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Alameda County Environmental Health

Declaration from the Responsible Party

Letter Report <u>Groundwater Monitoring Conducted 1 September 2009</u> <u>2440 East Eleventh Street</u> <u>Oakland CA</u> <u>RO No. 29</u>

Prepared by Streamborn, Dated 30 September 2009

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Jeffrey Eandi Vice President Eandi Metal Works 976 Twenty-Third Avenue Oakland CA 94606

Signed

Dated <u>30 September 2009</u>



30 September 2009

Project No. P279

#### <u>Letter Report</u> <u>Groundwater Monitoring Conducted 1 September 2009</u> <u>2440 East Eleventh Street</u> <u>Oakland CA</u> <u>RO No. 29</u>

Dear Mr. Eandi (hardcopy):

This letter report documents the results of groundwater monitoring conducted 1 September 2009 for monitoring wells MW1, MW2, MW3, MW4, and MW5 at/near the subject property. The results of our work are summarized in the following:

- Table 1 provides a chronology of environmental activities.
- Table 2 provides a bibliography.
- Table 3 summarizes groundwater level and gradient data.
- Table 4 summarizes well purging and sampling information since 2001. Purge water generated during sampling was containerized in labeled drums and stored onsite.
- Table 5 summarizes groundwater analytical data from monitoring wells.
- Figure 1 provides a location map (USGS).
- Figure 2 provides a vicinity map.
- Figure 3 provides a site plan.
- Figure 4 shows the groundwater levels and gradient (1 September 2009).
- Figure 5 shows temporal concentrations of TPH-gasoline in the monitoring wells.
- Attachment 1 contains the groundwater sampling forms.
- Attachment 2 contains the laboratory reports and chain-of-custody forms.
- Attachment 3 contains the results of the Geotracker survey conducted 28 August 2009.

The groundwater monitoring results for 1 September 2009 are consistent with historic results.

The next groundwater-monitoring event is scheduled circa March/April 2010.

Please contact us with any questions or comments.

Sincerely,

**STREAMBORN** 

ough to braif

Douglas W. Lovell, PE Geoenvironmental Engineer

Attachments



Electronic Submission: This report, the water levels, and the laboratory EDF were uploaded to Geotracker (http://geotracker.swrcb.ca.gov/). This report was also uploaded to the Alameda County server.



# Table 1 (Page 1 of 2)Environmental Chronology2440 East Eleventh Street<br/>Oakland CA

Date	Performed By	Event
Unknown	Unknown	• 1,000-gallon underground leaded gasoline tank was installed.
15 August 1991	Eandi Metal Works	• The 1,000-gallon tank was emptied of product. Use of the tank was discontinued.
11 May 1992	Unknown	• The 1,000-gallon tank was removed and soil and groundwater contamination was discovered.
10 July 1995	AGI Technologies	• Five soil borings were drilled. Soil samples were collected and analyzed for TPH-gasoline, BTEX, MtBE, and total metals.
		• Three of the borings were completed as monitoring wells (MW1, MW2, and MW3). The other two borings (E1 and E2) were grouted.
		• Water levels were measured in wells MW1, MW2, and MW3.
		• Wells MW1, MW2, and MW3 were developed and groundwater samples were collected. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
		• An elevation survey was conducted for wells MW1, MW2, and MW3.
17 July 1995	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
20 October 1995	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and total lead.
25 January 1996	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
25 April 1996	AGI Technologies	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
11 - 12 June 2001	Kleinfelder	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and total lead.
5 February 2002	Kleinfelder	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, MtBE, and total lead.
9 June 2004	Streamborn	• Using a backhoe, the excavation for the former tank was partially re-excavated.
		• Soil samples were collected from the base (7.5-8 feet below ground surface) and each of the four sidewalls (5-5.5 feet below ground surface) by exposing native soil and driving a brass liner into the exposed soil.
		• Soil samples were analyzed for TPH-diesel/kerosene/stoddard solvent, TPH-gasoline, BTEX, fuel oxygenates, and total lead.
12 August 2004	Streamborn	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• Seven geoprobe borings (B1-B7) were drilled to depths between 20 and 32 feet. Soil samples were collected continuously in the borings.
		• Two soil samples were retained from each of the borings for chemical analysis. One soil sample approximately coincided with the depth of groundwater observed during drilling and the other soil sample coincided with the bottom of the boring. Soil sample were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• Temporary casings were installed in the borings and water levels allowed to stabilize

		• Temporary casings were installed in the borings and water levels allowed to stabilize for at least one hour. Water levels were measured.
		• Purged groundwater samples were collected from the temporary casings. Samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, and total lead.
		• The temporary casings were removed from the borings and the borings were grouted.
17-23 September 2004	Streamborn	• Using a backhoe, the excavation for the former tank was completely re-excavated. The excavated soil was air-dried and replaced in the excavation using ±2-foot lifts. Each lift was compacted using a whacker. 6 inches of imported Class II aggregate base was placed as the final lift of soil.
		• The pavement and sidewalk were repaved with reinforced concrete. The concrete thickness was 8 inches. The reinforcement was #5 rebar on 12-inch centers.
2 March 2005	Streamborn	• Groundwater levels were measured in wells MW1, MW2, and MW3.
		• Groundwater samples were collected from wells MW1, MW2, and MW3. Samples were analyzed for TPH-gasoline, BTEX, and fuel oxygenates.



#### Table 1 (Page 2 of 2)

#### Environmental Chronology 2440 East Eleventh Street

#### Oakland CA

Date	Performed By	Event
28 September 2006	Streamborn	• Two direct push borings were drilled to 17 feet. Soil samples were collected continuously during drilling and selected samples were analyzed for TPH-gasoline, BTEX, fuel oxygenates, total lead, and lead scavengers (1,2-dichloroethane and ethylene dibromide).
		• Each boring was subsequently overdrilled using a hollow-stem auger and completed as a two-inch diameter, 17-foot deep monitoring well (MW4 and MW5).
		• The elevations of wells MW4 and MW5 were surveyed.
2 October 2006	Streamborn	Wells MW4 and MW5 were developed.
		• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260), total lead, and lead scavengers (1,2-dichloroethane and ethylene dibromide).
20 March 2007	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
10 September	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
2007		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
10 March 2008	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
8 September 2008	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
3 March 2009	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).
28 August 2009	Streamborn	• Virgil Chavez Land Surveying (Vallejo CA) surveyed wells MW1 through MW5 to the NAD83 horizontal datum and the NAVD88 vertical datum.
1 September 2009	Streamborn	• Groundwater levels were measured in wells MW1, MW2, MW3, MW4, and MW5.
		• Groundwater samples were collected from wells MW1, MW2, MW3, MW4, and MW5. Samples were analyzed for TPH-gasoline/BTEX/fuel oxygenates (EPA Method 8260).

