (TDS), ammonia, nitrate, chloride, manganese, iron, total trihalomethanes and haloacetic acids (including the individual components), and various "standard minerals" (e.g. calcium and magnesium).[3]

The SMRP requires the submission of data from the Project's monitoring well network to the Regional Board in an annual report. Annual reports, due by March 1 of the following year, are required to include the following items, per Part A.4 of the SMRP:

- A table of groundwater injection and recovery data, including the cumulative total volume injected/recovered since Project inception.
- Maps of well locations, groundwater elevation contours, extent of injected groundwater flow, and extent of dissolved chemical constituents (isoconcentration maps).
- A table of location and construction details for the wells.
- A table of current groundwater depths, elevations, and horizontal and vertical gradients.
- A table of current and historical (past five years) water quality results for the wells.
- A discussion of field and laboratory results that includes conclusions, recommendations, and data anomalies.

INJECTION AND RECOVERY ACTIVITIES

No injection or recovery activities took place during 2014. Accordingly, the injection and recovery rates were in compliance with the permitted maximum rates – for both injection and recovery – of one million gallons per day. The cumulative volumes of injected and recovered water since Project inception (2009) are shown in Table 2.

SAMPLING AND ANALYSIS ACTIVITIES

The SMRP generally requires groundwater level monitoring on an hourly basis in the applicable monitoring wells listed above for each group. Prior to 2014, EBMUD installed dedicated pressure transducers in these wells to collect hourly groundwater level data. However, in early 2014, EBMUD staff discovered that the pressure transducers were not providing accurate results. Therefore, the pressure transducers were offline from late January to May 2014. Following the installation of new pressure transducers, hourly groundwater level data were collected from May through December 2014.

As noted in the 2013 Annual Report, monitoring well MW-7 was damaged by a PG&E contractor in 2012 and has not been repaired because PG&E has not accepted responsibility for the damage.

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[3] Table 4 of the SMRP also requires monitoring for "Title 22" drinking water parameters under the following conditions that are not currently applicable: MW-10D once with Group 1 monitoring and MW-5D and MW-7 with Group 4 monitoring.

Since this well has not been repaired, groundwater level monitoring was not conducted in 2014 for well MW-7.

The SMRP also requires groundwater quality monitoring, as discussed above, following a phased approach. In 2013, EBMUD initiated monitoring of Group 2 wells, which essentially entailed adding MW-6 to the annual monitoring well network. In 2014, EBMUD initiated monitoring of Group 3 wells, which entailed the addition of MW-5D and MW-7 to the annual monitoring network, in response to the detection of chlorine residual and haloacetic acids at MW-6, as detailed in the 2013 Annual Report. As discussed above, MW-7 is currently damaged. Therefore, MW-7 was not sampled during 2014.

EBMUD staff collected the 2014 groundwater samples for the required water quality analyses over four days: December 12, 13, 16, and 17. A peristaltic pump with new tubing was used to purge and sample wells MW-2S, MW-2I, and MW-4. A submersible pump with new tubing was used to purge and sample MW-5D and MW-6. The Bayside Well was purged using the dedicated downhole turbine pump with the sample collected from a spigot at the wellhead. Purge water was disposed of on permeable ground adjacent to wells MW-2S, MW-2I, MW-4, MW-5D, and MW-6. Purge water from the Bayside Well was pumped to an onsite holding tank and eventually discharged to Oro Loma Sanitary District under a separate discharge permit. No surface water discharges occurred.

Groundwater monitoring and sampling were completed according to the following procedures:

1. Measure static water level within each well, and calculate three-well volumes required for purging in accordance with USEPA groundwater sampling protocols.
2. Purge the well until three well casing volumes have been removed.
3. Measure field water quality parameters (pH, specific conductance, and temperature) periodically during purging.
4. Collect samples in containers with appropriate preservatives in accordance with USEPA sampling protocols for individual constituents.
5. Measure residual chlorine immediately after sample collection.
6. Transport samples to EBMUD's state-certified laboratory in a cooler under chain of custody for analytical testing.

Attachment A provides well purge logs, including the static water level, purge volumes, and field parameter measurements.

GROUNDWATER ELEVATIONS AND FLOW DIRECTIONS

Static water levels measured prior to well purging and sampling in December 2014 are summarized in Table 3, along with calculated groundwater elevations based on the reference elevations noted in Table 1. Table 3 also provides historical static water levels and groundwater elevations, as reported in the 2013 Annual Report.

Groundwater elevations derived from the new pressure transducers installed in May 2014 are plotted by well for May through December 2014 (Attachment B). Groundwater elevation

contours for August 1, 2014, corresponding to a low tide in San Francisco Bay, are shown on Figure 2. Groundwater elevation contours for December 1, 2014, corresponding to a high tide in San Francisco Bay, are shown on Figure 3. As shown on Figures 2 and 3, the groundwater flow direction is primarily to the south with a southwesterly component at low tide (Figure 2) and southeasterly to southwesterly components at high tide (Figure 3). Horizontal hydraulic gradients are variable with lower gradients further from the bay and higher gradients closer to the bay.

Groundwater elevations during low tide ranged from -8.92 feet above mean sea level (amsl) to -10.15 feet amsl (Figure 2). Groundwater elevations during high tide ranged from -6.38 feet amsl to -7.04 feet amsl (Figure 3).

Vertical hydraulic gradients were calculated based on groundwater elevations and well construction information for the nested wells MW-5S, MW-5I, and MW-5D. Specifically, vertical gradients were calculated for a low tide using groundwater elevation data from 11:05 AM on August 1, 2014, and for a high tide using data from 9:50 AM on December 1, 2014. The calculated vertical gradients for these dates, including supporting data for the calculations, are presented in Table 4. The overall vertical gradient under both conditions is downward at approximately 0.04 to 0.05 feet per foot. These results are consistent with the vertical gradients reported in the 2013 Annual Report.

GROUNDWATER QUALITY RESULTS

The 2014 analytical results are included in the following tables, along with historical water quality results for the last five years (2009 through 2013):

- Table 5 includes data for general water quality parameters (e.g., pH, chlorine residual, iron) and standard minerals (e.g., calcium, magnesium, potassium).
- Table 6 includes data for disinfection byproducts (haloacetic acids [HAAs] and trihalomethanes [THMs]).

Copies of the analytical lab reports for the 2014 water quality data are provided in Attachment C.[4]

For wells with pre-2014 data (Bayside Well, MW-2S, MW-2I, MW-4, and MW-6), the 2014 water quality results summarized in Table 5 are generally consistent. Concentrations for a number of parameters in MW-2S are noted as continuing to be higher than in the other monitoring wells. The 2014 data also indicate that iron concentrations are much lower than previous results for MW-2S, MW-2I, and MW-4, and MW-6. The analytical lab reports have been reviewed, but no apparent explanation was identified for these lower concentrations.

As noted above, well MW-5D was sampled for the first time in 2014. The results for MW-5D summarized in Table 5 are generally consistent with other monitoring wells, with the exception of MW-2S.

[4] The lab reports in Attachment C include results for additional parameters beyond those required by the SMRP. EBMUD collected this information per drinking water regulations unrelated to the Permit and SMRP. These data are not discussed in this Report.

For the 2014 groundwater quality results summarized in Table 5, TDS has been used as a representative constituent to evaluate overall groundwater quality conditions. The isoconcentration contours shown on Figure 4 are based on TDS concentrations for deep monitoring wells, including the Bayside Well, MW-4, MW-5D, and MW-6 (Table 1). The isoconcentration contours indicate the lowest concentration of 130 milligrams per liter (mg/L) occurs at the Bayside Well with increasing TDS concentrations in a northerly direction (i.e. further inland). The highest TDS concentration of 490 mg/L was detected at well MW-5D. Therefore, TDS concentrations decrease along the southerly groundwater flow direction (Figure 3).

The disinfection byproducts data summarized in Table 6 are also consistent with previous results with most constituents below Method Detection Limits (MDLs) in each well. Testing for HAAs in the groundwater sample collected from well MW-6 was inadvertently omitted. In addition, the combined parameters HAA(5), HAA(9), and total THMs (TTHMs) are within the range of historical results. These data also indicate no exceedances of the Permit's effluent water quality limits for HAAs and TTHMs. The only disinfection byproducts detected in 2014 were reported at low concentrations as summarized below:

- Chloroform: 0.45 micrograms per liter (µg/L) in the Bayside Well
- Bromochloroacetic acid: 0.50 µg/L in Well MW-2I
- Monochloroacetic acid: 0.72 µg/L in Well MW-4

CONCLUSIONS

EBMUD conducted the 2014 groundwater monitoring at the Bayside Groundwater Project site in accordance with the Self Monitoring and Reporting Program Order No. R2-2007-0038 with minor exceptions, as noted above. In 2015, EBMUD will continue to implement groundwater monitoring for the Group 3 wells and work with PG&E on the repair of well MW-7 and its subsequent addition to the monitoring program. West Yost understands that EBMUD will repeat its request to the Regional Board to reduce the frequency of groundwater level measurements from hourly to quarterly during periods when the Project is inactive. The 2015 Annual Report will be submitted to the Regional Board by March 1, 2016.

Please call Charles Hardy at (925) 949-5814 or Jim Strandberg at (925) 949-5825 with any questions or comments on this Report.

Sincerely,

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Francis, Thomas, Senior Civil Engineer, EBMUD, 2014, Letter to Mary Rose Casa, Regional Board, February 25, 2014, *Subject: East Bay Municipal Utility District Bayside Groundwater Project, 2013 Annual Report, Order No. R2-2007-0038*.

Regional Board, 2007, Order No. R2-2007-0038 *Waste Discharge Requirements for East Bay Municipal Utility District, Bayside Groundwater Project, San Lorenzo, Alameda County*, Adopted May 9, 2007.

Table 1. Groundwater Monitoring Well Construction Details

Well ID	Latitude	Longitude	Address	City	Completion Date	Drilled Depth, feet bgs[a]	Casing Depth, feet bgs	Depth of Top of Perforation, feet bgs	Depth of Bottom of Perforation, feet bgs	Casing Diameter, inches	Reference Elevation, feet amsl[b]	Reference Location on Well
MW-1	37° 40' 4.8"	122° 9' 25.2"	2600 Grant Ave.	San Lorenzo		665	650	520	640	2	8.71	Top of steel casing
MW-2S						210	60	40	60	2	9.90	Top of steel casing
MW-2I[c]						210	200	160	190	2		
MW-3	37° 40' 4.8"	122° 9' 28.8"				665	660	520	650	2	8.12	Top of steel casing
MW-4	37° 40' 11.6"	122° 9' 28.8"	2575 Grant Ave.			705	650	520	650	2	8.96	Top of steel rim
MW-5S	37° 40' 34.4"	122° 9' 06.6"	2006 Via Barrett		Sep-08	460	210	200	210	2	13.88	Seal of vault lid at easterly edge
MW-5I	37° 40' 34.4"	122° 9' 06.6"	2005 Via Barrett		Sep-08	460	325	315	325	2		
MW-5D	37° 40' 34.4"	122° 9' 06.6"	2007 Via Barrett		Feb-01	1,025	640	500	630	4	13.76	Top of casing at northerly edge
MW-6	37° 40' 07"	122° 9' 04.5"	15600 Worthley		Nov-00	1,000	655	480	650	4	9.46	Top of casing easterly edge
MW-7	37° 39' 56.5"	122° 8' 44.2"	Western tip of San Lorenzo Park		Nov-00	972	680	510	630	4	7.42	Top of casing at northerly edge
MW-8D	37° 43' 04"	122° 11' 50.3"	1970 Davis St.			910	490	420	480	2	14.76	Top of steel rim
MW-9S	37° 41' 11"	122° 6' 46"	589 E. Lewelling Ave.		Jan-08	460	120	110	120	2	54.39	Seal of vault, westerly side
MW-9I					Jan-08	460	210	200	210	2		
MW-9D[d]					Jan-08	460	335	325	335	2		
MW-10S	37° 41' 19"	122° 9' 43"	15526 Wick Blvd.	San Leandro	Sep-08	680	120	100	120	2	11.76	Seal of vault lid at easterly edge
MW-10I					Sep-08	680	360	340	360	2		
MW-10D					Sep-08	680	610	590	610	2		

[a] bgs = below ground surface

[b] amsl = above Mean Sea Level

[c] Well MW-2I is referred to in the Permit as "MW-2D."

[d] Well MW-9D is referred to in the Permit as "MW-9."

Table 2. Historical Injected and Recovered Water Volumes		
Year	Injected Volume, gallons	Recovered Volume, gallons
2009	445,000	4,545,000
2010	0	113,000,000
2011	28,432,401	0
2012	0	0
2013	0	0
2014	0	0
Total	**28,877,401**	**117,545,000**

Table 3. Summary of Groundwater Elevation and Depth

Measurement Date	Groundwater Elevation, feet amsl								Depth to Groundwater, feet							
	Bayside	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	Bayside	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7
12/8/08			0.99		-4.07	[a]					8.78[b]		12.68[b]			
12/9/08		-5.06		1.09						13.74[b]		8.73[b]				
12/14/09					-3.75								12.71			
12/15/09			0.95	1.44							8.95	8.46				
12/8/10	-7.22		1.71	0.25	-7.45				15.6		8.19	9.65	16.41			
12/21/11		-4.16	1.12	3.59	-4.17					12.87	8.78	6.31	13.13			
1/5/12		-3.94	1.04	6.24	-3.97					12.65	8.86	3.66	12.93			
12/13/12		-4.49	2.38	1.72	-4.16	-4.52				13.20	7.52	8.18	13.12	13.98		
12/18/13		-4.06	1.59	0.37	-6.68	-6.46				12.77	8.31	9.53	15.64	15.92		
12/12-12/17/14		-6.54	2.75	0.18	-6.01	-5.99	-5.76	[c]		15.25	7.15	9.72	14.97	15.45	19.52	[c]

[a] Gray shaded cells indicate that no monitoring was required for the well at that time period, reflecting the transition between monitoring groups.

[b] Applicable well reference elevations are different from those in Table 1.

[c] MW-7 was damaged in 2012, and accurate data collection in 2014 has not been feasible.

Table 4. Calculated Vertical Hydraulic Gradients for Low Tide and High Tide in San Francisco Bay

Nested Well	Measurement Date and Time	Screened Interval, feet	Center of Screened Intervals, feet bgs	Groundwater Elevation, feet amsl	Shallow to Intermediate Vertical Gradient, feet/foot	Intermediate to Deep Vertical Gradient, feet/foot	Shallow to Deep Vertical Gradient, feet/foot	Vertical Gradient Direction
Low Tide								
MW-5S	8/1/2014 @ 11:05	200 - 210	205	8.933	0.0694	--	0.0483	downward
MW-5I	8/1/2014 @ 11:05	315 - 325	320	0.953		0.0387		
MW-5D	8/1/2014 @ 11:05	500 - 630	575	-8.922	--			
High Tide								
MW-5S	12/1/2014 @ 09:50	200 - 210	205	9.341	0.0744	--	0.0425	downward
MW-5I	12/1/2014 @ 09:50	315 - 325	320	0.781		0.0281		
MW-5D	12/1/2014 @ 09:50	500 - 630	575	-6.377	--			

Table 5. Current and Historical Groundwater Quality Results for General Water Quality Parameters and Standard Minerals[a]

Sample Date	General Water Quality Parameters								Standard Minerals									
															Alkalinity (as CaCO3)			
	pH	Chlorine Residual, mg/L	TDS, mg/L	Ammonia, mg/L	Nitrate as N, mg/L	Chloride, mg/L	Manganese, µg/L	Iron, µg/L	Calcium, mg/L	Magnesium, mg/L	Potassium, mg/L	Sodium, mg/L	Sulfate, mg/L	Hardness, mg/L	Total, mg/L	Hydroxide, mg/L	Carbonate, mg/L	Bicarbonate, mg/L
Bayside Well																		
12/14/2009	8.18	ND	200	<0.3	0.029	31	55.4	55.4	28,000	7,400	1,400	41,000	23	97	110	<0.1	0.66	109
12/8/2010	7.37	ND	360	<0.3	E0.004	55	58.1	58.1	27,000	7,900	1,700	84,000	42	100	170	<0.1	0.37	170
12/21/2011	8.17	ND	89	<0.12	0.18	9	11.2	11.2	10,800	2,780	768	15,200	11	40	47	<0.1	0.64	46
1/5/2012	7.82	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2012	7.98	ND	110	<0.3	0.0074	10	16.8	16.8	12,200	3,120	789	21,300	13	47	59	<0.1	0.53	59
12/18/2013	7.87	ND	120	0.56	<0.003	13	22.8	22.8	14,000	3,770	1,050	22,500	15	50	65	<0.1	0.45	64
12/17/2014	8.19	ND	130	0.42	<0.00090	15	23.0	52.3	B14,700	3,880	1,070	28,000	15	70	69	<0.1	0.99	68
MW-2S																		
12/15/2009	6.55	ND	87,000	<0.3	<0.095	39,000	36,900	36,900	1,300,000	2,800,000	500,000	23,000,000	4,000	17,000	380	<0.1	0.2	380
12/8/2010	6.33	ND	80,000	<0.3	<0.31	44,000	35,000	35,000	1,300,000	2,500,000	450,000	21,000,000	5,700	16,000	390	<0.1	<0.1	390
12/21/2011	6.67	0.14	78,000	<0.12	<0.095	44,000	36,400	36,400	1,250,000	2,780,000	509,000	22,200,000	5,700	16,000	420	<0.1	0.18	420
1/5/2012	6.83	0.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2012	6.29	ND	83,000	0.42	E0.19	E52,000	36,700	36,700	1,230,000	2,950,000	488,000	24,900,000	6,700	16,000	390	<0.1	<0.1	390
12/18/2013	6.67	0.08	85,000	0.7	<0.15	45,000	36,100	36,100	1,230,000	2,580,000	568,000	22,300,000	5,700	17,000	430	<0.1	0.19	420
12/13/2014	6.57	0.20	83,000	<0.30	23[b]	39,000	36,900	<31.2[c]	1,230,000	2,680,000	462,000	22,000,000	6,100	17,000	380	<0.1	0.13	380
MW-2I																		
12/15/2009	8.05	ND	510	<0.3	0.16	84	98.6	98.6	15,000	13,000	6,100	160,000	26	100	310	<0.1	2.8	307
12/8/2010	7.56	ND	620	<0.3	<0.0031	110	99.8	99.8	17,000	15,000	6,000	170,000	23	100	310	<0.1	1	310
12/21/2011	7.86	ND	520	0.168	<0.095	79	102	102	13,900	12,600	5,200	153,000	32	94	310	<0.1	2.1	300
1/5/2012	7.82	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2012	8.08	ND	520	<0.3	E0.0036	82	105	105	14,800	13,000	5,600	177,000	31	93	310	<0.1	3.5	310
12/18/2013	7.83	ND	500	<0.3	<0.003	75	115	115	14,800	13,400	6,760	153,000	32	89	310	<0.1	1.9	300
12/12/2014	7.9	ND	520	1.12	<0.0090	81	99	213[c]	14,600	12,600	5,330	153,000	31	94	310	<0.1	2.3	310
MW-4																		
12/14/2009	8.02	ND	440	<0.3	0.36	54	228	228	30,000	12,000	2,800	110,000	37	120	240	<0.1	1.6	238
12/8/2010	7.51	ND	430	<0.3	<0.0031	57	203	203	29,000	12,000	2,600	100,000	42	130	230	<0.1	0.7	230
12/21/2011	7.8	0.08	400	<0.12	0.026	56	260	260	27,800	10,500	2,410	103,000	41	120	230	<0.1	1.4	230
1/5/2012	7.42	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2012	7.64	ND	420	<0.3	0.0071	57	232	232	28,900	11,200	2,490	119,000	40	120	250	<0.1	1	240
12/18/2013	7.78	ND	430	<0.3	<0.003	59	237	237	32,200	13,000	3,050	113,000	42	130	260	<0.1	1.5	260
12/16/2014	8.22	0.10	450	<0.3	0.028	56	239	33.7[c]	32,200	12,800	2,720	113,000	39	130	270	<0.1	4.2	270
MW-5D																		
12/16/2014	7.00	0.40	490	<0.3	<0.009	96	241	180	42,800	10,800	2,590	123,000	46	150	230	<0.1	0.22	230
MW-6																		
12/13/2012	7.26	ND	420	<0.3	0.099	56	302	302	31,000	7,680	1,880	117,000	46	120	220	<0.1	0.38	220
12/18/2013	7.41	0.07	420	<0.3	0.017	120	223	223	32,400	8,580	2,140	110,000	95	110	230	<0.1	0.55	230
12/13/2014	7.92	0.10	430	<0.3	0.0042	58	209	25.4[c]	34,100	8,890	2,390	110,000	56	120	230	<0.1	1.8	230

[a] Symbols and data qualifiers are described as follows:
"<" or "ND" indicates non-detect (ND) results, with the Method Detection Limit (MDL) shown as the value following "<".
"B" preceding a value indicates that the parameter was detected in the laboratory blank associated with this data point.
"E" preceding a value indicates an estimated value detected between the MDL and the Reporting Limit.
"--" indicates that no result was reported for the analyte on the corresponding sample date.

[b] Reported 12/13/2014 nitrate concentration of 23 mg/L for MW-2S is uncharacteristically high. The analytical lab report notes that the analysis for nitrate exceeded the hold time.

[c] Reported December 2014 iron concentrations for several wells (MW-2S, MW-2I, MW-4, and MW-6) are substantially different from previous iron concentrations for each well. Analytical lab reports have been reviewed, but no apparent explanation was identified.

Table 6. Current and Historical Groundwater Quality Results for Disinfection Byproducts[a]

Sample Date	Haloacetic Acids											Trihalomethanes				
	HAA(5),[a] µg/L	HAA(9),[b] µg/L	Bromochloro-acetic Acid, µg/L	Bromodichloro-acetic Acid, µg/L	Chlorodibromo-acetic Acid, µg/L	Dibromo-acetic Acid, µg/L	Dichloro-acetic Acid, µg/L	Monobromo-acetic Acid, µg/L	Monochloro-acetic Acid, µg/L	Tribromo-acetic Acid, µg/L	Trichloro-acetic Acid, µg/L	TTHMs,[d] µg/L	Chloroform, µg/L	Bromodichloro-methane, µg/L	Dibromochloro-methane, µg/L	Bromoform, µg/L
Bayside Well																
12/14/2009	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/8/2010	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/21/2011	0.59	0.59	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	0.59	--	--	--	--	--
1/5/2012	--	--	--	--	--	--	--	--	--	--	--	<40.09	38	1.6	0.26	<0.23
12/13/2012	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<9.71	9.1	0.25	<0.13	<0.23
12/18/2013	0.35	1.6	I 1.3	<0.16	<0.19	I 0.35	<0.23	<0.22	<0.68	<0.44	<0.21	<2.94	2.5	<0.079	<0.13	<0.23
12/17/2014	ND	ND	<0.15	<0.31	<0.31	<0.25	<0.18	<0.29	<0.65	<0.72	<0.17	<0.45	0.45	<0.079	<0.13	<0.23
MW-2S																
12/15/2009	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/8/2010	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/21/2011	0.31	0.31	<0.55	<0.26	<0.54	0.31	<0.99	<0.54	<0.78	<0.83	<0.3	--	--	--	--	--
1/5/2012	--	--	--	--	--	--	--	--	--	--	--	<0.609	<0.17	<0.079	<0.13	<0.23
12/13/2012	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/18/2013	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/13/2014	ND	ND	<0.15	<0.31	<0.31	<0.25	<0.18	<0.29	<0.65	N,J <0.72	<0.17	<0.609	<0.17	<0.079	<0.13	<0.23
MW-2I																
12/15/2009	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/8/2010	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/21/2011	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	--	--	--	--	--
1/5/2012	--	--	--	--	--	--	--	--	--	--	--	<0.609	<0.17	<0.079	<0.13	<0.23
12/13/2012	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/18/2013	0.34	0.34	<0.14	<0.16	<0.19	I 0.34	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/12/2014	ND	<3.4	0.50	<0.31	<0.31	<0.25	<0.18	<0.29	<0.65	J <0.72	<0.17	<0.609	<0.17	<0.079	<0.13	<0.23
MW-4																
12/14/2009	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/8/2010	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	<2.43	<0.57	<0.58	<0.64	<0.64
12/21/2011	<2.9	<5	<0.55	<0.26	<0.54	<0.25	<0.99	<0.54	<0.78	<0.83	<0.3	--	--	--	--	--
1/5/2012	--	--	--	--	--	--	--	--	--	--	--	<0.609	<0.17	<0.079	<0.13	<0.23
12/13/2012	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/18/2013	0.36	4.0	I 3.6	<0.16	<0.19	0.36	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/16/2014	<1.6	<3.1	<0.15	<0.31	<0.31	<0.25	<0.18	<0.29	0.72	<0.72	<0.17	<0.609	<0.17	<0.079	<0.13	<0.23
MW-5D																
12/16/2014	<1.5	<3.0	<0.15	<0.31	<0.31	<0.25	<0.18	<0.29	<0.65	<0.72	<0.17	<0.609	<0.17	<0.079	<0.13	<0.23
MW-6																
12/13/2012	ND	ND	<0.14	<0.16	<0.19	<0.11	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/18/2013	0.34	3.9	I, N 3.6	<0.16	<0.19	0.34	<0.23	<0.22	<0.68	<0.44	<0.21	<0.609	<0.17	<0.079	<0.13	<0.23
12/13/2014	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]	<0.609	<0.17	<0.079	<0.13	<0.23

[a] Symbols and data qualifiers are described as follows:
"<" or "ND" indicates non-detect (ND) results, with the Method Detection Limit (MDL) shown as the value following "<", except for haloacetic acid (HAA) totals and total trihalomethanes (TTHMs) as detailed below.
"I" preceding a value indicates a dual column quantitation difference greater than 40 percent Relative Percent Difference.
"J" preceding a value indicates that the quantitation of the result does not meet the laboratory's Standard Operating Procedure criteria.
"N" preceding a value indicates that the spike recovery for this data point was outside of control limits.
"--" indicates that no result was reported for the analyte on the corresponding sample date.

[b] HAA5 value is calculated by addiing values for dibromoacetic, dichloroacetic, monobromoacetic, monochloroacetic, and trichloroacetic acids, with "<" indicating that the sum includes ND data. If all results are ND, then the sum is indicated as ND.

[c] HAA9 value is calculated by addiing results for all individual haloacetic acid values shown, with "<" indicating that the sum includes ND data. If all results are ND, then the sum is indicated as ND.

[d] TTHMs value is calculated by addiing individual trihalomethane values (including MDLs for ND data). If ND data is included, "<" is included with the TTHMs value.

[e] Well MW-6 was not monitored for haloacetic acids in 2014.

