EAST BAY
MUNICIPAL UTILITY DISTRICT

March 1, 2010

Mr. Michael Rochette
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Re: East Bay Municipal Utility District Bayside Groundwater Project, 2009 Annual Report, Order No. R2-2007-0038

Dear Mr. Rochette:

In accordance with the General Waste Discharge Requirements of Order No. R2-2007-0038, this submittal is the 2009 annual self monitoring report for East Bay Municipal Utility District's (District's) Bayside Groundwater Project.

Construction of the Bayside Groundwater Project is nearing completion. In November and December of 2009, the facility underwent a series of tests, involving the extraction of groundwater and injection of the District's distribution water into the ground. The tests included: Bayside Well startup; well development; well pump performance; chemical system performance; seven days of extraction testing; additional extraction testing after the installation of a deep well air release valve; and injection of distribution water. Discharges of extracted groundwater directly to local receiving waters are under the purview of the Regional Water Quality Control Board's (RWQCB's) Dewatering General Permit (DGP; Order No. R2-2007-0033-0009), while discharges of facility test water are allowed under the State Water Resources Control Board's General Construction Stormwater Permit (GCSP; Order No. 99-08-DWQ). The GCSP authorizes discharges of non-storm water provided that appropriate BMPs are implemented and the discharges do not result in a violation of any water quality standard. The required extracted water quality monitoring results were submitted to Mr. Farhad Azimzadeh of your office under a separate cover on February 5, 2010.

In total, approximately 4,545,000 gallons were extracted over 13 days and 445,000 gallons of water were injected via the Bayside Well on December 15 and 16, 2009. Tables 1 to 3 summarize the injection and extraction volume data.

The Self Monitoring and Reporting Program (SMP) of Order No. R2-2007-0038 requires EBMUD to schedule and conduct a phased approach for groundwater quality monitoring. The SMP requires EBMUD to begin groundwater level and quality monitoring three months prior to initiating operation and continue for one additional year after operation ceases. Table 3 of the SMP tabulates monitoring well groups for phased monitoring. Monitoring is required to begin with Group 1 wells (Bayside Well, MW-2s, MW-2D[1], and MW-4). The monitoring of Group 1 wells is to be conducted on an annual basis until the expanding injected waterfront reaches MW-4.

According to Provision C (6) of the order, MW-10D was to be monitored once, within 3 months of permit adoption, for Title 22's drinking water parameters. However, since MW-10D had not been installed at the time, with the RWQCB's permission, MW-5D was monitored in August 2007 instead. The results were submitted to your office previously in 2007.

[1] "MW-2D" is actually "MW-2I".

In December 2009, annual water quality sampling was conducted and samples were analyzed in accordance with Table 4 of the SMP. EBMUD retained Fugro West, Inc. to collect water quality samples at the Bayside Well, MW-2S, MW-2I and MW-4. Sampling was conducted according to the USEPA groundwater sampling protocol and a Waterra pump was used. Purge water discharges were disposed of on permeable ground adjacent to the wells. No surface water discharges occurred.

Sampling was completed according to the following procedure:

1. Disinfect all equipment including water level sounder, pump, and tubing with a dilute bleach solution[2].
2. Measure static water level at each well and calculate the three-well volume of the well required for purging as per USEPA groundwater sampling protocol.
3. Purge the well and collect the samples.
4. Measure field water quality data and collect samples in sample containers with appropriate preservatives as per relevant USEPA sampling protocols for individual constituents.
5. Transport samples to EBMUD's state certified laboratory in a cooler for further analyses, under chain of custody.

Table 4 contains construction details for all available wells in the groundwater monitoring system[3]. Table 5 contains groundwater elevation/depth to groundwater data. Table 6 summarizes general groundwater quality data; Table 7 summarizes sampling results for standard minerals; Table 8 summarizes haloacetic acids data; and Table 9 summarizes results for trihalomethanes. Tables 10 and 11 summarize vertical gradient calculations. Appendix A contains the original lab reports including the analytical methods used and associated method detection limits and minimum levels of quantitation.

Figure 1 shows the groundwater level monitoring network and Figure 2 shows the groundwater quality monitoring network. Pressure transducers have been installed in all of the wells listed in Table 4, in addition to the Bayside Well. These transducers measure water level and temperature at a minimum of 30-minute intervals. Figures 3 and 4 present the groundwater level contour maps for October 1 and December 25, 2009, respectively. Figures 5 to 17 present the 2009 groundwater level trends for the monitoring wells.

The high chloride concentration from MW-2S, a shallow well screened from 40 to 60 feet below grade, is consistent with historic high chloride concentrations observed in the local shallow zone. Results for TTHMs and HAAs were well below the permit limits of 80 µg/L and 60 µg/L, respectively. No exceedances of water quality limits in the order were observed.

Groundwater elevation contour maps were prepared to represent subsurface conditions on October 1 and December 25, before and after the extraction/injection tests that occurred between early November and mid-December. In both occasions, the deep aquifer was flowing in a southwesterly direction in the immediate area surrounding the Bayside project site. The gradients were 0.003 ft/ft and 0.0003 ft/ft on October 1 and December 25, respectively. Water levels at the Bayside Well were not used in these representations because of an error in surveying the top of its well casing. However, since MW-1 is very close to the Bayside Well and screened at the same depth, it is expected that conditions observed in MW-1 were representative of those at the Bayside Well too.

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[2] In the case of the Bayside Well, samples were collected simply by activating the pump in the extraction mode.
[3] Not all of the wells in Table 4 are required to be monitored according to Order No. R2-2007-0038.

Vertical gradients were calculated for the three nested wells at MW-5 for October 1 and December 25 (see Tables 10 and 11). The direction of flow was downward in each case.

Figures 5 through 17 show that there were no meaningful significant water level fluctuations in the deep aquifer throughout the year. The typical pattern of higher groundwater levels during the winter/spring than fall/summer prevailed. Wells closer to the Bayside Well did reflect the extraction and injection of water in November and December with corresponding temporary decreasing and increasing water levels (e.g., MW-3 and MW-4). The water levels quickly recovered in those cases.

Several aberrations in water levels were observed in some of the other wells and they were considered anomalies as it was later determined that construction workers onsite or others might have tampered with the pressure transducers. For example, MW-1's water level dropped 150 feet within the span of 30 minutes on November 5 and then recovered completely just as abruptly on November 9. There was no groundwater extraction or injection on either date. In addition, the transducer in MW-2S is believed to have malfunctioned for a significant period of time. According to Figure 6, water level reached as high as 102.22 ft above mean sea level (amsl) on September 14, while the top of the casing is at 9.9 ft amsl. Yet, this well was never observed to be flowing.

There was a data gap between February and August 2009 as the data storage space ran out due to the high recording frequency. EBMUD will address this issue with more frequent data downloading in the future.

The extent of injected water was not evaluated because only 445,000 gallons were injected in 2009, compared to 10 times that amount extracted.

In 2010, upon the completion of more tests, EBMUD expects to formally initiate Phase I operation of the Bayside facility. We will continue to monitor injection and extraction of groundwater in accordance with all associated regulatory permits.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

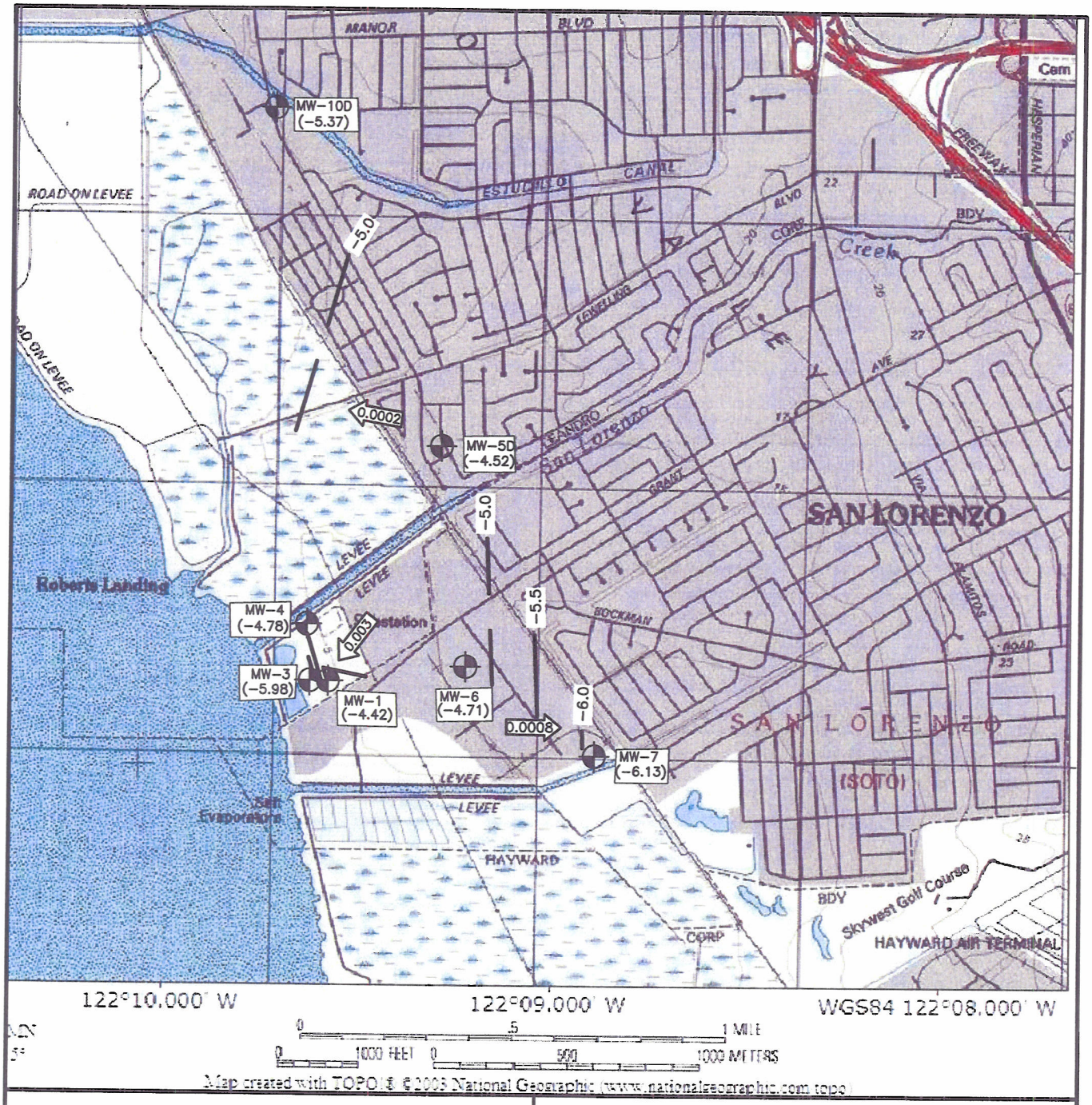
If you have any questions, please contact me at (510) 287-0345 or Derek Lee, Senior Environmental Health and Safety Specialist, at (510) 287-1086.

Sincerely,

John H. Schroeter, P.E.
Manager of Environmental Compliance

Figure 1 – Groundwater Level Monitoring Well Network

Figure 2 – Groundwater Quality Monitoring Well Network



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- (−6.62) GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- −6.50 GROUNDWATER ELEVATION CONTOUR IN FEET BELOW MEAN SEA LEVEL (CONTOUR INTERVAL– 0.5 FEET)
- 0.006 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