General Notes

(a) TPH = total petroleum hydrocarbons.

(b) BTEX = benzene, toluene, xylenes, and total xylenes.

(c) MtBE = methyl tert-butyl ether.



#### Table 2 (Page 1 of 2) Bibliography 2440 East Eleventh Street Oakland CA

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ACHCSA (2003). *Fuel Leak Case # RO0000029 – 976 23<sup>rd</sup> Avenue, Oakland, CA 94606.* Correspondence from Amir K. Gholami, Alameda County Health Care Services Agency, Alameda CA. Correspondence to Eandi Metal Works, Oakland CA. 11 December 2003.

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Streamborn (2005b). Letter Report, Groundwater Monitoring Conducted 2 March 2005, 2440 East Eleventh Street, Oakland CA, RO No. 29. Prepared for Eandi Metal Works, Oakland CA. Prepared by Streamborn, Berkeley CA. 25 March 2005.

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#### Table 2 (Page 2 of 2) Bibliography 2440 East Eleventh Street Oakland CA

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#### Table 3

#### Groundwater Level and Gradient Data 2440 East Eleventh Street Oakland CA

Location	M	W1	MV	W2	MV	W3	M	W4	MV	W5			
Ground Surface Elevation	24.	.51	24.	.21	23	.06	23	.12	22	.59			
Casing Diameter (inches)	2	2	2	2		2		2		2			
Surveyed Latitude and Longitude (NAD83)	37.780 -122.23		37.7800499 -122.2358522			37.7800410 -122.2361722		37.7799066 -122.2361136		00613 363355	Groundwater Gradient		
Measuring Point	TOC N Side Elev = 24.14		TOC N Side Elev = 23.92		TOC I Elev =	N Side 22.69		TOC N Side Elev = 22.45		N Side 21.94			
	Depth	Elev	Depth	Elev	Depth	Elev	Depth	Elev	Depth	Elev			
Intercepted Interval	9 to 20	4.5 to 15.5	9 to 20	4.2 to 15.2	9 to 20	3.1 to 14.1	6 to 17	6.1 to 17.1	6 to 17	5.6 to 16.6	Direction	Magnitude	
14 July 1995	9.72	14.42	10.74	13.18	10.95	11.74							
17 July 1995	11.11	13.03	10.93	12.99	11.04	11.65							
20 October 1995	11.96	12.18	11.92	12.00	12.11	10.58							
25 January 1996	8.14	16.00	8.23	15.69	8.83	13.86							
11-12 June 2001	10.35	13.79	11.50	12.42	11.08	11.61							
5 February 2002	11.00	13.14	11.10	12.82	11.30	11.39							
12 August 2004	10.95	13.19	11.17	12.75	11.77	10.92					N 115° W	0.02	
2 March 2005	8.25	15.89	8.44	15.48	9.36	13.33					N 120° W	0.03	
2 October 2006	11.08	13.06	11.15	12.77	11.79	10.90	11.48	10.97	11.28	10.66	N 126° W	0.02	
20 March 2007	10.96	13.18	10.78	13.14	10.91	11.78	10.57	11.88	10.41	11.53	N 127° W	0.01	
10 September 2007	11.24	12.90	11.54	12.38	12.20	10.49	11.91	10.54	11.68	10.26	N 128° W	0.02	
10 March 2008	10.74	13.40	10.89	13.03	10.60	12.09	10.28	12.17	10.16	11.78	N 114° W	0.01	
8 September 2008	11.73	12.41	11.42	12.50	12.09	10.60	11.77	10.68	11.57	10.37	N 124° W	0.01	
3 March 2009	8.31	15.83	8.22	15.70	9.30	13.39	8.98	13.47	8.93	13.01	N 117° W	0.02	
1 September 2009	10.99	13.15	11.29	12.63	11.97	10.72	11.68	10.77	11.45	10.49	N 114° W	0.02	
Total Depth (Last Measurement)	19.8		19.8		19.6		17.3		17.2				

#### General Notes

(a) Elevations are cited in units of feet, relative to the NAVD88 datum (NOT Mean Sea Level).

(b) TOC = top of PVC casing. N = north. Measuring points were the top of the PVC casing, north side.

(c) The intercepted intervals correspond to the sand pack interval. The depths of the intercepted intervals were measured relative to ground surface.

(d) On 28 August 2009, Virgil Chavez Land Surveying (Vallejo CA) surveyed wells MW1 through MW5. Horizontal coordinates were surveyed relative to the NAD83 datum. Elevations were surveyed relative to the NAVD88 datum. According to Virgil Chavez Land Surveying, subtract 2.726 feet from the NAVD88 elevations to convert to NGVD29 (Mean Sea Level) datum. Previous surveys had been conducted by HTT Engineering (Oakland CA) and Streamborn; however, the data in this table are based solely on the survey by Virgil Chavez Land Surveying.