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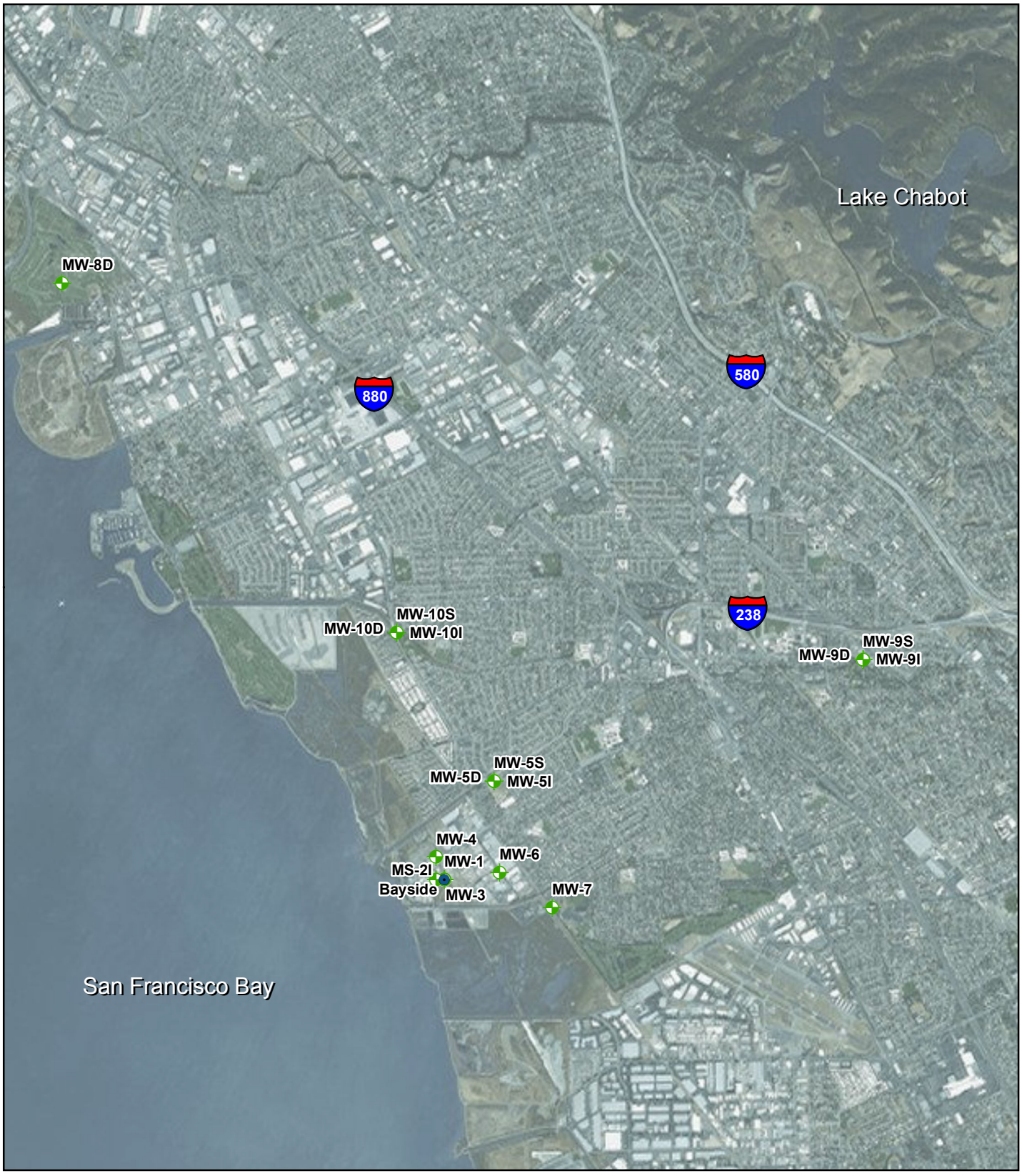


LEGEND

- Groundwater Monitoring Well
- ASR (Bayside) Well

N

0 0.5 1

Miles

FIGURE 1

East Bay Municipal Utility District
2014 Bayside Annual Report

Well Location Map

WEST YOST ASSOCIATES

LEGEND

- Groundwater monitoring well and elevation, feet above mean sea level (amsl)
- Groundwater elevation contour, feet amsl, dashed where approximate
- Approximate groundwater horizontal gradient direction and magnitude

N

0 300 600

Scale in Feet

FIGURE 2

East Bay Municipal Utility District
2014 Bayside Annual Report

Groundwater Elevation Contours
Low Tide (August 1, 2014)

WEST YOST ASSOCIATES

LEGEND

- Groundwater monitoring well and elevation, feet above mean sea level (amsl)
- Groundwater elevation contour, feet amsl, dashed where approximate
- Approximate groundwater horizontal gradient direction and magnitude

N

0 300 600

Scale in Feet

FIGURE 3

East Bay Municipal Utility District
2014 Bayside Annual Report

Groundwater Elevation Contours
High Tide (December 1, 2014)

WEST YOST ASSOCIATES

LEGEND

- Groundwater monitoring well and TDS concentration in mg/L.
- TDS concentration contour, dashed where approximate.

N

0 300 600

Scale in Feet

FIGURE 4

East Bay Municipal Utility District
2014 Bayside Annual Report

Groundwater TDS Contours
December 2014

WEST YOST ASSOCIATES

ATTACHMENT A

Groundwater Purging Logs

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: **Bayside**	INSPECTOR: NPK+TQ	DATE: 12/17/14

PURGING DATA

WELL DIAMETER (inches): **18**	TUBING DIAMETER (inches): **NA**	WELL SCREEN INTERVAL DEPTH: **NA**	INITIAL TOTALIZER READING (gal): 5795870	PURGE PUMP TYPE: **0 – dedicated well pump**

WELL VOLUME PURGE: ~~**Purge 40,000 gal**~~ 25,500 gal

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **NA**	PURGING INITIATED AT: 0900	PURGING ENDED AT: 0934	TOTAL VOLUME PURGED (gallons): 25,608	FINAL TOTALIZER READING (gal): 5821478

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	FLOW TOTALIZER (gallons)
0900	9222	9,222	8.0	18.5	212	5805092
0916	7786	17,008	8.08	17.0	204.8	5812878
0934	8600	25,608	8.19	16.7	195.1	5821478

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: **5**	INSPECTOR: TWQ / NK	DATE: 12/15/14 & 12/16/14

PURGING DATA

WELL DIAMETER (inches): **4**	TUBING DIAMETER (inches): **3/8**	WELL SCREEN INTERVAL DEPTH: **500** feet to **630** feet	INITIAL STATIC DEPTH TO WATER (feet): 19.52	PURGE PUMP TYPE: **ESP**

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (**640** feet – 19.52 feet) X **0.65** gallons/foot = 403 gallons X 3 = 1209

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 625	PURGING INITIATED AT: 0910	PURGING ENDED AT: 1215 12-16-14	TOTAL VOLUME PURGED (gallons): 1230	FINAL STATIC DEPTH TO WATER (feet): 19.52

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	
						50 gal @ 0933 hrs
0957	100	100	6.4	17.0	645	
1045	100	200	6.9	17.5	661	
1130	100	300	7.1	18.0	669	
1215	100	400	7.2	18.9	668	
1300	100	500	7.2	20.7	659	
1345	100	600	7.1	20.9	699	
1430	100	700	7.1	20.9	705	
1515	100	800	7.1	20.8	701	END 12.15.14
0945	100	900	7.1	19.1	678	Resumed purging 12.16.14 0900 hrs
1030	100	1000	7.0	20.0	690	
1115	100	1100	7.0	20.7	698	
1200	100	1200	7.1	21.0	701	
1215	30	1230	7.0	20.4	697	

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: **4**	INSPECTOR: NPK	DATE: 12/15/14

PURGING DATA

WELL DIAMETER (inches): **2**	TUBING DIAMETER (inches): **3/8**	WELL SCREEN INTERVAL DEPTH: **520** feet to **650** feet	INITIAL STATIC DEPTH TO WATER (feet): 14.97	PURGE PUMP TYPE: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (**650** feet – 14.97 feet) X **0.16** gallons/foot = 102 gallons 306

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 20	PURGING INITIATED AT: 936	PURGING ENDED AT: 1450	TOTAL VOLUME PURGED (gallons): 309	FINAL STATIC DEPTH TO WATER (feet): 15.62

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ µS/cm
1031	55	55	8.09	16.3	592
1125	54	109	8.30	16.2	587
1220	55	164	8.07	15.8	576
1313	53	217	7.83	16.0	586
1410	52	269	8.11	16.4	602
1450	40	309	8.26	16.3	610

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: **2S**	INSPECTOR: DSS	DATE: 12/13/14

PURGING DATA

WELL DIAMETER (inches): **2**	TUBING DIAMETER (inches): **3/8**	WELL SCREEN INTERVAL DEPTH: **40** feet to **60** feet	INITIAL STATIC DEPTH TO WATER (feet): 7.15	PURGE PUMP TYPE: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (**60** feet – 7.15 feet) X **0.16** gallons/foot = 8.5 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 0905	PURGING ENDED AT: 1000	TOTAL VOLUME PURGED (gallons): 25	FINAL STATIC DEPTH TO WATER (feet): 7.3

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm
0920	10	10	6.37	16.8	34.11 mS
0935	5	15	6.37	16.9	52.4 mS
0940	5	20	6.49	17.0	42.91 mS
1000	5	25	6.51	17.6	74.7 mS

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: 6	INSPECTOR: NPK	DATE: 12/13/14

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 480 feet to 655 feet	INITIAL STATIC DEPTH TO WATER (feet): 15.45	PURGE PUMP TYPE: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (655 feet – 15.45 feet) X 0.65 gallons/foot = 416 gallons 1248

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 251	PURGING INITIATED AT: 0923	PURGING ENDED AT: 1800	TOTAL VOLUME PURGED (gallons): 1250	FINAL STATIC DEPTH TO WATER (feet): 15.57

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)
~~0911~~ 1055	200	200	7.60	20.2	659.9
1220	200	400	7.62	18.5	698
1342	200	600	7.81	18.1	633
1450	175	775	7.91	18.1	606
1620	225	1,000	8.06	17.5	580
1740	200	1,200	8.03	16.6	567
1800	50	1,250	7.92	17.1	566

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

GROUNDWATER PURGING LOG

SITE NAME: Bayside Wells		
WELL NO: **2I**	INSPECTOR: TWQ/ NK	DATE: 12.12.14

PURGING DATA

WELL DIAMETER (inches): **2**	TUBING DIAMETER (inches): **3/8**	WELL SCREEN INTERVAL DEPTH: **160** feet to **190** feet	INITIAL STATIC DEPTH TO WATER (feet): 9.72	PURGE PUMP TYPE: P

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (**200** feet – 9.72 feet) X **0.16** gallons/foot = 30.5 gallons 91.5

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 0900	PURGING ENDED AT: 1217	TOTAL VOLUME PURGED (gallons): 92	FINAL STATIC DEPTH TO WATER (feet): 12.83

TIME	VOLUME PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	
0920	5	5	7.6	16°	659 uS	
0938	15	20	7.2	15.9	663	
0954	5	25	7.2	15.1	900	
1005	5	30	7.5	15.7	861	
1019	5	35	7.6	15.5	796	
1030	5	40	7.8	15.4	822	Battery Died
1048	10	50	7.5	15.2	712	Emptied Drum
1113	10	60	65	15.6	696	
1133	10	70	7.3	15.9	673	New pH meter New Battery
1153	10	80	7.5	16.2	675	
1217	12	92	7.9	16.4	664	

WELL CAPACITY (Gallons Per Foot):