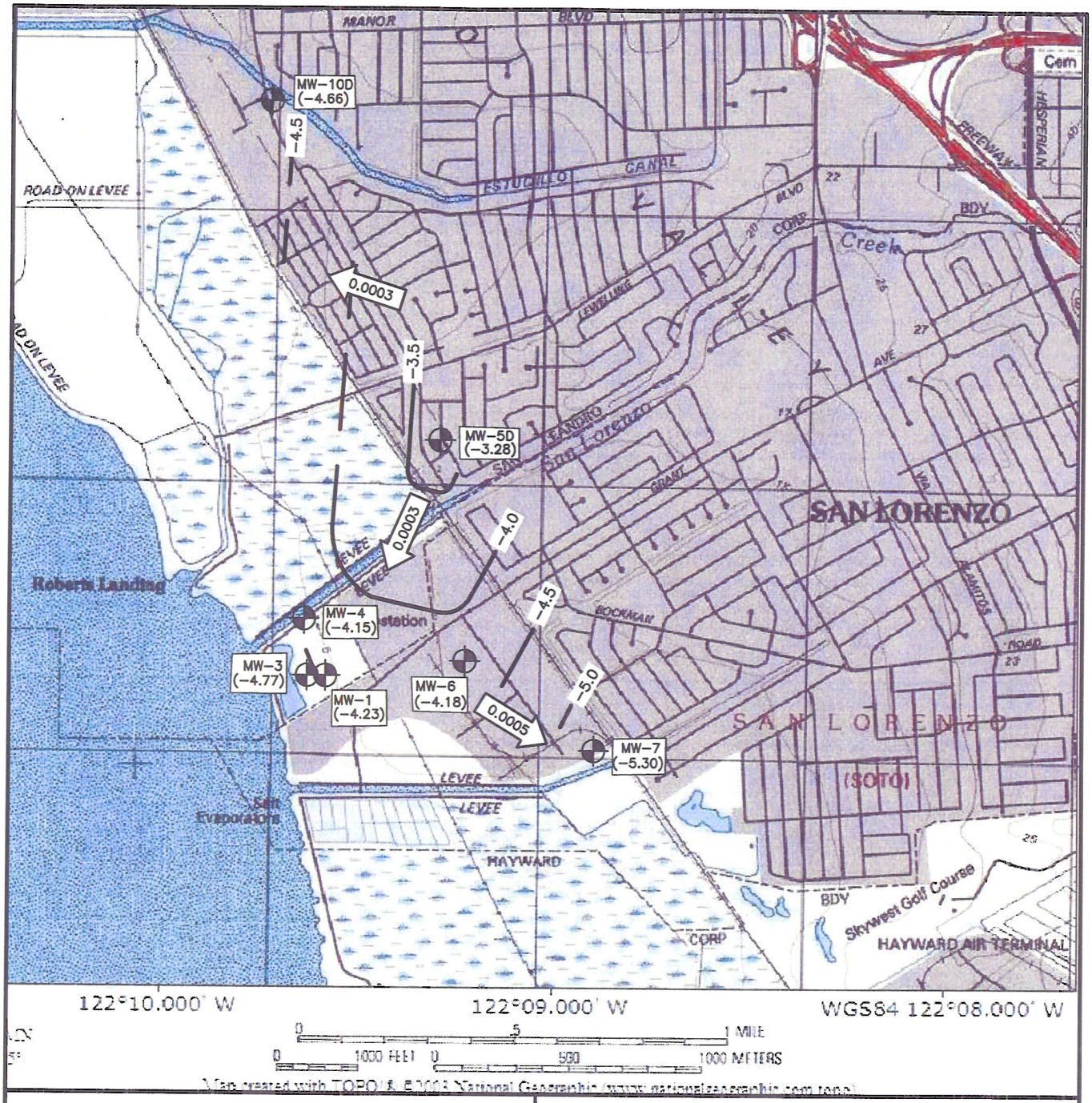
GROUNDWATER ELEVATION CONTOUR MAP

OCTOBER 1, 2009

EBMUD BAYSIDE WELL NETWORK
SAN LORENZO, CALIFORNIA

PROJECT NO. 10–654–59

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA



LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- (−3.24) GROUNDWATER ELEVATION IN FEET BELOW MEAN SEA LEVEL
- −3.0 GROUNDWATER ELEVATION CONTOUR IN FEET BELOW MEAN SEA LEVEL (CONTOUR INTERVAL– 0.5 FEET)
- 0.006 CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 4

GROUNDWATER ELEVATION CONTOUR MAP

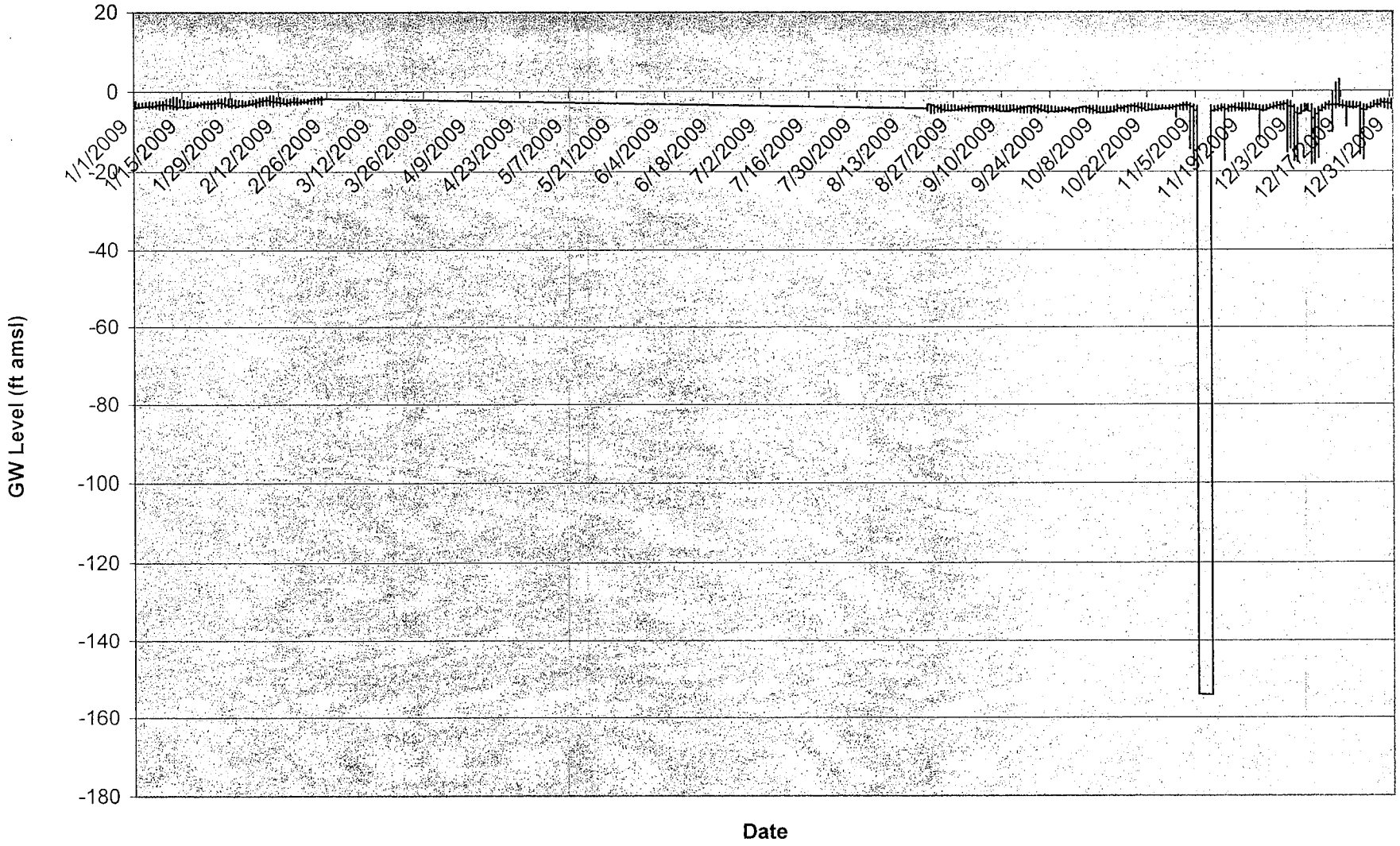
DECEMBER 25, 2009

EBMUD BAYSIDE WELL NETWORK
SAN LORENZO, CALIFORNIA

PROJECT NO. 10–654–59

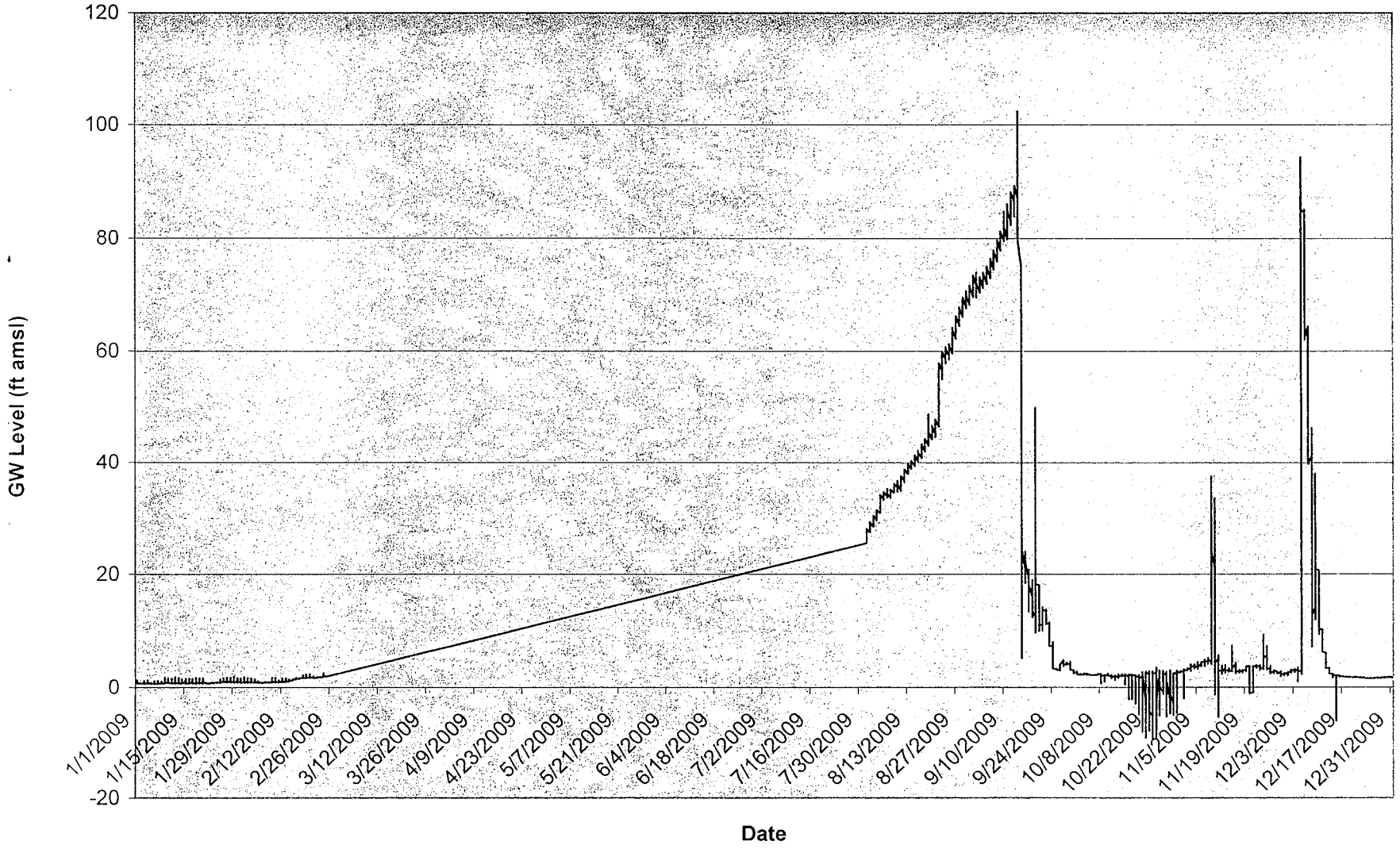
ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

Figure 5 - MW-1 2009 GW Level Trend



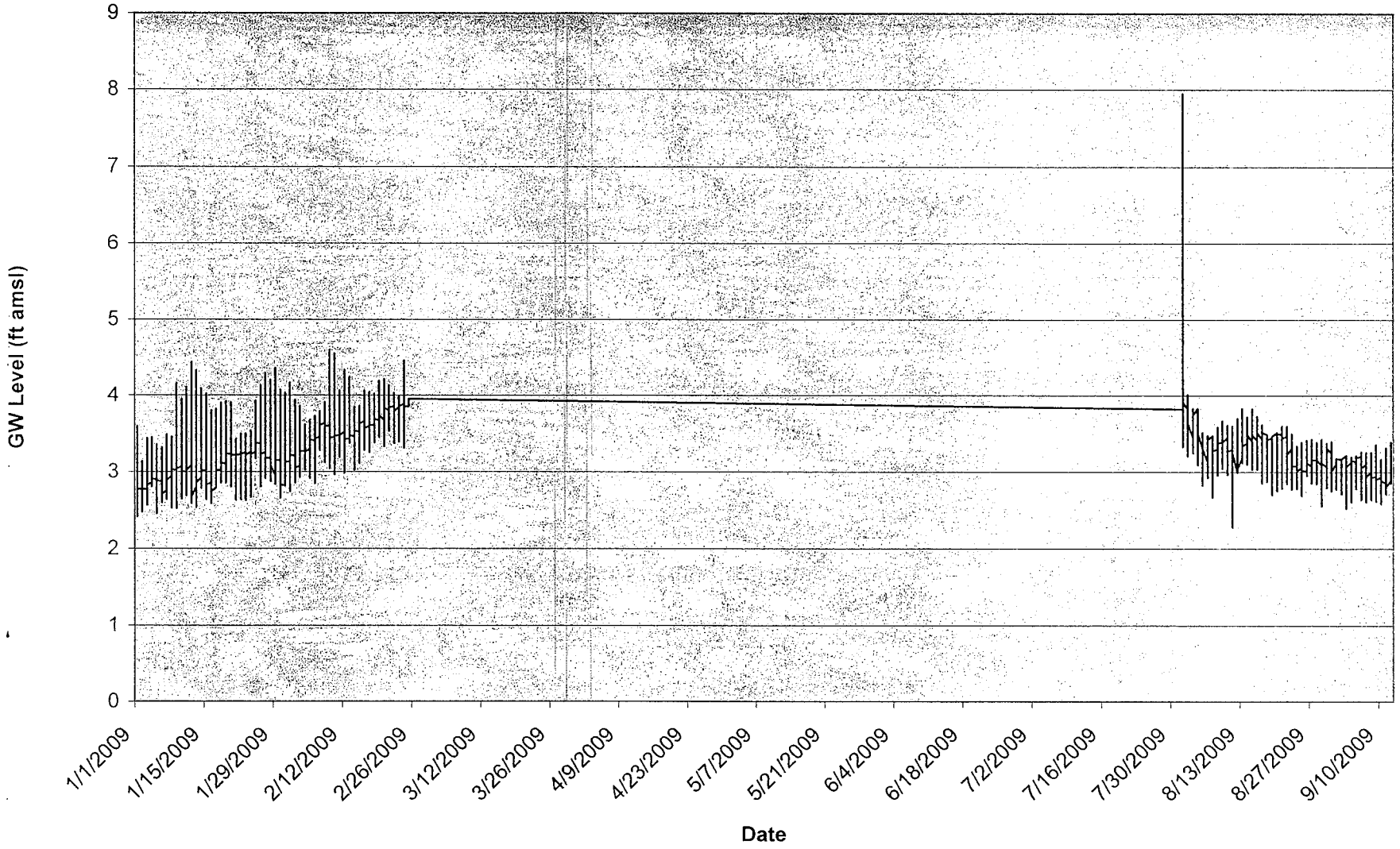
* Inadvertent movement of the transducer in November is believed to have caused the observed significant drop in water level.