#### Table 4

#### Well Purging and Sampling Information Since 2001

#### 2440 East Eleventh Street Oakland CA

Well No.	Sample Date	Sample Type	Purge Method	Purge Duration (minutes)	Approximate Volume Purged (gallons)	Volume Purged (static water casing volumes)	Purged Dry?	Dissolved Oxygen (mg/L)	рН	Specific Conductance (µS/cm)	Temp (°C)	ORP (mV)	Turbidity/ Color
MW1	11 Jun 01	Grab	SPP	NM	20	NC	no	NM	6.8	310	21.4	NM	NM
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	290	18.8	NM	NM
	12 Aug 04	Grab	SPP	4	5	±3	no	1.1	7.0	230	18.8	-130	Clear/none
	2 Mar 05	Grab	SPP	7	6	±3	no	2.2	6.9	230	17.1	-160	Clear/none
	2 Oct 06	Grab	SPP	7	5	±3	no	1.0	6.6	380	17.7	-130	Translucent/gray
	20 Mar 07	Grab	SPP	25	5	±3	no	0.8	6.8	410	16.1	-130	Clear/none
	10 Sep 07	Grab	SPP	8	5	±3	no	0.9	6.7	480	18.0	-100	Clear/none
	10 Mar 08	Grab	SPP	11	5	±3	no	0.7	6.9	410	16.6	-110	Clear/none
	8 Sep 08	Grab	SPP	6	4	±3	no	1.0	6.9	530	18.4	-80	Clear/none
	3 Mar 09	Grab	SPP	11	6	±3	no	0.8	6.8	480	15.8	-60	Clear/none
	1 Sep 09	Grab	SPP	15	5	±3	no	0.8	6.8	500	19.2	-80	Clear/none
MW2	12 Jun 01	Grab	SPP	NM	15	NC	no	NM	7.1	430	17.2	NM	NM
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	400	16.8	NM	NM
	12 Aug 04	Grab	SPP	4	5	±3	no	2.0	6.8	510	18.9	-170	Turbid/gray
	2 Mar 05	Grab	SPP	7	6	±3	no	2.0	6.7	490	17.7	-220	Clear/none
	2 Oct 06	Grab	SPP	7	5	±3	no	1.0	6.7	490	18.0	-110	Clear/none
	20 Mar 07	Grab	SPP	20	5	±3	no	1.0	6.9	490	16.7	-170	Clear/none
	10 Sep 07	Grab	SPP	7	4	±3	no	0.7	6.8	560	19.6	-110	Clear/none
	10 Sep 07	Grab	SPP	11	5	±3	no	0.9	7.1	520	17.1	-90	Clear/none
	8 Sep 08	Grab	SPP	7	5	±3		1.5	7.5	670	17.1	-50	Clear/none
	3 Mar 09	Grab	SPP	11	6	±3	no	0.9	6.9	690	15.9	-50	Clear/none
		Grab	SPP	11	5	±3 ±3	no	0.9	6.9	670	21.1	-60	
MW3	1 Sep 09 12 Jun 01		SPP		12	±3 NC	no	0.7 NM	7.4		17.2	NM	Translucent/gray NM
IVI W S		Grab		NM			no			440			
	5 Feb 02	Grab	SPP	NM	4	NC	no	NM	6.6	410	17.8	NM	NM
	12 Aug 04	Grab	SPP	8	4	±3	no	1.7	6.6	440	19.0	-150	Clear/none
	2 Mar 05	Grab	SPP	6	5	±3	no	2.3	6.8	500	18.1	-200	Clear/none
	2 Oct 06	Grab	SPP	6	4	±3	no	1.0	6.8	490	18.8	-60	Clear/none
	20 Mar 07	Grab	SPP	25	4	±3	no	1.6	6.7	540	16.8	-60	Clear/none
	10 Sep 07	Grab	SPP	7	4	±3	no	0.9	6.7	530	18.8	-120	Clear/none
	10 Mar 08	Grab	SPP	10	5	±3	no	0.7	7.1	510	17.5	-100	Clear/none
	8 Sep 08	Grab	SPP	6	4	±3	no	1.0	7.0	600	19.3	-50	Clear/none
	3 Mar 09	Grab	SPP	7	5	±3	no	0.9	6.8	620	16.7	-50	Clear/none
	1 Sep 09	Grab	SPP	12	4	±3	no	0.8	6.8	570	19.6	-60	Clear/none
MW4	2 Oct 06	Grab	SPP	24	14	±16	no	4.6	7.1	630	18.5	180	Translucent/brown
	20 Mar 07	Grab	SPP	15	3	±3	no	1.2	6.5	470	15.7	170	Clear/none
	10 Sep 07	Grab	SPP	7	3	±3	no	1.4	6.4	490	18.1	120	Translucent/gray
	10 Mar 08	Grab	SPP	9	4	±3	no	1.4	6.6	480	15.9	120	Clear/none
	8 Sep 08	Grab	SPP	4	3	±3	no	1.3	6.6	560	18.1	140	Clear/none
	3 Mar 09	Grab	SPP	7	4	±3	no	2.0	6.6	590	15.8	280	Clear/none
	1 Sep 09	Grab	SPP	9	3	±3	no	0.9	6.6	530	18.3	130	Clear/none
MW5	2 Oct 06	Grab	SPP	35	22	±24	no	3.4	7.0	600	19.1	30	Translucent/brown
	20 Mar 07	Grab	SPP	23	3	±3	no	0.9	6.9	580	16.6	-70	Clear/none
	10 Sep 07	Grab	SPP	7	3	±3	no	0.8	6.8	630	19.5	-90	Clear/none
	10 Mar 08	Grab	SPP	11	4	±3	no	1.0	7.1	570	16.6	-100	Clear/none
	8 Sep 08	Grab	SPP	4	3	±3	no	1.0	7.1	730	20.4	-80	Clear/none
	3 Mar 09	Grab	SPP	8	4	±3	no	0.8	6.9	670	16.1	-80	Clear/none
	1 Sep 09	Grab	SPP	9	3	±3	no	0.9	6.8	660	19.9	-70	Clear/none

General Notes

(a) NM = not measured.

- (b) NC = not calculated.
- (c) ORP = oxidation-reduction potential.
- (d) SPP = submersible purge pump.
- (d) Measurements cited in this table correspond to the end of purging (time of sampling).



#### Table 5

#### Groundwater Analytical Data from Monitoring Wells

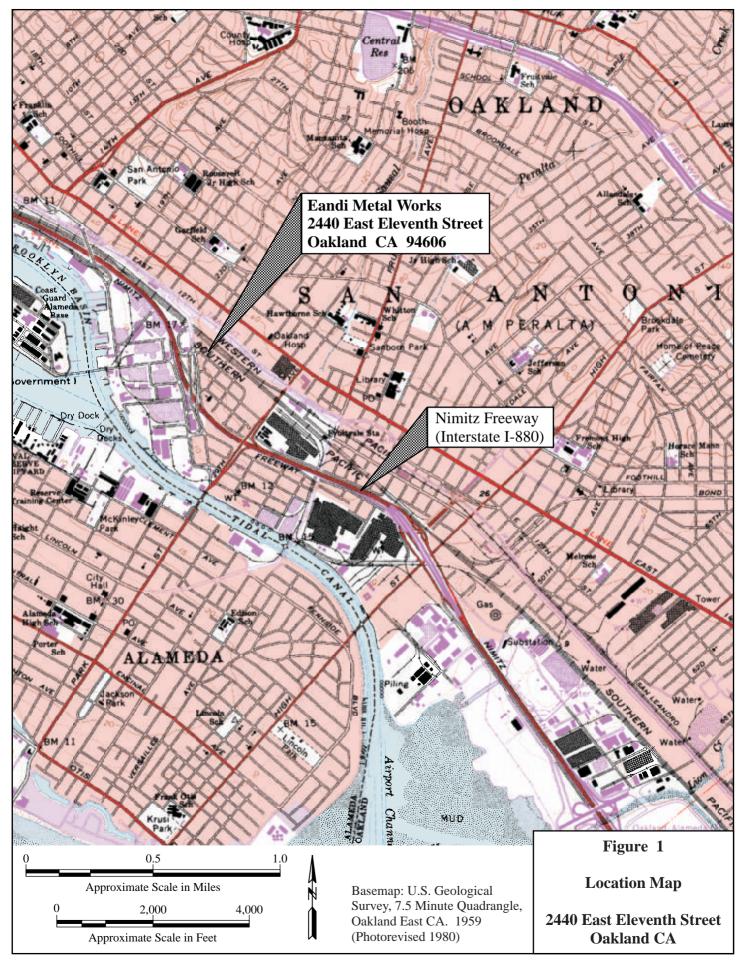
#### 2440 East Eleventh Street Oakland CA