2" = 0.16; **4"** = 0.65

PURGING EQUIPMENT CODES: **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

ATTACHMENT B

Groundwater Elevation Trends for Monitoring Wells

Figure B-1. 2014 MW-1 Groundwater Elevation Trend

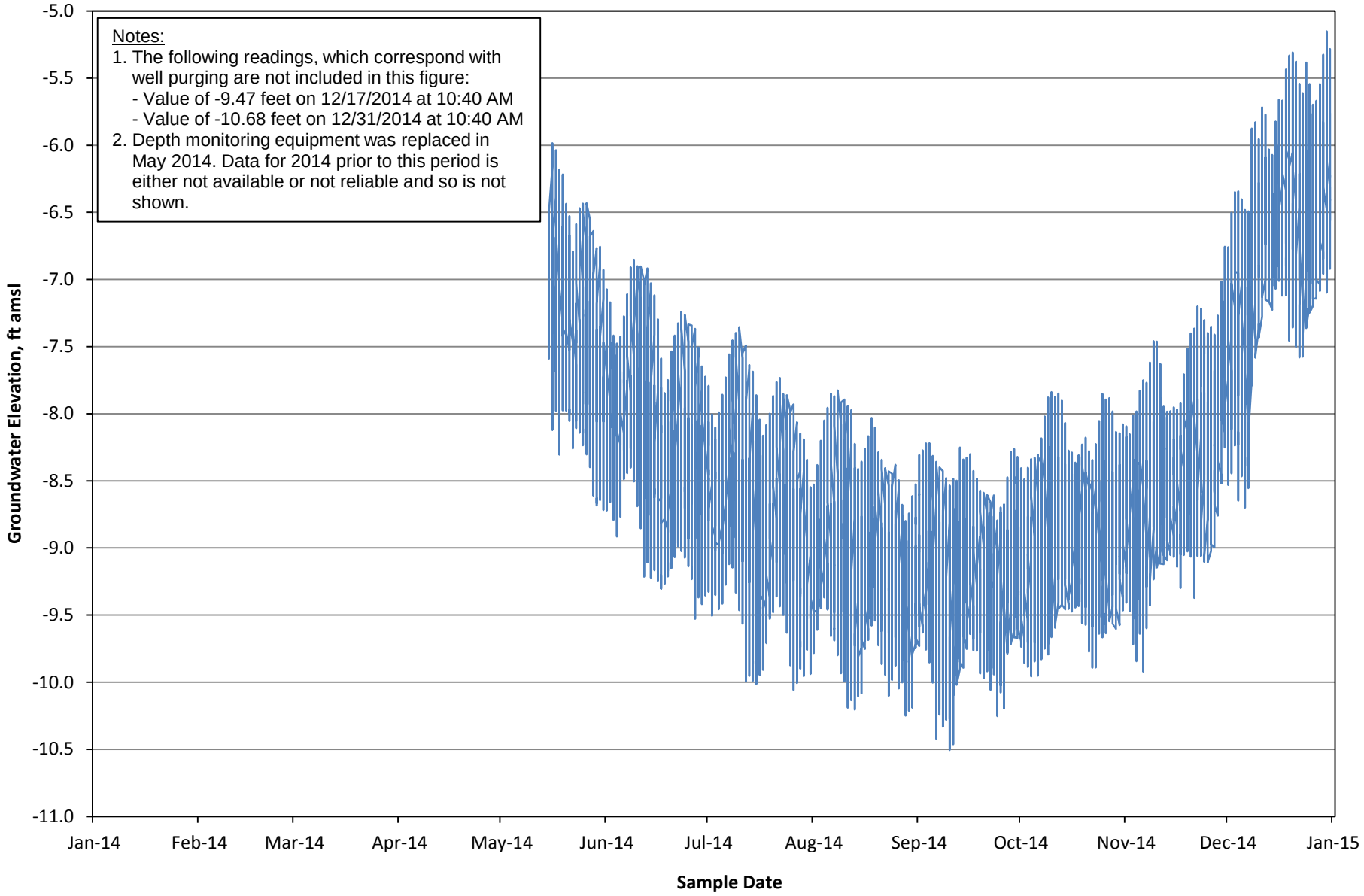


Figure B-2. 2014 MW-2S Groundwater Elevation Trend

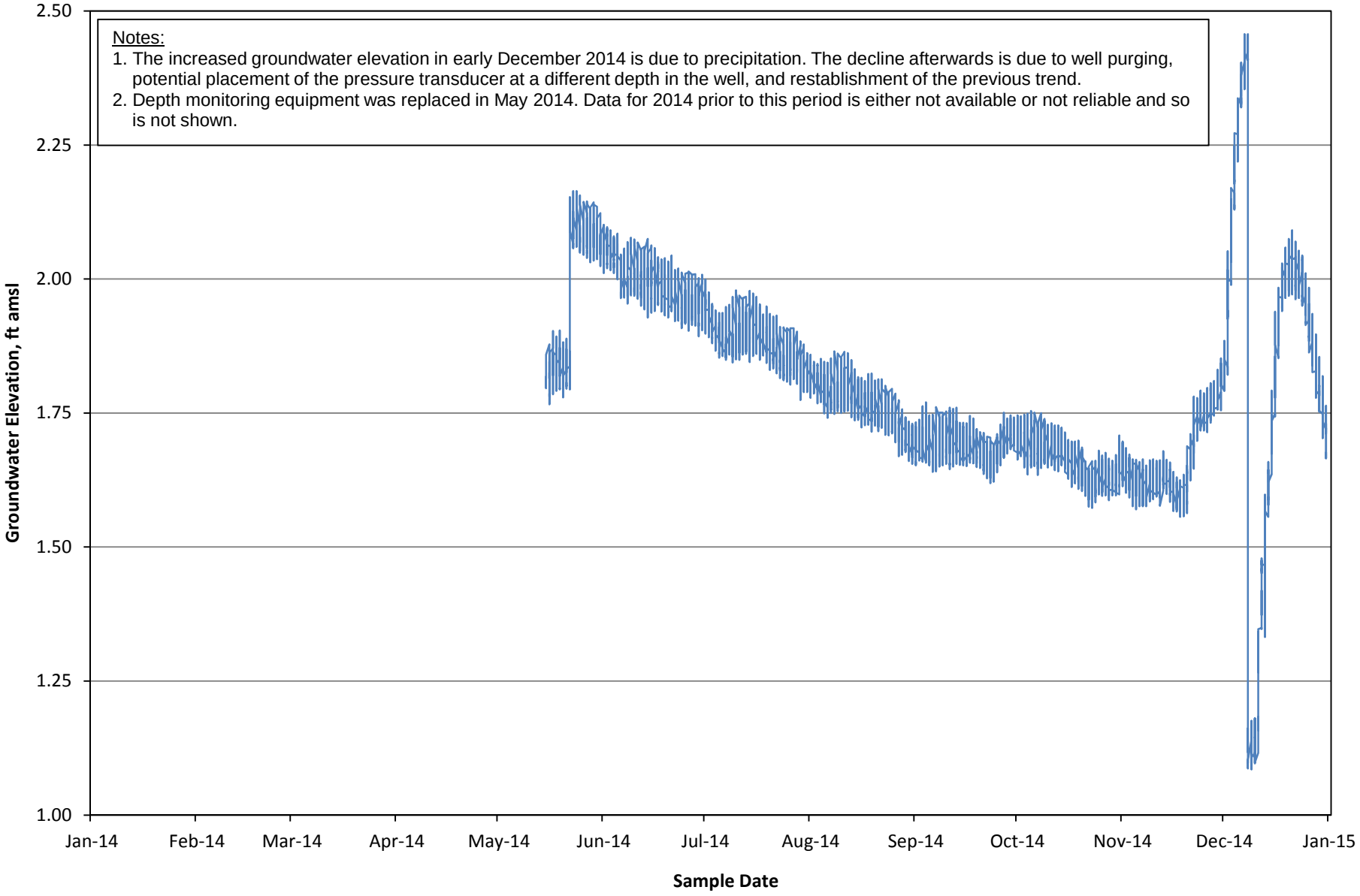


Figure B-3. 2014 MW-2I Groundwater Elevation Trend

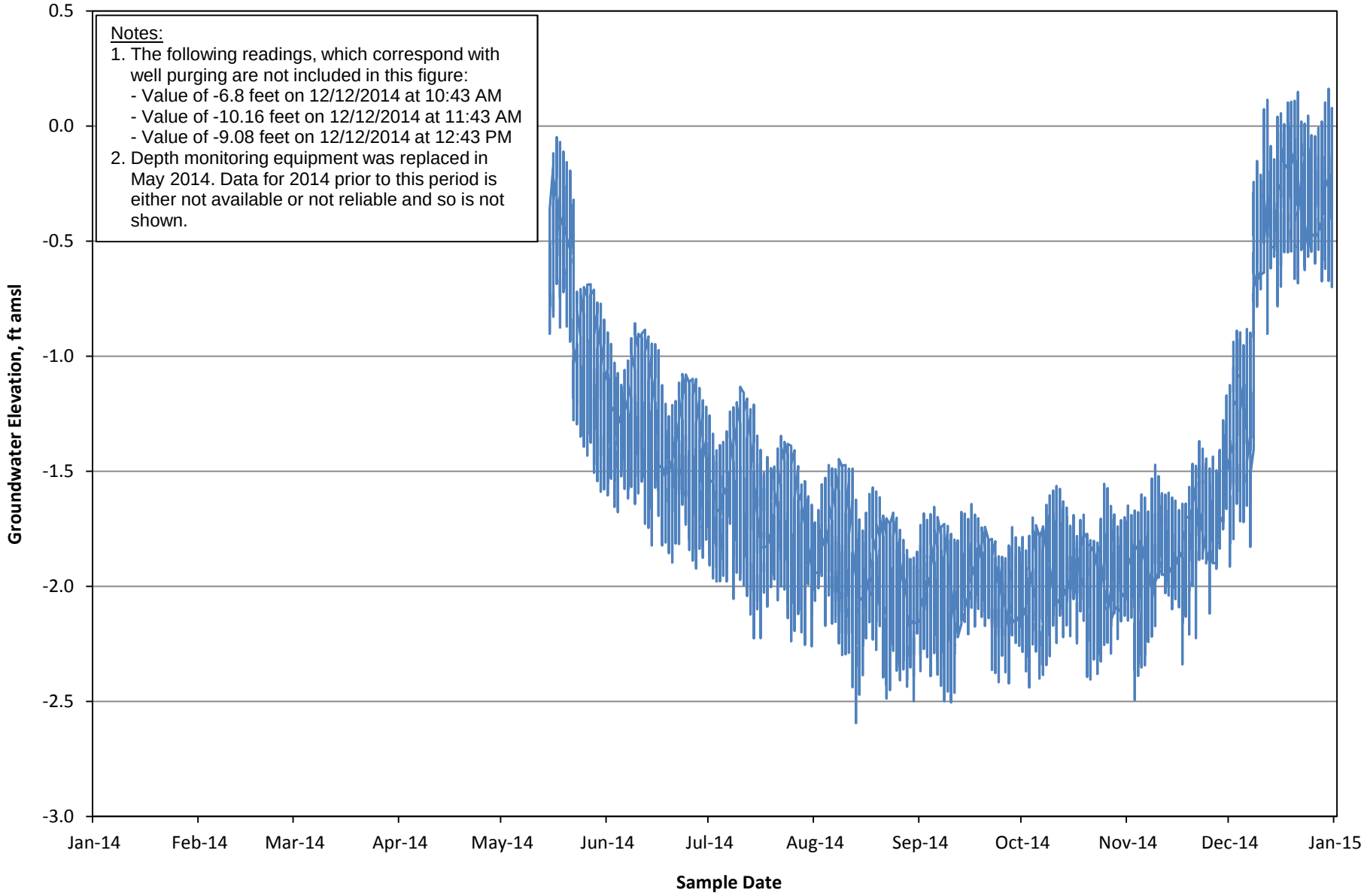


Figure B-4. 2014 MW-3 Groundwater Elevation Trend

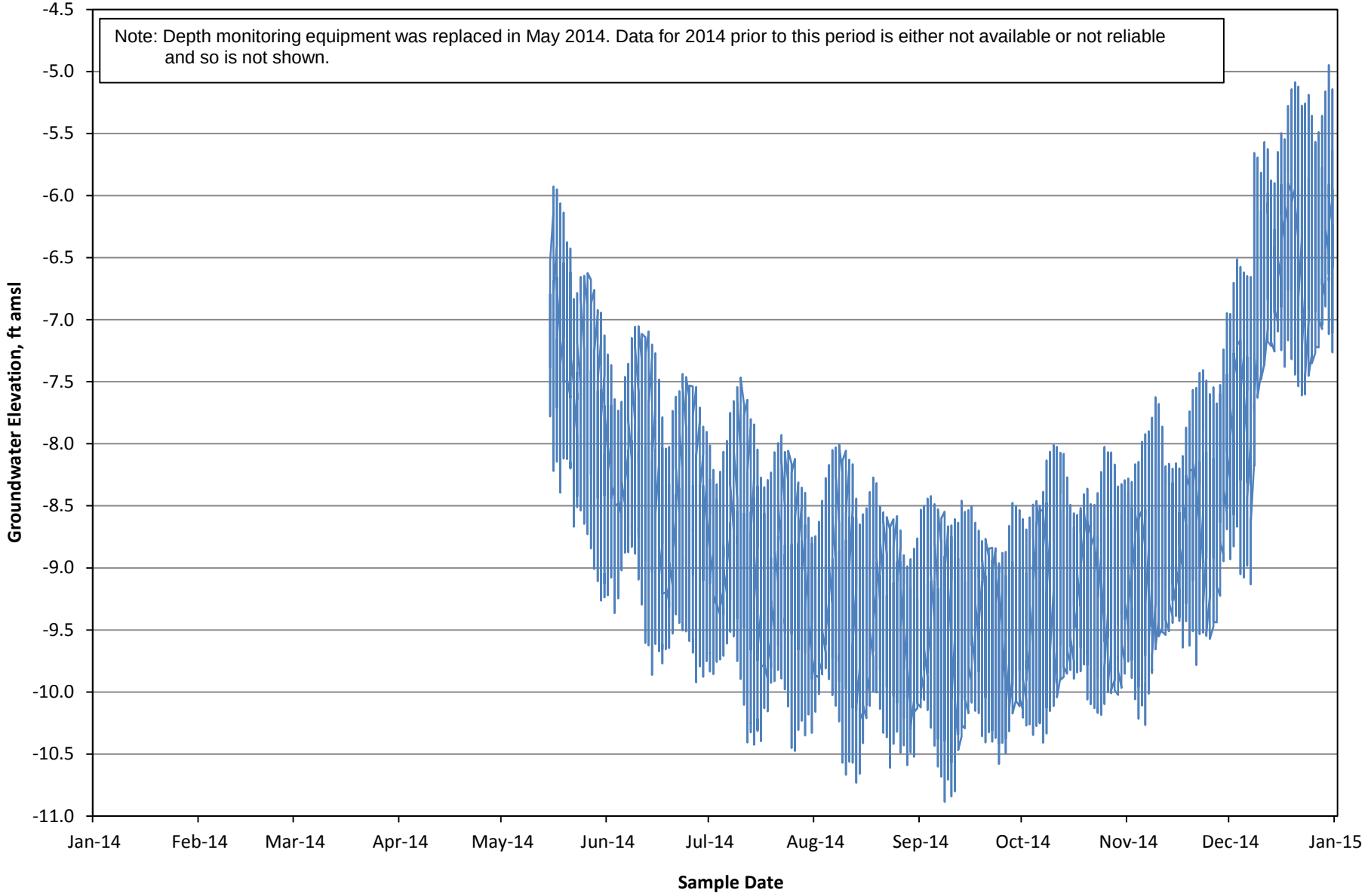


Figure B-5. 2014 MW-4 Groundwater Elevation Trend

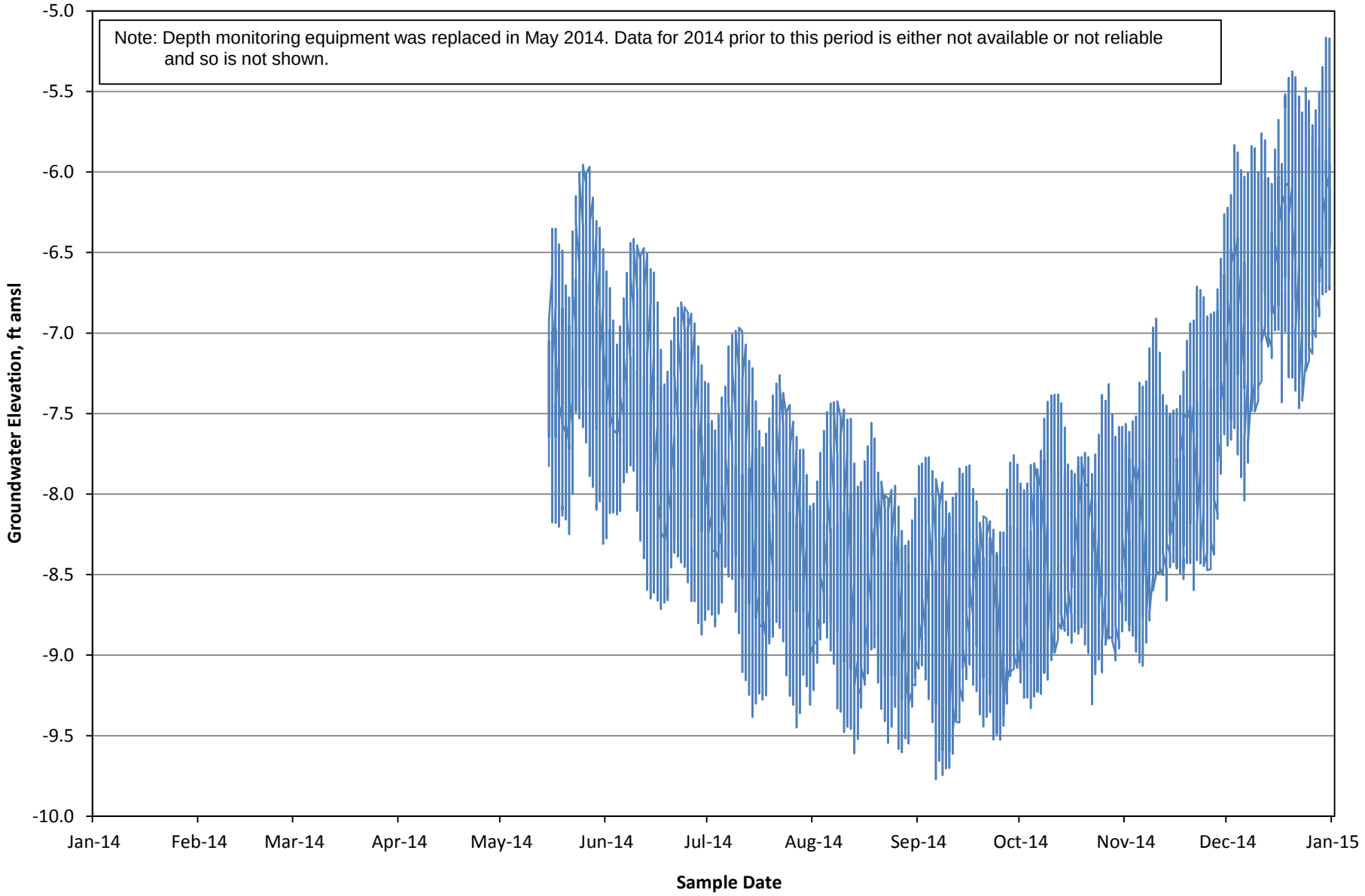


Figure B-6. 2014 MW-5S Groundwater Elevation Trend

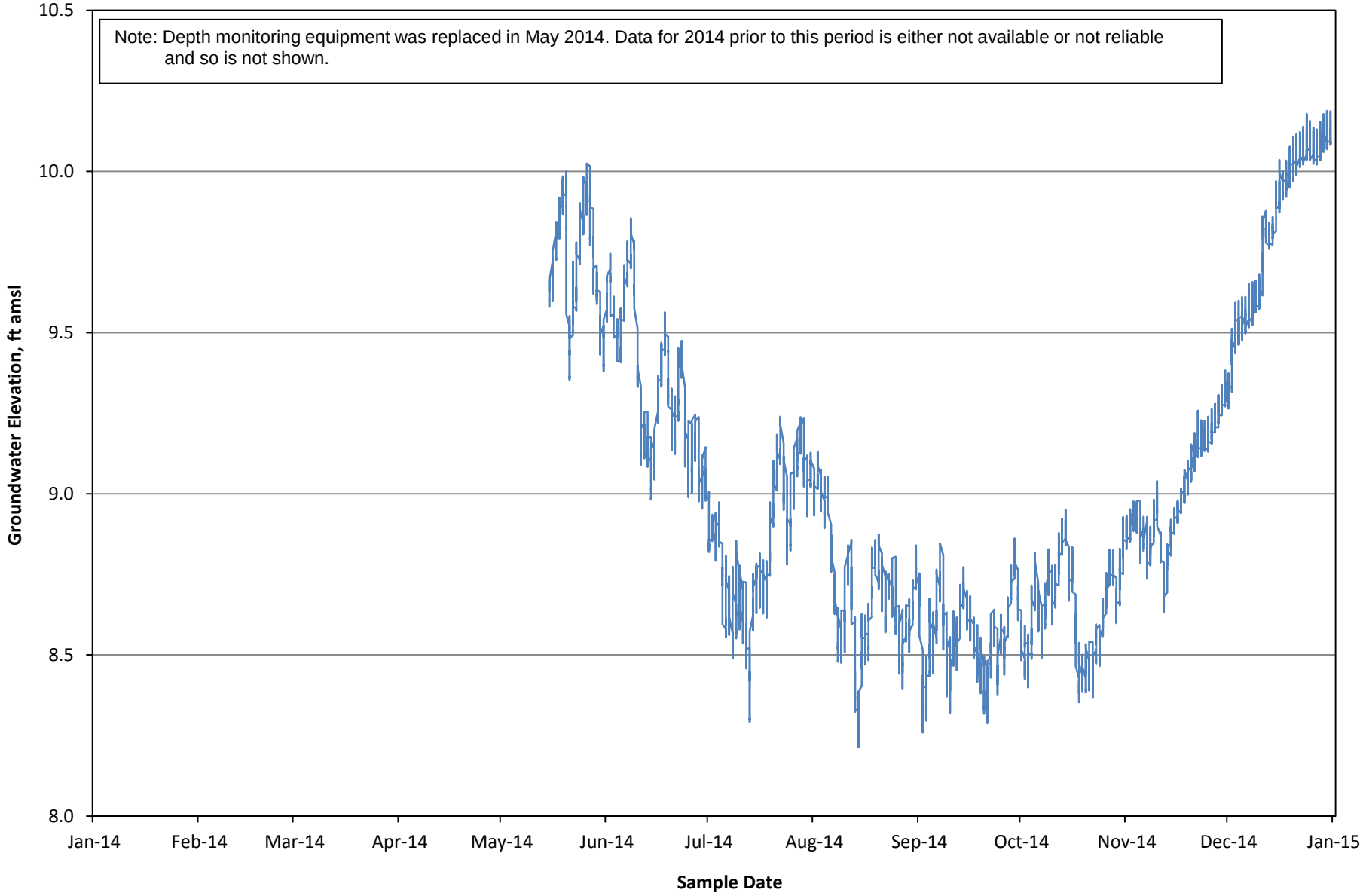


Figure B-7. 2014 MW-5I Groundwater Elevation Trend

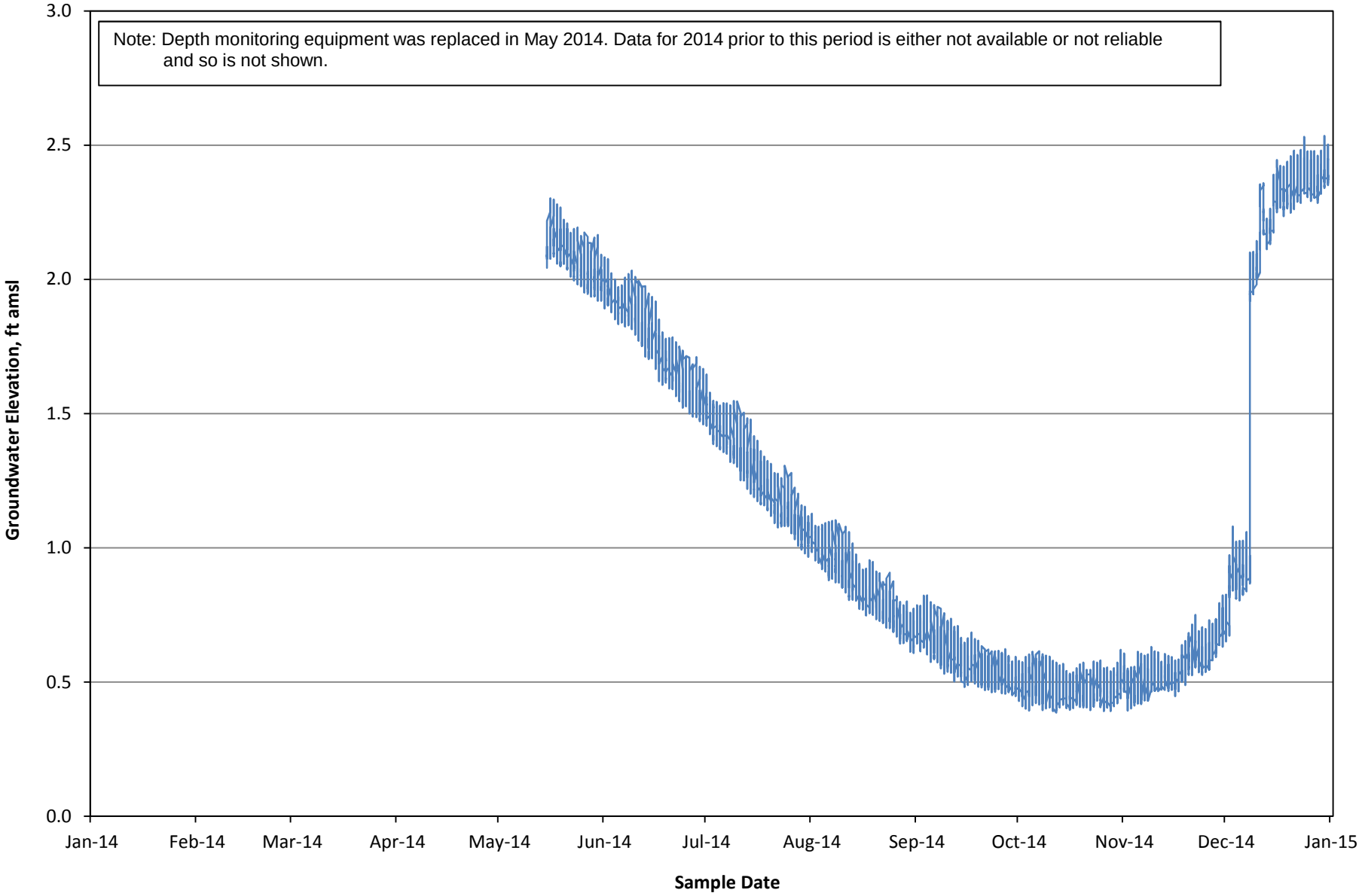


Figure B-8. 2014 MW-5D Groundwater Elevation Trend

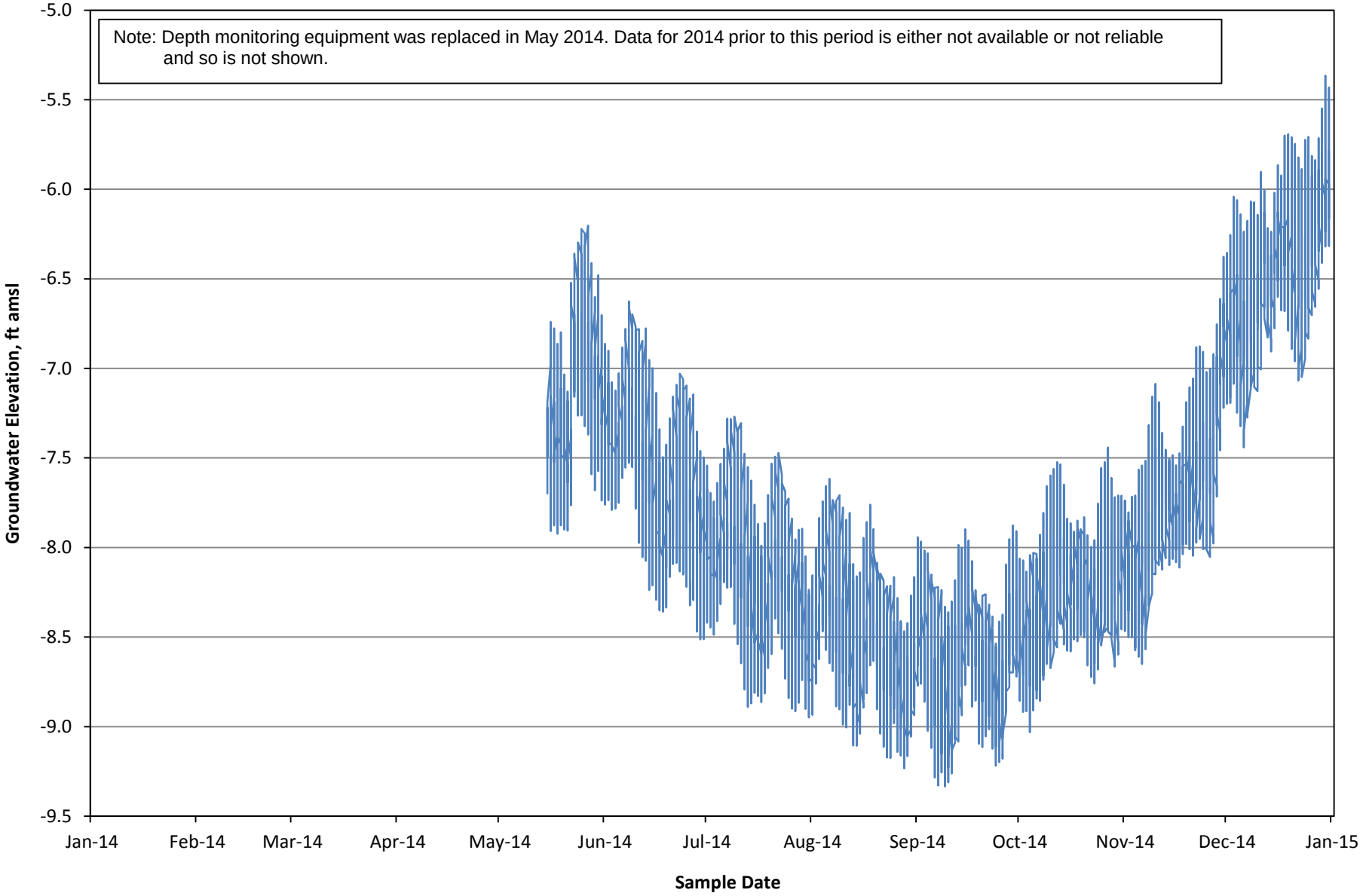


Figure B-9. 2014 MW-6 Groundwater Elevation Trend

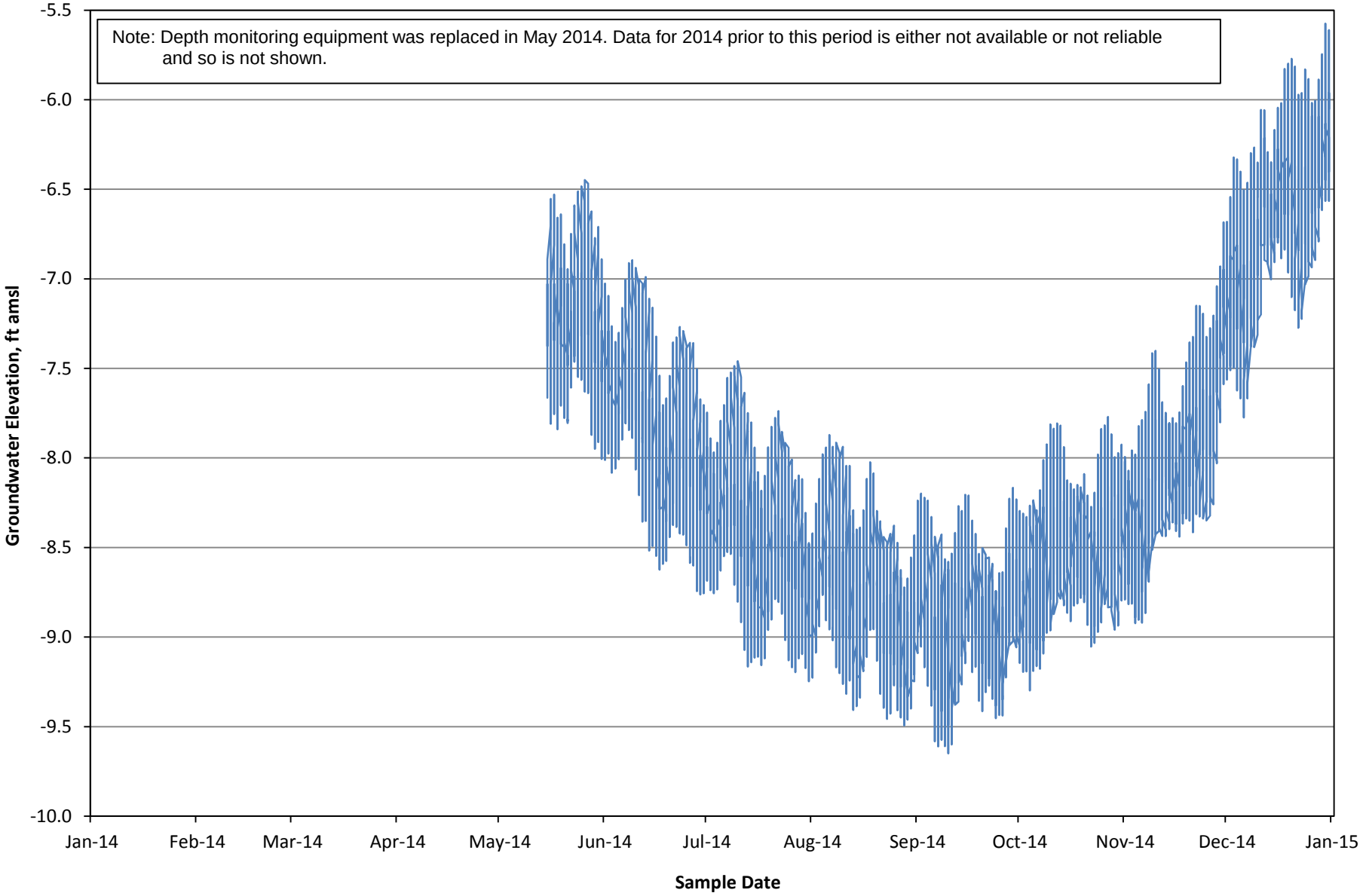


Figure B-10. 2014 MW-9D Groundwater Elevation Trend

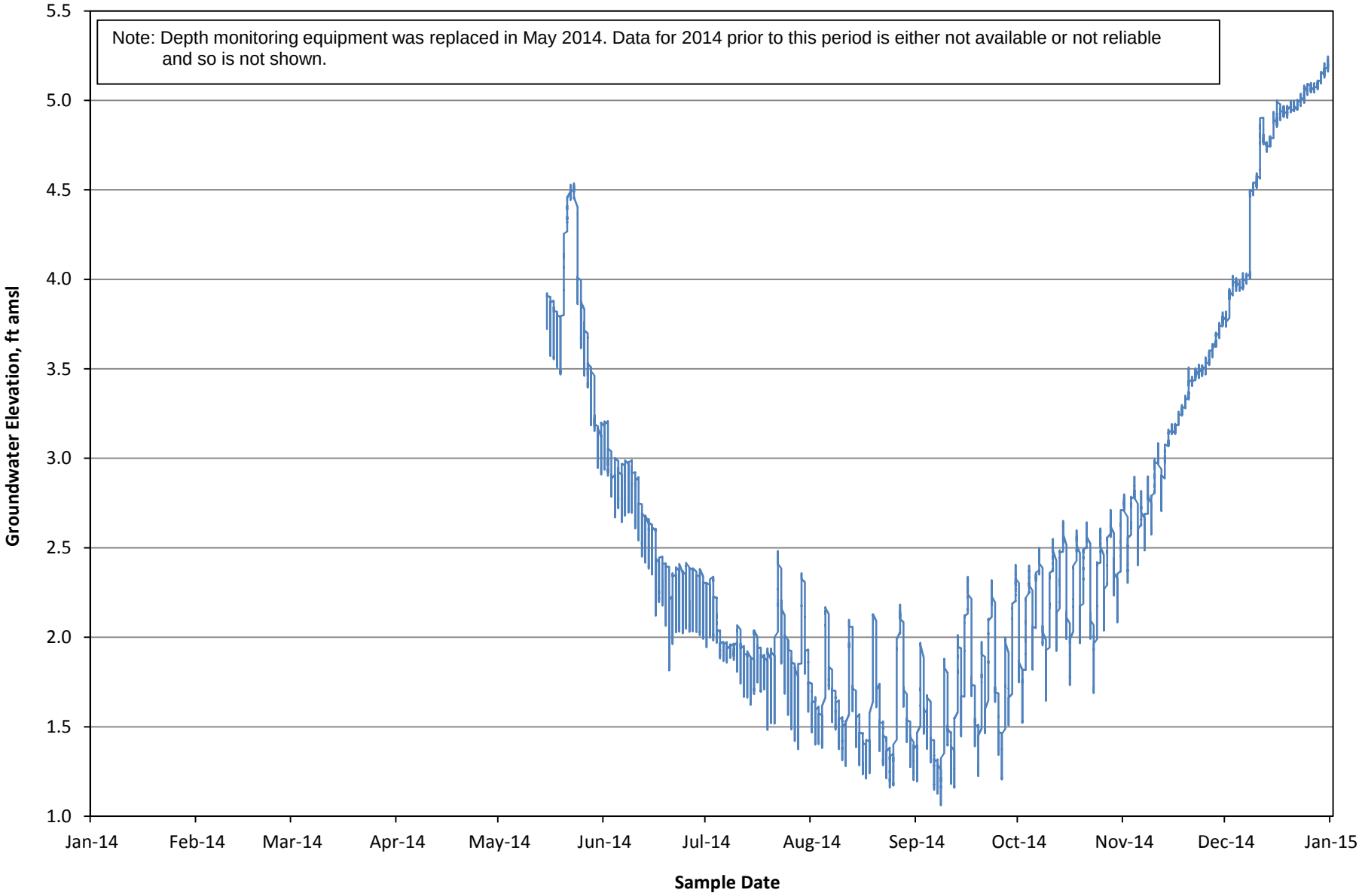


Figure B-11. 2014 MW-10I Groundwater Elevation Trend

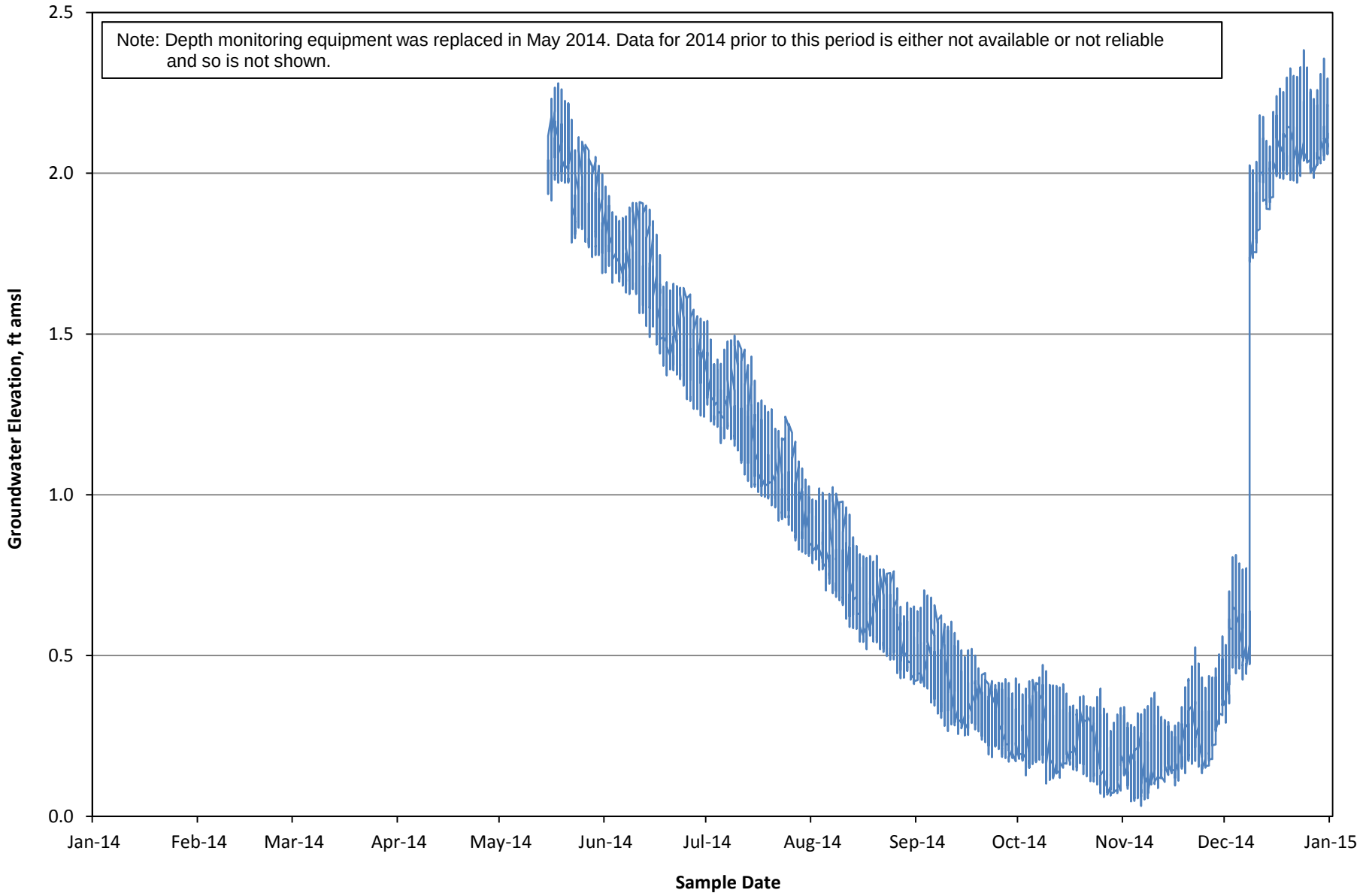
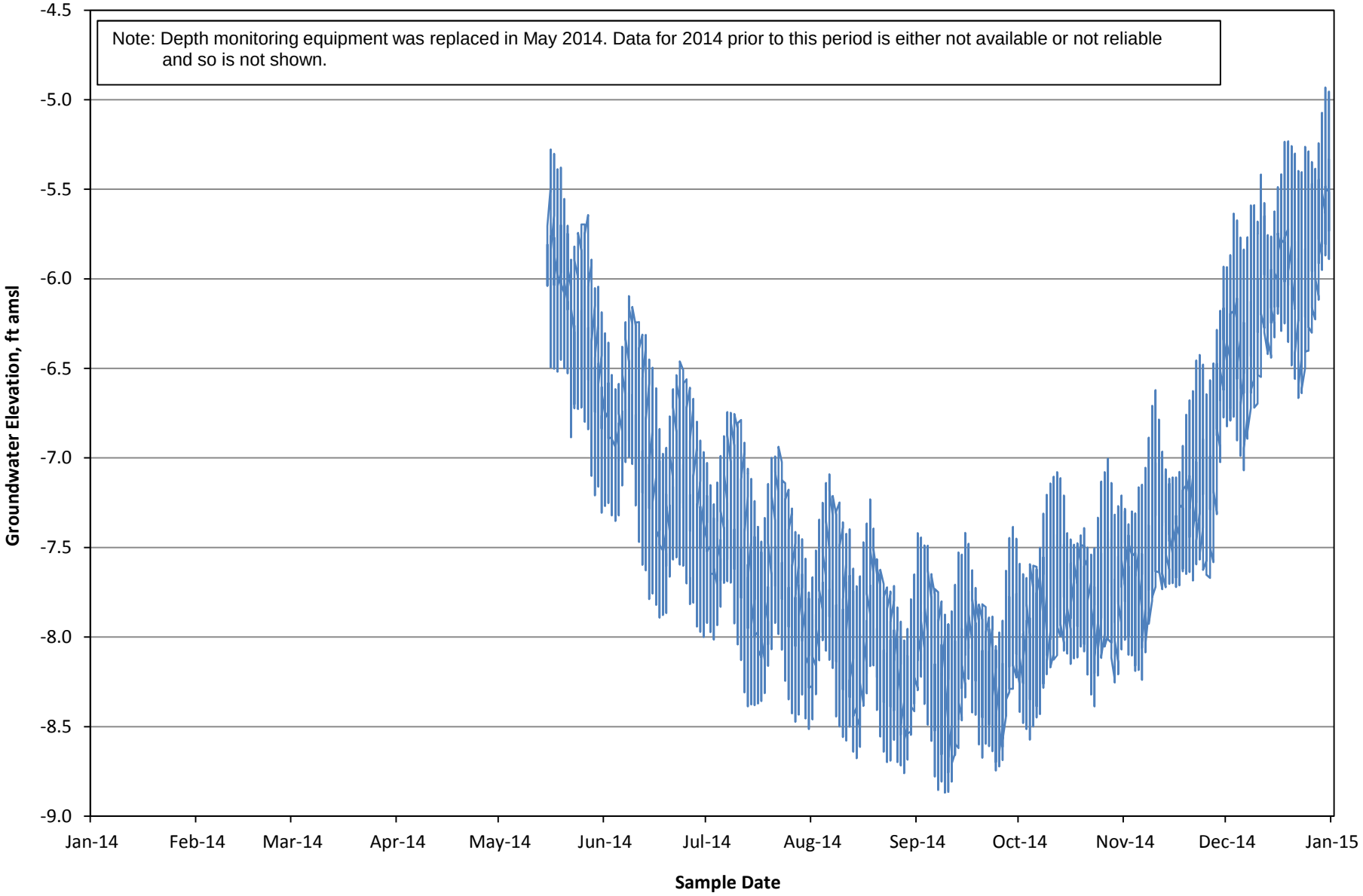


Figure B-12. 2014 MW-10D Groundwater Elevation Trend



ATTACHMENT C

Analytical Lab Reports for 2014 Water Quality Sampling

EAST BAY MUNICIPAL UTILITY DISTRICT
Laboratory Services Division
Phone (510)287-1432 Fax (510)465-5462
PO Box 24055, MS 59, Oakland, CA 94623

Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:42 pm
Login No.: L195327

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
3 - Samples received by the lab on: Dec 17 2014, 10:57 am
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195327-1	GRAB	17-Dec-2014 09:35	WTP BAYSIDE	BAY WELL HEAD	-
L195327-2	QCFB	17-Dec-2014 09:50	FIELD QC	COLLECTION QC	-
L195327-3	GRAB	17-Dec-2014 09:55	WTP BAYSIDE	BAY WELL HEAD	-

Legend to the laboratory qualifiers used in this report:
* - Duplicate value outside of control limits
< - Less than
B - Analyte detected in method blank
F - Analyte detected in field or rinsate blank
JB - Estimated value, method blank exceeds 10% of sample concentration
N - Spike recovery outside of control limits
Q - Data not suitable for regulatory compliance reporting
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

EAST BAY MUNICIPAL UTILITY DISTRICT
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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference							RawH2O	
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA								
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**8.19**	pH units	1				
CHLORINE RESIDUAL: TOTAL	<	0.02	mg/L	1	0.02			
Run ID: R256980 / Work Group No.: WG196469								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 09:35								
Method: EPA 524.2 - Volatile Organics, GC/MS							RawH2O	
TARGET ANALYTES								
ACETONE	**Q,F**	**0.70**	ug/L	1	0.35			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
ACRYLONITRILE	Q,U	0.45	ug/L	1	0.45			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
ALLYL CHLORIDE	Q,U	0.17	ug/L	1	0.17			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
TERT-AMYL METHYL ETHER	Q,U	0.17	ug/L	1	0.17		3	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BENZENE	Q,U	0.14	ug/L	1	0.14		0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BROMOBENZENE	Q,U	0.16	ug/L	1	0.16			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BROMOCHLOROMETHANE	Q,U	0.21	ug/L	1	0.21			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BROMODICHLOROMETHANE	Q,U	0.21	ug/L	1	0.21			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BROMOFORM	Q,U	0.31	ug/L	1	0.31			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
BROMOMETHANE	Q,U	0.55	ug/L	1	0.55			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
TERT-BUTYL ALCOHOL	Q,U	1.7	ug/L	1	1.7		2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
N-BUTYLBENZENE	Q,U	0.25	ug/L	1	0.25			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
SEC-BUTYLBENZENE	Q,U	0.69	ug/L	1	0.69			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
TERT-BUTYLBENZENE	Q,U	0.18	ug/L	1	0.18			
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.								
CARBON DISULFIDE	Q,U	0.44	ug/L	1	0.44			

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT
Laboratory Services Division
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Phone (510)287-1432 Fax (510)465-5462

Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analyse to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CARBON TETRACHLORIDE	Q,U	0.25	ug/L	1	0.25	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROACETONITRILE	Q,U	0.23	ug/L	1	0.23		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROBENZENE	Q,U	0.21	ug/L	1	0.21	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1-CHLOROBUTANE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROETHANE	Q,U	0.38	ug/L	1	0.38		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROFORM	**Q,F**	**0.43**	ug/L	1	0.15		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROMETHANE	Q,U	0.15	ug/L	1	0.15		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
O-CHLOROTOLUENE	Q,U	0.19	ug/L	1	0.19		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
P-CHLOROTOLUENE	Q,U	0.19	ug/L	1	0.19		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DIBROMOCHLOROMETHANE	Q,U	0.26	ug/L	1	0.26		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DIBROMOCHLOROPROPANE	Q,U	0.28	ug/L	1	0.28		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DIBROMOMETHANE	Q,U	0.28	ug/L	1	0.28		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2-DICHLOROBENZENE	Q,U	0.23	ug/L	1	0.23	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,3-DICHLOROBENZENE	Q,U	0.23	ug/L	1	0.23		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,4-DICHLOROBENZENE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRANS-1,4-DICHLORO-2-BUTENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DICHLORODIFLUOROMETHANE	Q,U	0.17	ug/L	1	0.17	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							

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Laboratory Services Division
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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
1,1-DICHLOROETHANE	Q,U	0.21	ug/L	1	0.21	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2-DICHLOROETHANE	Q,U	0.14	ug/L	1	0.14	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1-DICHLOROETHENE	Q,U	0.20	ug/L	1	0.2	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CIS-1,2-DICHLOROETHENE	Q,U	0.25	ug/L	1	0.25	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRANS-1,2-DICHLOROETHENE	Q,U	0.19	ug/L	1	0.19	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2-DICHLOROPROPANE	Q,U	0.15	ug/L	1	0.15	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,3-DICHLOROPROPANE	Q,U	0.22	ug/L	1	0.22		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
SEC-DICHLOROPROPANE	Q,U	0.24	ug/L	1	0.24		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1-DICHLOROPROPENE	Q,U	0.26	ug/L	1	0.26		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1-DICHLORO-2-PROPANONE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CIS-1,3-DICHLOROPROPENE	Q,U	0.23	ug/L	1	0.23	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRANS-1,3-DICHLOROPROPENE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DIISOPROPYL ETHER	Q,U	0.29	ug/L	1	0.29		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL BENZENE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL ETHER	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYLENE DIBROMIDE	Q,U	0.19	ug/L	1	0.19		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYLMETHACRYLATE	Q,U	0.14	ug/L	1	0.14		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL-T-BUTYL ETHER	Q,U	0.19	ug/L	1	0.19	3	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error							

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
in sampling.							
FLUOROTRICHLOROMETHANE	Q,U	0.22	ug/L	1	0.22	5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	Q,U	0.25	ug/L	1	0.25	10	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
HEXACHLOROBUTADIENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
HEXACHLOROETHANE	Q,U	0.25	ug/L	1	0.25		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
2-HEXANONE	Q,U	0.25	ug/L	1	0.25		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
IODOMETHANE	Q,U	0.69	ug/L	1	0.69		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ISOPROPYLBENZENE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
P-ISOPROPYLTOLUENE	Q,U	0.22	ug/L	1	0.22		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
METHYLACRYLONITRILE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
METHYLACRYLATE	Q,U	0.26	ug/L	1	0.26		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
METHYLENE CHLORIDE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
2-BUTANONE	Q,U	0.43	ug/L	1	0.43		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
4-METHYL-2-PENTANONE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
METHYLMETHACRYLATE	Q,U	0.28	ug/L	1	0.28		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
METHYL-T-BUTYL ETHER	Q,U	0.39	ug/L	1	0.39	3	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
NAPHTHALENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
NITROBENZENE	Q,U	1.0	ug/L	1	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
2-NITROPROPANE	Q,U	0.77	ug/L	1	0.77		

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analyse to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
PENTACHLOROETHANE	Q,U	0.17	ug/L	1	0.17		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
N-PROPYLBENZENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
STYRENE	Q,U	0.19	ug/L	1	0.19	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,1,2-TETRACHLOROETHANE	Q,U	0.18	ug/L	1	0.18		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,2,2-TETRACHLOROETHANE	Q,U	0.20	ug/L	1	0.2	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TETRACHLOROETHENE	Q,U	0.20	ug/L	1	0.2	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TETRAHYDROFURAN	Q,U	0.54	ug/L	1	0.54		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TOLUENE	Q,U	0.16	ug/L	1	0.16	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2,3-TRICHLOROBENZENE	Q,U	0.24	ug/L	1	0.24		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2,4-TRICHLOROBENZENE	Q,U	0.19	ug/L	1	0.19	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,1-TRICHLOROETHANE	Q,U	0.19	ug/L	1	0.19	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,2-TRICHLOROETHANE	Q,U	0.21	ug/L	1	0.21	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRICHLOROETHENE	Q,U	0.17	ug/L	1	0.17	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2,3-TRICHLOROPROPANE	Q,U	0.19	ug/L	1	0.19		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2,4-TRIMETHYLBENZENE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,3,5-TRIMETHYLBENZENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
VINYL CHLORIDE	Q,U	0.22	ug/L	1	0.22	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							

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Laboratory Services Division
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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Method Reference — Matrix: Tag:

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
O-XYLENE	Q,U	0.18	ug/L	1	0.18	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
M+P XYLENES	Q,U	0.37	ug/L	1	0.37	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
VALUE(S) USED TO CALCULATE OTHER VALUE(S)						
TOTAL 1,3-DICHLOROPROPENES	Q,U	0.41	ug/L	1		0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TOTAL XYLENES	Q,U	0.55	ug/L	1		0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
INTERNAL STANDARD						
FLUOROBENZENE	Q	98.0	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
SURROGATE						
4-BROMOFLUOROBENZENE	Q	99.2	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