Figure 6 - MW-2S 2009 GW Level Trend



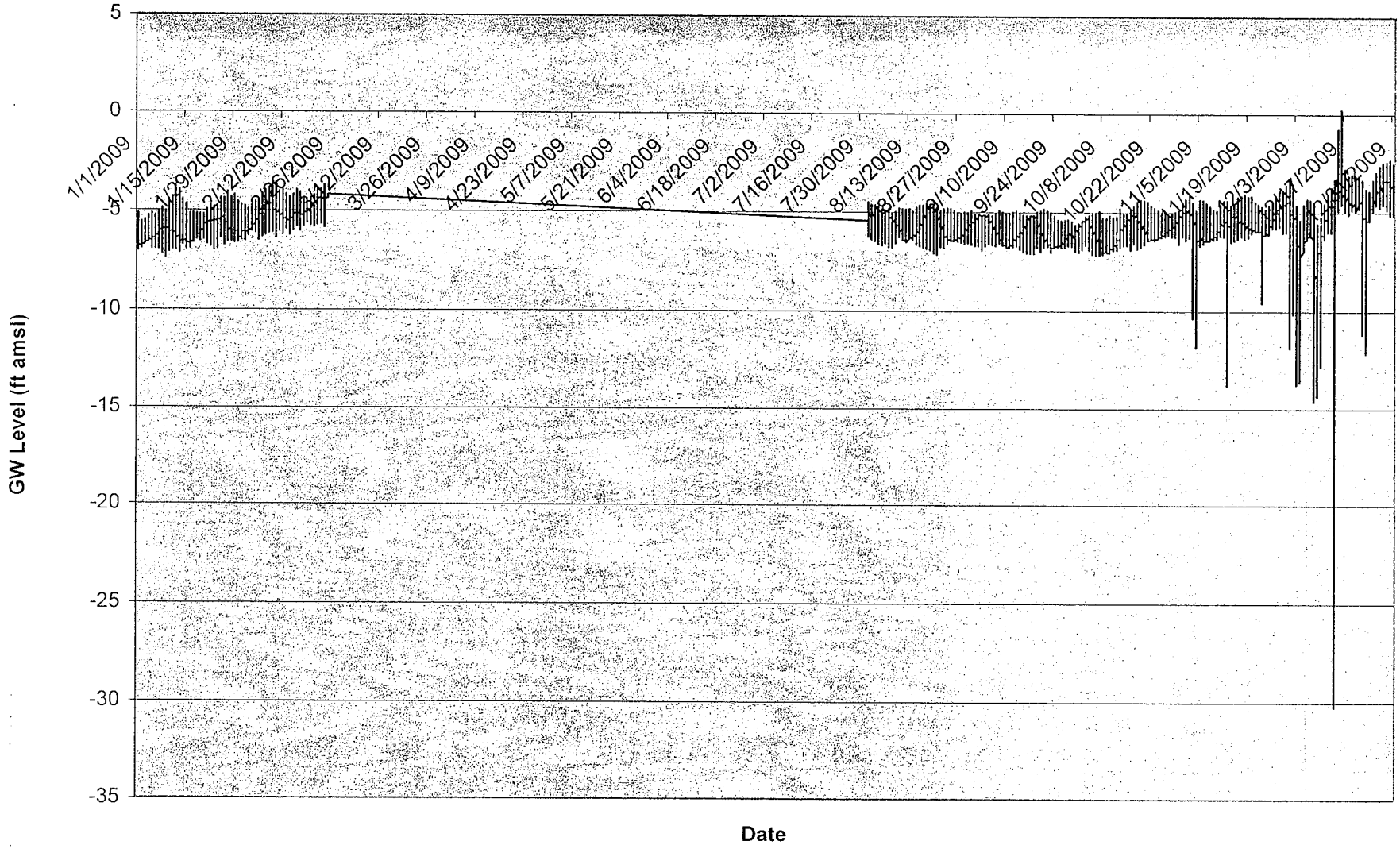
* The transducer malfunctioned for a significant period of time. Most of the readings recorded in 2009 are considered invalid as the data would suggest a flowing well when no such conditions were ever observed.

Figure 7 - MW 2I 2009 GW Level Trend



* Inadvertent movement of the transducer in August is believed to have caused the observed sudden rise in water level.

Figure 8 - MW-3 2009 GW Level Trend



* The -30.25 ft amsl recorded on December 14 is considered an anomaly because no extraction occurred at the time.