ocation	Sample Date	Sample Type	Total Lead (µg/L)	TPH- Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	1,2- Dichloro- ethane (µg/L)	Ethylene Dibromide (µg/L)	MtBE (µg/L)	Other Fuel Oxygenates (EPA Method 8260) (µg/L)
MW1	17 Jul 1995	Grab	<40	22,000	390	2,000	800	5,300	NM	NM	<125	NM
:	20 Oct 1995	Grab	<40	14,000	270	540	360	1,800	NM	NM	NM	NM
-	25 Jan 1996	Grab	<40	16,000	740	1,300	490	2,700	NM	NM	<500	NM
	25 Apr 1996	Grab	<40	4,600	180	450	190	1,000	NM	NM	<250	NM
-	11 Jun 2001	Grab	14	7,100	14	35	240	720	NM	NM	NM	NM
-	5 Feb 2002	Grab	3.7	9,300	6.3	11	230	560	NM	NM	< 0.7	NM
	12 Aug 2004	Grab	<5	2,900	9.1	6.0	130	160	NM	NM	0.72	<0.5 to <5
	2 Mar 2005	Grab	NM	950	1.9	0.60	19	4.0	NM	NM	0.80	<0.5 to <5
-	2 Oct 2006	Grab	<100	830	4.1	0.80	44	7.8	<0.5	<0.5	<0.5	<0.5 to <100
-	20 Mar 2007	Grab	NM	470	2.1	<0.5	8.5	1.8	<0.5	NM	0.63	<0.5 to <100
	10 Sep 2007	Grab	NM	3,400	18	6.4	170	43	<0.5	NM	1.1	<0.5 to <100
-	10 Mar 2008	Grab	NM	950	2.9	0.4	170	1.9	<0.5	NM	0.72	<0.5 to <100
-												
-	8 Sep 2008	Grab	NM	3,600	14	6.5	200	19	<0.5	NM	0.62	<0.5 to <100
	3 Mar 2009	Grab	NM	1,600	5.2	2.1	68	9.7	NM	NM	0.56	<0.5 to <5
	1 Sep 2009	Grab	NM	1,700	7.0	2.2	64	4.2	NM	NM	< 0.5	<0.5 to <5
	17 Jul 1995	Grab	56.4	21,000	370	1,700	930	5,100	NM	NM	<125	<0.5 to <5
-	20 Oct 1995	Grab	<40	730	18	27	26	7.9	NM	NM	NM	NM
	25 Jan 1996	Grab	<40	14,000	74	660	1,000	2,600	NM	NM	670	NM
	25 Apr 1996	Grab	<40	13,000	370	440	1,000	2,900	NM	NM	<500	NM
	12 Jun 2001	Grab	7.7	3,200	11	6.2	170	270	NM	NM	NM	NM
	5 Feb 2002	Grab	3.5	2,900	7.6	3.8	220	160	NM	NM	< 0.7	NM
	12 Aug 2004	Grab	<5	3,100	2.6	1.8	< 0.5	13	NM	NM	< 0.5	<0.5 to <5
	2 Mar 2005	Grab	NM	3,700	<5	<2.5	340	22	NM	NM	<2.5	<2.5 to <25
-	2 Oct 2006	Grab	<100	7,200	<2.5	3.0	380	30	<2.5	<2.5	<2.5	<2.5 to <500
	20 Mar 2007	Grab	NM	7,000	<5.0	<5.0	370	34	<5.0	NM	<5.0	<5.0 to <1,000
	10 Sep 2007	Grab	NM	9,300	<2.5	3.8	530	38	<2.5	NM	<2.5	<2.5 to <500
-	10 Mar 2008	Grab	NM	6,500	<2.5	<2.5	200	13	<2.5	NM	<2.5	<2.5 to <500
-	8 Sep 2008	Grab	NM	7,300	<2.5	<2.5	290	12	<2.5	NM	<2.5	<2.5 to <500
-	3 Mar 2009	Grab	NM	3,700	<0.5	1.1	<0.5	4.7	NM	NM	<0.5	<0.5 to <5
-	1 Sep 2009	Grab	NM	5,100	<0.3	1.1	<0.3 140	9.2	NM	NM	<0.5	<0.5 to <5
	-											
_	17 Jul 1995	Grab	153	8,400	1,200	150	1,000	1,700	NM	NM	<125	NM
	20 Oct 1995	Grab	<40	5,800	600	590	43	340	NM	NM	NM	NM
	25 Jan 1996	Grab	<40	10,000	1,200	290	870	1,300	NM	NM	<250	NM
	25 Apr 1996	Grab	<40	8,900	830	140	1,000	1,000	NM	NM	400	NM
-	12 Jun 2001	Grab	7.4	1,800	37	4.5	98	19	NM	NM	NM	NM
:	5 Feb 2002	Grab	4.4	1,100	32	2.1	76	9.5	NM	NM	< 0.5	NM
	12 Aug 2004	Grab	<5	1,100	4.5	< 0.5	6.0	1.8	NM	NM	1.4	<0.5 to <5
	2 Mar 2005	Grab	NM	3,000	27	3.0	76	22	NM	NM	<2.5	<2.5 to <25
	2 Oct 2006	Grab	<100	1,500	6.6	< 0.5	5.0	2.5	< 0.5	< 0.5	< 0.5	<0.5 to <100
	20 Mar 2007	Grab	NM	2,200	15	1.6	14	12	< 0.5	NM	0.52	<0.5 to <100
	10 Sep 2007	Grab	NM	1,000	4.2	< 0.5	< 0.5	0.82	< 0.5	NM	0.53	<0.5 to <100
	10 Mar 2008	Grab	NM	4,000	13	1.1	7.0	7.4	<0.5	NM	<0.5	TAME = 0.53 Others <0.5 to <100
-	8 Sep 2008	Grab	NM	1,100	9.7	0.75	7.7	5.9	< 0.5	NM	0.59	<0.5 to <100
	3 Mar 2009	Grab	NM	2,100	14	1.6	16	14	NM	NM	< 0.5	<0.5 to <5
	1 Sep 2009	Grab	NM	1,400	4.7	< 0.5	0.52	1.7	NM	NM	< 0.5	<0.5 to <5
MW4	2 Oct 2006	Grab	<100	<50	<0.5	< 0.5	0.96	< 0.5	<0.5	< 0.5	< 0.5	<0.5 to <100
:	20 Mar 2007	Grab	NM	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	NM	< 0.5	<0.5 to <100
F	10 Sep 2007	Grab	NM	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	NM	< 0.5	<0.5 to <100
-	10 Mar 2008	Grab	NM	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	NM	< 0.5	<0.5 to <100
	8 Sep 2008	Grab	NM	<50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	NM	< 0.5	<0.5 to <100
-	3 Mar 2009	Grab	NM	<50	< 0.5	< 0.5	<0.5	<1	NM	NM	< 0.5	<0.5 to <5
-	1 Sep 2009	Grab	NM	<50	<0.5	<0.5	<0.5	<1.0	NM	NM	<0.5	<0.5 to <5
	2 Oct 2006	Grab	<100	3,000	20	0.97	69	130	<0.5	<0.5	2.6	<0.5 to <100
-	20 Mar 2007	Grab	NM	2,800	13	1.5	27	35	<0.5	NM	1.6	<0.5 to <100
-	10 Sep 2007	Grab	NM	1,900	13	0.78	10	9.2	<0.5	NM	2.5	<0.5 to <100
-	-											
-	10 Mar 2008	Grab	NM	4,900	7.8	1.4	13	12	<0.5	NM	1.2	<0.5 to <100
	8 Sep 2008	Grab	NM	2,300	9.7	0.75	7.7	5.9	<0.5	NM	2.3	<0.5 to <100
-	3 Mar 2009	Grab	NM	2,600	11	4	60	30	NM	NM	<2.5	<2.5 to <25
-	1 Sep 2009	Grab	NM	1,800	5.5	0.68	5.5	2.5	NM	NM	0.98	<0.5