D4-1,2-DICHLOROBENZENE	Q	99.4	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						

Run ID: R257258 / Work Group No.: WG196458
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 12:05

Method: EPA 525.2 - Semivolatile Organics, GC/MS — RawH2O

TARGET ANALYTES						
ACENAPHTHYLENE	U	0.035	ug/L	.959	0.035	
ALACHLOR	U	0.037	ug/L	.959	0.037	1
ALDRIN	U	0.024	ug/L	.959	0.024	
ANTHRACENE	U	0.040	ug/L	.959	0.04	
ATRAZINE	U	0.042	ug/L	.959	0.042	0.5
BENZO(A)ANTHRACENE	U	0.016	ug/L	.959	0.016	
BENZO(B)FLUORANTHENE	U	0.065	ug/L	.959	0.065	
BENZO(K)FLUORANTHENE	U	0.012	ug/L	.959	0.012	
BENZO(A)PYRENE	U	0.030	ug/L	.959	0.03	0.1
BENZO(GHI)PERYLENE	U	0.014	ug/L	.959	0.014	
BIS(2-ETHYLHEXYL)ADIPATE	**JB**	**0.12**	ug/L	.959	0.029	5
BIS(2-ETHYLHEXYL)PHTHALATE	**JB**	**0.13**	ug/L	.959	0.057	3
ALPHA BHC	U	0.024	ug/L	.959	0.024	
BETA BHC	U	0.043	ug/L	.959	0.043	
DELTA BHC	U	0.040	ug/L	.959	0.04	
GAMMA BHC	U	0.024	ug/L	.959	0.024	0.2
BROMACIL	U	0.14	ug/L	.959	0.14	
BUTACHLOR	U	0.019	ug/L	.959	0.019	
BUTYLBENZYL PHTHALATE	**JB**	**0.096**	ug/L	.959	0.023	
CHLORDANE	U	0.096	ug/L	.959	0.096	0.1
CHLORDANE-ALPHA	U	0.014	ug/L	.959	0.014	
CHLORDANE-GAMMA	U	0.023	ug/L	.959	0.023	
CHLOROBENZILATE	U	0.0096	ug/L	.959	0.0096	
CHLORONEB	U	0.021	ug/L	.959	0.021	

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Method Reference — Matrix — Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
CHLOROTHALONIL	U	0.024	ug/L	.959	0.024	
CHRYSENE	U	0.012	ug/L	.959	0.012	
DCPA	U	0.029	ug/L	.959	0.029	
4,4'-DDD	U	0.016	ug/L	.959	0.016	
4,4'-DDE	U	0.020	ug/L	.959	0.02	
4,4'-DDT	U	0.014	ug/L	.959	0.014	
DIBENZO(A,H)ANTHRACENE	U	0.016	ug/L	.959	0.016	
DI-N-BUTYL PHTHALATE		**0.13**	ug/L	.959	0.083	
DIELDRIN	U	0.021	ug/L	.959	0.021	
DIETHYL PHTHALATE	**JB**	**0.20**	ug/L	.959	0.038	
DIMETHOATE	U	0.035	ug/L	.959	0.035	
DIMETHYL PHTHALATE	U	0.030	ug/L	.959	0.03	
2,4-DINITROTOLUENE	U	0.030	ug/L	.959	0.03	
2,6-DINITROTOLUENE	U	0.023	ug/L	.959	0.023	
ALPHA ENDOSULFAN	U	0.012	ug/L	.959	0.012	
BETA ENDOSULFAN	U	0.016	ug/L	.959	0.016	
ENDOSULFAN SULFATE	U	0.025	ug/L	.959	0.025	
ENDRIN	U	0.052	ug/L	.959	0.052	0.1
ENDRIN ALDEHYDE	U	0.052	ug/L	.959	0.052	
EPTC	U	0.057	ug/L	.959	0.057	
ETRIDIAZOLE	U	0.024	ug/L	.959	0.024	
FLUORENE	U	0.021	ug/L	.959	0.021	
HEPTACHLOR	U	0.065	ug/L	.959	0.065	
HEPTACHLOR EPOXIDE	U	0.13	ug/L	.959	0.13	
HEXACHLOROBENZENE	U	0.011	ug/L	.959	0.011	0.5
HEXACHLOROCYCLOPENTADIENE	U	0.016	ug/L	.959	0.016	1
HEXAZINONE	U	0.043	ug/L	.959	0.043	
INDENO(1,2,3-CD)PYRENE	U	0.016	ug/L	.959	0.016	
ISOPHORONE	U	0.021	ug/L	.959	0.021	
METHOXYCHLOR	U	0.012	ug/L	.959	0.012	10
METOLACHLOR	U	0.039	ug/L	.959	0.039	
METRIBUZIN	U	0.030	ug/L	.959	0.03	
MOLINATE	U	0.025	ug/L	.959	0.025	2
AROCLOR 1016	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1221	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1232	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1242	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1248	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1254	U	0.48	ug/L	.959	0.48	0.5
AROCLOR 1260	U	0.48	ug/L	.959	0.48	0.5
PENTACHLOROPHENOL	U	0.76	ug/L	.959	0.76	
CIS-PERMETHRIN	U	0.020	ug/L	.959	0.02	
TRANS-PERMETHRIN	U	0.016	ug/L	.959	0.016	
PHENANTHRENE	U	0.014	ug/L	.959	0.014	
PROMETRYN	U	0.053	ug/L	.959	0.053	
PROPACHLOR	U	0.012	ug/L	.959	0.012	
PYRENE	U	0.030	ug/L	.959	0.03	
SIMAZINE	U	0.034	ug/L	.959	0.034	1
TERBACIL	U	0.045	ug/L	.959	0.045	
THIOBENCARB	U	0.018	ug/L	.959	0.018	1
TOXAPHENE	U	0.48	ug/L	.959	0.48	1
TRIFLURALIN	U	0.014	ug/L	.959	0.014	

INTERNAL STANDARD

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
D10-ACENAPHTHENE	N	52.0	% recovery	1	1			
D10-PHENANTHRENE		79.2	% recovery	1	1			
D12-CHRYSENE		91.2	% recovery	1	1			
SURROGATE								
D12-PERYLENE		100	% recovery	1	1			
1,3-DIMETHYL-2-NITROBENZENE		81	% recovery	1	1			
TRIPHENYL PHOSPHATE		120	% recovery	1	1			
Run ID: R257352 / Work Group No.: WG196441								
Prep Date1: 24-DEC-14 Prep Date2: 22-DEC-14 Analyzed 30-Dec-14 00:15								
Method: EPA 548.1 - Endothall, GC/MS							RawH2O	
TARGET ANALYTES								
ENDOTHALL	U	1.0	ug/L	1	1		45	
INTERNAL STANDARD								
D10-ACENAPHTHENE		77.6	% recovery		1			
Run ID: R257350 / Work Group No.: WG196567								
Prep Date1: 19-DEC-14 Prep Date2: 29-DEC-14 Analyzed 29-Dec-14 16:38								
Method: EPA 8260B - Trihalomethanes, GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM		**0.45**	ug/L	1	0.17			
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079			
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13			
BROMOFORM	U	0.23	ug/L	1	0.23			
INTERNAL STANDARD								
FLUOROBENZENE		81.6	% recovery	1				
D5-CHLOROBENZENE		83.2	% recovery	1				
D4-1,4-DICHLOROBENZENE		86.0	% recovery	1				
SURROGATE								
D8-TOLUENE		101	% recovery	1				
4-BROMOFLUOROBENZENE		105	% recovery	1				
Run ID: R257029 / Work Group No.: WG196459								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 11:26								
Method: EPA 300.1 - Ion Chromatography							RawH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
FLUORIDE		**0.53**	mg/L	1	0.0004	0.1		
CHLORIDE		**15**	mg/L	1	0.002			
NITRITE AS N	U	0.00050	mg/L	1	0.0005	0.4		
NITRATE AS N	U	0.00090	mg/L	1	0.0009	0.4		
SULFATE		**15**	mg/L	1	0.003	0.5		
SURROGATE								
DICHLOROACETATE		91	% recovery	1				
Run ID: R256845 / Work Group No.: WG196321								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 17:56								
Method: EPA 314.0 - Ion Chromatography							RawH2O	
Instrument calibrated 07-JAN-15								
TARGET ANALYTES								
PERCHLORATE	U	0.500	ug/L	1	0.5	4		
Run ID: R257452 / Work Group No.: WG196701								
Prep Date1: 06-JAN-15 Analyzed 07-Jan-15 16:32								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: EPA 504.1 - EDB & DBCP, GC/ECD							RawH2O	
TARGET ANALYTES								
ETHYLENE DIBROMIDE	U	0.0020	ug/L	1	0.002	0.02		
DIBROMOCHLOROPROPANE	U	0.0020	ug/L	1	0.002	0.01		
Run ID: R257046 / Work Group No.: WG196482								
Prep Date1: 23-DEC-14 Prep Date2: 23-DEC-14 Analyzed 23-Dec-14 23:02								
Method: EPA 508.1 - Organochlorine Pesticides & PCBs: GC/ECD							RawH2O	
TARGET ANALYTES								
HEPTACHLOR	U,N,*	0.0064	ug/L	1	0.0064	0.01		
HEPTACHLOR EPOXIDE	U,N,*	0.0041	ug/L	1	0.0041	0.01		
INTERNAL STANDARD								
PENTACHLORONITROBENZENE		110	% recovery		1			
SURROGATE								
DECACHLOROBIPHENYL		88	% recovery		1			
Run ID: R257488 / Work Group No.: WG196730								
Prep Date1: 17-DEC-14 Prep Date2: 07-JAN-15 Analyzed 08-Jan-15 03:27								
Method: EPA 508A - PCB Screen, GC/ECD							RawH2O	
TARGET ANALYTES								
DECACHLOROBIPHENYL	**Q**		ug/L	1	0.22	0.5		
Sample not extracted, not analyzed for 508A because 508-PCBs were rushed. See R257302 for 508-PCB results								
Run ID: R257426 / Work Group No.: WG196645								
Prep Date1: 26-DEC-14 Prep Date2: 02-JAN-15 Analyzed 02-Jan-15 12:49								
Method: EPA 515.3 - Chlorinated Acids, GC/ECD							RawH2O	
TARGET ANALYTES								
ACIFLUORFEN	U	0.028	ug/L	1	0.028			
BENTAZON	U,*	0.14	ug/L	1	0.14	2		
CHLORAMBEN	U	0.012	ug/L	1	0.012			
(2,4-DICHLOROPHENOXY)ACETIC ACID	U	0.056	ug/L	1	0.056	10		
DALAPON	U	0.25	ug/L	1	0.25	10		
4-(2,4-DICHLOROPHENOXY)BUTANOIC ACID	U	0.26	ug/L	1	0.26			
DACTHAL (DCPA)	U,*	0.050	ug/L	1	0.05			
DICAMBA	U	0.036	ug/L	1	0.036	1.5		
3,5-DICHLOROBENZOIC ACID	U	0.025	ug/L	1	0.025			
DICHLORPROP	U	0.21	ug/L	1	0.21			
DINOSEB	U	0.057	ug/L	1	0.057	2		
4-NITROPHENOL	U,N,*	0.075	ug/L	1	0.075	5		
Qualitative result only. Diazomethane derivatization procedure does not provide accurate quantitation.								
PENTACHLOROPHENOL	U,N	0.014	ug/L	1	0.014	0.2		
PICLORAM	U	0.022	ug/L	1	0.022	1		
(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	U	0.082	ug/L	1	0.082			
2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	U	0.063	ug/L	1	0.063	1		
INTERNAL STANDARD								
4,4'-DIBROMOCTAFLUOROBENZENE		120	% recovery		1			
SURROGATE								
DICHLOROPHENYLACETIC ACID		120	% recovery		1			
Run ID: R257382 / Work Group No.: WG196674								
Prep Date1: 22-DEC-14 Prep Date2: 02-JAN-15 Analyzed 03-Jan-15 01:34								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: EPA 552.2 - Haloacetic Acids & Dalapon							RawH2O	
TARGET ANALYTES								
BROMOCHLOROACETIC ACID	U	0.15	ug/L	1	0.15			
BROMODICHLOROACETIC ACID	U	0.31	ug/L	1	0.31			
CHLORODIBROMOACETIC ACID	U	0.31	ug/L	1	0.31			
DALAPON	U	0.53	ug/L	1	0.53			
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1		
DICHLOROACETIC ACID	U	0.18	ug/L	1	0.18	1		
MONOBROMOACETIC ACID	U	0.29	ug/L	1	0.29	1		
MONOCHLOROACETIC ACID	U	0.65	ug/L	1	0.65	2		
TRIBROMOACETIC ACID	U	0.72	ug/L	1	0.72			
TRICHLOROACETIC ACID	U	0.17	ug/L	1	0.17	1		
VALUE CALCULATED FROM OTHER RESULTS								
HAA(5)		0.0	ug/L		1.5			
HAA(9)		0.0	ug/L		3			
INTERNAL STANDARD								
1,2,3-TRICHLOROPROPANE		94	% recovery		1			
SURROGATE								
2,3-DIBROMOPROPIONIC ACID		100	% recovery		1			
Run ID: R257422 / Work Group No.: WG196718								
Prep Date1: 29-DEC-14 Prep Date2: 06-JAN-15 Analyzed 06-Jan-15 21:48								
Method: SM5310C - 2000, TOC, Wet-Oxidation Method							RawH2O	
TARGET ANALYTES								
TOTAL ORGANIC CARBON		**0.64**	mg/L	1	0.024			
Run ID: R257018 / Work Group No.: WG196436								
Prep Date1: 22-DEC-14 Analyzed 23-Dec-14 17:44								
Method: EPA 531.1 - Carbamates, HPLC							RawH2O	
TARGET ANALYTES								
ALDICARB SULFOXIDE	U	1.10	ug/L	5	1.1	3		
ALDICARB SULFONE	U	2.25	ug/L	5	2.25	4		
ALDICARB	U	2.05	ug/L	5	2.05	3		
OXAMYL	U	2.10	ug/L	5	2.1	20		
METHOMYL	U	1.40	ug/L	5	1.4	2		
3-HYDROXYCARBOFURAN	U	1.15	ug/L	5	1.15	3		
PROPOXUR	U	2.45	ug/L	5	2.45			
CARBOFURAN	U	1.95	ug/L	5	1.95	5		
CARBARYL	U	3.75	ug/L	5	3.75			
METHIOCARB	U	2.60	ug/L	5	2.6			
Run ID: R257312 / Work Group No.: WG196330								
Prep Date1: 17-DEC-14 Analyzed 22-Dec-14 18:40								
Method: EPA 547 - Glyphosate, HPLC							RawH2O	
TARGET ANALYTES								
GLYPHOSATE	U	10	ug/L	5	10	25		
Run ID: R257272 / Work Group No.: WG196480								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 15:30								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: EPA 549.2 - Diquat & Paraquat, HPLC							RawH2O	
TARGET ANALYTES								
DIQUAT	U	0.29	ug/L	1	0.29	4		
PARAQUAT	U	0.25	ug/L	1	0.25	20		
Run ID: R257316 / Work Group No.: WG196511								
Prep Date1: 18-DEC-14 Prep Date2: 24-DEC-14 Analyzed 24-Dec-14 15:24								
Method: SM2120B - 2001, Visual Comparison							RawH2O	
TARGET ANALYTES								
COLOR		**2.0**	color unit	1	1			
pH=8								
Run ID: R256831 / Work Group No.: WG196327								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 12:30								
Method: SM2130B - 2001, Nephelometric							RawH2O	
TARGET ANALYTES								
TURBIDITY		**0.14**	NTU	1	0.08			
Run ID: R256832 / Work Group No.: WG196328								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 13:05								
Method: SM2320B - 1997, Titration							RawH2O	
TARGET ANALYTES								
ALKALINITY: TOTAL AS CACO3		**69**	mg/L	1	5			
Run ID: R256892 / Work Group No.: WG196393								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 08:13								
Method: SM2340C - 1997, Titration: EDTA							RawH2O	
TARGET ANALYTES								
HARDNESS: TOTAL AS CACO3		**70**	mg/L	1	3			
Run ID: R256989 / Work Group No.: WG196477								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 13:00								
Method: SM2510B - 1997, Meter: Platinum Electrode							RawH2O	
TARGET ANALYTES								
CONDUCTIVITY		**214**	umhos/cm	1	0.3			
Run ID: R256956 / Work Group No.: WG196426								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 13:20								
Method: SM2540C - 1997, Dried at 180C							RawH2O	
TARGET ANALYTES								
TOTAL DISSOLVED SOLIDS		**130**	mg/L	1	11			
Run ID: R256883 / Work Group No.: WG196348								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00								
Method: SM4500-CN C, E - 1999, Distillation & Colorimetric							RawH2O	
TARGET ANALYTES								
CYANIDE: TOTAL	U	0.003	mg/L	1	0.003			
Run ID: R256872 / Work Group No.: WG196347								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 11:00								