Figure 9 - MW-4 2009 GW Level Trend

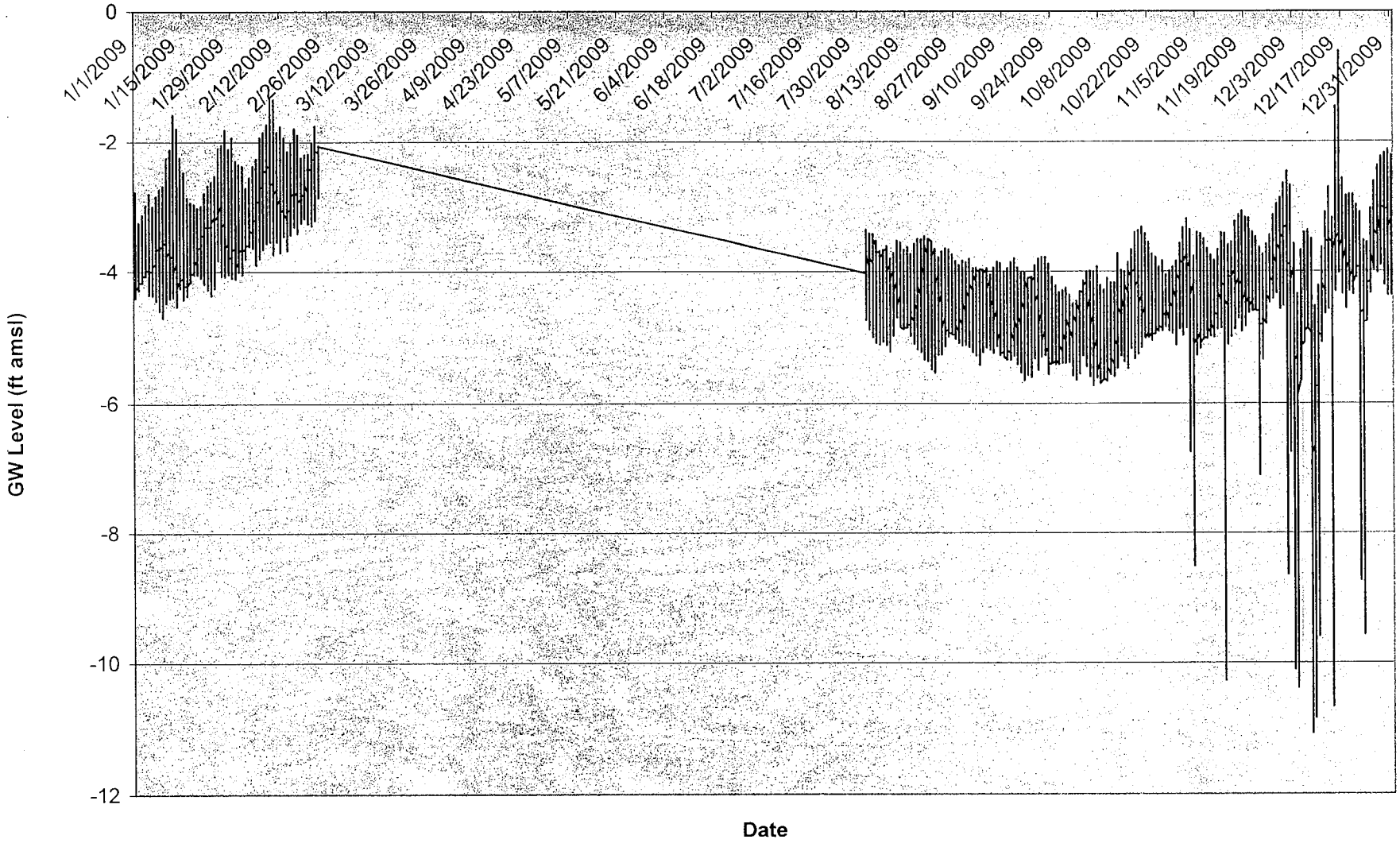


Figure 10 - MW-5S GW Level Trend

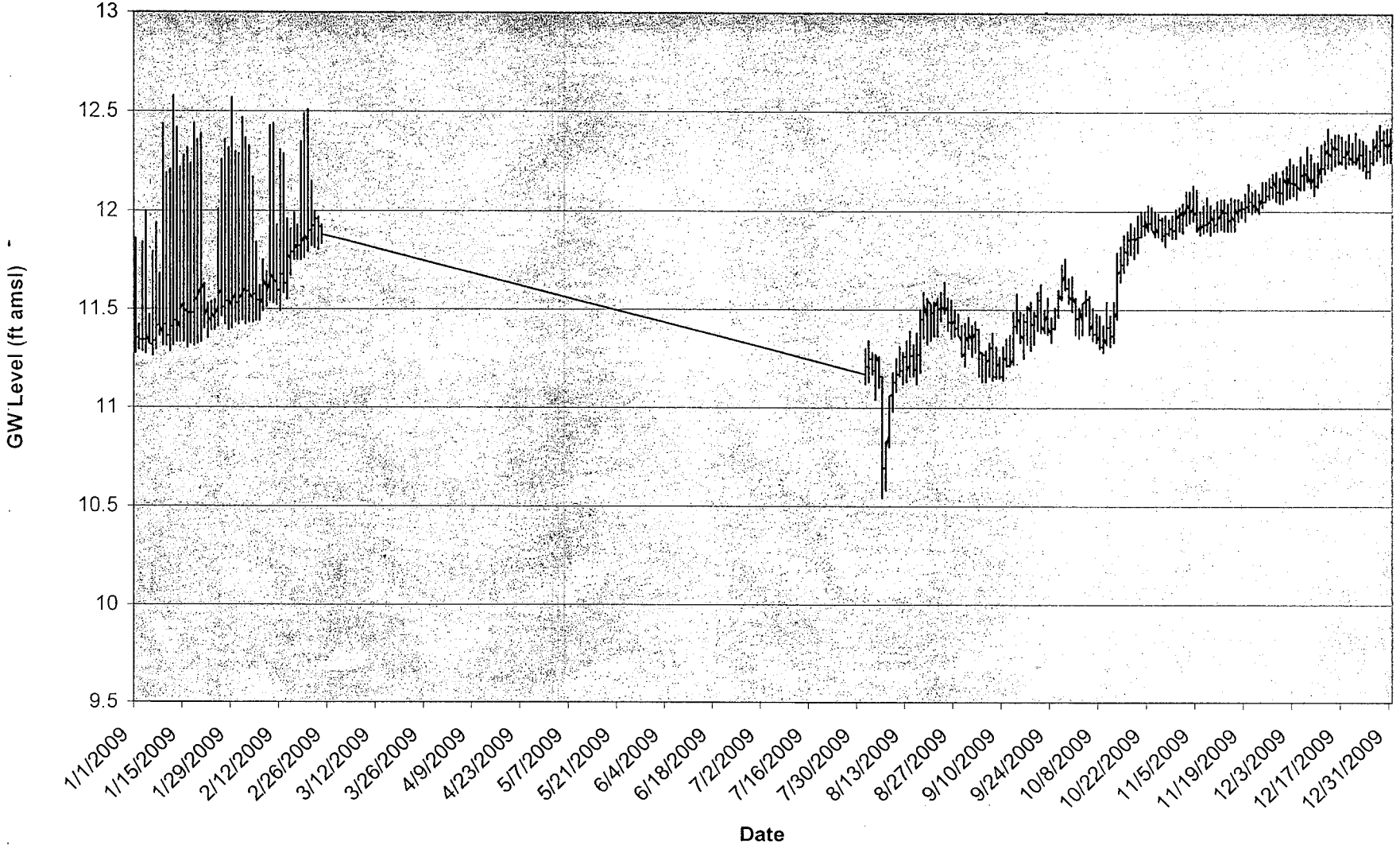


Figure 11 - MW5I 2009 GW Level Trend

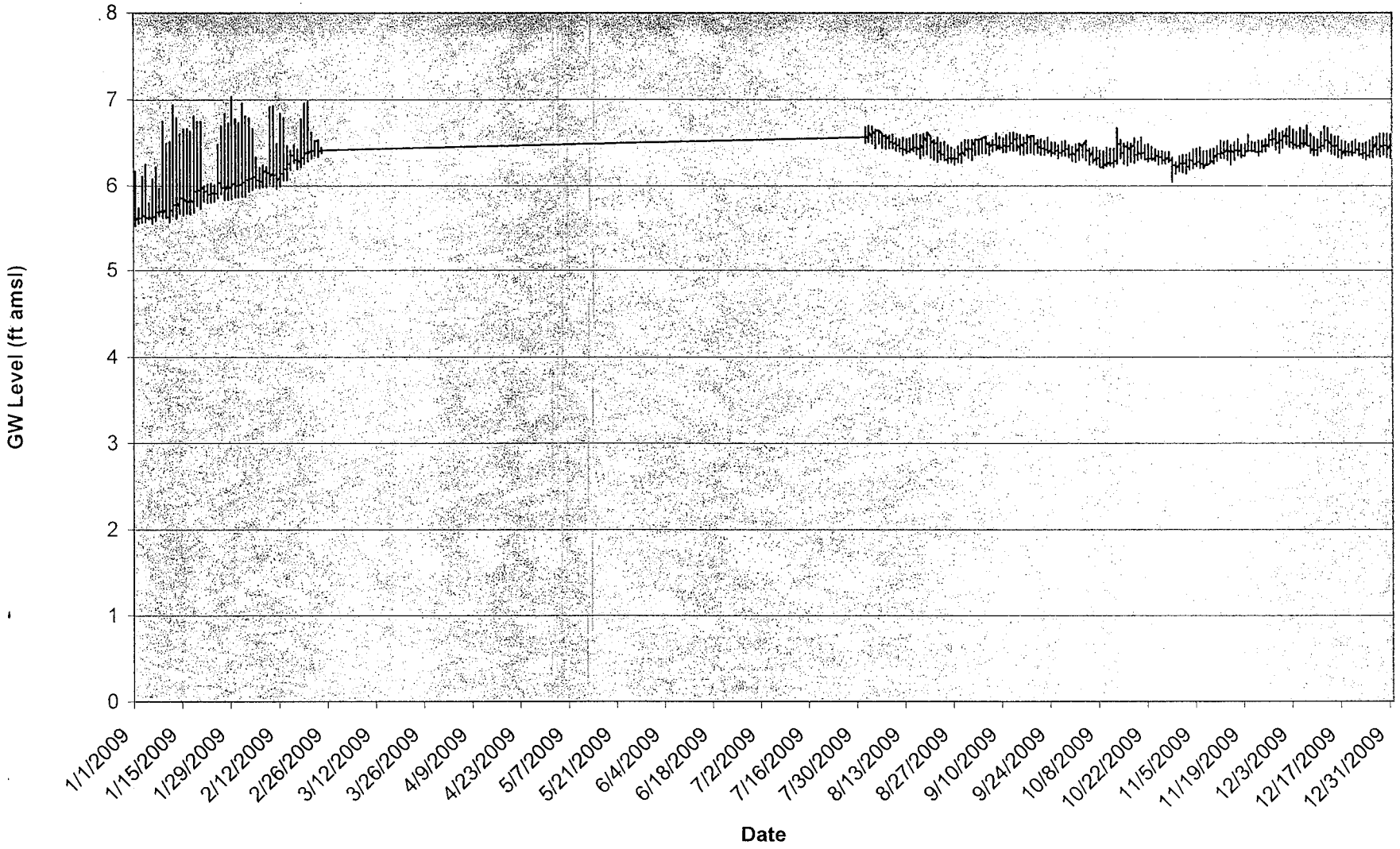
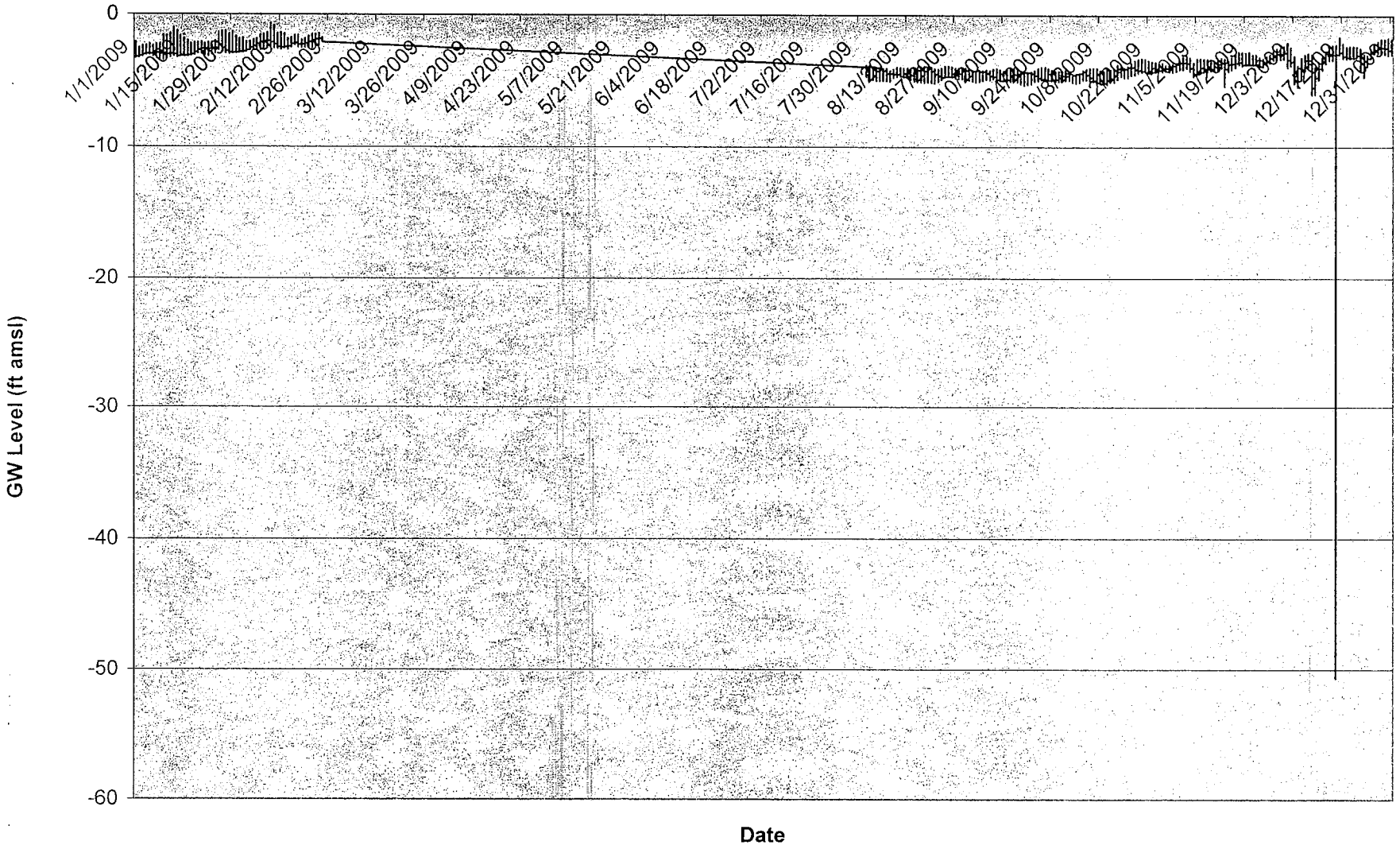


Figure 12 - MW-5D 2009 GW Level Trend



* A transducer error is believed to have resulted in the significant drop in observed water level on December 15. Groundwater was not extracted on that date.