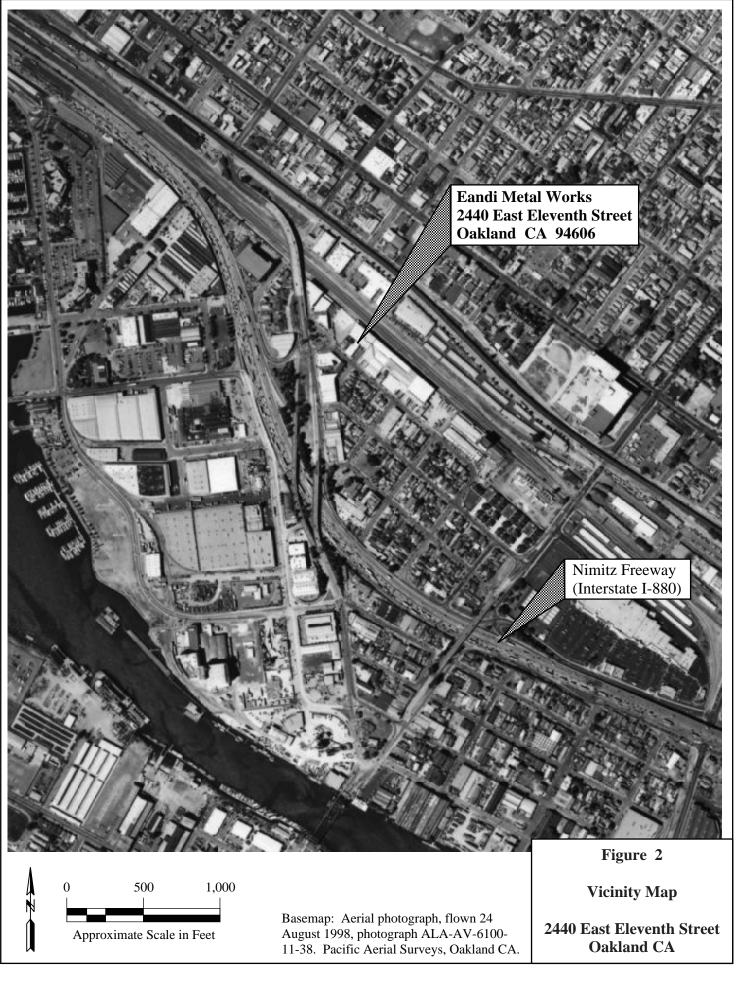
#### General Notes

- (a) TPH = total petroleum hydrocarbons. MtBE = methyl tert-butyl ether. TAME = tert-amyl methyl ether.
- (b) NM = not measured.
- (c) Samples were collected using a Teflon bailer fitted with a bottom-emptying device.