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Laboratory Services Division
PO Box 24055, MS 59, Oakland, CA 94623
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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1			
Run ID: R256894 / Work Group No.: WG196400								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 12:30								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: BICARBONATE		**68**	mg/L	1	5			
Run ID: R256894 / Work Group No.: WG196400								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 12:30								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: CARBONATE		**0.99**	mg/L	1	0.1			
Run ID: R256894 / Work Group No.: WG196400								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 12:30								
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N		**0.420**	mg/L	1	0.3			
Run ID: R257271 / Work Group No.: WG196583								
Prep Date1: 30-DEC-14 Analyzed 30-Dec-14 07:15								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
ALUMINUM	U	11.4	ug/L	1.04	11.4	50		
CALCIUM	**B**	**14,700**	ug/L	1.04	15.6			
COPPER	U	6.24	ug/L	1.04	6.24	50		
IRON		**52.3**	ug/L	1.04	3.12	100		
POTASSIUM		**1,070**	ug/L	1.04	15.6			
MAGNESIUM		**3,880**	ug/L	1.04	9.36			
MANGANESE		**23.0**	ug/L	1.04	0.52	20		
SODIUM		**28,000**	ug/L	1.04	11.4			
ZINC		**11.2**	ug/L	1.04	4.16	50		
Run ID: R257139 / Work Group No.: WG196556								
Prep Date1: 29-DEC-14 Analyzed 29-Dec-14 10:05								
Method: EPA 200.8 - Rev. 5.4, ICP-MS Scan							RawH2O	
TARGET ANALYTES								
SILVER	U	0.081	ug/L	1.02	0.081	10		
BARIUM		**29**	ug/L	1.02	0.1	100		
BERYLLIUM	U	0.051	ug/L	1.02	0.051	1		
CADMIUM	U	0.030	ug/L	1.02	0.03	1		
CHROMIUM		**1.0**	ug/L	1.02	0.61	10		
NICKEL		**0.43**	ug/L	1.02	0.3	10		
LEAD		**0.59**	ug/L	1.02	0.071	5		
ANTIMONY	U	0.30	ug/L	1.02	0.3	6		
THALLIUM	U	0.30	ug/L	1.02	0.3	1		
Run ID: R257176 / Work Group No.: WG196552								
Prep Date1: 19-DEC-14 Prep Date2: 29-DEC-14 Analyzed 29-Dec-14 11:35								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-1 (P202120-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:35am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.19
CL2R = 0.0 DEPTH = NA . Extract 508A within HOLDTIME (Pending
results of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: EPA 245.1 - Cold Vapor AA							RawH2O	
TARGET ANALYTES								
MERCURY	U	0.040	ug/L	1	0.04			
Run ID: R256972 / Work Group No.: WG196409								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 09:35								
Method: SM3114B - 2009, Gaseous Hydride AA							RawH2O	
TARGET ANALYTES								
ARSENIC		**0.38**	ug/L	1	0.3	2		
Run ID: R256998 / Work Group No.: WG196427								
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 12:45								
Method: SM3114B - 2009, Gaseous Hydride AA							RawH2O	
TARGET ANALYTES								
SELENIUM	U	0.400	ug/L	1	0.4			
Run ID: R256994 / Work Group No.: WG196428								
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 09:56								
Method: SM9221B - 2006, Multiple Tube Fermentation							RawH2O	
TARGET ANALYTES								
TOTAL COLIFORMS	<	1.8	MPN/100 mL		1.8			
Run ID: R256923 / Work Group No.: WG196334								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 12:26								
Method: SM9221F - 2001, Multiple Tube Fermentation							RawH2O	
TARGET ANALYTES								
E. COLI	<	1.8	MPN/100 mL		1.8			
Run ID: R256923 / Work Group No.: WG196334								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 12:26								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Tag
Method Reference						Matrix	
Method: EPA 524.2 - Volatile Organics, GC/MS						DrinkH2O	
TARGET ANALYTES							
ACETONE	**Q**	**0.38**	ug/L	1	0.35		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ACRYLONITRILE	Q,U	0.45	ug/L	1	0.45		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ALLYL CHLORIDE	Q,U	0.17	ug/L	1	0.17		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TERT-AMYL METHYL ETHER	Q,U	0.17	ug/L	1	0.17	3	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BENZENE	Q,U	0.14	ug/L	1	0.14	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BROMOBENZENE	Q,U	0.16	ug/L	1	0.16		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BROMOCHLOROMETHANE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BROMODICHLOROMETHANE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BROMOFORM	Q,U	0.31	ug/L	1	0.31		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
BROMOMETHANE	Q,U	0.55	ug/L	1	0.55		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TERT-BUTYL ALCOHOL	Q,U	1.7	ug/L	1	1.7	2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
N-BUTYLBENZENE	Q,U	0.25	ug/L	1	0.25		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
SEC-BUTYLBENZENE	Q,U	0.69	ug/L	1	0.69		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TERT-BUTYLBENZENE	Q,U	0.18	ug/L	1	0.18		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CARBON DISULFIDE	Q,U	0.44	ug/L	1	0.44		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CARBON TETRACHLORIDE	Q,U	0.25	ug/L	1	0.25	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CHLOROACETONITRILE	Q,U	0.23	ug/L	1	0.23		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Method Reference — Matrix — Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
CHLOROBENZENE	Q,U	0.21	ug/L	1	0.21	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1-CHLOROBUTANE	Q,U	0.21	ug/L	1	0.21	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
CHLOROETHANE	Q,U	0.38	ug/L	1	0.38	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
CHLOROFORM	**Q**	**0.46**	ug/L	1	0.15	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
CHLOROMETHANE	Q,U	0.15	ug/L	1	0.15	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
O-CHLOROTOLUENE	Q,U	0.19	ug/L	1	0.19	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
P-CHLOROTOLUENE	Q,U	0.19	ug/L	1	0.19	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
DIBROMOCHLOROMETHANE	Q,U	0.26	ug/L	1	0.26	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
DIBROMOCHLOROPROPANE	Q,U	0.28	ug/L	1	0.28	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
DIBROMOMETHANE	Q,U	0.28	ug/L	1	0.28	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2-DICHLOROBENZENE	Q,U	0.23	ug/L	1	0.23	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,3-DICHLOROBENZENE	Q,U	0.23	ug/L	1	0.23	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,4-DICHLOROBENZENE	Q,U	0.18	ug/L	1	0.18	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TRANS-1,4-DICHLORO-2-BUTENE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
DICHLORODIFLUOROMETHANE	Q,U	0.17	ug/L	1	0.17	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,1-DICHLOROETHANE	Q,U	0.21	ug/L	1	0.21	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2-DICHLOROETHANE	Q,U	0.14	ug/L	1	0.14	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,1-DICHLOROETHENE	Q,U	0.20	ug/L	1	0.2	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
CIS-1,2-DICHLOROETHENE	Q,U	0.25	ug/L	1	0.25	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRANS-1,2-DICHLOROETHENE	Q,U	0.19	ug/L	1	0.19	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,2-DICHLOROPROPANE	Q,U	0.15	ug/L	1	0.15	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,3-DICHLOROPROPANE	Q,U	0.22	ug/L	1	0.22		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
SEC-DICHLOROPROPANE	Q,U	0.24	ug/L	1	0.24		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1-DICHLOROPROPENE	Q,U	0.26	ug/L	1	0.26		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1-DICHLORO-2-PROPANONE	Q,U	0.21	ug/L	1	0.21		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
CIS-1,3-DICHLOROPROPENE	Q,U	0.23	ug/L	1	0.23	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
TRANS-1,3-DICHLOROPROPENE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
DIISOPROPYL ETHER	Q,U	0.29	ug/L	1	0.29		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL BENZENE	Q,U	0.18	ug/L	1	0.18	0.5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL ETHER	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYLENE DIBROMIDE	Q,U	0.19	ug/L	1	0.19		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYLMETHACRYLATE	Q,U	0.14	ug/L	1	0.14		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
ETHYL-T-BUTYL ETHER	Q,U	0.19	ug/L	1	0.19	3	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
FLUOROTRICHLOROMETHANE	Q,U	0.22	ug/L	1	0.22	5	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	Q,U	0.25	ug/L	1	0.25	10	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							
HEXACHLOROBUTADIENE	Q,U	0.20	ug/L	1	0.2		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.							

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Method Reference — Matrix — Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
HEXACHLOROETHANE	Q,U	0.25	ug/L	1	0.25	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
2-HEXANONE	Q,U	0.25	ug/L	1	0.25	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
IODOMETHANE	Q,U	0.69	ug/L	1	0.69	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
ISOPROPYLBENZENE	Q,U	0.21	ug/L	1	0.21	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
P-ISOPROPYLTOLUENE	Q,U	0.22	ug/L	1	0.22	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
METHYLACRYLONITRILE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
METHYLACRYLATE	Q,U	0.26	ug/L	1	0.26	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
METHYLENE CHLORIDE	Q,U	0.18	ug/L	1	0.18	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
2-BUTANONE	Q,U	0.43	ug/L	1	0.43	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
4-METHYL-2-PENTANONE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
METHYLMETHACRYLATE	Q,U	0.28	ug/L	1	0.28	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
METHYL-T-BUTYL ETHER	Q,U	0.39	ug/L	1	0.39	3
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
NAPHTHALENE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
NITROBENZENE	Q,U	1.0	ug/L	1	1	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
2-NITROPROPANE	Q,U	0.77	ug/L	1	0.77	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
PENTACHLOROETHANE	Q,U	0.17	ug/L	1	0.17	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
N-PROPYLBENZENE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
STYRENE	Q,U	0.19	ug/L	1	0.19	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						

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EAST BAY MUNICIPAL UTILITY DISTRICT
Laboratory Services Division
PO Box 24055, MS 59, Oakland, CA 94623
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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Method Reference — Matrix — Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
1,1,1,2-TETRACHLOROETHANE	Q,U	0.18	ug/L	1	0.18	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,1,2,2-TETRACHLOROETHANE	Q,U	0.20	ug/L	1	0.2	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TETRACHLOROETHENE	Q,U	0.20	ug/L	1	0.2	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TETRAHYDROFURAN	Q,U	0.54	ug/L	1	0.54	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TOLUENE	Q,U	0.16	ug/L	1	0.16	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2,3-TRICHLOROBENZENE	Q,U	0.24	ug/L	1	0.24	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2,4-TRICHLOROBENZENE	Q,U	0.19	ug/L	1	0.19	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,1,1-TRICHLOROETHANE	Q,U	0.19	ug/L	1	0.19	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,1,2-TRICHLOROETHANE	Q,U	0.21	ug/L	1	0.21	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TRICHLOROETHENE	Q,U	0.17	ug/L	1	0.17	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2,3-TRICHLOROPROPANE	Q,U	0.19	ug/L	1	0.19	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,2,4-TRIMETHYLBENZENE	Q,U	0.21	ug/L	1	0.21	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
1,3,5-TRIMETHYLBENZENE	Q,U	0.20	ug/L	1	0.2	
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
VINYL CHLORIDE	Q,U	0.22	ug/L	1	0.22	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
O-XYLENE	Q,U	0.18	ug/L	1	0.18	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
M+P XYLENES	Q,U	0.37	ug/L	1	0.37	0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
VALUE(S) USED TO CALCULATE OTHER VALUE(S)						
TOTAL 1,3-DICHLOROPROPENES	Q,U	0.41	ug/L	1		0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
TOTAL XYLENES	Q,U	0.55	ug/L	1		0.5
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error						

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195327-2 (P202120-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 17 2014, 09:50am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: QCFB for L195327-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_Y_Acid CONTAINER ID # BTL8 126100

Method Reference — Matrix: Tag:

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
in sampling.						
INTERNAL STANDARD						
FLUOROBENZENE	Q	97.8	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
SURROGATE						
4-BROMOFLUOROBENZENE	Q	97.2	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						
D4-1,2-DICHLOROBENZENE	Q	98.6	% recovery	1		
Analysis does not meet SOP criteria concerning QCFB. Analytes detected in QCFB and suspect error in sampling.						

Run ID: R257258 / Work Group No.: WG196458
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 11:19

Method: EPA 504.1 - EDB & DBCP, GC/ECD — Matrix: DrinkH2O

TARGET ANALYTES						
ETHYLENE DIBROMIDE	U	0.0020	ug/L	1	0.002	0.02
DIBROMOCHLOROPROPANE	U	0.0020	ug/L	1	0.002	0.01

Run ID: R257046 / Work Group No.: WG196482
Prep Date1: 23-DEC-14 Prep Date2: 23-DEC-14 Analyzed 23-Dec-14 21:57

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195327-3 (P202120-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 17 2014, 09:55am Sample collector: NKlumpp
Date Received: Dec 17 2014, 10:57am Sample receiver: JALLARD
Sample Comments: annual BAYSIDE Sampling per DPH Title 22 and WDR ; SUBCONTRACT DATA

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: EPA 218.6 - Hexavalent Chromium by IC							RawH2O	
Subcontract data from E. S. Babcock Lab								
Comment: ND - NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT								
SUBCONTRACT LAB DATA								
HEXAVALENT CHROMIUM	**ND**	**0.013**	ug/L	1	0.013	1		
Run ID: R257303 / Work Group No.: WG196579								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 19:38								
Method: EPA 508 - PCBS by 508							RawH2O	
Subcontract data from E. S. Babcock Lab								
Comment: Total PCBs as DCB STORET # 39516; Analyte NOT DETECTED at or above the Method Detection Limit (if MDL is reported), otherwise at or above the Reportable Detection Limit (RDL)								
SUBCONTRACT LAB DATA								
TETRACHLORO-M-XYLENE		**79.3**	% recovery		1			
AROCLOR 1016	**ND**	**0.17**	ug/L		0.17	0.5		
AROCLOR 1221	**ND**	**0.11**	ug/L		0.11	0.5		
AROCLOR 1232	**ND**	**0.19**	ug/L		0.19	0.5		
AROCLOR 1242	**ND**	**0.036**	ug/L		0.036	0.5		
AROCLOR 1248	**ND**	**0.092**	ug/L		0.092	0.5		
AROCLOR 1254	**ND**	**0.29**	ug/L		0.29	0.5		
AROCLOR 1260	**ND**	**0.27**	ug/L		0.27	0.5		
TOTAL PCB'S	**ND**	**0.5**	ug/L		0.5	0.5		
Run ID: R257302 / Work Group No.: WG196580								
Prep Date1: 19-DEC-14 Analyzed 23-Dec-14 10:47								
Method: SM2150B - 1997, Ambient Temperature, one panelist							RawH2O	
Subcontract data from Caltest Analytical								
Comment: ND - Non Detect - indicates analytical result has not ben detected. Analyzed at ambient temperature. Not dechlorinated.								
SUBCONTRACT LAB DATA								
THRESHOLD ODOR NUMBER	**ND**	**1**	TON		1	1		
NUMBER ANALYZING SAMPLE		**1**	Panelists					
TEMPERATURE		**21**	deg C					
Run ID: R257138 / Work Group No.: WG196561								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 16:04								

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Analytical Report Prepared for DEREK LEE

Report generated on: Jan 20, 2015 12:12 pm
Login No.: L195530

Reported by:

JACK C. LIM
Laboratory Program Manager

Approved by:

NIRMELA ARSEM
Laboratory Services Division Manager

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
2 - Samples received by the lab on: Dec 31 2014, 10:35 am
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195530-1	GRAB	31-Dec-2014 09:55	WTP BAYSIDE	BAY WELL HEAD	-
L195530-2	QCFB	31-Dec-2014 09:52	FIELD QC	COLLECTION QC	-

Legend to the laboratory qualifiers used in this report:
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195530-1 (P203526-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 31 2014, 09:55am Sample collector: NKlumpp
Date Received: Dec 31 2014, 10:35am Sample receiver: JALLARD
Sample Comments: Follow-up sampling for 524 and 8260. Residual Cl2: <0.02 ppm

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix / Tag
Method: EPA 524.2 - Volatile Organics, GC/MS							RawH2O
TARGET ANALYTES							
ACETONE	U	0.35	ug/L	1	0.35		
ACRYLONITRILE	U	0.45	ug/L	1	0.45		
ALLYL CHLORIDE	U	0.17	ug/L	1	0.17		
TERT-AMYL METHYL ETHER	U	0.17	ug/L	1	0.17	3	
BENZENE	U	0.14	ug/L	1	0.14	0.5	
BROMOBENZENE	U	0.16	ug/L	1	0.16		
BROMOCHLOROMETHANE	U	0.21	ug/L	1	0.21		
BROMODICHLOROMETHANE	U	0.21	ug/L	1	0.21		
BROMOFORM	U	0.31	ug/L	1	0.31		
BROMOMETHANE	U	0.55	ug/L	1	0.55		
TERT-BUTYL ALCOHOL	U	1.7	ug/L	1	1.7	2	
N-BUTYLBENZENE	U	0.25	ug/L	1	0.25		
SEC-BUTYLBENZENE	U	0.69	ug/L	1	0.69		
TERT-BUTYLBENZENE	U	0.18	ug/L	1	0.18		
CARBON DISULFIDE	U	0.44	ug/L	1	0.44		
CARBON TETRACHLORIDE	U	0.25	ug/L	1	0.25	0.5	
CHLOROACETONITRILE	U	0.23	ug/L	1	0.23		
CHLOROBENZENE	U	0.21	ug/L	1	0.21	0.5	
1-CHLOROBUTANE	U	0.21	ug/L	1	0.21		
CHLOROETHANE	U	0.38	ug/L	1	0.38		
CHLOROFORM		**0.42**	ug/L	1	0.15		
CHLOROMETHANE	U	0.15	ug/L	1	0.15		
O-CHLOROTOLUENE	U	0.19	ug/L	1	0.19		
P-CHLOROTOLUENE	U	0.19	ug/L	1	0.19		
DIBROMOCHLOROMETHANE	U	0.26	ug/L	1	0.26		
DIBROMOCHLOROPROPANE	U	0.28	ug/L	1	0.28		
DIBROMOMETHANE	U	0.28	ug/L	1	0.28		
1,2-DICHLOROBENZENE	U	0.23	ug/L	1	0.23	0.5	
1,3-DICHLOROBENZENE	U	0.23	ug/L	1	0.23		
1,4-DICHLOROBENZENE	U	0.18	ug/L	1	0.18	0.5	
TRANS-1,4-DICHLORO-2-BUTENE	U	0.20	ug/L	1	0.2		
DICHLORODIFLUOROMETHANE	U	0.17	ug/L	1	0.17	0.5	
1,1-DICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5	
1,2-DICHLOROETHANE	U	0.14	ug/L	1	0.14	0.5	
1,1-DICHLOROETHENE	U	0.20	ug/L	1	0.2	0.5	
CIS-1,2-DICHLOROETHENE	U	0.25	ug/L	1	0.25	0.5	
TRANS-1,2-DICHLOROETHENE	U	0.19	ug/L	1	0.19	0.5	
1,2-DICHLOROPROPANE	U	0.15	ug/L	1	0.15	0.5	
1,3-DICHLOROPROPANE	U	0.22	ug/L	1	0.22		
SEC-DICHLOROPROPANE	U	0.24	ug/L	1	0.24		
1,1-DICHLOROPROPENE	U	0.26	ug/L	1	0.26		
1,1-DICHLORO-2-PROPANONE	U	0.21	ug/L	1	0.21		
CIS-1,3-DICHLOROPROPENE	U	0.23	ug/L	1	0.23	0.5	
TRANS-1,3-DICHLOROPROPENE	U	0.18	ug/L	1	0.18	0.5	
DIISOPROPYL ETHER	U	0.29	ug/L	1	0.29		
ETHYL BENZENE	U	0.18	ug/L	1	0.18	0.5	
ETHYL ETHER	U	0.20	ug/L	1	0.2		
ETHYLENE DIBROMIDE	U	0.19	ug/L	1	0.19		
ETHYLMETHACRYLATE	U	0.14	ug/L	1	0.14		
ETHYL-T-BUTYL ETHER	U	0.19	ug/L	1	0.19	3	
FLUOROTRICHLOROMETHANE	U	0.22	ug/L	1	0.22	5	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.25	ug/L	1	0.25	10	

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195530-1 (P203526-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 31 2014, 09:55am Sample collector: NKlumpp
Date Received: Dec 31 2014, 10:35am Sample receiver: JALLARD
Sample Comments: Follow-up sampling for 524 and 8260. Residual Cl2: <0.02 ppm

Method Reference — Matrix: — Tag:

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
HEXACHLOROBUTADIENE	U	0.20	ug/L	1	0.2	
HEXACHLOROETHANE	U	0.25	ug/L	1	0.25	
2-HEXANONE	U	0.25	ug/L	1	0.25	
IODOMETHANE	U	0.69	ug/L	1	0.69	
ISOPROPYLBENZENE	U	0.21	ug/L	1	0.21	
P-ISOPROPYLTOLUENE	U	0.22	ug/L	1	0.22	
METHYLACRYLONITRILE	U	0.20	ug/L	1	0.2	
METHYLACRYLATE	U	0.26	ug/L	1	0.26	
METHYLENE CHLORIDE	U	0.18	ug/L	1	0.18	0.5
2-BUTANONE	U	0.43	ug/L	1	0.43	
4-METHYL-2-PENTANONE	U	0.20	ug/L	1	0.2	
METHYLMETHACRYLATE	U	0.28	ug/L	1	0.28	
METHYL-T-BUTYL ETHER	U	0.39	ug/L	1	0.39	3
NAPHTHALENE	U	0.20	ug/L	1	0.2	
NITROBENZENE	U	1.0	ug/L	1	1	
2-NITROPROPANE	U	0.77	ug/L	1	0.77	
PENTACHLOROETHANE	U	0.17	ug/L	1	0.17	
N-PROPYLBENZENE	U	0.20	ug/L	1	0.2	
STYRENE	U	0.19	ug/L	1	0.19	0.5
1,1,1,2-TETRACHLOROETHANE	U	0.18	ug/L	1	0.18	
1,1,2,2-TETRACHLOROETHANE	U	0.20	ug/L	1	0.2	0.5
TETRACHLOROETHENE	U	0.20	ug/L	1	0.2	0.5
TETRAHYDROFURAN	U	0.54	ug/L	1	0.54	
TOLUENE	U	0.16	ug/L	1	0.16	0.5
1,2,3-TRICHLOROBENZENE	U	0.24	ug/L	1	0.24	
1,2,4-TRICHLOROBENZENE	U	0.19	ug/L	1	0.19	0.5
1,1,1-TRICHLOROETHANE	U	0.19	ug/L	1	0.19	0.5
1,1,2-TRICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5
TRICHLOROETHENE	U	0.17	ug/L	1	0.17	0.5
1,2,3-TRICHLOROPROPANE	U	0.19	ug/L	1	0.19	
1,2,4-TRIMETHYLBENZENE	U	0.21	ug/L	1	0.21	
1,3,5-TRIMETHYLBENZENE	U	0.20	ug/L	1	0.2	
VINYL CHLORIDE	U	0.22	ug/L	1	0.22	0.5
O-XYLENE	U	0.18	ug/L	1	0.18	0.5
M+P XYLENES	U	0.37	ug/L	1	0.37	0.5
VALUE(S) USED TO CALCULATE OTHER VALUE(S)						
TOTAL 1,3-DICHLOROPROPENES	U	0.41	ug/L	1		0.5
TOTAL XYLENES	U	0.55	ug/L	1		0.5
INTERNAL STANDARD						
FLUOROBENZENE		96.4	% recovery	1		
SURROGATE						
4-BROMOFLUOROBENZENE		93.0	% recovery	1		
D4-1,2-DICHLOROBENZENE		103	% recovery	1		