Figure 13 - MW-6 2009 GW Level Trend

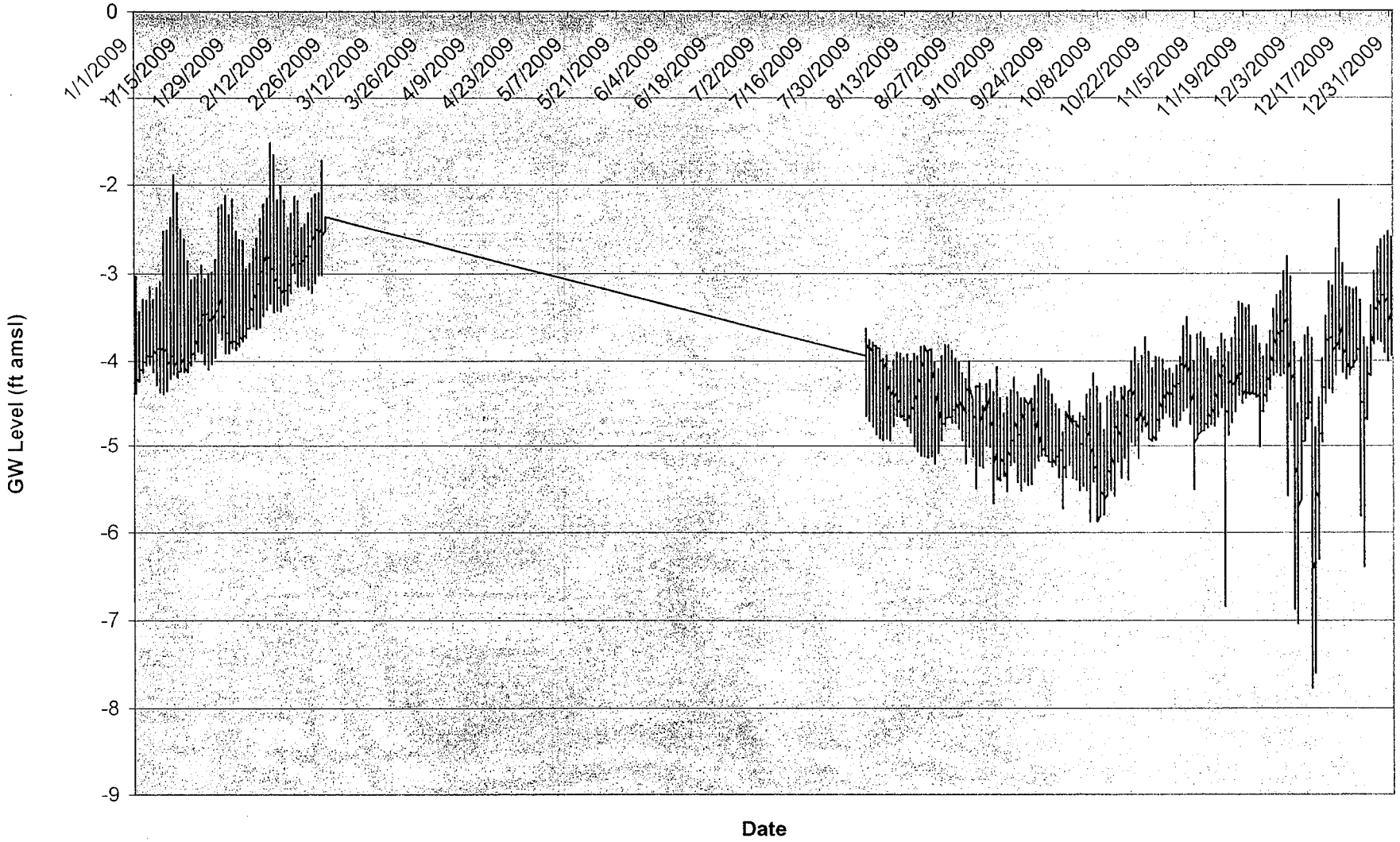


Figure 14 - MW-7 2009 GW Level Trend

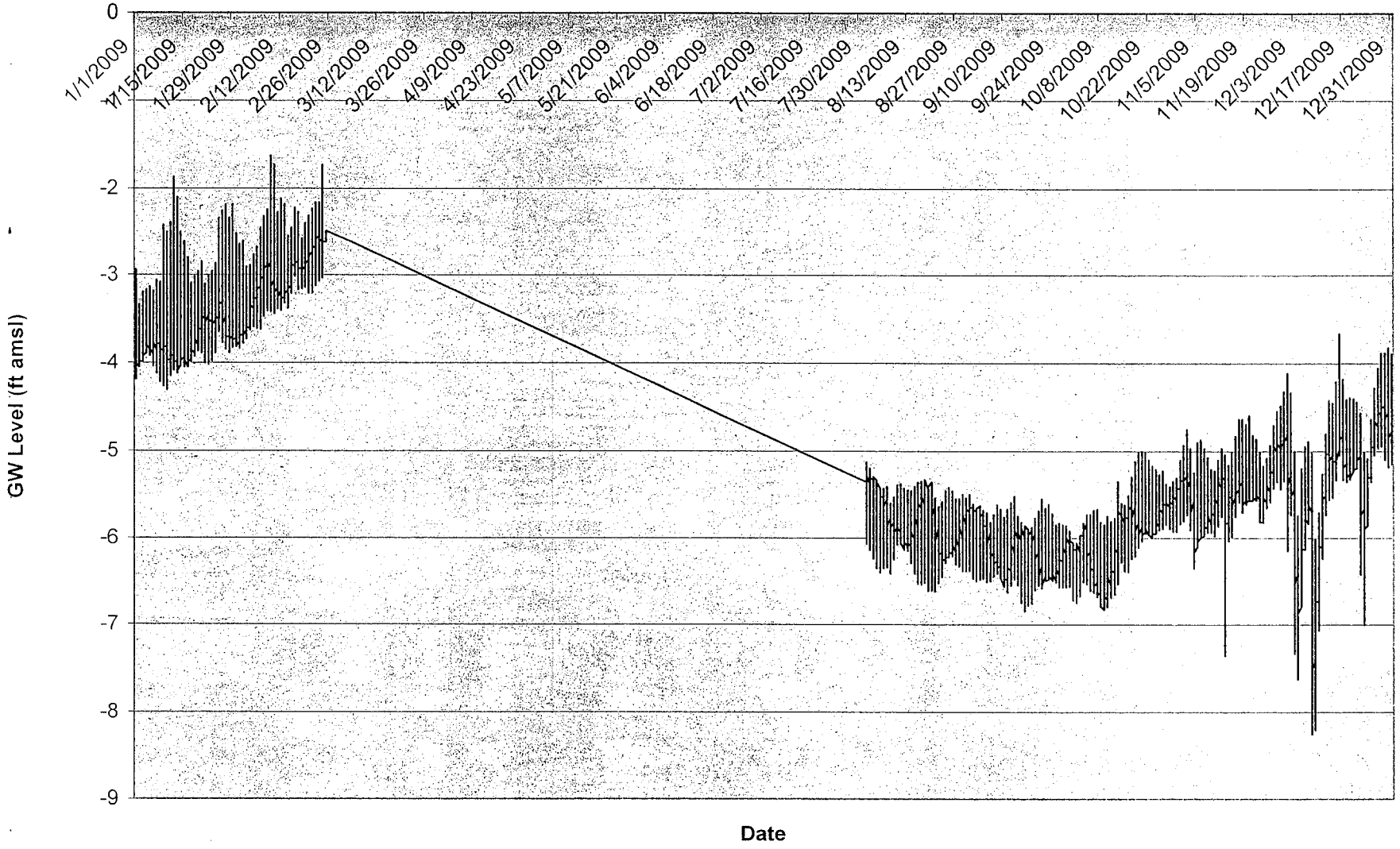


Figure 15 - MW-9D 2009 GW Level Trend

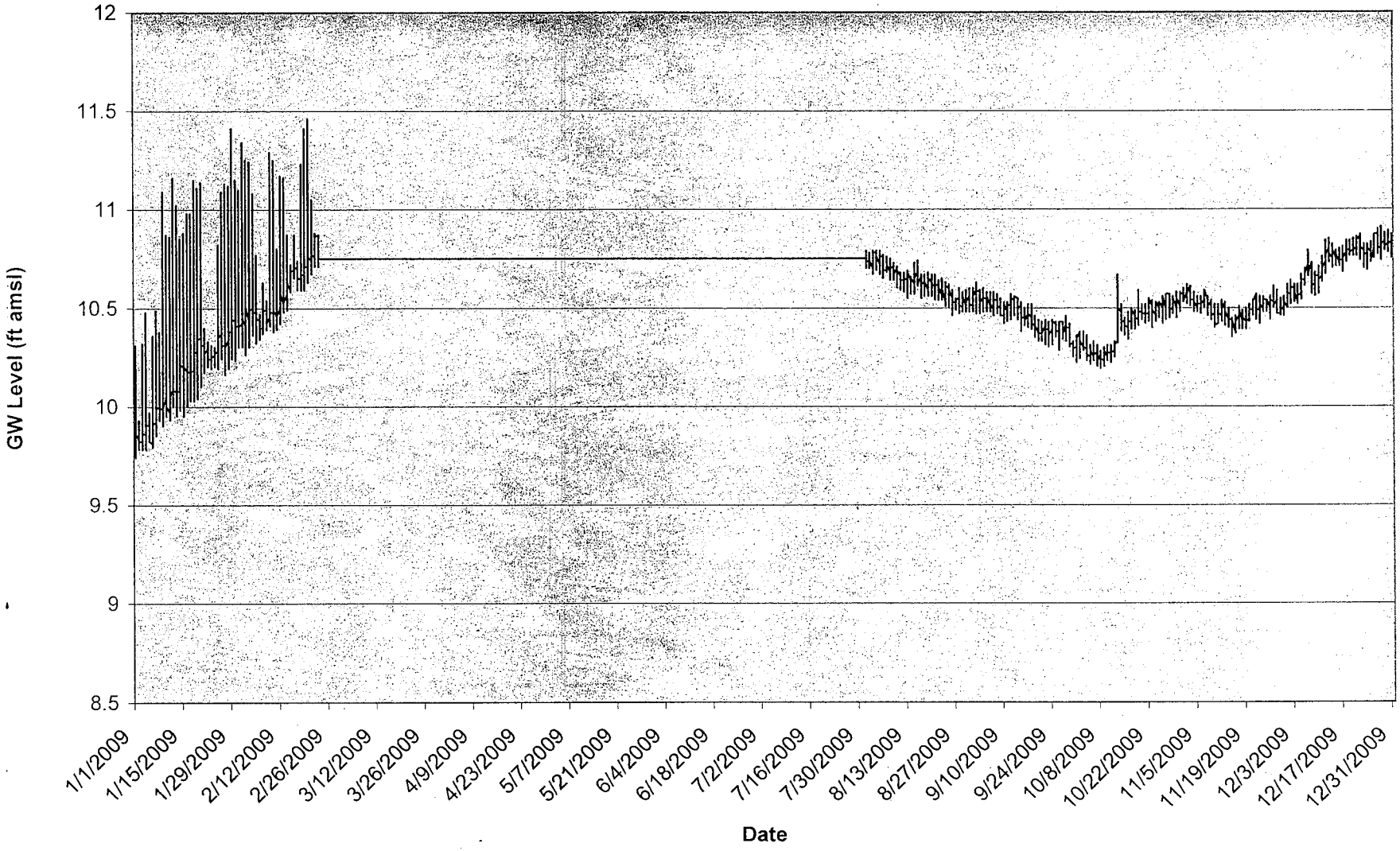


Figure 16 - MW-10I 2009 GW Level Trend

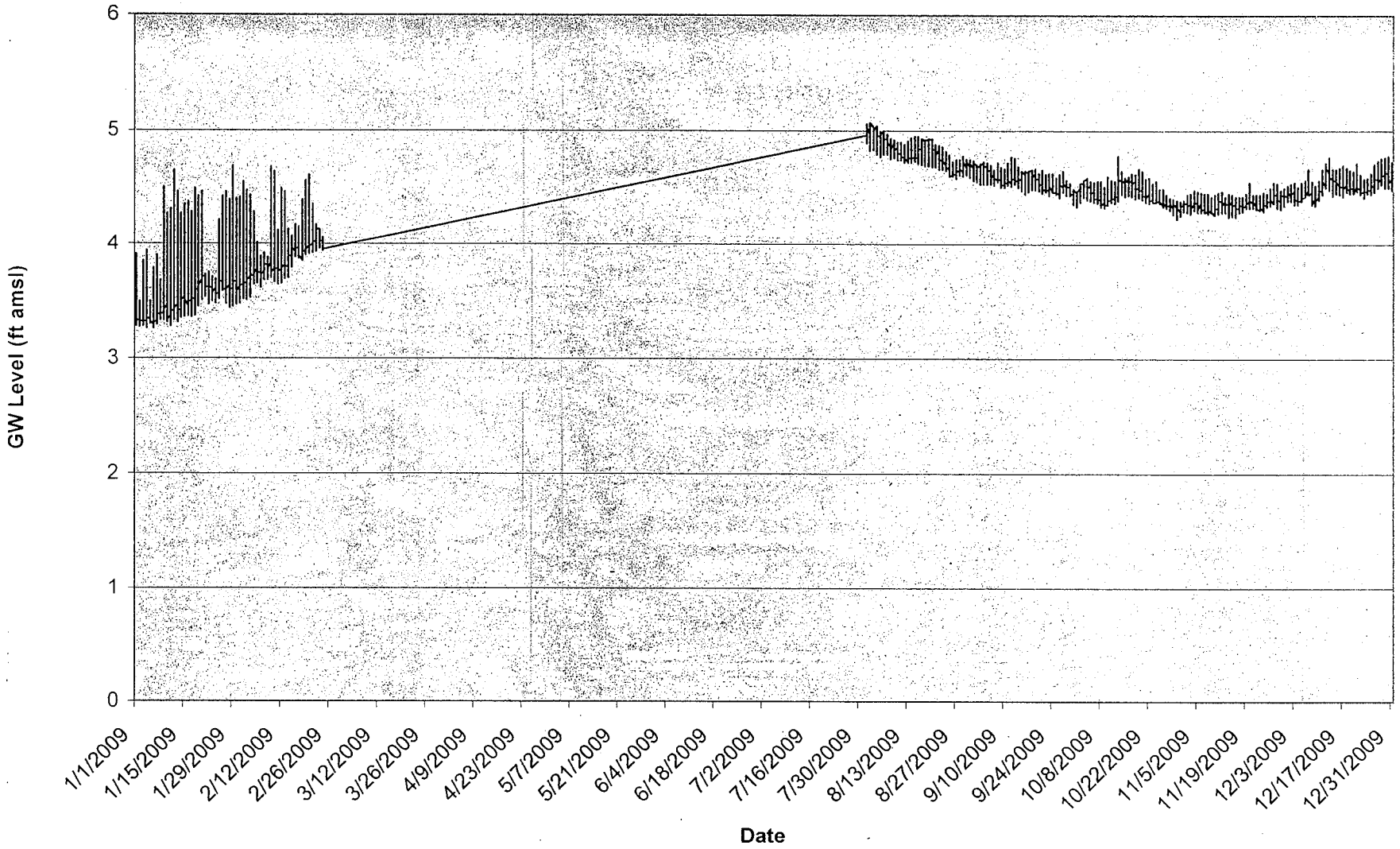


Figure 17 - MW-10D 2009 GW Level Trend

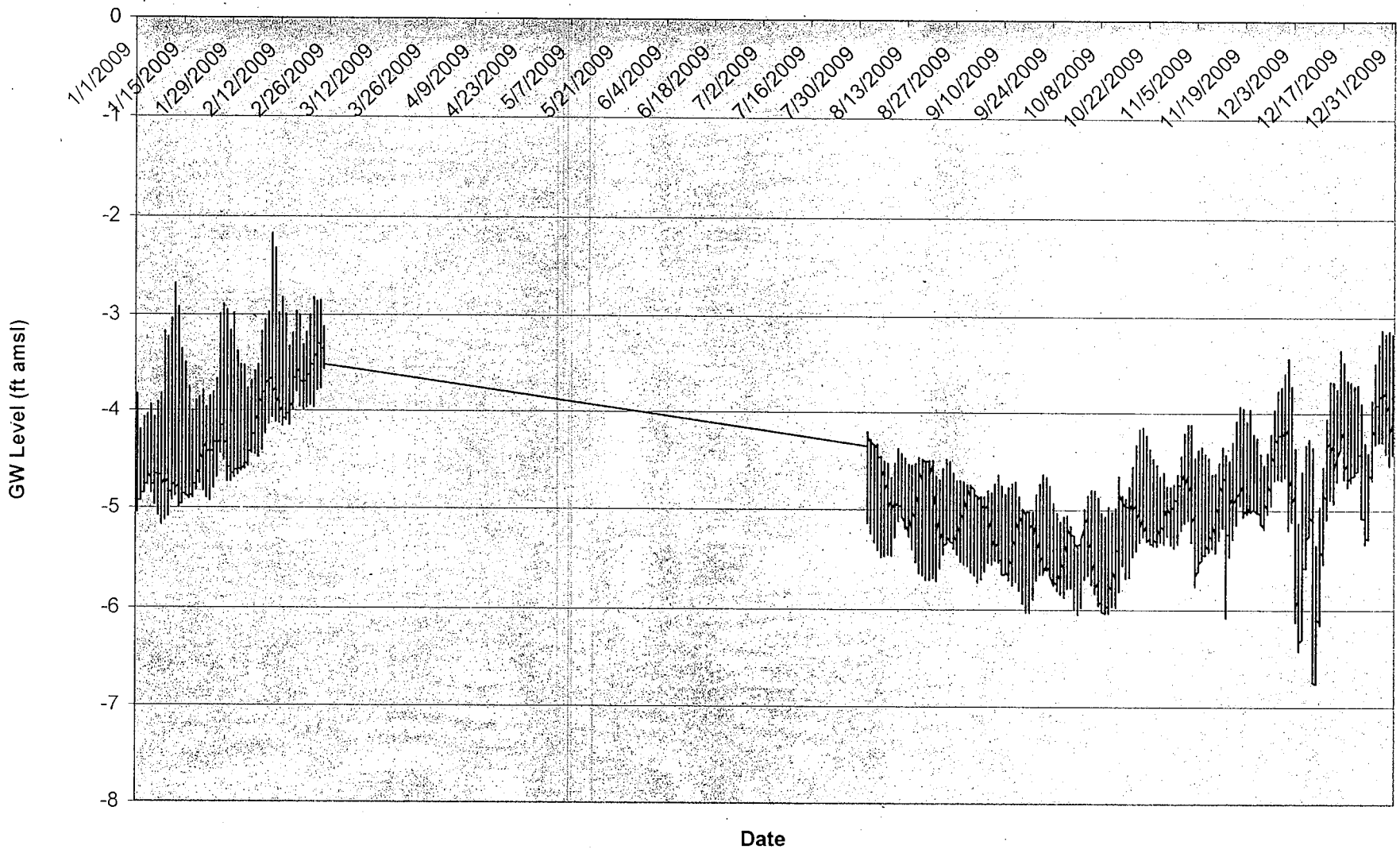


Table 1: Extraction Summary		
Date	Average Flow Rate (GPM)	Approx. Total Volume (gallons)
Permit Limit		365 million gallons/yr
11/3/2009	860	116,000
11/4/2009	1000	285,000
11/13/2009	1400	336,000
11/23/2009	800	119,000
12/1/2009	960	236,000
12/2/2009	475	78,000
12/3/2009	1290	627,000
12/4/2009	1280	603,000
12/8/2009	1272	907,000
12/9/2009	1216	517,000
12/10/2009	1230	119,000
12/22/2009	1136	355,000
12/23/2009	950	247,000
Annual Total:		**4,545,000**