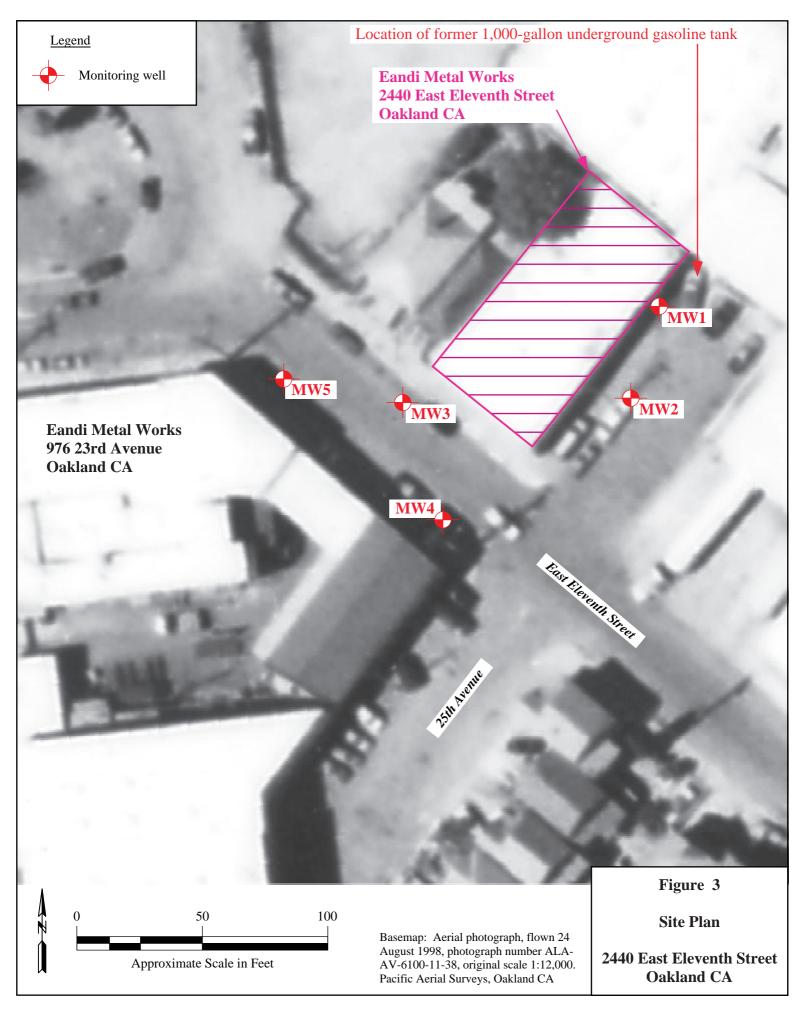




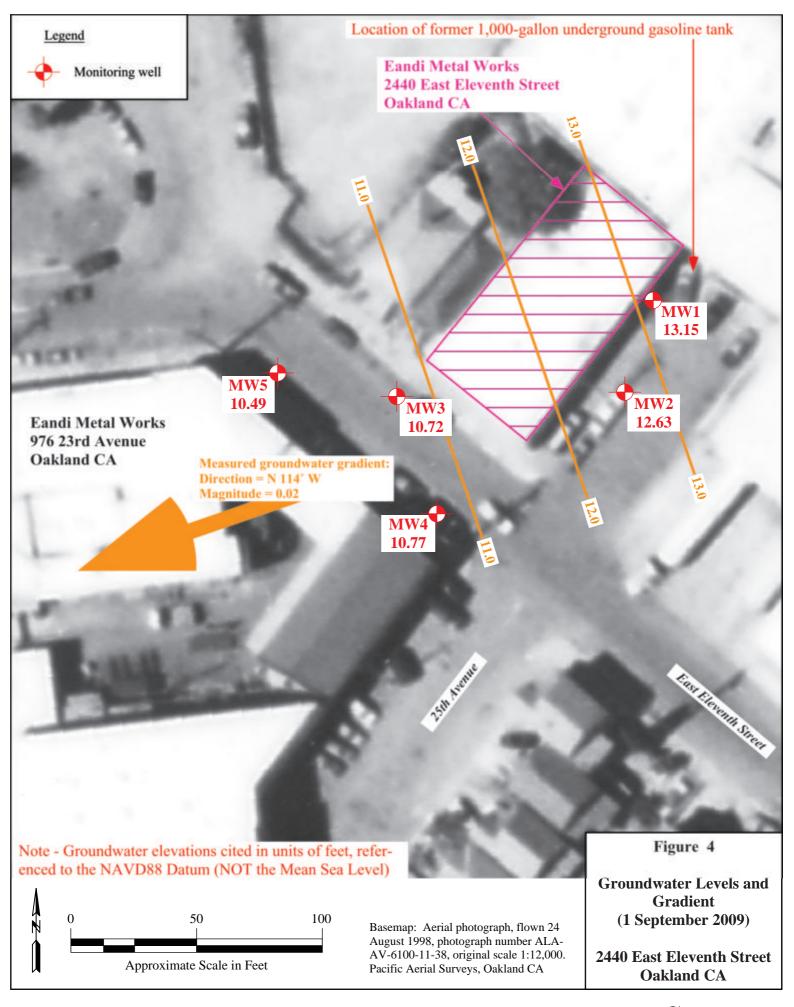




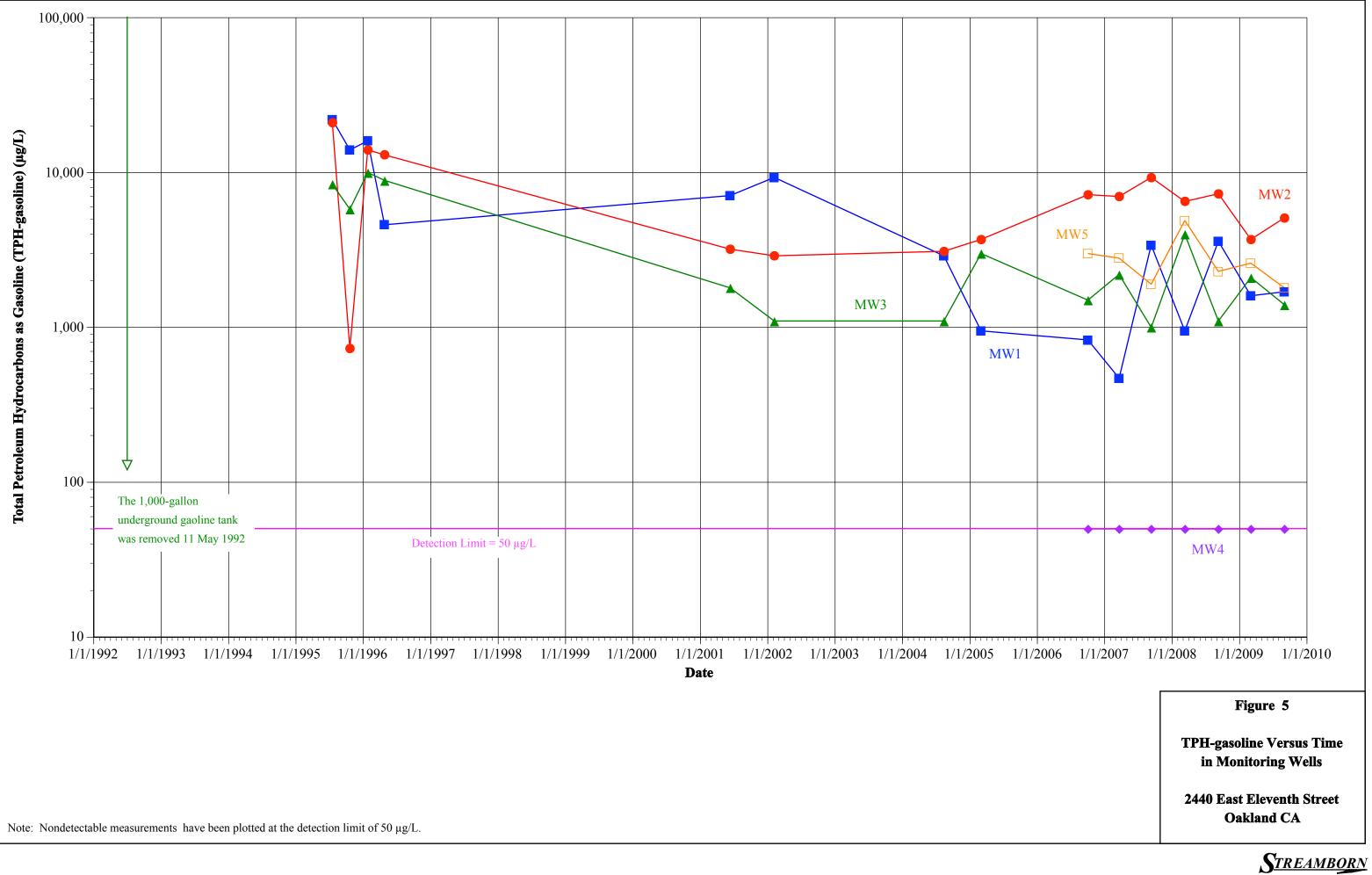




<u>Streamborn</u>







# ATTACHMENT 1

Groundwater Sampling Forms



Project Name/Number:	Eandi Metal Works / P279	Logged By: Alex S. Bowerman
Property Location:	2440 East Eleventh Street, Oakland CA	Date: 1 September 2009
Well Number:	MW1	Casing Diameter (in): 2
Purging Equipment:	Submersible purge pump	Sample Type: Grab
Sampling Equipment:	Bailer equipped with bottom-emptying device	Depth to Water: 10,99
Measuring Point:	Top of casing, north side	Total Depth: 19,8
Free Product:	None	Strongdor: Grasoline odor PID = 77.3
Comments:		Sample Number: MW1

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

$\frac{19.8 - 10.99}{3} = 2.94 \text{ ft}$ off bottom	Total Depth (feet)	-	Depth to Water (feet)		0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well		Single Casing Volume (gallons)		Three Casing Volumes (gallons)
	19.8	-	10.99	x	0.16	=	1.4	x 3	4.2

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
MARS O	10:48	1.35	6.74		19,6	-69.1	Translucent	Brown	no	Start purge
B/10 1.5	17:53	0.74	6,76		19.5	-94.1	Clear	none	ne	N.
W/3 3.0	10:58	0.69	6.77		19.4	- 95.0	Chear	vont	40	
4.5	11:03	0.79	6.78	503	19.2	-77.6	Clear	none	иО	
·										
				, · ·						Collect sample

Project Name/Number:	Eandi Metal Works / P279	Logged By:	Alex S. Bowerman
Property Location:	2440 East Eleventh Street, Oakland CA	Date:	1 September 2009
Well Number:	MW2	Casing Diameter (in):	2
Purging Equipment:	Submersible purge pump	Sample Type:	Grab
Sampling Equipment:	Bailer equipped with bottom-emptying device	Depth to Water:	11.29
Measuring Point:	Top of casing, north side	Total Depth:	19.8
Free Product:	None	Odor:	Strong gas PID = 230
Comments:		Sample Number:	

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

$\frac{19.8-11.29}{3} = 2.84 \text{ ft} \\ \text{off bo Now}$	Total Depth (feet)	-	Depth to Water (feet)	-	0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	-	Single Casing Volume (gallons)		Three Casing Volumes (gallons)
	19.8	-	11.29	x	0.16	II	1.4	x 3	4.2

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	loz	0.65	6.76		Z3.0	-57.8	Trans	Grey	NO	Start purge