Run ID: R257390 / Work Group No.: WG196662
Prep Date1: 05-JAN-15 Analyzed 05-Jan-15 13:27

Method: EPA 8260B - Trihalomethanes, GC/MS — Matrix: GroundH2O

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
TARGET ANALYTES						
CHLOROFORM		**0.55**	ug/L	1	0.17	
Confirms original sample L195327-1						
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079	
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13	
BROMOFORM	U	0.23	ug/L	1	0.23	
INTERNAL STANDARD						
FLUOROBENZENE		80.4	% recovery	1		

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: WTP BAYSIDE Bayside GW Project Extraction Wells at 2540 Grant Avenue, San Lorenzo
Locator: BAY WELL HEAD Sample tap at the well, as shown in Drawing No. 2097-C-002
Lab ID: L195530-1 (P203526-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 31 2014, 09:55am Sample collector: NKlumpp
Date Received: Dec 31 2014, 10:35am Sample receiver: JALLARD
Sample Comments: Follow-up sampling for 524 and 8260. Residual Cl2: <0.02 ppm

Method Reference Matrix Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
D5-CHLOROBENZENE		83.6	% recovery	1		
D4-1,4-DICHLOROBENZENE		87.4	% recovery	1		
SURROGATE						
D8-TOLUENE		101	% recovery	1		
4-BROMOFLUOROBENZENE		103	% recovery	1		

Run ID: R257375 / Work Group No.: WG196661
Prep Date1: 05-JAN-15 Analyzed 05-Jan-15 11:16

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195530-2 (P203526-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 31 2014, 09:52am Sample collector: NKlumpp
Date Received: Dec 31 2014, 10:35am Sample receiver: JALLARD
Sample Comments: QCFB for L195530-2 ; Prep'd on 12/24/2014 by JA; 524 acidified with 1+1 HCL? _x_Acid CONTAINER ID #1264101

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: EPA 524.2 - Volatile Organics, GC/MS						RawH2O	
TARGET ANALYTES							
ACETONE	U	0.35	ug/L	1	0.35		
ACRYLONITRILE	U	0.45	ug/L	1	0.45		
ALLYL CHLORIDE	U	0.17	ug/L	1	0.17		
TERT-AMYL METHYL ETHER	U	0.17	ug/L	1	0.17	3	
BENZENE	U	0.14	ug/L	1	0.14	0.5	
BROMOBENZENE	U	0.16	ug/L	1	0.16		
BROMOCHLOROMETHANE	U	0.21	ug/L	1	0.21		
BROMODICHLOROMETHANE	U	0.21	ug/L	1	0.21		
BROMOFORM	U	0.31	ug/L	1	0.31		
BROMOMETHANE	U	0.55	ug/L	1	0.55		
TERT-BUTYL ALCOHOL	U	1.7	ug/L	1	1.7	2	
N-BUTYLBENZENE	U	0.25	ug/L	1	0.25		
SEC-BUTYLBENZENE	U	0.69	ug/L	1	0.69		
TERT-BUTYLBENZENE	U	0.18	ug/L	1	0.18		
CARBON DISULFIDE	U	0.44	ug/L	1	0.44		
CARBON TETRACHLORIDE	U	0.25	ug/L	1	0.25	0.5	
CHLOROACETONITRILE	U	0.23	ug/L	1	0.23		
CHLOROBENZENE	U	0.21	ug/L	1	0.21	0.5	
1-CHLOROBUTANE	U	0.21	ug/L	1	0.21		
CHLOROETHANE	U	0.38	ug/L	1	0.38		
CHLOROFORM	U	0.15	ug/L	1	0.15		
CHLOROMETHANE	U	0.15	ug/L	1	0.15		
O-CHLOROTOLUENE	U	0.19	ug/L	1	0.19		
P-CHLOROTOLUENE	U	0.19	ug/L	1	0.19		
DIBROMOCHLOROMETHANE	U	0.26	ug/L	1	0.26		
DIBROMOCHLOROPROPANE	U	0.28	ug/L	1	0.28		
DIBROMOMETHANE	U	0.28	ug/L	1	0.28		
1,2-DICHLOROBENZENE	U	0.23	ug/L	1	0.23	0.5	
1,3-DICHLOROBENZENE	U	0.23	ug/L	1	0.23		
1,4-DICHLOROBENZENE	U	0.18	ug/L	1	0.18	0.5	
TRANS-1,4-DICHLORO-2-BUTENE	U	0.20	ug/L	1	0.2		
DICHLORODIFLUOROMETHANE	U	0.17	ug/L	1	0.17	0.5	
1,1-DICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5	
1,2-DICHLOROETHANE	U	0.14	ug/L	1	0.14	0.5	
1,1-DICHLOROETHENE	U	0.20	ug/L	1	0.2	0.5	
CIS-1,2-DICHLOROETHENE	U	0.25	ug/L	1	0.25	0.5	
TRANS-1,2-DICHLOROETHENE	U	0.19	ug/L	1	0.19	0.5	
1,2-DICHLOROPROPANE	U	0.15	ug/L	1	0.15	0.5	
1,3-DICHLOROPROPANE	U	0.22	ug/L	1	0.22		
SEC-DICHLOROPROPANE	U	0.24	ug/L	1	0.24		
1,1-DICHLOROPROPENE	U	0.26	ug/L	1	0.26		
1,1-DICHLORO-2-PROPANONE	U	0.21	ug/L	1	0.21		
CIS-1,3-DICHLOROPROPENE	U	0.23	ug/L	1	0.23	0.5	
TRANS-1,3-DICHLOROPROPENE	U	0.18	ug/L	1	0.18	0.5	
DIISOPROPYL ETHER	U	0.29	ug/L	1	0.29		
ETHYL BENZENE	U	0.18	ug/L	1	0.18	0.5	
ETHYL ETHER	U	0.20	ug/L	1	0.2		
ETHYLENE DIBROMIDE	U	0.19	ug/L	1	0.19		
ETHYLMETHACRYLATE	U	0.14	ug/L	1	0.14		
ETHYL-T-BUTYL ETHER	U	0.19	ug/L	1	0.19	3	
FLUOROTRICHLOROMETHANE	U	0.22	ug/L	1	0.22	5	

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195530-2 (P203526-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 31 2014, 09:52am Sample collector: NKlumpp
Date Received: Dec 31 2014, 10:35am Sample receiver: JALLARD
Sample Comments: QCFB for L195530-2 ; Prep'd on 12/24/2014 by JA; 524 acidified with 1+1 HCL? _x_Acid CONTAINER ID #1264101

Method Reference — Matrix — Tag

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.25	ug/L	1	0.25	10
HEXACHLOROBUTADIENE	U	0.20	ug/L	1	0.2	
HEXACHLOROETHANE	U	0.25	ug/L	1	0.25	
2-HEXANONE	U	0.25	ug/L	1	0.25	
IODOMETHANE	U	0.69	ug/L	1	0.69	
ISOPROPYLBENZENE	U	0.21	ug/L	1	0.21	
P-ISOPROPYLTOLUENE	U	0.22	ug/L	1	0.22	
METHYLACRYLONITRILE	U	0.20	ug/L	1	0.2	
METHYLACRYLATE	U	0.26	ug/L	1	0.26	
METHYLENE CHLORIDE	U	0.18	ug/L	1	0.18	0.5
2-BUTANONE	U	0.43	ug/L	1	0.43	
4-METHYL-2-PENTANONE	U	0.20	ug/L	1	0.2	
METHYLMETHACRYLATE	U	0.28	ug/L	1	0.28	
METHYL-T-BUTYL ETHER	U	0.39	ug/L	1	0.39	3
NAPHTHALENE	U	0.20	ug/L	1	0.2	
NITROBENZENE	U	1.0	ug/L	1	1	
2-NITROPROPANE	U	0.77	ug/L	1	0.77	
PENTACHLOROETHANE	U	0.17	ug/L	1	0.17	
N-PROPYLBENZENE	U	0.20	ug/L	1	0.2	
STYRENE	U	0.19	ug/L	1	0.19	0.5
1,1,1,2-TETRACHLOROETHANE	U	0.18	ug/L	1	0.18	
1,1,2,2-TETRACHLOROETHANE	U	0.20	ug/L	1	0.2	0.5
TETRACHLOROETHENE	U	0.20	ug/L	1	0.2	0.5
TETRAHYDROFURAN	U	0.54	ug/L	1	0.54	
TOLUENE	U	0.16	ug/L	1	0.16	0.5
1,2,3-TRICHLOROBENZENE	U	0.24	ug/L	1	0.24	
1,2,4-TRICHLOROBENZENE	U	0.19	ug/L	1	0.19	0.5
1,1,1-TRICHLOROETHANE	U	0.19	ug/L	1	0.19	0.5
1,1,2-TRICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5
TRICHLOROETHENE	U	0.17	ug/L	1	0.17	0.5
1,2,3-TRICHLOROPROPANE	U	0.19	ug/L	1	0.19	
1,2,4-TRIMETHYLBENZENE	U	0.21	ug/L	1	0.21	
1,3,5-TRIMETHYLBENZENE	U	0.20	ug/L	1	0.2	
VINYL CHLORIDE	U	0.22	ug/L	1	0.22	0.5
O-XYLENE	U	0.18	ug/L	1	0.18	0.5
M+P XYLENES	U	0.37	ug/L	1	0.37	0.5
VALUE(S) USED TO CALCULATE OTHER VALUE(S)						
TOTAL 1,3-DICHLOROPROPENES	U	0.41	ug/L	1		0.5
TOTAL XYLENES	U	0.55	ug/L	1		0.5
INTERNAL STANDARD						
FLUOROBENZENE		97.4	% recovery	1		
SURROGATE						
4-BROMOFLUOROBENZENE		97.6	% recovery	1		
D4-1,2-DICHLOROBENZENE		99.2	% recovery	1		

Run ID: R257390 / Work Group No.: WG196662
Prep Date1: 05-JAN-15 Analyzed 05-Jan-15 13:05

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Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:47 pm
Login No.: L195246

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
1 - Sample received by the lab on: Dec 13 2014, 12:59 pm
0 - Lost Analyses
1 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type Collected	Site	Locator	ClientID
L195246-1	GRAB 13-Dec-2014 10:05	GW BAYSIDE	BAY1-MW2S	MW-2S

Legend to the laboratory qualifiers used in this report:
D - Surrogate spike outside of control limits
H - Analyzed past hold time
J - Estimated value, quantitation does not meet SOP criteria
N - Spike recovery outside of control limits
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2S OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW2-60
ClientID: MW-2S
Lab ID: L195246-1 (P202442-2)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 10:05am Sample collector: DSS
Date Received: Dec 13 2014, 12:59pm Sample receiver: JXIE
Sample Comments: MW-2S; +FLD DATA: pH = 6.57; Cl2R = 0.2 mg/L; Depth to GW = 7.3 feet; GW Elevation = __na__feet; Labelled as RAW WATER for the program. (Analytical NOTE: may need to dilute for ICP & IC - salt water intrusion

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA							GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**6.57**	pH units	1				
DEPTH		**7.3**	feet	1				
CHLORINE RESIDUAL: TOTAL		**0.2**	mg/L	1	0.02			
Run ID: R257026 / Work Group No.: WG196504								
Prep Date1: 13-DEC-14 Analyzed 13-Dec-14 10:05								
Method: EPA 8260B - Trihalomethanes, GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM	U	0.17	ug/L	1	0.17			
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079			
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13			
BROMOFORM	U	0.23	ug/L	1	0.23			
INTERNAL STANDARD								
FLUOROBENZENE		87.4	% recovery	1				
D5-CHLOROBENZENE		91.0	% recovery	1				
D4-1,4-DICHLOROBENZENE		90.8	% recovery	1				
SURROGATE								
D8-TOLUENE		103	% recovery	1				
4-BROMOFLUOROBENZENE		100	% recovery	1				
Run ID: R256878 / Work Group No.: WG196297								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 13:16								
Method: EPA 300.1 - Ion Chromatography							GroundH2O	1
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
CHLORIDE		**39,000**	mg/L	5000	10			
SURROGATE								
DICHLOROACETATE		93	% recovery	5000				
Run ID: R256880 / Work Group No.: WG196371								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 15:50								
Method: EPA 300.1 - Ion Chromatography							GroundH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
NITRATE AS N	**H**	**23**	mg/L	5000	4.5		0.4	
SULFATE		**6,100**	mg/L	5000	15		0.5	
SURROGATE								
DICHLOROACETATE	D	120	% recovery	5000				
Run ID: R256792 / Work Group No.: WG196252								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 10:34								
Method: EPA 552.2 - Haloacetic Acids & Dalapon							GroundH2O	
TARGET ANALYTES								
BROMOCHLOROACETIC ACID	U	0.15	ug/L	1	0.15			
BROMODICHLOROACETIC ACID	U	0.31	ug/L	1	0.31			
CHLORODIBROMOACETIC ACID	U	0.31	ug/L	1	0.31			
DALAPON	U	0.53	ug/L	1	0.53			
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25		1	
DICHLOROACETIC ACID	U	0.18	ug/L	1	0.18		1	

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2S OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW2-60
ClientID: MW-2S
Lab ID: L195246-1 (P202442-2)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 10:05am Sample collector: DSS
Date Received: Dec 13 2014, 12:59pm Sample receiver: JXIE
Sample Comments: MW-2S; +FLD DATA: pH = 6.57; Cl2R = 0.2 mg/L; Depth to GW = 7.3 feet; GW Elevation = __na__feet; Labelled as RAW WATER for the program. (Analytical NOTE: may need to dilute for ICP & IC - salt water intrusion

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
MONOBROMOACETIC ACID	U	0.29	ug/L	1	0.29	1	
MONOCHLOROACETIC ACID	U	0.65	ug/L	1	0.65	2	
TRIBROMOACETIC ACID	U,N,J	0.72	ug/L	1	0.72		
TRICHLOROACETIC ACID	U	0.17	ug/L	1	0.17	1	
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.0	ug/L		1.5		
HAA(9)		0.0	ug/L		3		
INTERNAL STANDARD							
1,2,3-TRICHLOROPROPANE		120	% recovery		1		
SURROGATE							
2,3-DIBROMOPROPIONIC ACID		120	% recovery		1		
Run ID: R257156 / Work Group No.: WG196473							
Prep Date1: 16-DEC-14 Prep Date2: 23-DEC-14 Analyzed 25-Dec-14 04:29							
Method: SM2320B - 1997, Titration						GroundH2O	
TARGET ANALYTES							
ALKALINITY: TOTAL AS CACO3		**380**	mg/L	1	5		
Run ID: R256761 / Work Group No.: WG196255							
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 08:03							
Method: SM2340C - 1997, Titration: EDTA						GroundH2O	
TARGET ANALYTES							
HARDNESS: TOTAL AS CACO3		**17,000**	mg/L	200	600		
Run ID: R256790 / Work Group No.: WG196294							
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 10:00							
Method: SM2540C - 1997, Dried at 180C						GroundH2O	
TARGET ANALYTES							
TOTAL DISSOLVED SOLIDS		**83,000**	mg/L	20	220		
Run ID: R256883 / Work Group No.: WG196348							
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00							
Method: SM4500-CO2 D - Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: BICARBONATE		**380**	mg/L	1	5		
Run ID: R256766 / Work Group No.: WG196268							
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40							
Method: SM4500-CO2 D - Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: CARBONATE		**0.13**	mg/L	1	0.1		
Run ID: R256766 / Work Group No.: WG196268							
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40							
Method: SM4500-CO2 D - Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1		
Run ID: R256766 / Work Group No.: WG196268							
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40							

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2S OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW2-60
ClientID: MW-2S
Lab ID: L195246-1 (P202442-2)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 10:05am Sample collector: DSS
Date Received: Dec 13 2014, 12:59pm Sample receiver: JXIE
Sample Comments: MW-2S; +FLD DATA: pH = 6.57; Cl2R = 0.2 mg/L; Depth to GW = 7.3 feet; GW Elevation = __na__feet; Labelled as RAW WATER for the program. (Analytical NOTE: may need to dilute for ICP & IC - salt water intrusion

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N	U	0.300	mg/L	1	0.3			
Run ID: R256866 / Work Group No.: WG196372								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 10:00								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
CALCIUM		**1.23E+06**	ug/L	10.4	156			
IRON	U	31.2	ug/L	10.4	31.2	100		
POTASSIUM		**462,000**	ug/L	10.4	156			
MAGNESIUM		**2.68E+06**	ug/L	10.4	93.6			
MANGANESE		**36,900**	ug/L	10.4	5.2	20		
SODIUM		**2.20E+07**	ug/L	52	570			
Run ID: R256898 / Work Group No.: WG196382								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 11:06								

Results with 6 figures or more are expressed in scientific notation.
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Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:47 pm
Login No.: L195233

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
2 - Samples received by the lab on: Dec 12 2014, 01:16 pm
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195233-1	GRAB	12-Dec-2014 12:34	GW BAYSIDE	BAY1-MW2I	MW-2I
L195233-2	QCFB	12-Dec-2014 12:34	FIELD QC	COLLECTION QC	-

Legend to the laboratory qualifiers used in this report:
J - Estimated value, quantitation does not meet SOP criteria
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2I OW-1 the same parcel as the Bayside Well on Oro Loma Property; aka BAY1-MW2D until 11-2009; formerly BAY1-MW2-190
ClientID: MW-2I
Lab ID: L195233-1 (P202127-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 12 2014, 12:34pm Sample collector: T QUANE
Date Received: Dec 12 2014, 01:16pm Sample receiver: PTRUONG
Sample Comments: MW-2I; +FLD DATA: pH =7.9; Cl2R = 0.0 mg/L; Depth to GW = 12.83 feet; GW Elevation = __NA___ feet; Labelled as RAW WATER for the program.

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: EPA 8260B - Trihalomethanes, GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM	U	0.17	ug/L	1	0.17			
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079			
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13			
BROMOFORM	U	0.23	ug/L	1	0.23			
INTERNAL STANDARD								
FLUOROBENZENE		91.4	% recovery	1				
D5-CHLOROBENZENE		92.4	% recovery	1				
D4-1,4-DICHLOROBENZENE		92.6	% recovery	1				
SURROGATE								
D8-TOLUENE		104	% recovery	1				
4-BROMOFLUOROBENZENE		103	% recovery	1				
Run ID: R256878 / Work Group No.: WG196297								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 12:53								
Method: EPA 300.1 - Ion Chromatography							GroundH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
CHLORIDE		**81**	mg/L	10	0.02			
NITRATE AS N	U	0.0090	mg/L	10	0.009	0.4		
SULFATE		**31**	mg/L	10	0.03	0.5		
SURROGATE								
DICHLOROACETATE		100	% recovery	10				
Run ID: R256754 / Work Group No.: WG196215								
Prep Date1: 12-DEC-14 Analyzed 12-Dec-14 18:39								
Method: EPA 552.2 - Haloacetic Acids & Dalapon							GroundH2O	
TARGET ANALYTES								
BROMOCHLOROACETIC ACID		**0.50**	ug/L	1	0.15			
BROMODICHLOROACETIC ACID	U	0.31	ug/L	1	0.31			
CHLORODIBROMOACETIC ACID	U	0.31	ug/L	1	0.31			
DALAPON	U	0.53	ug/L	1	0.53			
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1		
DICHLOROACETIC ACID	U	0.18	ug/L	1	0.18	1		
MONOBROMOACETIC ACID	U	0.29	ug/L	1	0.29	1		
MONOCHLOROACETIC ACID	U	0.65	ug/L	1	0.65	2		
TRIBROMOACETIC ACID	U,J	0.72	ug/L	1	0.72			
TRICHLOROACETIC ACID	U	0.17	ug/L	1	0.17	1		
VALUE CALCULATED FROM OTHER RESULTS								
HAA(5)		0.0	ug/L		1.5			
HAA(9)		0.50	ug/L		3			
INTERNAL STANDARD								
1,2,3-TRICHLOROPROPANE		120	% recovery		1			
SURROGATE								
2,3-DIBROMOPROPIONIC ACID		110	% recovery		1			
Run ID: R257156 / Work Group No.: WG196473								
Prep Date1: 16-DEC-14 Prep Date2: 23-DEC-14 Analyzed 25-Dec-14 03:46								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2I OW-1 the same parcel as the Bayside Well on Oro Loma Property; aka BAY1-MW2D until 11-2009; formerly BAY1-MW2-190
ClientID: MW-2I
Lab ID: L195233-1 (P202127-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 12 2014, 12:34pm Sample collector: T QUANE
Date Received: Dec 12 2014, 01:16pm Sample receiver: PTRUONG
Sample Comments: MW-2I; +FLD DATA: pH =7.9; Cl2R = 0.0 mg/L; Depth to GW = 12.83 feet; GW Elevation = __NA___ feet; Labelled as RAW WATER for the program.

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SM2320B - 1997, Titration							GroundH2O	
TARGET ANALYTES								
ALKALINITY: TOTAL AS CACO3		**310**	mg/L	1	5			
Run ID: R256761 / Work Group No.: WG196255								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 08:03								
Method: SM2340C - 1997, Titration: EDTA							GroundH2O	
TARGET ANALYTES								
HARDNESS: TOTAL AS CACO3		**94**	mg/L	1	3			
Run ID: R256790 / Work Group No.: WG196294								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 10:00								
Method: SM2540C - 1997, Dried at 180C							GroundH2O	
TARGET ANALYTES								
TOTAL DISSOLVED SOLIDS		**520**	mg/L	1	11			
Run ID: R256883 / Work Group No.: WG196348								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: CARBONATE		**2.3**	mg/L	1	0.1			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: BICARBONATE		**310**	mg/L	1	5			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N		**1.12**	mg/L	1	0.3			
Run ID: R256797 / Work Group No.: WG196293								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 07:00								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
CALCIUM		**14,600**	ug/L	1.04	15.6			
IRON		**213**	ug/L	1.04	3.12	100		
POTASSIUM		**5,330**	ug/L	1.04	15.6			
MAGNESIUM		**12,600**	ug/L	1.04	9.36			
MANGANESE		**98.7**	ug/L	1.04	0.52	20		
SODIUM		**153,000**	ug/L	1.04	11.4			
Run ID: R256898 / Work Group No.: WG196382								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 09:10								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW2I OW-1 the same parcel as the Bayside Well on Oro Loma Property; aka BAY1-MW2D until 11-2009; formerly BAY1-MW2-190
ClientID: MW-2I
Lab ID: L195233-1 (P202127-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 12 2014, 12:34pm Sample collector: T QUANE
Date Received: Dec 12 2014, 01:16pm Sample receiver: PTRUONG
Sample Comments: MW-2I; +FLD DATA: pH =7.9; Cl2R = 0.0 mg/L; Depth to GW = 12.83 feet; GW Elevation = __NA___ feet; Labelled as RAW WATER for the program.