Table 2: Injection Summary		
Date	Average Flow Rate (GPM)	Approx. Total Volume (gallons)
Permit Limit		365 million gallons/yr
12/15/2009	535	160,000
12/16/2009	587	285,000
Annual Total:		**445,000**

Table 3: Cumulative Total Volume Injected/Recovered		
Year	Recovered Volume (gallons)	Injected Volume (gallons)
2009	4,545,000	445,000

Table 4: Groundwater Monitoring Wells Information

Well ID	Latitude	Longitude	Address	City	Completion Date	Drilled Depth (ft bgs)	Casing Depth (ft bgs)	Depth of Perforation Begin (ft bgs)	Depth of Perforation End (ft bgs)	Casing Diameter (in)	Reference Elevation (ft amsl)	Reference Location on Well
MW-1[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[1]	37° 40' 4.8"	122° 9' 25.2"	2600 Grant Ave	San Lorenzo		210	60	40	60	2	9.9	Top of steel casing
MS-2I[1]	37° 40' 4.8"	122° 9' 25.2"	2600 Grant Ave	San Lorenzo		210	200	160	190	2	9.9	Top of steel casing
MW-3[1]	37° 40' 4.8"	122° 9' 28.8"	2600 Grant Ave	San Lorenzo		665	660	520	650	2	8.12	Top of steel casing
MW-4[1]	37° 40' 11.6"	122° 9' 28.8"	2575 Grant Ave	San Lorenzo		705	650	520	650	2	8.96	Top of steel rim
MW-5S[1]	37° 40' 34.4"	122° 9' 06.6"	2006 Via Barrett	San Lorenzo	Sep-08	460	210	200	210	2	13.88	Seat of vault lid @ e'ly edge
MW-5I[1]	37° 40' 34.4"	122° 9' 06.6"	2005 Via Barrett	San Lorenzo	Sep-08	460	325	315	325	2	13.88	Seat of vault lid @ e'ly edge
MW-5D[1]	37° 40' 34.4"	122° 9' 06.6"	2007 Via Barrett	San Lorenzo	Feb-01	1025	640	500	630	4	13.76	Top of casing @ n'ly fastener hole
MW-6[1]	37° 40' 07"	122° 9' 04.5"	15600 Worthley	San Lorenzo	Nov-00	1000	655	480	650	4	9.46	Top of casing @ e'ly edge
MW-7[1]	37° 39' 56.5"	122° 8' 44.2"	Western tip of San Lorenzo park	San Lorenzo	Nov-00	972	680	510	630	4	7.42	Top of casing @ n'ly edge
MW-8D	34° 43' 04"	122° 11' 50.3"	1970 Davis Street	San Leandro		910	490	420	480	2	14.76	Top of steel rim
MW-9S	37° 41' 11"	122° 6' 46"	589 E. Lewelling Ave	San Lorenzo	Jan-08	460	120	110	120	2	54.39	Seat of vault, w'ly side
MW-9I	37° 41' 11"	122° 6' 46"	589 E. Lewelling Ave	San Lorenzo	Jan-08	460	210	200	210	2	54.39	Seat of vault, w'ly side
MW-9D[1]	37° 41' 11"	122° 6' 46"	589 E. Lewelling Ave	San Lorenzo	Jan-08	460	335	325	335	2	54.39	Seat of vault, w'ly side
MW-10S	37° 41' 19"	122° 9' 43"	15528 Wick Blvd	San Leandro	Sep-08	680	120	100	120	2	11.76	Seat of vault lid @ e'ly edge
MW-10I[1]	37° 41' 19"	122° 9' 43"	15528 Wick Blvd	San Leandro	Sep-08	680	360	340	360	2	11.76	Seat of vault lid @ e'ly edge
MW-10D[1]	37° 41' 19"	122° 9' 43"	15528 Wick Blvd	San Leandro	Sep-08	680	610	590	610	2	11.76	Seat of vault lid @ e'ly edge

Notes:

1 - Groundwater level monitoring required per Order No. R2-2007-0038

Table 5: Groundwater Elevation/Depth to Groundwater Data

	Groundwater Elevation ft amsl									Depth to Groundwater ft bgs								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			0.99		-4.07							8.78		12.68				
12/9/2008		-5.06		1.09							13.74		8.73					
12/14/2009					-3.75									12.71				
12/15/2009			0.95	1.44								8.95	8.46					

Notes:
BW = Bayside Well

Table 6: General Water Quality Data

	pH								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			6.6		7.82				
12/9/2008		7.96		7.97					
12/14/2009	8.18				8.02				
12/15/2009			6.55	8.05					

	Chlorine Residual								
	mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
			ND		ND				
		ND		ND					
	ND				ND				
			ND	ND					

	TDS								
	mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
			77000		400				
		170		520					
	200				440				
			87000	510					

	Ammonia as N								
	mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			0.28		0.28				
12/9/2008		<0.2		0.84					
12/14/2009	<0.3				<0.3				
12/15/2009			<0.3	<0.3					

	Nitrate as N								
	mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
			<0.14		<0.14				
		<0.14		<0.14					
	0.029				0.36				
			<0.095	0.16					

	Chloride								
	mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
			510		50				
		25		78					
	31				54				
			39000	84					

	Manganese								
	µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			18800		206				
12/9/2008		56.7		101					
12/14/2009	55.4				228				
12/15/2009			36900	98.6					

	Iron								
	µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
			<230		47				
		<11		210					
	130				35				
			<31	110					

Notes:
BW = Bayside Well

Table 7: Standard Minerals Data

	Calcium µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			630000		25400				
12/9/2008		17000		15000					
12/14/2009	28000				30000				
12/15/2009			1300000	15000					

	Magnesium µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			1500000		10600				
12/9/2008		5400		14000					
12/14/2009	7400				12000				
12/15/2009			2.80E+06	13000					

	Potassium µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			230000		3200				
12/9/2008		1100		5500					
12/14/2009	1400				2800				
12/15/2009			500000	6100					

	Sodium µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			11000000		102000				
12/9/2008		36000		150000					
12/14/2009	41000				110000				
12/15/2009			2.30E+07	160000					

	Sulfate mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			5600		32				
12/9/2008		16		27					
12/14/2009	23				37				
12/15/2009			4000	26					

	Hardness mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			16000		110				
12/9/2008		64		93					
12/14/2009	97				120				
12/15/2009			17000	100					

	Alkalinity: Total as $CaCO_3$ mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			420		230				
12/9/2008		87		160					
12/14/2009	110				240				
12/15/2009			380	310					

	Alkalinity: Hydroxide mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.1		<0.1				
12/9/2008		<0.1		<0.1					
12/14/2009	< 0.1				<0.1				
12/15/2009			<0.1	<0.1					

	Alkalinity: Carbonate mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			0.16		1.4				
12/9/2008		0.74		1.4					
12/14/2009	0.66				1.6				
12/15/2009			0.2	2.8					

	Alkalinity: Bicarbonate mg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			420		229				
12/9/2008		86.2		159					
12/14/2009	109				238				
12/15/2009			380	307					

Notes:
BW = Bayside Well

Table 8: Haloacetic Acids Data

	HAA(5) µg/L									HAA(9) µg/L									Bromochloroacetic Acid µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			2.1		<2.9							3.6		<5							<0.55		<0.55					
12/9/2008		<2.9		<2.9							<5		<5							<0.55		<0.55					
12/14/2009	<2.9				<2.9					<5				<5					<0.55				<0.55				
12/15/2009			<2.9	<2.9								<5	<5								<0.55	<0.55					
	Bromodichloroacetic Acid µg/L									Chlorodibromoacetic Acid µg/L									Dibromoacetic Acid µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			1.5		<0.26							<0.54		<0.54							0.6		<0.25					
12/9/2008		<0.26		<0.26							<0.54		<0.54							<0.25		<0.25					
12/14/2009	<0.26				<0.26					<0.54				<0.54					<0.25				<0.25				
12/15/2009			<0.26	<0.26								<0.54	<0.54								<0.25	<0.25					
	Dichloroacetic Acid µg/L									Monobromoacetic Acid µg/L									Monochloroacetic Acid µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.99		<0.99							<0.54		<0.54							1.5		<0.78					
12/9/2008		<0.99		<0.99							<0.54		<0.54							<0.78		<0.78					
12/14/2009	<0.99				<0.99					<0.54				<0.54					<0.78				<0.78				
12/15/2009			<0.99	<0.99								<0.54	<0.54								<0.78	<0.78					

Table 8: Haloacetic Acids Data

	Tribromoacetic Acid µg/L									Trichloroacetic Acid µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.83		<0.83							<0.3		<0.3				
12/9/2008		<0.83		<0.83							<0.3		<0.3					
12/14/2009	<0.83				<0.83					<0.3				<0.3				
12/15/2009			<0.83	<0.83								<0.3	<0.3					

Notes:
BW = Bayside Well

Table 9: Trihalomethanes Data

	TTHMs µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.37		<0.37				
12/9/2008		<0.37		<0.37					
12/16/2008									<0.37
12/1/2009	0.1								
12/4/2009	0.11								
12/14/2009	<2.43[1]				<2.43[1]				
12/15/2009			<2.43[1]	<2.43[1]					

	Chloroform µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.054		<0.054				
12/9/2008		<0.054		<0.054					
12/16/2008									<0.054
12/1/2009									
12/4/2009									
12/14/2009	<0.57				<0.57				
12/15/2009			<0.57	<0.57					

	Bromodichloromethane µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.074		<0.074				
12/9/2008		<0.074		<0.074					
12/16/2008									<0.074
12/1/2009									
12/4/2009									
12/14/2009	< 0.58				<0.58				
12/15/2009			<0.58	<0.58					

	Dibromochloromethane µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.11		<0.11				
12/9/2008		<0.11		<0.11					
12/16/2008									<0.11
12/14/2009	< 0.64				<0.64				
12/15/2009			<0.64	<0.64					

	Bromoform µg/L								
	BW	MW-1	MW-2S	MW-2I	MW-4	MW-6	MW-5D	MW-7	MW-10D
12/8/2008			<0.13		<0.13				
12/9/2008		<0.13		<0.13					
12/16/2008									<0.13
12/14/2009	<0.64				<0.64				
12/15/2009			<0.64	<0.64					

Notes:
BW = Bayside Well
1 - Calculated from individual THMs

Table 10: Vertical Gradientsfor the Nested MW-5 Wells on 10/1/2009			
Nested Well Set	**MW-5S**	**MW-5I**	**MW-5D**
Elevation at land surface (ft amsl)	13.88	13.88	13.76
Depth of monitoring well (ft bgs)	210	325	640
Depth to water (ft bgs)	2.43	7.49	18.21
Hydraulic Head (ft)	11.45	6.39	-4.45
pressure Head (ft)	207.57	317.51	621.79
Elevation Head (ft)	-196.12	-311.12	-626.24
Vertical Hydraulic Gradient (ft/ft)		0.044	0.034

* Data from 2330 hrs on 10/1/2009

Table 11: Vertical Gradients for the Nested MW-5 Wells on 12/25/2009			
Nested Well Set	**MW-5S**	**MW-5I**	**MW-5D**
Elevation at land surface (ft amsl)	13.88	13.88	13.76
Depth of monitoring well (ft bgs)	210	325	640
Depth to water (ft bgs)	1.63	7.49	16.64
Hydraulic Head (ft)	12.25	6.39	-2.88
pressure Head (ft)	208.37	317.51	623.36
Elevation Head (ft)	-196.12	-311.12	-626.24
Vertical Hydraulic Gradient (ft/ft)		0.051	0.029

* Data from 2330 hrs on 12/25/2009

Appendix A: Lab Reports

EBMUD Laboratory
Analytical Report

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

California Environmental Laboratory Accreditation Program Certificate Number 1060

Laboratory Report - L156788

LSR # - B455-0706-1 Project Title: BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038

Report generated on: Feb 25, 2010 03:57 pm

3 - Samples received by the lab on: Dec 14 2009, 02:48 pm
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time not met

Client PM: DEREK LEE Lab PM: JACK C. LIM

This is an electronic transmittal of a Laboratory Analytical Report

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L156788-1	GRAB	14-Dec-2009 14:07	WTP BAYSIDE	BAY WELL HEAD	Derek Lee Injection GRP 1
L156788-2	GRAB	14-Dec-2009 13:42	GW BAYSIDE	BAY1-MW4	Derek Lee Injection GRP 1
L156788-3	QCFB	14-Dec-2009 14:07	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

RESULTS IN THIS REPORT ARE REPORTED IN ACCORDANCE WITH TITLE 22, SECTION 64819

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

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-1 (P159091-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 02:07pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: BAYSIDE WELL Cl2R = 0mg/L pH = 8.18; Elevation = unknown feet; Depth to GW
N/A feet; +TRANSMITTAL for OXY-18