1.5	107	0.91	6.77					Grey	ho	
3.0	111	0.73	6.79		21.5	-61.4	Trans	Grey	no	
4.5	116	0.72	6-8	≥ 674	21,1	-60.3	Trans	Grey	nu	
			6.85	•				(		
									•	
										Collect sample

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Project Name/Number:	Eandi Metal Works / P279	Logged By: Alex S. Bowerman
Property Location:	2440 East Eleventh Street, Oakland CA	Date: 1 September 2009
Well Number:	MW3	Casing Diameter (in): 2
Purging Equipment:	Submersible purge pump	Sample Type: Grab
Sampling Equipment:	Bailer equipped with bottom-emptying device	Depth to Water: 11.97
Measuring Point:	Top of casing, north side	Total Depth: 19,6
Free Product:	None	Odor: Gasoline odor, PID=0.0
Comments:		Sample Number: MW3

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

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$\frac{19.6 - 11.97}{3} = 2.54 \text{ fr}$ off <b>Bottom</b>	Total Depth (feet)	-	Depth to Water (feet)		0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	I	Single Casing Volume (gallons)		Three Casing Volumes (gallons)
	19.6	-	11.97	x	0.16	=	1.2	x.3	3,6

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	11:35	0.80	6.83		20.0	-59.7	Trans	brown	50	Start purge
1.25	11:3g	0.86	6.82		19.6	-64.2	Trans	brown	5	
2.5	11:43	0.81	6.82		19.6	-58.6	trans	brown	50	
3.75	11:47	0.78	6.82	567	19.6	-56.2		none	NU	
										Collect sample

Project Name/Number:	Eandi Metal Works / P279	Logged By:	Alex S. Bowerman	
Property Location:	2440 East Eleventh Street, Oakland CA	Date:	1 September 2009	
Well Number:	MW4	Casing Diameter (in):	2	
Purging Equipment:	Submersible purge pump	Sample Type:	Grab	
Sampling Equipment:	Bailer equipped with bottom-emptying device	Depth to Water:	11.68	· · · · · ·
. Measuring Point:	Top of casing, north side	Total Depth:	17.3	
Free Product:	None	Odor:	None P	10=0.0
Comments:		Sample Number:	MW4	

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

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17.3-11.68 = 1.87 3 ft of		-	Depth to Water (feet)	x	0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	Single Casing Volume (gallons)		Three Casing Volumes (gallons)
Bo Her	17.3	-	11.68	x	0.16	=	0.0	x 3	2.7