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195233-2 (P202127-6)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 12 2014, 12:34pm Sample collector: T QUANE
Date Received: Dec 12 2014, 01:16pm Sample receiver: PTRUONG
Sample Comments: QCFB for L195233-1; Prep'd on 11-DEC-14 by JLA;

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: EPA 8260B - Trihalomethanes, GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.17	ug/L	1	0.17		
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079		
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13		
BROMOFORM	U	0.23	ug/L	1	0.23		
INTERNAL STANDARD							
FLUOROBENZENE		91.6	% recovery	1			
D5-CHLOROBENZENE		97.4	% recovery	1			
D4-1,4-DICHLOROBENZENE		96.6	% recovery	1			
SURROGATE							
D8-TOLUENE		102	% recovery	1			
4-BROMOFLUOROBENZENE		97.8	% recovery	1			

Run ID: R256878 / Work Group No.: WG196297
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 12:31

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Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:47 pm
Login No.: L195299

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
3 - Samples received by the lab on: Dec 16 2014, 11:40 am
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195299-1	GRAB	16-Dec-2014 09:14	GW BAYSIDE	BAY1-MW4	-
L195299-2	GRAB	16-Dec-2014 10:01	GW BAYSIDE	BAY1-MW4	-
L195299-3	QCFB	16-Dec-2014 09:26	FIELD QC	COLLECTION QC	-

Legend to the laboratory qualifiers used in this report:
< - Less than
JB - Estimated value, method blank exceeds 10% of sample concentration
N - Spike recovery outside of control limits
Q - Data not suitable for regulatory compliance reporting
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference							RawH2O	
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA								
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**8.22**	pH units	1				
DEPTH		**14.97**	feet	1				
CHLORINE RESIDUAL: TOTAL		**0.1**	mg/L	1	0.02			
Run ID: R256999 / Work Group No.: WG196489								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 09:14								
Method: EPA 524.2 - Volatile Organics, GC/MS							RawH2O	
TARGET ANALYTES								
ACETONE	U	0.35	ug/L	1	0.35			
ACRYLONITRILE	U	0.45	ug/L	1	0.45			
ALLYL CHLORIDE	U	0.17	ug/L	1	0.17			
TERT-AMYL METHYL ETHER	U	0.17	ug/L	1	0.17		3	
BENZENE	U	0.14	ug/L	1	0.14		0.5	
BROMOBENZENE	U	0.16	ug/L	1	0.16			
BROMOCHLOROMETHANE	U	0.21	ug/L	1	0.21			
BROMODICHLOROMETHANE	U	0.21	ug/L	1	0.21			
BROMOFORM	U	0.31	ug/L	1	0.31			
BROMOMETHANE	U	0.55	ug/L	1	0.55			
TERT-BUTYL ALCOHOL	U	1.7	ug/L	1	1.7		2	
N-BUTYLBENZENE	U	0.25	ug/L	1	0.25			
SEC-BUTYLBENZENE	U	0.69	ug/L	1	0.69			
TERT-BUTYLBENZENE	U	0.18	ug/L	1	0.18			
CARBON DISULFIDE	U	0.44	ug/L	1	0.44			
CARBON TETRACHLORIDE	U	0.25	ug/L	1	0.25		0.5	
CHLOROACETONITRILE	U	0.23	ug/L	1	0.23			
CHLOROBENZENE	U	0.21	ug/L	1	0.21		0.5	
1-CHLOROBUTANE	U	0.21	ug/L	1	0.21			
CHLOROETHANE	U	0.38	ug/L	1	0.38			
CHLOROFORM	U	0.15	ug/L	1	0.15			
CHLOROMETHANE	U	0.15	ug/L	1	0.15			
O-CHLOROTOLUENE	U	0.19	ug/L	1	0.19			
P-CHLOROTOLUENE	U	0.19	ug/L	1	0.19			
DIBROMOCHLOROMETHANE	U	0.26	ug/L	1	0.26			
DIBROMOCHLOROPROPANE	U	0.28	ug/L	1	0.28			
DIBROMOMETHANE	U	0.28	ug/L	1	0.28			
1,2-DICHLOROBENZENE	U	0.23	ug/L	1	0.23		0.5	
1,3-DICHLOROBENZENE	U	0.23	ug/L	1	0.23			
1,4-DICHLOROBENZENE	U	0.18	ug/L	1	0.18		0.5	
TRANS-1,4-DICHLORO-2-BUTENE	U	0.20	ug/L	1	0.2			
DICHLORODIFLUOROMETHANE	U	0.17	ug/L	1	0.17		0.5	
1,1-DICHLOROETHANE	U	0.21	ug/L	1	0.21		0.5	
1,2-DICHLOROETHANE	U	0.14	ug/L	1	0.14		0.5	
1,1-DICHLOROETHENE	U	0.20	ug/L	1	0.2		0.5	
CIS-1,2-DICHLOROETHENE	U	0.25	ug/L	1	0.25		0.5	
TRANS-1,2-DICHLOROETHENE	U	0.19	ug/L	1	0.19		0.5	
1,2-DICHLOROPROPANE	U	0.15	ug/L	1	0.15		0.5	
1,3-DICHLOROPROPANE	U	0.22	ug/L	1	0.22			
SEC-DICHLOROPROPANE	U	0.24	ug/L	1	0.24			
1,1-DICHLOROPROPENE	U	0.26	ug/L	1	0.26			
1,1-DICHLORO-2-PROPANONE	U	0.21	ug/L	1	0.21			

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Method Reference

Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
CIS-1,3-DICHLOROPROPENE	U	0.23	ug/L	1	0.23	0.5	
TRANS-1,3-DICHLOROPROPENE	U	0.18	ug/L	1	0.18	0.5	
DIISOPROPYL ETHER	U	0.29	ug/L	1	0.29		
ETHYL BENZENE	U	0.18	ug/L	1	0.18	0.5	
ETHYL ETHER	U	0.20	ug/L	1	0.2		
ETHYLENE DIBROMIDE	U	0.19	ug/L	1	0.19		
ETHYLMETHACRYLATE	U	0.14	ug/L	1	0.14		
ETHYL-T-BUTYL ETHER	U	0.19	ug/L	1	0.19	3	
FLUOROTRICHLOROMETHANE	U	0.22	ug/L	1	0.22	5	
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.25	ug/L	1	0.25	10	
HEXACHLOROBUTADIENE	U	0.20	ug/L	1	0.2		
HEXACHLOROETHANE	U	0.25	ug/L	1	0.25		
2-HEXANONE	U	0.25	ug/L	1	0.25		
IODOMETHANE	U	0.69	ug/L	1	0.69		
ISOPROPYLBENZENE	U	0.21	ug/L	1	0.21		
P-ISOPROPYLTOLUENE	U	0.22	ug/L	1	0.22		
METHYLACRYLONITRILE	U	0.20	ug/L	1	0.2		
METHYLACRYLATE	U	0.26	ug/L	1	0.26		
METHYLENE CHLORIDE	U	0.18	ug/L	1	0.18	0.5	
2-BUTANONE	U	0.43	ug/L	1	0.43		
4-METHYL-2-PENTANONE	U	0.20	ug/L	1	0.2		
METHYLMETHACRYLATE	U	0.28	ug/L	1	0.28		
METHYL-T-BUTYL ETHER	U	0.39	ug/L	1	0.39	3	
NAPHTHALENE	U	0.20	ug/L	1	0.2		
NITROBENZENE	U	1.0	ug/L	1	1		
2-NITROPROPANE	U	0.77	ug/L	1	0.77		
PENTACHLOROETHANE	U	0.17	ug/L	1	0.17		
N-PROPYLBENZENE	U	0.20	ug/L	1	0.2		
STYRENE	U	0.19	ug/L	1	0.19	0.5	
1,1,1,2-TETRACHLOROETHANE	U	0.18	ug/L	1	0.18		
1,1,2,2-TETRACHLOROETHANE	U	0.20	ug/L	1	0.2	0.5	
TETRACHLOROETHENE	U	0.20	ug/L	1	0.2	0.5	
TETRAHYDROFURAN	U	0.54	ug/L	1	0.54		
TOLUENE	U	0.16	ug/L	1	0.16	0.5	
1,2,3-TRICHLOROBENZENE	U	0.24	ug/L	1	0.24		
1,2,4-TRICHLOROBENZENE	U	0.19	ug/L	1	0.19	0.5	
1,1,1-TRICHLOROETHANE	U	0.19	ug/L	1	0.19	0.5	
1,1,2-TRICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5	
TRICHLOROETHENE	U	0.17	ug/L	1	0.17	0.5	
1,2,3-TRICHLOROPROPANE	U	0.19	ug/L	1	0.19		
1,2,4-TRIMETHYLBENZENE	U	0.21	ug/L	1	0.21		
1,3,5-TRIMETHYLBENZENE	U	0.20	ug/L	1	0.2		
VINYL CHLORIDE	U	0.22	ug/L	1	0.22	0.5	
O-XYLENE	U	0.18	ug/L	1	0.18	0.5	
M+P XYLENES	U	0.37	ug/L	1	0.37	0.5	
VALUE(S) USED TO CALCULATE OTHER VALUE(S)							
TOTAL 1,3-DICHLOROPROPENES	U	0.41	ug/L	1		0.5	
TOTAL XYLENES	U	0.55	ug/L	1		0.5	
INTERNAL STANDARD							
FLUOROBENZENE		98.4	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		97.8	% recovery	1			
D4-1,2-DICHLOROBENZENE		102	% recovery	1			

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Run ID: R257258 / Work Group No.: WG196458								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 11:42								
Method: EPA 525.2 - Semivolatile Organics, GC/MS							RawH2O	
TARGET ANALYTES								
ACENAPHTHYLENE	U	0.034	ug/L	.958	0.034			
ALACHLOR	U	0.037	ug/L	.958	0.037	1		
ALDRIN	U	0.024	ug/L	.958	0.024			
ANTHRACENE	U	0.040	ug/L	.958	0.04			
ATRAZINE	U	0.042	ug/L	.958	0.042	0.5		
BENZO(A)ANTHRACENE	U	0.016	ug/L	.958	0.016			
BENZO(B)FLUORANTHENE	U	0.065	ug/L	.958	0.065			
BENZO(K)FLUORANTHENE	U	0.011	ug/L	.958	0.011			
BENZO(A)PYRENE	U	0.030	ug/L	.958	0.03	0.1		
BENZO(GHI)PERYLENE	U	0.014	ug/L	.958	0.014			
BIS(2-ETHYLHEXYL)ADIPATE	JB	**0.096**	ug/L	.958	0.029	5		
BIS(2-ETHYLHEXYL)PHTHALATE	JB	**0.46**	ug/L	.958	0.057	3		
ALPHA BHC	U	0.024	ug/L	.958	0.024			
BETA BHC	U	0.043	ug/L	.958	0.043			
DELTA BHC	U	0.040	ug/L	.958	0.04			
GAMMA BHC	U	0.024	ug/L	.958	0.024	0.2		
BROMACIL	U	0.14	ug/L	.958	0.14			
BUTACHLOR	U	0.019	ug/L	.958	0.019			
BUTYLBENZYL PHTHALATE	JB	**0.096**	ug/L	.958	0.023			
CHLORDANE	U	0.096	ug/L	.958	0.096	0.1		
CHLORDANE-ALPHA	U	0.014	ug/L	.958	0.014			
CHLORDANE-GAMMA	U	0.023	ug/L	.958	0.023			
CHLOROBENZILATE	U	0.0096	ug/L	.958	0.0096			
CHLORONEB	U	0.021	ug/L	.958	0.021			
CHLOROTHALONIL	U	0.024	ug/L	.958	0.024			
CHRYSENE	U	0.011	ug/L	.958	0.011			
DCPA	U	0.029	ug/L	.958	0.029			
4,4'-DDD	U	0.016	ug/L	.958	0.016			
4,4'-DDE	U	0.020	ug/L	.958	0.02			
4,4'-DDT	U	0.014	ug/L	.958	0.014			
DIBENZO(A,H)ANTHRACENE	U	0.016	ug/L	.958	0.016			
DI-N-BUTYL PHTHALATE		**0.16**	ug/L	.958	0.083			
DIELDRIN	U	0.021	ug/L	.958	0.021			
DIETHYL PHTHALATE	JB	**0.36**	ug/L	.958	0.038			
DIMETHOATE	U	0.034	ug/L	.958	0.034			
DIMETHYL PHTHALATE	U	0.030	ug/L	.958	0.03			
2,4-DINITROTOLUENE	U	0.030	ug/L	.958	0.03			
2,6-DINITROTOLUENE	U	0.023	ug/L	.958	0.023			
ALPHA ENDOSULFAN	U	0.011	ug/L	.958	0.011			
BETA ENDOSULFAN	U	0.016	ug/L	.958	0.016			
ENDOSULFAN SULFATE	U	0.025	ug/L	.958	0.025			
ENDRIN	U	0.052	ug/L	.958	0.052	0.1		
ENDRIN ALDEHYDE	U	0.052	ug/L	.958	0.052			
EPTC	U	0.057	ug/L	.958	0.057			
ETRIDIAZOLE	U	0.024	ug/L	.958	0.024			
FLUORENE	U	0.021	ug/L	.958	0.021			
HEPTACHLOR	U	0.065	ug/L	.958	0.065			
HEPTACHLOR EPOXIDE	U	0.13	ug/L	.958	0.13			

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Phone (510)287-1432 Fax (510)465-5462
Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Method Reference						Matrix	Tag
Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	
HEXACHLOROBENZENE	U	0.011	ug/L	.958	0.011	0.5	
HEXACHLOROCYCLOPENTADIENE	U	0.016	ug/L	.958	0.016	1	
HEXAZINONE	U	0.043	ug/L	.958	0.043		
INDENO(1,2,3-CD)PYRENE	U	0.016	ug/L	.958	0.016		
ISOPHORONE	U	0.021	ug/L	.958	0.021		
METHOXYCHLOR	U	0.011	ug/L	.958	0.011	10	
METOLACHLOR	U	0.039	ug/L	.958	0.039		
METRIBUZIN	U	0.030	ug/L	.958	0.03		
MOLINATE	U	0.025	ug/L	.958	0.025	2	
AROCLOR 1016	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1221	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1232	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1242	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1248	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1254	U	0.48	ug/L	.958	0.48	0.5	
AROCLOR 1260	U	0.48	ug/L	.958	0.48	0.5	
PENTACHLOROPHENOL	U	0.76	ug/L	.958	0.76		
CIS-PERMETHRIN	U	0.020	ug/L	.958	0.02		
TRANS-PERMETHRIN	U	0.016	ug/L	.958	0.016		
PHENANTHRENE	U	0.014	ug/L	.958	0.014		
PROMETRYN	U	0.053	ug/L	.958	0.053		
PROPACHLOR	U	0.011	ug/L	.958	0.011		
PYRENE	U	0.030	ug/L	.958	0.03		
SIMAZINE	U	0.034	ug/L	.958	0.034	1	
TERBACIL	U	0.045	ug/L	.958	0.045		
THIOBENCARB	U	0.018	ug/L	.958	0.018	1	
TOXAPHENE	U	0.48	ug/L	.958	0.48	1	
TRIFLURALIN	U	0.014	ug/L	.958	0.014		
INTERNAL STANDARD							
D10-ACENAPHTHENE	N	61.6	% recovery	1	1		
D10-PHENANTHRENE		71.2	% recovery	1	1		
D12-CHRYSENE		80.0	% recovery	1	1		
SURROGATE							
D12-PERYLENE		96	% recovery	1	1		
1,3-DIMETHYL-2-NITROBENZENE		83	% recovery	1	1		
TRIPHENYL PHOSPHATE		120	% recovery	1	1		

Run ID: R257352 / Work Group No.: WG196441
Prep Date1: 24-DEC-14 Prep Date2: 22-DEC-14 Analyzed 29-Dec-14 23:31

Method: EPA 548.1 - Endothall, GC/MS						RawH2O
TARGET ANALYTES						
ENDOTHALL	U	1.0	ug/L	1	1	45
INTERNAL STANDARD						
D10-ACENAPHTHENE		72.0	% recovery		1	

Run ID: R257350 / Work Group No.: WG196567
Prep Date1: 19-DEC-14 Prep Date2: 29-DEC-14 Analyzed 29-Dec-14 17:06

Method: EPA 8260B - Trihalomethanes, GC/MS						GroundH2O
TARGET ANALYTES						
CHLOROFORM	U	0.17	ug/L	1	0.17	
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079	
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13	
BROMOFORM	U	0.23	ug/L	1	0.23	

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Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
INTERNAL STANDARD								
FLUOROBENZENE		88.2	% recovery	1				
D5-CHLOROBENZENE		91.0	% recovery	1				
D4-1,4-DICHLOROBENZENE		97.4	% recovery	1				
SURROGATE								
D8-TOLUENE		102	% recovery	1				
4-BROMOFLUOROBENZENE		103	% recovery	1				
Run ID: R256878 / Work Group No.: WG196297								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 16:46								
Method: EPA 300.1 - Ion Chromatography							RawH2O	1
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
CHLORIDE		**56**	mg/L	5	0.01			
SULFATE		**39**	mg/L	5	0.015	0.5		
SURROGATE								
DICHLOROACETATE		96	% recovery	5				
Run ID: R256845 / Work Group No.: WG196321								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 14:05								
Method: EPA 300.1 - Ion Chromatography							RawH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
FLUORIDE		**0.19**	mg/L	1	0.0004	0.1		
NITRITE AS N		**0.0091**	mg/L	1	0.0005	0.4		
NITRATE AS N		**0.028**	mg/L	1	0.0009	0.4		
SURROGATE								
DICHLOROACETATE		96	% recovery	1				
Run ID: R256845 / Work Group No.: WG196321								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 14:42								
Method: EPA 314.0 - Ion Chromatography							RawH2O	
Instrument calibrated 07-JAN-15								
TARGET ANALYTES								
PERCHLORATE	U	0.500	ug/L	1	0.5	4		
Run ID: R257452 / Work Group No.: WG196701								
Prep Date1: 06-JAN-15 Analyzed 08-Jan-15 08:57								
Method: EPA 504.1 - EDB & DBCP, GC/ECD							RawH2O	
TARGET ANALYTES								
ETHYLENE DIBROMIDE	U	0.0020	ug/L	1	0.002	0.02		
DIBROMOCHLOROPROPANE	U	0.0020	ug/L	1	0.002	0.01		
Run ID: R257046 / Work Group No.: WG196482								
Prep Date1: 23-DEC-14 Prep Date2: 23-DEC-14 Analyzed 23-Dec-14 22:30								
Method: EPA 508.1 - Organochlorine Pesticides & PCBs: GC/ECD							RawH2O	
TARGET ANALYTES								
HEPTACHLOR	U	0.0064	ug/L	1	0.0064	0.01		
HEPTACHLOR EPOXIDE	U	0.0041	ug/L	1	0.0041	0.01		
INTERNAL STANDARD								
PENTACHLORONITROBENZENE		110	% recovery		1			
SURROGATE								
DECACHLOROBIPHENYL		99	% recovery		1			

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Lab ID: L195299-1 (P202125-1)
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CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Run ID: R257488 / Work Group No.: WG196730							
Prep Date1: 17-DEC-14 Prep Date2: 07-JAN-15 Analyzed 08-Jan-15 02:41							
Method: EPA 508A - PCB Screen, GC/ECD						RawH2O	
TARGET ANALYTES							
DECACHLOROBIPHENYL	**Q**		ug/L	1	0.22	0.5	
Sample not extracted, not analyzed for 508A because 508-PCBs were rushed. See R257302 for 508-PCB results							
Run ID: R257426 / Work Group No.: WG196645							
Prep Date1: 26-DEC-14 Prep Date2: 02-JAN-15 Analyzed 02-Jan-15 12:49							
Method: EPA 515.3 - Chlorinated Acids, GC/ECD						RawH2O	
TARGET ANALYTES							
ACIFLUORFEN	U	0.028	ug/L	1	0.028		
BENTAZON	U	0.14	ug/L	1	0.14	2	
CHLORAMBEN	U	0.012	ug/L	1	0.012		
(2,4-DICHLOROPHENOXY)ACETIC ACID	U	0.056	ug/L	1	0.056	10	
DALAPON	U	0.25	ug/L	1	0.25	10	
4-(2,4-DICHLOROPHENOXY)BUTANOIC ACID	U	0.26	ug/L	1	0.26		
DACTHAL (DCPA)	U	0.050	ug/L	1	0.05		
DICAMBA	U	0.036	ug/L	1	0.036	1.5	
3,5-DICHLOROBENZOIC ACID	U	0.025	ug/L	1	0.025		
DICHLORPROP	U	0.21	ug/L	1	0.21		
DINOSEB	U	0.057	ug/L	1	0.057	2	
4-NITROPHENOL	U	0.075	ug/L	1	0.075	5	
Qualitative result only. Diazomethane derivatization procedure does not provide accurate quantitation.							
PENTACHLOROPHENOL	U	0.014	ug/L	1	0.014	0.2	
PICLORAM	U	0.022	ug/L	1	0.022	1	
(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	U	0.082	ug/L	1	0.082		
2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	U	0.063	ug/L	1	0.063	1	
INTERNAL STANDARD							
4,4'-DIBROMOCTAFLUOROBENZENE		130	% recovery		1		
SURROGATE							
DICHLOROPHENYLACETIC ACID		130	% recovery		1		
Run ID: R257382 / Work Group No.: WG196674							
Prep Date1: 22-DEC-14 Prep Date2: 02-JAN-15 Analyzed 03-Jan-15 00:37							
Method: EPA 552.2 - Haloacetic Acids & Dalapon						RawH2O	
TARGET ANALYTES							
BROMOCHLOROACETIC ACID	U	0.15	ug/L	1	0.15		
BROMODICHLOROACETIC ACID	U	0.31	ug/L	1	0.31		
CHLORODIBROMOACETIC ACID	U	0.31	ug/L	1	0.31		
DALAPON	U	0.53	ug/L	1	0.53		
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1	
DICHLOROACETIC ACID	U	0.18	ug/L	1	0.18	1	
MONOBROMOACETIC ACID	U	0.29	ug/L	1	0.29	1	
MONOCHLOROACETIC ACID		**0.72**	ug/L	1	0.65	2	
TRIBROMOACETIC ACID	U	0.72	ug/L	1	0.72		
TRICHLOROACETIC ACID	U	0.17	ug/L	1	0.17	1	
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.72	ug/L		1.5		
HAA(9)		0.72	ug/L		3		

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Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
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Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
INTERNAL STANDARD								
1,2,3-TRICHLOROPROPANE		97	% recovery		1			
SURROGATE								
2,3-DIBROMOPROPIONIC ACID		100	% recovery		1			
Run ID: R257422 / Work Group No.: WG196718								
Prep Date1: 29-DEC-14 Prep Date2: 06-JAN-15 Analyzed 06-Jan-15 20:22								
Method: SM5310C - 2000, TOC, Wet-Oxidation Method							RawH2O	
TARGET ANALYTES								
TOTAL ORGANIC CARBON		**0.61**	mg/L	10	0.24			
Run ID: R256852 / Work Group No.: WG196305								
Prep Date1: 17-DEC-14 Analyzed 18-Dec-14 05:41								
Method: EPA 531.1 - Carbamates, HPLC							RawH2O	
TARGET ANALYTES								
ALDICARB SULFOXIDE	U	1.10	ug/L	5	1.1	3		
ALDICARB SULFONE	U	2.25	ug/L	5	2.25	4		
ALDICARB	U	2.05	ug/L	5	2.05	3		
OXAMYL	U	2.10	ug/L	5	2.1	20		
METHOMYL	U	1.40	ug/L	5	1.4	2		
3-HYDROXYCARBOFURAN	U	1.15	ug/L	5	1.15	3		
PROPOXUR	U	2.45	ug/L	5	2.45			
CARBOFURAN	U	1.95	ug/L	5	1.95	5		
CARBARYL	U	3.75	ug/L	5	3.75			
METHIOCARB	U	2.60	ug/L	5	2.6			
Run ID: R257312 / Work Group No.: WG196330								
Prep Date1: 17-DEC-14 Analyzed 22-Dec-14 18:13								
Method: EPA 547 - Glyphosate, HPLC							RawH2O	
TARGET ANALYTES								
GLYPHOSATE	U	10	ug/L	5	10	25		
Run ID: R257272 / Work Group No.: WG196480								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 15:16								
Method: EPA 549.2 - Diquat & Paraquat, HPLC							RawH2O	
TARGET ANALYTES								
DIQUAT	U	0.29	ug/L	1	0.29	4		
PARAQUAT	U	0.25	ug/L	1	0.25	20		
Run ID: R257316 / Work Group No.: WG196511								
Prep Date1: 18-DEC-14 Prep Date2: 24-DEC-14 Analyzed 24-Dec-14 15:02								
Method: SM2120B - 2001, Visual Comparison							RawH2O	
TARGET ANALYTES								
COLOR		**2.0**	color unit	1	1			
pH=8								
Run ID: R256831 / Work Group No.: WG196327								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 12:30								

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CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
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Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SM2130B - 2001, Nephelometric							RawH2O	
TARGET ANALYTES								
TURBIDITY		**0.28**	NTU	1	0.08			
Run ID: R256832 / Work Group No.: WG196328								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 13:05								
Method: SM2320B - 1997, Titration							RawH2O	
TARGET ANALYTES								
ALKALINITY: TOTAL AS CACO3		**270**	mg/L	1	5			
Run ID: R256829 / Work Group No.: WG196319								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 07:10								
Method: SM2340C - 1997, Titration: EDTA							RawH2O	
TARGET ANALYTES								
HARDNESS: TOTAL AS CACO3		**130**	mg/L	1	3			
Run ID: R256989 / Work Group No.: WG196477								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 13:00								
Method: SM2510B - 1997, Meter: Platinum Electrode							RawH2O	
TARGET ANALYTES								
CONDUCTIVITY		**693**	umhos/cm	1	0.3			
Run ID: R256956 / Work Group No.: WG196426								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 13:20								
Method: SM2540C - 1997, Dried at 180C							RawH2O	
TARGET ANALYTES								
TOTAL DISSOLVED SOLIDS		**450**	mg/L	1	11			
Run ID: R256883 / Work Group No.: WG196348								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00								
Method: SM4500-CN C, E - 1999, Distillation & Colorimetric							RawH2O	
TARGET ANALYTES								
CYANIDE: TOTAL	U	0.003	mg/L	1	0.003			
Run ID: R256872 / Work Group No.: WG196347								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 11:00								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: BICARBONATE		**270**	mg/L	1	5			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								

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CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
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Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: CARBONATE		**4.2**	mg/L	1	0.1			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N	U	0.300	mg/L	1	0.3			
Run ID: R256982 / Work Group No.: WG196437								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 06:30								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
ALUMINUM	U	11.4	ug/L	1.04	11.4	50		
CALCIUM		**32,200**	ug/L	1.04	15.6			
COPPER	U	6.24	ug/L	1.04	6.24	50		
IRON		**33.7**	ug/L	1.04	3.12	100		
POTASSIUM		**2,720**	ug/L	1.04	15.6			
MAGNESIUM		**12,800**	ug/L	1.04	9.36			
MANGANESE		**239**	ug/L	1.04	0.52	20		
SODIUM		**113,000**	ug/L	1.04	11.4			
ZINC	U	4.16	ug/L	1.04	4.16	50		
Run ID: R256898 / Work Group No.: WG196382								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 10:30								
Method: EPA 200.8 - Rev. 5.4, ICP-MS Scan							RawH2O	
TARGET ANALYTES								
SILVER	U	0.081	ug/L	1.02	0.081	10		
BARIUM		**70**	ug/L	1.02	0.1	100		
BERYLLIUM	U	0.051	ug/L	1.02	0.051	1		
CADMIUM		**0.16**	ug/L	1.02	0.03	1		
CHROMIUM		**1.8**	ug/L	1.02	0.61	10		
NICKEL		**0.86**	ug/L	1.02	0.3	10		
LEAD		**0.17**	ug/L	1.02	0.071	5		
ANTIMONY	U	0.30	ug/L	1.02	0.3	6		
THALLIUM	U	0.30	ug/L	1.02	0.3	1		
Run ID: R257176 / Work Group No.: WG196552								
Prep Date1: 19-DEC-14 Prep Date2: 29-DEC-14 Analyzed 29-Dec-14 11:28								
Method: EPA 245.1 - Cold Vapor AA							RawH2O	
TARGET ANALYTES								
MERCURY	U	0.040	ug/L	1	0.04			
Run ID: R256972 / Work Group No.: WG196409								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 09:35								
Method: SM3114B - 2009, Gaseous Hydride AA							RawH2O	
TARGET ANALYTES								
ARSENIC		**1.3**	ug/L	1	0.3	2		
Run ID: R256998 / Work Group No.: WG196427								
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 12:45								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-1 (P202125-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 09:14am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 8.22
CL2R = 0.1 DEPTH =14.97 . Extract 508A within HOLDTIME (Pending results
of 508-PCBS will determine if analysis to proceed)

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: SM3114B - 2009, Gaseous Hydride AA						RawH2O	
TARGET ANALYTES							
SELENIUM	U	0.400	ug/L	1	0.4		
Run ID: R256994 / Work Group No.: WG196428							
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 09:56							
Method: SM9221B - 2006, Multiple Tube Fermentation						RawH2O	
TARGET ANALYTES							
TOTAL COLIFORMS		**13**	MPN/100 mL		1.8		
Run ID: R256925 / Work Group No.: WG196309							
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 12:49							
Method: SM9221F - 2001, Multiple Tube Fermentation						RawH2O	
TARGET ANALYTES							
E. COLI	<	1.8	MPN/100 mL		1.8		
Run ID: R256925 / Work Group No.: WG196309							
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 12:49							

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW4 OW-1 the same parcel as the Bayside Well on Oro Loma Property; formerly BAY1-MW5
Lab ID: L195299-2 (P202125-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 10:01am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: annual BAYSIDE Sampling per DPH Title 22 and WDR ; SUBCONTRACT DATA