Parameter	Qualifier	Result	Units	Dilution	MDL	RL/ML	Matrix	Tag
Method: PER SUBCONTRACT LABORATORY REPORT - Subcontract data transmittal							GroundH2O	
Subcontract data from Test America								
Comment: Original report transmitted to client. Copy of report archived with data packet.								
SUBCONTRACT LAB DATA								
DATA TRANSMITTAL								
Run ID: R194348 / Work Group No.: WG159436								
Prep Date1: 22-DEC-09 Analyzed 22-Dec-09 00:00								
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA							GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS								
PH		**8.18**	pH units	1				
CHLORINE RESIDUAL: TOTAL	U	0.1	mg/L	1	0.1			
Run ID: R193389 / Work Group No.: WG158967								
Prep Date1: 14-DEC-09 Analyzed 14-Dec-09 14:07								
Method: EPA 8260B - Trihalomethanes: GC/MS							GroundH2O	
TARGET ANALYTES								
CHLOROFORM	U	0.57	ug/L	1	0.57			
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58			
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64			
BROMOFORM	U	0.64	ug/L	1	0.64			
INTERNAL STANDARD								
FLUOROBENZENE		99.2	% recovery	1				
SURROGATE								
4-BROMOFLUOROBENZENE		100	% recovery	1				
Run ID: R193523 / Work Group No.: WG158997								
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 19:05								
Method: EPA 300.1 - Anions by IC: EPA 300.1							GroundH2O	
Instrument calibrated 12-NOV-09								
TARGET ANALYTES								
CHLORIDE		**31**	mg/L	20	0.11			
SULFATE		**23**	mg/L	20	0.36	0.5		
SURROGATE								
DICHLOROACETATE		100	% recovery	20				
Run ID: R193463 / Work Group No.: WG158979								
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 19:41								
Method: EPA 300.1 - Anions by IC: EPA 300.1							GroundH2O	1
Instrument calibrated 12-NOV-09								
TARGET ANALYTES								
NITRATE AS N		**0.029**	mg/L	1	0.0019	0.4		
SURROGATE								
DICHLOROACETATE		99	% recovery	1				
Run ID: R193463 / Work Group No.: WG158979								
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 20:18								

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

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-1 (P159091-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 02:07pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: BAYSIDE WELL Cl2R = 0mg/L pH = 8.18; Elevation = unknown feet; Depth to GW N/A feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: EPA 552.2 - Haloacetic Acids & Dalapon						GroundH2O	
TARGET ANALYTES							
BROMOCHLOROACETIC ACID	U	0.55	ug/L	1	0.55		
BROMODICHLOROACETIC ACID	U	0.26	ug/L	1	0.26		
CHLORODIBROMOACETIC ACID	U	0.54	ug/L	1	0.54		
DALAPON	U	0.15	ug/L	1	0.15		
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1	
DICHLOROACETIC ACID	U	0.99	ug/L	1	0.99	1	
MONOBROMOACETIC ACID	U	0.54	ug/L	1	0.54	1	
MONOCHLOROACETIC ACID	U	0.78	ug/L	1	0.78	2	
TRIBROMOACETIC ACID	U	0.83	ug/L	1	0.83		
TRICHLOROACETIC ACID	U	0.30	ug/L	1	0.3	1	
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.0	ug/L		2.9		
HAA(9)		0.0	ug/L		5		
INTERNAL STANDARD							
1,2,3-TRICHLOROPROPANE		98	% recovery		1		
SURROGATE							
2,3-DIBROMOPROPIONIC ACID		89	% recovery		1		
Run ID: R193732 / Work Group No.: WG159118							
Prep Date1: 16-DEC-09 Prep Date2: 21-DEC-09 Analyzed 21-Dec-09 21:15							
Method: SM(20)2320 B - Alkalinity: Total, Titration						GroundH2O	
TARGET ANALYTES							
ALKALINITY: TOTAL AS CACO3		**110**	mg/L	1	5		
Run ID: R193480 / Work Group No.: WG159000							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 13:54							
Method: SM(20)2340 C - HARDNESS: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
HARDNESS: TOTAL AS CACO3		**97**	mg/L	1	2		
Run ID: R193561 / Work Group No.: WG159047							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 07:59							
Method: SM(20)2540 C - Solids: Total Dissolved						GroundH2O	
TARGET ANALYTES							
TOTAL DISSOLVED SOLIDS		**200**	mg/L	1	14		
Run ID: R193666 / Work Group No.: WG159012							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 07:45							
Method: SM(20)4500-CO2 D - BICARBONATE, CALCULATION						GroundH2O	
TARGET ANALYTES							
ALKALINITY: BICARBONATE		**109**	mg/L	1	5		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Hydroxide, calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							

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

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-1 (P159091-1)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 02:07pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: BAYSIDE WELL Cl2R = 0mg/L pH = 8.18; Elevation = unknown feet; Depth to GW N/A feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: SM(20)4500-CO2 D - Carbonate, Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: CARBONATE		**0.66**	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-H+ B - Electrometric						GroundH2O	
TARGET ANALYTES							
PH		**7.8**	pH units	1			
Run ID: R193485 / Work Group No.: WG159015							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 08:07							
Method: SM(20)4500-NH3 B,C - AMMONIA: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
AMMONIA AS N	U	0.300	mg/L	1	0.3		
Run ID: R193424 / Work Group No.: WG158978							
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 11:26							
Method: EPA 200.7 - ICP Scan						RawH2O	
TARGET ANALYTES							
CALCIUM		**28,000**	ug/L	1.04	14		
IRON		**130**	ug/L	1.04	3.1	100	
POTASSIUM		**1,400**	ug/L	1.04	19		
MAGNESIUM		**7,400**	ug/L	1.04	5.2		
MANGANESE		**55.4**	ug/L	1.04	0.416	20	
SODIUM		**41,000**	ug/L	1.04	22		
Run ID: R193600 / Work Group No.: WG159053							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 10:49							

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-2 (P159091-8)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 01:42pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: MW-4 Cl2R = 0.06mg/L; pH = 8.02; Elevation = unknown feet; Depth to GW = 12.71 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: PER SUBCONTRACT LABORATORY REPORT - Subcontract data transmittal						GroundH2O	
Subcontract data from Test America							
Comment: Original report transmitted to client. Copy of report archived with data packet.							
SUBCONTRACT LAB DATA							
DATA TRANSMITTAL							
Run ID: R194348 / Work Group No.: WG159436							
Prep Date1: 22-DEC-09 Analyzed 22-Dec-09 00:00							
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA						GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS							
PH		**8.02**	pH units	1			
DEPTH		**12.71**	feet	1			
CHLORINE RESIDUAL: TOTAL	U	0.1	mg/L	1	0.1		
Run ID: R193389 / Work Group No.: WG158967							
Prep Date1: 14-DEC-09 Analyzed 14-Dec-09 13:42							
Method: EPA 8260B - Trihalomethanes: GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.57	ug/L	1	0.57		
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58		
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64		
BROMOFORM	U	0.64	ug/L	1	0.64		
INTERNAL STANDARD							
FLUOROBENZENE		99.6	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		100	% recovery	1			
Run ID: R193523 / Work Group No.: WG158997							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 19:32							
Method: EPA 300.1 - Anions by IC: EPA 300.1						GroundH2O	
Instrument calibrated 12-NOV-09							
TARGET ANALYTES							
CHLORIDE		**54**	mg/L	50	0.28		
NITRATE AS N		**0.36**	mg/L	50	0.095	0.4	
SULFATE		**37**	mg/L	50	0.9	0.5	
SURROGATE							
DICHLOROACETATE		100	% recovery	50			
Run ID: R193463 / Work Group No.: WG158979							
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 22:11							
Method: EPA 552.2 - Haloacetic Acids & Dalapon						GroundH2O	
TARGET ANALYTES							
BROMOCHLOROACETIC ACID	U	0.55	ug/L	1	0.55		
BROMODICHLOROACETIC ACID	U	0.26	ug/L	1	0.26		
CHLORODIBROMOACETIC ACID	U	0.54	ug/L	1	0.54		
DALAPON	U	0.15	ug/L	1	0.15		
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1	
DICHLOROACETIC ACID	U	0.99	ug/L	1	0.99	1	
MONOBROMOACETIC ACID	U	0.54	ug/L	1	0.54	1	
MONOCHLOROACETIC ACID	U	0.78	ug/L	1	0.78	2	
TRIBROMOACETIC ACID	U	0.83	ug/L	1	0.83		
TRICHLOROACETIC ACID	U	0.30	ug/L	1	0.3	1	

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

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-2 (P159091-8)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 01:42pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: MW-4 Cl2R = 0.06mg/L; pH = 8.02; Elevation = unknown feet; Depth to GW = 12.71 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.0	ug/L		2.9		
HAA(9)		0.0	ug/L		5		
INTERNAL STANDARD							
1,2,3-TRICHLOROPROPANE		97	% recovery		1		
SURROGATE							
2,3-DIBROMOPROPIONIC ACID		87	% recovery		1		
Run ID: R193732 / Work Group No.: WG159118							
Prep Date1: 16-DEC-09 Prep Date2: 21-DEC-09 Analyzed 21-Dec-09 21:59							
Method: SM(20)2320 B - Alkalinity: Total, Titration						GroundH2O	
TARGET ANALYTES							
ALKALINITY: TOTAL AS CACO3		**240**	mg/L	1	5		
Run ID: R193480 / Work Group No.: WG159000							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 13:54							
Method: SM(20)2340 C - HARDNESS: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
HARDNESS: TOTAL AS CACO3		**120**	mg/L	1	2		
Run ID: R193561 / Work Group No.: WG159047							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 07:59							
Method: SM(20)2540 C - Solids: Total Dissolved						GroundH2O	
TARGET ANALYTES							
TOTAL DISSOLVED SOLIDS		**440**	mg/L	1.33	19		
Run ID: R193666 / Work Group No.: WG159012							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 07:45							
Method: SM(20)4500-CO2 D - BICARBONATE, CALCULATION						GroundH2O	
TARGET ANALYTES							
ALKALINITY: BICARBONATE		**238**	mg/L	1	5		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Hydroxide, calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Carbonate, Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: CARBONATE		**1.6**	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-H+ B - Electrometric						GroundH2O	
TARGET ANALYTES							
PH		**7.8**	pH units	1			
Run ID: R193485 / Work Group No.: WG159015							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 08:07							

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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 WDR Order# R2-2007-0038
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
ClientID: Derek Lee Injection GRP 1
Lab ID: L156788-2 (P159091-8)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 14 2009, 01:42pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: MW-4 Cl2R = 0.06mg/L; pH = 8.02; Elevation = unknown feet; Depth to GW = 12.71 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: SM(20)4500-NH3 B,C - AMMONIA: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
AMMONIA AS N	U	0.300	mg/L	1	0.3		
Run ID: R193424 / Work Group No.: WG158978							
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 11:26							
Method: EPA 200.7 - ICP Scan						RawH2O	
TARGET ANALYTES							
CALCIUM		**30,000**	ug/L	1.04	14		
IRON		**35**	ug/L	1.04	3.1	100	
POTASSIUM		**2,800**	ug/L	1.04	19		
MAGNESIUM		**12,000**	ug/L	1.04	5.2		
MANGANESE		**228**	ug/L	1.04	0.416	20	
SODIUM		**110,000**	ug/L	1.04	22		
Run ID: R193600 / Work Group No.: WG159053							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 14:19							

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L156788-3 (P159582-3)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 14 2009, 02:07pm Sample collector: JBergstrom
Date Received: Dec 14 2009, 02:48pm Sample receiver: EJOHNSTO
Sample Comments: QCFB for L156788-1 & 2;Prep'd on 11-DEC-09 by RTC;extra +HOLD for COC documentation; Acid CONTAINER ID N/A.

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: EPA 8260B - Trihalomethanes: GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.57	ug/L	1	0.57		
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58		
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64		
BROMOFORM	U	0.64	ug/L	1	0.64		
INTERNAL STANDARD							
FLUOROBENZENE		103	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		100	% recovery	1			

Run ID: R193523 / Work Group No.: WG158997
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 14:56

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EBMUD Laboratory
Analytical Report

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California Environmental Laboratory Accreditation Program Certificate Number 1060

Laboratory Report - L156820

LSR # - B455-0706-1 Project Title: BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038

Report generated on: Feb 25, 2010 03:58 pm

3 - Samples received by the lab on: Dec 15 2009, 02:15 pm
0 - Lost Analyses
0 - Hold Time Exceedences
Turn-around-time not met

Client PM: DEREK LEE Lab PM: JACK C. LIM

This is an electronic transmittal of a Laboratory Analytical Report

Samples included in this report:

Sample	Type	Collected	Site	Locator	ClientID
L156820-1	GRAB	15-Dec-2009 12:59	GW BAYSIDE	BAY1-MW2S	Derek Lee Injection GRP 1
L156820-2	GRAB	15-Dec-2009 13:09	GW BAYSIDE	BAY1-MW2I	Derek Lee Injection GRP 1
L156820-3	QCFB	15-Dec-2009 12:59	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

RESULTS IN THIS REPORT ARE REPORTED IN ACCORDANCE WITH TITLE 22, SECTION 64819

EAST BAY MUNICIPAL UTILITY DISTRICT
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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-1 (P159091-6)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 12:59pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2S Cl2R = 0.05 mg/L pH = 6.55 ; Elevation = NA ; Depth to GW= 8.95 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: PER SUBCONTRACT LABORATORY REPORT - Subcontract data transmittal						GroundH2O	
Subcontract data from Test America							
Comment: Original report transmitted to client. Copy of report archived with data packet.							
SUBCONTRACT LAB DATA							
DATA TRANSMITTAL							
Run ID: R194349 / Work Group No.: WG159437							
Prep Date1: 22-DEC-09 Analyzed 22-Dec-09 00:00							
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA						GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS							
PH		**6.55**	pH units	1			
DEPTH		**8.95**	feet	1			
CHLORINE RESIDUAL: TOTAL	U	0.1	mg/L	1	0.1		
Run ID: R193483 / Work Group No.: WG159017							
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 12:59							
Method: EPA 8260B - Trihalomethanes: GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.57	ug/L	1	0.57		
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58		
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64		
BROMOFORM	U	0.64	ug/L	1	0.64		
INTERNAL STANDARD							
FLUOROBENZENE		101	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		100	% recovery	1			
Run ID: R193523 / Work Group No.: WG158997							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 20:00							
Method: EPA 300.1 - Anions by IC: EPA 300.1						GroundH2O	
Instrument calibrated 12-NOV-09							
TARGET ANALYTES							
NITRATE AS N	U	0.095	mg/L	50	0.095	0.4	
SURROGATE							
DICHLOROACETATE		96	% recovery	50			
Run ID: R193463 / Work Group No.: WG158979							
Prep Date1: 15-DEC-09 Analyzed 16-Dec-09 05:45							
Method: EPA 300.1 - Anions by IC: EPA 300.1						GroundH2O	1
Instrument calibrated 12-NOV-09							
TARGET ANALYTES							
CHLORIDE		**39,000**	mg/L	25000	140		
SULFATE		**4,000**	mg/L	25000	450	0.5	
SURROGATE							
DICHLOROACETATE		100	% recovery	25000			
Run ID: R193463 / Work Group No.: WG158979							
Prep Date1: 15-DEC-09 Analyzed 16-Dec-09 11:23							

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-1 (P159091-6)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 12:59pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2S Cl2R = 0.05 mg/L pH = 6.55 ; Elevation = NA ; Depth to GW= 8.95 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: EPA 552.2 - Haloacetic Acids & Dalapon						GroundH2O	
TARGET ANALYTES							
BROMOCHLOROACETIC ACID	U	0.55	ug/L	1	0.55		
BROMODICHLOROACETIC ACID	U	0.26	ug/L	1	0.26		
CHLORODIBROMOACETIC ACID	U	0.54	ug/L	1	0.54		
DALAPON	U	0.15	ug/L	1	0.15		
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1	
DICHLOROACETIC ACID	U	0.99	ug/L	1	0.99	1	
MONOBROMOACETIC ACID	U	0.54	ug/L	1	0.54	1	
MONOCHLOROACETIC ACID	U	0.78	ug/L	1	0.78	2	
TRIBROMOACETIC ACID	U	0.83	ug/L	1	0.83		
TRICHLOROACETIC ACID	U	0.30	ug/L	1	0.3	1	
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.0	ug/L		2.9		
HAA(9)		0.0	ug/L		5		
INTERNAL STANDARD							
1,2,3-TRICHLOROPROPANE		98	% recovery		1		
SURROGATE							
2,3-DIBROMOPROPIONIC ACID		98	% recovery		1		
Run ID: R193732 / Work Group No.: WG159118							
Prep Date1: 16-DEC-09 Prep Date2: 21-DEC-09 Analyzed 21-Dec-09 22:43							
Method: SM(20)2320 B - Alkalinity: Total, Titration						GroundH2O	
TARGET ANALYTES							
ALKALINITY: TOTAL AS CACO3		**380**	mg/L	1	5		
Run ID: R193480 / Work Group No.: WG159000							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 13:54							
Method: SM(20)2340 C - HARDNESS: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
HARDNESS: TOTAL AS CACO3		**17,000**	mg/L	50	100		
Run ID: R193561 / Work Group No.: WG159047							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 07:59							
Method: SM(20)2540 C - Solids: Total Dissolved						GroundH2O	
TARGET ANALYTES							
TOTAL DISSOLVED SOLIDS		**87,000**	mg/L	50	700		
Run ID: R193666 / Work Group No.: WG159012							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 07:45							
Method: SM(20)4500-CO2 D - BICARBONATE, CALCULATION						GroundH2O	
TARGET ANALYTES							
ALKALINITY: BICARBONATE		**380**	mg/L	1	5		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Hydroxide, calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-1 (P159091-6)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 12:59pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2S Cl2R = 0.05 mg/L pH = 6.55 ; Elevation = NA ; Depth to GW= 8.95 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix / RL/ML	Tag
Method: SM(20)4500-CO2 D - Carbonate, Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: CARBONATE		**0.20**	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-H+ B - Electrometric						GroundH2O	
TARGET ANALYTES							
PH		**6.8**	pH units	1			
Run ID: R193485 / Work Group No.: WG159015							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 08:07							
Method: SM(20)4500-NH3 B,C - AMMONIA: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
AMMONIA AS N	U	0.300	mg/L	1	0.3		
Run ID: R193563 / Work Group No.: WG159061							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 09:48							
Method: EPA 200.7 - ICP Scan						RawH2O	
TARGET ANALYTES							
CALCIUM		**1.30E+06**	ug/L	10.4	140		
IRON	U	31	ug/L	10.4	31	100	
POTASSIUM		**500,000**	ug/L	10.4	190		
MAGNESIUM		**2.80E+06**	ug/L	10.4	52		
MANGANESE		**36,900**	ug/L	10.4	4.16	20	
SODIUM		**2.30E+07**	ug/L	104	2200		
Run ID: R193600 / Work Group No.: WG159053							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 15:47							

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

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-2 (P159091-7)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 01:09pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2I Cl2R = 0 mg/L pH = 8.05; Elevation = NA; Depth to GW 8.46 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: PER SUBCONTRACT LABORATORY REPORT - Subcontract data transmittal						GroundH2O	
Subcontract data from Test America							
Comment: Original report transmitted to client. Copy of report archived with data packet.							
SUBCONTRACT LAB DATA							
DATA TRANSMITTAL							
Run ID: R194349 / Work Group No.: WG159437							
Prep Date1: 22-DEC-09 Analyzed 22-Dec-09 00:00							
Method: SAMPLER PROVIDED FIELD MEASUREMENTS - DATA ENTRY LIST FOR FIELD DATA						GroundH2O	
FIELD ANALYSIS/OBSERVATION DATA PARAMETERS							
PH		**8.05**	pH units	1			
DEPTH		**8.46**	feet	1			
CHLORINE RESIDUAL: TOTAL	U	0.1	mg/L	1	0.1		
Run ID: R193483 / Work Group No.: WG159017							
Prep Date1: 15-DEC-09 Analyzed 15-Dec-09 13:09							
Method: EPA 8260B - Trihalomethanes: GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.57	ug/L	1	0.57		
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58		
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64		
BROMOFORM	U	0.64	ug/L	1	0.64		
INTERNAL STANDARD							
FLUOROBENZENE		102	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		98.4	% recovery	1			
Run ID: R193523 / Work Group No.: WG158997							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 20:27							
Method: EPA 300.1 - Anions by IC: EPA 300.1						GroundH2O	
Instrument calibrated 12-NOV-09							
TARGET ANALYTES							
CHLORIDE		**84**	mg/L	50	0.28		
NITRATE AS N		**0.16**	mg/L	50	0.095	0.4	
SULFATE		**26**	mg/L	50	0.9	0.5	
SURROGATE							
DICHLOROACETATE		100	% recovery	50			
Run ID: R193463 / Work Group No.: WG158979							
Prep Date1: 15-DEC-09 Analyzed 16-Dec-09 06:22							
Method: EPA 552.2 - Haloacetic Acids & Dalapon						GroundH2O	
TARGET ANALYTES							
BROMOCHLOROACETIC ACID	U	0.55	ug/L	1	0.55		
BROMODICHLOROACETIC ACID	U	0.26	ug/L	1	0.26		
CHLORODIBROMOACETIC ACID	U	0.54	ug/L	1	0.54		
DALAPON	U	0.15	ug/L	1	0.15		
DIBROMOACETIC ACID	U	0.25	ug/L	1	0.25	1	
DICHLOROACETIC ACID	U	0.99	ug/L	1	0.99	1	
MONOBROMOACETIC ACID	U	0.54	ug/L	1	0.54	1	
MONOCHLOROACETIC ACID	U	0.78	ug/L	1	0.78	2	
TRIBROMOACETIC ACID	U	0.83	ug/L	1	0.83		

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-2 (P159091-7)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 01:09pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2I Cl2R = 0 mg/L pH = 8.05; Elevation = NA; Depth to GW 8.46 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
TRICHLOROACETIC ACID	U	0.30	ug/L	1	0.3	1	
VALUE CALCULATED FROM OTHER RESULTS							
HAA(5)		0.0	ug/L		2.9		
HAA(9)		0.0	ug/L		5		
INTERNAL STANDARD							
1,2,3-TRICHLOROPROPANE		98	% recovery		1		
SURROGATE							
2,3-DIBROMOPROPIONIC ACID		87	% recovery		1		
Run ID: R193732 / Work Group No.: WG159118							
Prep Date1: 16-DEC-09 Prep Date2: 21-DEC-09 Analyzed 21-Dec-09 23:27							
Method: SM(20)2320 B - Alkalinity: Total, Titration						GroundH2O	
TARGET ANALYTES							
ALKALINITY: TOTAL AS CACO3		**310**	mg/L	1	5		
Run ID: R193480 / Work Group No.: WG159000							
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 13:54							
Method: SM(20)2340 C - HARDNESS: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
HARDNESS: TOTAL AS CACO3		**100**	mg/L	1	2		
Run ID: R193561 / Work Group No.: WG159047							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 07:59							
Method: SM(20)2540 C - Solids: Total Dissolved						GroundH2O	
TARGET ANALYTES							
TOTAL DISSOLVED SOLIDS		**510**	mg/L	2	28		
Run ID: R193666 / Work Group No.: WG159012							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 07:45							
Method: SM(20)4500-CO2 D - BICARBONATE, CALCULATION						GroundH2O	
TARGET ANALYTES							
ALKALINITY: BICARBONATE		**307**	mg/L	1	5		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Hydroxide, calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: HYDROXIDE	U	0.10	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							
Method: SM(20)4500-CO2 D - Carbonate, Calculation						GroundH2O	
TARGET ANALYTES							
ALKALINITY: CARBONATE		**2.8**	mg/L	1	0.1		
Run ID: R193487 / Work Group No.: WG159020							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 09:17							

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

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
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: Derek Lee Injection GRP 1
Lab ID: L156820-2 (P159091-7)
Sample Type: GRAB (Instantaneous Grab)
Date Collected: Dec 15 2009, 01:09pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: MW-2I Cl2R = 0 mg/L pH = 8.05; Elevation = NA; Depth to GW 8.46 feet; +TRANSMITTAL for OXY-18

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: SM(20)4500-H+ B - Electrometric						GroundH2O	
TARGET ANALYTES							
PH		8.0	pH units	1			
Run ID: R193485 / Work Group No.: WG159015							
Prep Date1: 17-DEC-09 Analyzed 17-Dec-09 08:07							
Method: SM(20)4500-NH3 B,C - AMMONIA: TOTAL, TITRATION						GroundH2O	
TARGET ANALYTES							
AMMONIA AS N	U	0.300	mg/L	1	0.3		
Run ID: R193563 / Work Group No.: WG159061							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 09:48							
Method: EPA 200.7 - ICP Scan						RawH2O	
TARGET ANALYTES							
CALCIUM		15,000	ug/L	1.04	14		
IRON		110	ug/L	1.04	3.1	100	
POTASSIUM		6,100	ug/L	1.04	19		
MAGNESIUM		13,000	ug/L	1.04	5.2		
MANGANESE		98.6	ug/L	1.04	0.416	20	
SODIUM		160,000	ug/L	1.04	22		
Run ID: R193600 / Work Group No.: WG159053							
Prep Date1: 18-DEC-09 Analyzed 18-Dec-09 15:43							

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Analytical Results Report

LSR#: B455-0706-1 BAYSIDE GROUND WATER PROJECT WDR Order# R2-2007-0038
Site: FIELD QC Sample collection QC
Locator: COLLECTION QC Field QC Sample submitted for analysis
Lab ID: L156820-3 (P159582-2)
Sample Type: QCFB (Field Blank Grab)
Date Collected: Dec 15 2009, 12:59pm Sample collector: J Bergstrom
Date Received: Dec 15 2009, 02:15pm Sample receiver: JKIEU
Sample Comments: QCFB for L156820-1 to -2;Prep'd on 11-DEC-09 by RTC;extra +HOLD for COC documentation.

Method Reference / Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix RL/ML	Tag
Method: EPA 8260B - Trihalomethanes: GC/MS						GroundH2O	
TARGET ANALYTES							
CHLOROFORM	U	0.57	ug/L	1	0.57		
BROMODICHLOROMETHANE	U	0.58	ug/L	1	0.58		
DIBROMOCHLOROMETHANE	U	0.64	ug/L	1	0.64		
BROMOFORM	U	0.64	ug/L	1	0.64		
INTERNAL STANDARD							
FLUOROBENZENE		99.2	% recovery	1			
SURROGATE							
4-BROMOFLUOROBENZENE		101	% recovery	1			

Run ID: R193523 / Work Group No.: WG158997
Prep Date1: 16-DEC-09 Analyzed 16-Dec-09 15:24

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