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: EPA 218.6 - Hexavalent Chromium by IC							RawH2O	
Subcontract data from E. S. Babcock Lab								
Comment: ND - NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT								
SUBCONTRACT LAB DATA								
HEXAVALENT CHROMIUM	**ND**	**0.013**	ug/L	1	0.013	1		
Run ID: R257303 / Work Group No.: WG196579								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 17:39								
Method: EPA 508 - PCBS by 508							RawH2O	
Subcontract data from E. S. Babcock Lab								
Comment: Total PCBs as DCB STORET # 39516; Analyte NOT DETECTED at or above the Method Detection Limit (if MDL is reported), otherwise at or above the Reportable Detection Limit (RDL)								
SUBCONTRACT LAB DATA								
TETRACHLORO-M-XYLENE		**75**	% recovery	1				
AROCLOR 1016	**ND**	**0.17**	ug/L		0.17	0.5		
AROCLOR 1221	**ND**	**0.11**	ug/L		0.11	0.5		
AROCLOR 1232	**ND**	**0.19**	ug/L		0.19	0.5		
AROCLOR 1242	**ND**	**0.036**	ug/L		0.036	0.5		
AROCLOR 1248	**ND**	**0.092**	ug/L		0.092	0.5		
AROCLOR 1254	**ND**	**0.29**	ug/L		0.29	0.5		
AROCLOR 1260	**ND**	**0.27**	ug/L		0.27	0.5		
TOTAL PCB'S	**ND**	**0.5**	ug/L		0.5	0.5		
Run ID: R257302 / Work Group No.: WG196580								
Prep Date1: 19-DEC-14 Analyzed 23-Dec-14 10:33								
Method: PER SUBCONTRACT LABORATORY REPORT - Subcontract data transmittal							RawH2O	
Subcontract data								
Comment: Original report transmitted to client. Copy of report archived with data packet.								
SUBCONTRACT LAB DATA								
DATA TRANSMITTAL								
Run ID: R257047 / Work Group No.: WG196516								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 16:00								
Method: SM2150B - 1997, Ambient Temperature, one panelist							RawH2O	
Subcontract data from Caltest Analytical								
Comment: ND - non-detect The analysis was performed at 21 C, by client request								
SUBCONTRACT LAB DATA								
THRESHOLD ODOR NUMBER	**ND**	**1**	TON		1	1		
NUMBER ANALYZING SAMPLE		**1**	Panelists					
TEMPERATURE		**21**	deg C					
Run ID: R257048 / Work Group No.: WG196515								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 16:00								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195299-3 (P202125-4)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 16 2014, 09:26am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: QCFB for L195299-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_yes_Acid CONTAINER ID #1264119

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: EPA 524.2 - Volatile Organics, GC/MS							DrinkH2O	
TARGET ANALYTES								
ACETONE	U	0.35	ug/L	1	0.35			
ACRYLONITRILE	U	0.45	ug/L	1	0.45			
ALLYL CHLORIDE	U	0.17	ug/L	1	0.17			
TERT-AMYL METHYL ETHER	U	0.17	ug/L	1	0.17	3		
BENZENE	U	0.14	ug/L	1	0.14	0.5		
BROMOBENZENE	U	0.16	ug/L	1	0.16			
BROMOCHLOROMETHANE	U	0.21	ug/L	1	0.21			
BROMODICHLOROMETHANE	U	0.21	ug/L	1	0.21			
BROMOFORM	U	0.31	ug/L	1	0.31			
BROMOMETHANE	U	0.55	ug/L	1	0.55			
TERT-BUTYL ALCOHOL	U	1.7	ug/L	1	1.7	2		
N-BUTYLBENZENE	U	0.25	ug/L	1	0.25			
SEC-BUTYLBENZENE	U	0.69	ug/L	1	0.69			
TERT-BUTYLBENZENE	U	0.18	ug/L	1	0.18			
CARBON DISULFIDE	U	0.44	ug/L	1	0.44			
CARBON TETRACHLORIDE	U	0.25	ug/L	1	0.25	0.5		
CHLOROACETONITRILE	U	0.23	ug/L	1	0.23			
CHLOROBENZENE	U	0.21	ug/L	1	0.21	0.5		
1-CHLOROBUTANE	U	0.21	ug/L	1	0.21			
CHLOROETHANE	U	0.38	ug/L	1	0.38			
CHLOROFORM	U	0.15	ug/L	1	0.15			
CHLOROMETHANE	U	0.15	ug/L	1	0.15			
O-CHLOROTOLUENE	U	0.19	ug/L	1	0.19			
P-CHLOROTOLUENE	U	0.19	ug/L	1	0.19			
DIBROMOCHLOROMETHANE	U	0.26	ug/L	1	0.26			
DIBROMOCHLOROPROPANE	U	0.28	ug/L	1	0.28			
DIBROMOMETHANE	U	0.28	ug/L	1	0.28			
1,2-DICHLOROBENZENE	U	0.23	ug/L	1	0.23	0.5		
1,3-DICHLOROBENZENE	U	0.23	ug/L	1	0.23			
1,4-DICHLOROBENZENE	U	0.18	ug/L	1	0.18	0.5		
TRANS-1,4-DICHLORO-2-BUTENE	U	0.20	ug/L	1	0.2			
DICHLORODIFLUOROMETHANE	U	0.17	ug/L	1	0.17	0.5		
1,1-DICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5		
1,2-DICHLOROETHANE	U	0.14	ug/L	1	0.14	0.5		
1,1-DICHLOROETHENE	U	0.20	ug/L	1	0.2	0.5		
CIS-1,2-DICHLOROETHENE	U	0.25	ug/L	1	0.25	0.5		
TRANS-1,2-DICHLOROETHENE	U	0.19	ug/L	1	0.19	0.5		
1,2-DICHLOROPROPANE	U	0.15	ug/L	1	0.15	0.5		
1,3-DICHLOROPROPANE	U	0.22	ug/L	1	0.22			
SEC-DICHLOROPROPANE	U	0.24	ug/L	1	0.24			
1,1-DICHLOROPROPENE	U	0.26	ug/L	1	0.26			
1,1-DICHLORO-2-PROPANONE	U	0.21	ug/L	1	0.21			
CIS-1,3-DICHLOROPROPENE	U	0.23	ug/L	1	0.23	0.5		
TRANS-1,3-DICHLOROPROPENE	U	0.18	ug/L	1	0.18	0.5		
DIISOPROPYL ETHER	U	0.29	ug/L	1	0.29			
ETHYL BENZENE	U	0.18	ug/L	1	0.18	0.5		
ETHYL ETHER	U	0.20	ug/L	1	0.2			
ETHYLENE DIBROMIDE	U	0.19	ug/L	1	0.19			
ETHYLMETHACRYLATE	U	0.14	ug/L	1	0.14			
ETHYL-T-BUTYL ETHER	U	0.19	ug/L	1	0.19	3		
FLUOROTRICHLOROMETHANE	U	0.22	ug/L	1	0.22	5		

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195299-3 (P202125-4)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 16 2014, 09:26am Sample collector: N KLUMPP
Date Received: Dec 16 2014, 11:40am Sample receiver: PTRUONG
Sample Comments: QCFB for L195299-1; Prep'd on 12/11/2014 by JA; 524 acidified with 1+1 HCL?
_yes_Acid CONTAINER ID #1264119

Method Reference — Matrix: — Tag:

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.25	ug/L	1	0.25	10
HEXACHLOROBUTADIENE	U	0.20	ug/L	1	0.2	
HEXACHLOROETHANE	U	0.25	ug/L	1	0.25	
2-HEXANONE	U	0.25	ug/L	1	0.25	
IODOMETHANE	U	0.69	ug/L	1	0.69	
ISOPROPYLBENZENE	U	0.21	ug/L	1	0.21	
P-ISOPROPYLTOLUENE	U	0.22	ug/L	1	0.22	
METHYLACRYLONITRILE	U	0.20	ug/L	1	0.2	
METHYLACRYLATE	U	0.26	ug/L	1	0.26	
METHYLENE CHLORIDE	U	0.18	ug/L	1	0.18	0.5
2-BUTANONE	U	0.43	ug/L	1	0.43	
4-METHYL-2-PENTANONE	U	0.20	ug/L	1	0.2	
METHYLMETHACRYLATE	U	0.28	ug/L	1	0.28	
METHYL-T-BUTYL ETHER	U	0.39	ug/L	1	0.39	3
NAPHTHALENE	U	0.20	ug/L	1	0.2	
NITROBENZENE	U	1.0	ug/L	1	1	
2-NITROPROPANE	U	0.77	ug/L	1	0.77	
PENTACHLOROETHANE	U	0.17	ug/L	1	0.17	
N-PROPYLBENZENE	U	0.20	ug/L	1	0.2	
STYRENE	U	0.19	ug/L	1	0.19	0.5
1,1,1,2-TETRACHLOROETHANE	U	0.18	ug/L	1	0.18	
1,1,2,2-TETRACHLOROETHANE	U	0.20	ug/L	1	0.2	0.5
TETRACHLOROETHENE	U	0.20	ug/L	1	0.2	0.5
TETRAHYDROFURAN	U	0.54	ug/L	1	0.54	
TOLUENE	U	0.16	ug/L	1	0.16	0.5
1,2,3-TRICHLOROBENZENE	U	0.24	ug/L	1	0.24	
1,2,4-TRICHLOROBENZENE	U	0.19	ug/L	1	0.19	0.5
1,1,1-TRICHLOROETHANE	U	0.19	ug/L	1	0.19	0.5
1,1,2-TRICHLOROETHANE	U	0.21	ug/L	1	0.21	0.5
TRICHLOROETHENE	U	0.17	ug/L	1	0.17	0.5
1,2,3-TRICHLOROPROPANE	U	0.19	ug/L	1	0.19	
1,2,4-TRIMETHYLBENZENE	U	0.21	ug/L	1	0.21	
1,3,5-TRIMETHYLBENZENE	U	0.20	ug/L	1	0.2	
VINYL CHLORIDE	U	0.22	ug/L	1	0.22	0.5
O-XYLENE	U	0.18	ug/L	1	0.18	0.5
M+P XYLENES	U	0.37	ug/L	1	0.37	0.5
VALUE(S) USED TO CALCULATE OTHER VALUE(S)						
TOTAL 1,3-DICHLOROPROPENES	U	0.41	ug/L	1		0.5
TOTAL XYLENES	U	0.55	ug/L	1		0.5
INTERNAL STANDARD						
FLUOROBENZENE		97.6	% recovery	1		
SURROGATE						
4-BROMOFLUOROBENZENE		99.4	% recovery	1		
D4-1,2-DICHLOROBENZENE		102	% recovery	1		

Run ID: R257258 / Work Group No.: WG196458
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 12:40

Method: EPA 504.1 - EDB & DBCP, GC/ECD — Matrix: DrinkH2O

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML
TARGET ANALYTES						
ETHYLENE DIBROMIDE	U	0.0020	ug/L	1	0.002	0.02
DIBROMOCHLOROPROPANE	U	0.0020	ug/L	1	0.002	0.01

Run ID: R257046 / Work Group No.: WG196482
Prep Date1: 23-DEC-14 Prep Date2: 23-DEC-14 Analyzed 23-Dec-14 21:25

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Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:48 pm
Login No.: L195302

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
2 - Samples received by the lab on: Dec 16 2014, 01:16 pm
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time not met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195302-1	GRAB	16-Dec-2014 12:35	GW BAYSIDE	BAY1-MW5D	MW-2I
L195302-2	QCFB	16-Dec-2014 12:35	FIELD QC	COLLECTION QC	-

Legend to the laboratory qualifiers used in this report:
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW5D Q APN 411-0003-0083 Via Barrett, San Lorenzo; Formerly BAY-MW-BARETT
ClientID: MW-2I
Lab ID: L195302-1 (P203147-4)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 12:35pm Sample collector: tquane
Date Received: Dec 16 2014, 01:16pm Sample receiver: jallard
Sample Comments: MW-5D; +FLD DATA: pH = 7.0 ; Cl2R = 0.4 mg/L; Depth to GW = 19.52 feet; GW Elevation = 13.76' feet; Labelled as RAW WATER for the program.

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA							GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**7**	pH units	1				
DEPTH		**19.52**	feet	1				
CHLORINE RESIDUAL: TOTAL		**0.4**	mg/L	1	0.02			
Run ID: R257023 / Work Group No.: WG196475								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 12:35								
Method: EPA 8260B - Trihalomethanes, GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM	U	0.17	ug/L	1	0.17			
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079			
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13			
BROMOFORM	U	0.23	ug/L	1	0.23			
INTERNAL STANDARD								
FLUOROBENZENE		89.2	% recovery	1				
D5-CHLOROBENZENE		91.4	% recovery	1				
D4-1,4-DICHLOROBENZENE		93.2	% recovery	1				
SURROGATE								
D8-TOLUENE		101	% recovery	1				
4-BROMOFLUOROBENZENE		102	% recovery	1				
Run ID: R256878 / Work Group No.: WG196297								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 16:23								
Method: EPA 300.1 - Ion Chromatography							GroundH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
CHLORIDE		**96**	mg/L	10	0.02			
NITRATE AS N	U	0.0090	mg/L	10	0.009	0.4		
SULFATE		**46**	mg/L	10	0.03	0.5		
SURROGATE								
DICHLOROACETATE		95	% recovery	10				
Run ID: R256845 / Work Group No.: WG196321								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 16:38								
Method: EPA 552.2 - Haloacetic Acids & Dalapon							GroundH2O	
TARGET ANALYTES								
BROMOCHLOROACETIC ACID	U	0.15	ug/L	1	0.15			
BROMODICHLOROACETIC ACID	U	0.31	ug/L	1	0.31			
CHLORODIBROMOACETIC ACID	U	0.31	ug/L	1	0.31			
DALAPON	U	0.53	ug/L	1	0.53			
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1		
DICHLOROACETIC ACID	U	0.18	ug/L	1	0.18	1		
MONOBROMOACETIC ACID	U	0.29	ug/L	1	0.29	1		
MONOCHLOROACETIC ACID	U	0.65	ug/L	1	0.65	2		
TRIBROMOACETIC ACID	U	0.72	ug/L	1	0.72			
TRICHLOROACETIC ACID	U	0.17	ug/L	1	0.17	1		
VALUE CALCULATED FROM OTHER RESULTS								
HAA(5)		0.0	ug/L		1.5			
HAA(9)		0.0	ug/L		3			
INTERNAL STANDARD								
1,2,3-TRICHLOROPROPANE		96	% recovery		1			

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW5D Q APN 411-0003-0083 Via Barrett, San Lorenzo; Formerly BAY-MW-BARETT
ClientID: MW-2I
Lab ID: L195302-1 (P203147-4)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 12:35pm Sample collector: tquane
Date Received: Dec 16 2014, 01:16pm Sample receiver: jallard
Sample Comments: MW-5D; +FLD DATA: pH = 7.0 ; Cl2R = 0.4 mg/L; Depth to GW = 19.52 feet; GW Elevation = 13.76' feet; Labelled as RAW WATER for the program.

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
SURROGATE								
2,3-DIBROMOPROPIONIC ACID		100	% recovery		1			
Run ID: R257422 / Work Group No.: WG196718								
Prep Date1: 29-DEC-14 Prep Date2: 06-JAN-15 Analyzed 06-Jan-15 21:05								
Method: SM2320B - 1997, Titration							GroundH2O	
TARGET ANALYTES								
ALKALINITY: TOTAL AS CACO3		**230**	mg/L	1	5			
Run ID: R256829 / Work Group No.: WG196319								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 07:10								
Method: SM2340C - 1997, Titration: EDTA							GroundH2O	
TARGET ANALYTES								
HARDNESS: TOTAL AS CACO3		**150**	mg/L	1	3			
Run ID: R256989 / Work Group No.: WG196477								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 13:00								
Method: SM2540C - 1997, Dried at 180C							GroundH2O	
TARGET ANALYTES								
TOTAL DISSOLVED SOLIDS		**490**	mg/L	1	11			
Run ID: R256883 / Work Group No.: WG196348								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: BICARBONATE		**230**	mg/L	1	5			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: CARBONATE		**0.22**	mg/L	1	0.1			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								
Method: SM4500-CO2 D - Calculation							GroundH2O	
TARGET ANALYTES								
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1			
Run ID: R256839 / Work Group No.: WG196337								
Prep Date1: 17-DEC-14 Analyzed 17-Dec-14 03:15								
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N	U	0.300	mg/L	1	0.3			
Run ID: R256982 / Work Group No.: WG196437								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 06:30								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
CALCIUM		**42,800**	ug/L	1.04	15.6			
IRON		**180**	ug/L	1.04	3.12	100		
POTASSIUM		**2,590**	ug/L	1.04	15.6			
MAGNESIUM		**10,800**	ug/L	1.04	9.36			

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW5D Q APN 411-0003-0083 Via Barrett, San Lorenzo; Formerly BAY-MW-BARETT
ClientID: MW-2I
Lab ID: L195302-1 (P203147-4)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 16 2014, 12:35pm Sample collector: tquane
Date Received: Dec 16 2014, 01:16pm Sample receiver: jallard
Sample Comments: MW-5D; +FLD DATA: pH = 7.0 ; Cl2R = 0.4 mg/L; Depth to GW = 19.52 feet; GW Elevation = 13.76' feet; Labelled as RAW WATER for the program.

Method Reference						Matrix	Tag
Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	
MANGANESE		**241**	ug/L	1.04	0.52	20	
SODIUM		**123,000**	ug/L	1.04	11.4		

Run ID: R256898 / Work Group No.: WG196382
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 10:36

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L195302-2 (P203147-6)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 16 2014, 12:35pm Sample collector: tquane
Date Received: Dec 16 2014, 01:16pm Sample receiver: jallard
Sample Comments: QCFB for L195302-1; Prep'd on 12/11/2014 by JA.

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: EPA 8260B - Trihalomethanes, GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.17	ug/L	1	0.17		
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079		
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13		
BROMOFORM	U	0.23	ug/L	1	0.23		
INTERNAL STANDARD							
FLUOROBENZENE		88.0	% recovery	1			
D5-CHLOROBENZENE		89.0	% recovery	1			
D4-1,4-DICHLOROBENZENE		91.2	% recovery	1			
SURROGATE							
D8-TOLUENE		99.0	% recovery	1			
4-BROMOFLUOROBENZENE		104	% recovery	1			

Run ID: R256878 / Work Group No.: WG196297
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 16:00

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Analytical Report Prepared for NA

Report generated on: Jan 20, 2015 12:47 pm
Login No.: L195259

LSR B455-0706-1
Project Title: BAYSIDE GROUND WATER PROJECT

Login Performance Summary
2 - Samples received by the lab on: Dec 14 2014, 03:57 pm
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time met

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L195259-1	GRAB	13-Dec-2014 18:12	GW BAYSIDE	BAY1-MW6	-
L195259-2	GRAB	13-Dec-2014 18:10	GW BAYSIDE	BAY1-MW6	-

Legend to the laboratory qualifiers used in this report:
U - Analyte not detected
Qualifiers for subcontract work - See textvalue for description

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW6 R APN 438-0010-003 2364 Baumann Ave., San Lorenzo; formerly BAY-MW-WORTHLEY
Lab ID: L195259-1 (P202126-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 06:12pm Sample collector: N Klumpp
Date Received: Dec 14 2014, 03:57pm Sample receiver: RMOLINA
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 7.92
CL2R = 0.1 DEPTH = 15.57'

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA							RawH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**7.92**	pH units	1				
DEPTH		**15.57**	feet	1				
CHLORINE RESIDUAL: TOTAL		**0.1**	mg/L	1	0.02			
Run ID: R257025 / Work Group No.: WG196503								
Prep Date1: 13-DEC-14 Analyzed 13-Dec-14 18:12								
Method: EPA 8260B - Trihalomethanes, GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM	U	0.17	ug/L	1	0.17			
BROMODICHLOROMETHANE	U	0.079	ug/L	1	0.079			
DIBROMOCHLOROMETHANE	U	0.13	ug/L	1	0.13			
BROMOFORM	U	0.23	ug/L	1	0.23			
INTERNAL STANDARD								
FLUOROBENZENE		90.6	% recovery	1				
D5-CHLOROBENZENE		93.0	% recovery	1				
D4-1,4-DICHLOROBENZENE		94.8	% recovery	1				
SURROGATE								
D8-TOLUENE		101	% recovery	1				
4-BROMOFLUOROBENZENE		101	% recovery	1				
Run ID: R256878 / Work Group No.: WG196297								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 13:38								
Method: EPA 300.1 - Ion Chromatography							RawH2O	1
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
FLUORIDE		**0.19**	mg/L	1	0.0004	0.1		
NITRITE AS N	U	0.00050	mg/L	1	0.0005	0.4		
NITRATE AS N		**0.0042**	mg/L	1	0.0009	0.4		
SURROGATE								
DICHLOROACETATE		110	% recovery	1				
Run ID: R256792 / Work Group No.: WG196252								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 14:20								
Method: EPA 300.1 - Ion Chromatography							RawH2O	2
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
CHLORIDE		**58**	mg/L	10	0.02			
SURROGATE								
DICHLOROACETATE		94	% recovery	10				
Run ID: R256880 / Work Group No.: WG196371								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 16:28								
Method: EPA 300.1 - Ion Chromatography							RawH2O	
Instrument calibrated 09-DEC-14								
TARGET ANALYTES								
SULFATE		**56**	mg/L	100	0.3	0.5		
SURROGATE								
DICHLOROACETATE		110	% recovery	100				
Run ID: R256792 / Work Group No.: WG196252								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 13:43								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW6 R APN 438-0010-003 2364 Baumann Ave., San Lorenzo; formerly BAY-MW-WORTHLEY
Lab ID: L195259-1 (P202126-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 06:12pm Sample collector: N Klumpp
Date Received: Dec 14 2014, 03:57pm Sample receiver: RMOLINA
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 7.92
CL2R = 0.1 DEPTH = 15.57'

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: SM2320B - 1997, Titration							RawH2O	
TARGET ANALYTES								
ALKALINITY: TOTAL AS CACO3		**230**	mg/L	1	5			
Run ID: R256761 / Work Group No.: WG196255								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 08:03								
Method: SM2340C - 1997, Titration: EDTA							RawH2O	
TARGET ANALYTES								
HARDNESS: TOTAL AS CACO3		**120**	mg/L	1	3			
Run ID: R256790 / Work Group No.: WG196294								
Prep Date1: 16-DEC-14 Analyzed 16-Dec-14 10:00								
Method: SM2510B - 1997, Meter: Platinum Electrode							RawH2O	
TARGET ANALYTES								
CONDUCTIVITY		**676**	umhos/cm	1	0.3			
Run ID: R256956 / Work Group No.: WG196426								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 13:20								
Method: SM2540C - 1997, Dried at 180C							RawH2O	
TARGET ANALYTES								
TOTAL DISSOLVED SOLIDS		**430**	mg/L	1	11			
Run ID: R256883 / Work Group No.: WG196348								
Prep Date1: 18-DEC-14 Analyzed 18-Dec-14 07:00								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: BICARBONATE		**230**	mg/L	1	5			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-CO2 D - Calculation							RawH2O	
TARGET ANALYTES								
ALKALINITY: CARBONATE		**1.8**	mg/L	1	0.1			
Run ID: R256766 / Work Group No.: WG196268								
Prep Date1: 15-DEC-14 Analyzed 15-Dec-14 12:40								
Method: SM4500-NH3 B, C - 1997, Distillation & Titration							GroundH2O	
TARGET ANALYTES								
AMMONIA AS N	U	0.300	mg/L	1	0.3			
Run ID: R256982 / Work Group No.: WG196437								
Prep Date1: 23-DEC-14 Analyzed 23-Dec-14 06:30								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW6 R APN 438-0010-003 2364 Baumann Ave., San Lorenzo; formerly BAY-MW-WORTHLEY
Lab ID: L195259-1 (P202126-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 06:12pm Sample collector: N Klumpp
Date Received: Dec 14 2014, 03:57pm Sample receiver: RMOLINA
Sample Comments: ANNUAL BAYSIDE Sampling per DPH Title 22 AND WDR; +FLD DATA: pH = 7.92
CL2R = 0.1 DEPTH = 15.57'

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method Reference								
Method: EPA 200.7 - Rev. 4.4, ICP Scan							RawH2O	
TARGET ANALYTES								
ALUMINUM	U	11.4	ug/L	1.04	11.4	50		
CALCIUM		**34,100**	ug/L	1.04	15.6			
COPPER	U	6.24	ug/L	1.04	6.24	50		
IRON		**25.4**	ug/L	1.04	3.12	100		
POTASSIUM		**2,390**	ug/L	1.04	15.6			
MAGNESIUM		**8,890**	ug/L	1.04	9.36			
MANGANESE		**209**	ug/L	1.04	0.52	20		
SODIUM		**110,000**	ug/L	1.04	11.4			
ZINC	U	4.16	ug/L	1.04	4.16	50		
Run ID: R256898 / Work Group No.: WG196382								
Prep Date1: 19-DEC-14 Analyzed 19-Dec-14 10:24								
Method: EPA 200.8 - Rev. 5.4, ICP-MS Scan							RawH2O	
TARGET ANALYTES								
SILVER	U	0.081	ug/L	1.02	0.081	10		
BARIUM		**78**	ug/L	1.02	0.1	100		
BERYLLIUM	U	0.051	ug/L	1.02	0.051	1		
CADMIUM		**0.066**	ug/L	1.02	0.03	1		
CHROMIUM		**1.4**	ug/L	1.02	0.61	10		
NICKEL		**0.89**	ug/L	1.02	0.3	10		
LEAD		**0.35**	ug/L	1.02	0.071	5		
ANTIMONY	U	0.30	ug/L	1.02	0.3	6		
THALLIUM	U	0.30	ug/L	1.02	0.3	1		
Run ID: R257176 / Work Group No.: WG196552								
Prep Date1: 19-DEC-14 Prep Date2: 29-DEC-14 Analyzed 29-Dec-14 11:01								
Method: EPA 245.1 - Cold Vapor AA							RawH2O	
TARGET ANALYTES								
MERCURY	U	0.040	ug/L	1	0.04			
Run ID: R256972 / Work Group No.: WG196409								
Prep Date1: 22-DEC-14 Analyzed 22-Dec-14 09:35								
Method: SM3114B - 2009, Gaseous Hydride AA							RawH2O	
TARGET ANALYTES								
ARSENIC		**0.61**	ug/L	1	0.3	2		
Run ID: R256998 / Work Group No.: WG196427								
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 12:45								
Method: SM3114B - 2009, Gaseous Hydride AA							RawH2O	
TARGET ANALYTES								
SELENIUM	U	0.400	ug/L	1	0.4			
Run ID: R256994 / Work Group No.: WG196428								
Prep Date1: 18-DEC-14 Prep Date2: 22-DEC-14 Analyzed 22-Dec-14 09:56								

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Analytical Results Report

LSR B455-0706-1 BAYSIDE GROUND WATER PROJECT
Site: GW BAYSIDE East Bay Ground Water Injection/Extraction Project Bayside Groundwater
Locator: BAY1-MW6 R APN 438-0010-003 2364 Baumann Ave., San Lorenzo; formerly BAY-MW-WORTHLEY
Lab ID: L195259-2 (P202126-3)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 13 2014, 06:10pm Sample collector: N Klumpp
Date Received: Dec 14 2014, 03:57pm Sample receiver: RMOLINA
Sample Comments: annual BAYSIDE Sampling per DPH Title 22 and WDR ; SUBCONTRACT DATA

Method Reference							Matrix	Tag
Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML		

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