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pH	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	9:5z	1.36	6.59		19.3	150.9	Clear	None	so	Start purge
1	9:54	1.15	6.58		19.0	151.1	Clar	vone	nc	
2	9:57	9.88	6.60		18.6	136.4		None	n0	
3	10:01	0.86	6.59	531	18.3	131.3	Char	MOUY	NU	Do lower than
	•				•					previous sampling
										· · · ·
										Collect sample

Project Name/Number:	Eandi Metal Works / P279	Logged By:	Alex S. Bowerman
Property Location:	2440 East Eleventh Street, Oakland CA	Date:	1 September 2009
Well Number:	MW5	Casing Diameter (in):	2
Purging Equipment:	Submersible purge pump	Sample Type:	Grab
Sampling Equipment:	Bailer equipped with bottom-emptying device	Depth to Water:	11.45
Measuring Point:	Top of casing, north side	Total Depth:	17.2
Free Product:	None	Odor:	Strong Gas PID = Z,1
Comments:		Sample Number:	

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

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$\frac{17.2 - 11.45}{3} = 1.92$	Total Depth (feet)	-	Depth to Water (feet)	x	0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well		Single Casing Volume (gallons)		Three Casing Volumes (gallons)
Bottom	17.2	-	11.45	x	0.16	=	0.9	x 3	2.7

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	рН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	12:21	0.99	6.79	· ·	21.1	-58.9	Trans	Brown	Νυ	Start purge
1	12:24	0.98	6.80		z0.4	-63.1	Clear	none	ho	
2	12:27	6.93	6.83		20.0	-64.1	Clear	none	nr	
3	12:30	0.85	6.83	663	19.9	-65.6	Clear	. None	n. 0	
										Collect sample

# ATTACHMENT 2

Laboratory Reports and Chain-of-Custody Forms





# ANALYTICAL REPORT

Job Number: 720-22322-1 Job Description: 2440 East Eleventh Street

> For: Streamborn 900 Santa Fe Avenue Albany, CA 94706 Attention: Mr. Douglas W Lovell

Jani A

Approved for release. Tim Costello Project Manager I 9/18/2009 3:16 PM

Tim Costello Project Manager I tim.costello@testamericainc.com 09/18/2009

CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.

A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

#### Comments

No additional comments.

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

Method(s) 8260B/CA\_LUFTMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 57085 were outside control limits. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

#### **EXECUTIVE SUMMARY - Detections**

Client: Streamborn

Job Number: 720-22322-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-22322-2	MW1				
Benzene		7.0	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Org	anics (GRO)-C5-C12	1700	50	ug/L	8260B/CA_LUFTMS
Toluene		2.2	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		4.2	1.0	ug/L	8260B/CA_LUFTMS
Ethylbenzene		64	0.50	ug/L	8260B/CA_LUFTMS
720-22322-3	MW3				
Benzene		4.7	0.50	ug/L	8260B/CA LUFTMS
Gasoline Range Org	anics (GRO)-C5-C12	1400	50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		1.7	1.0	ug/L	8260B/CALUFTMS
Ethylbenzene		0.52	0.50	ug/L	8260B/CA_LUFTMS
720-22322-4	MW5				
Benzene		5.5	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Org	anics (GRO)-C5-C12	1800	50	ug/L	8260B/CA LUFTMS
Toluene	, , , , , , , , , , , , , , , , , , ,	0.68	0.50	ug/L	8260B/CA LUFTMS
Xylenes, Total		2.5	1.0	ug/L	8260B/CA_LUFTMS
MTBE		0.98	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		5.5	0.50	ug/L	8260B/CA_LUFTMS
720-22322-5	MW2				
Benzene		1.4	1.0	ug/L	8260B/CA LUFTMS
	anics (GRO)-C5-C12	5100	100	ug/L	8260B/CA_LUFTMS
Toluene		1.8	1.0	ug/L	8260B/CA LUFTMS
Xylenes, Total		9.2	2.0	ug/L	8260B/CA LUFTMS
Ethylbenzene		140	1.0	ug/L	8260B/CA_LUFTMS

#### **METHOD SUMMARY**

# Client: Streamborn Job Number: 720-22322-1 Description Lab Location Method Preparation Method Matrix: Water TAL SF SW846 8260B/CA\_LUFTMS Volatile Organic Compounds by GC/MS TAL SF SW846 8260B/CA\_LUFTMS Purge and Trap TAL SF SW846 5030B Lab References: Lab References: Lab References:

TAL SF = TestAmerica San Francisco

#### **Method References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### SAMPLE SUMMARY

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-22322-1	MW4	Water	09/01/2009 1001	09/02/2009 1640
720-22322-2	MW1	Water	09/01/2009 1103	09/02/2009 1640
720-22322-3	MW3	Water	09/01/2009 1147	09/02/2009 1640
720-22322-4	MW5	Water	09/01/2009 1230	09/02/2009 1640
720-22322-5	MW2	Water	09/01/2009 1316	09/02/2009 1640

Job Number: 720-22322-1

Client Sample ID	: MW4				
Lab Sample ID:	720-22322-1			Date Sam	pled: 09/01/2009 1001
Client Matrix:	Water			Date Rece	eived: 09/02/2009 1640
	8260B/CA	LUFTMS Volatile Organic Co	ompounds by GC/N	IS	
Method:	8260B/CA_LUFTMS	Analysis Batch: 720-57023	Instrument	ID:	SAT 3900C
Preparation:	5030B		Lab File ID	):	e:\data\200909\09030
Dilution:	1.0		Initial Weig	ht/Volume:	40 mL
Date Analyzed:	09/03/2009 2028		Final Weig	ht/Volume:	40 mL
Date Prepared:	09/03/2009 2028				
Analyte		Result (ug/L)	Qualifier		RL
Benzene		ND			0.50
Gasoline Range (	Organics (GRO)-C5-C12	ND			50
TAME		ND			0.50
Ethyl tert-butyl eth	ner	ND			0.50
Toluene		ND			0.50
Xylenes, Total		ND			1.0
MTBE		ND			0.50
DIPE		ND			1.0
ТВА		ND			5.0
Ethylbenzene		ND			0.50
Surrogate		%Rec	Qualifier	Acceptanc	e Limits
Toluene-d8 (Surr)		96		70 - 130	
1,2-Dichloroethan	e-d4 (Surr)	83		67 - 130	

Job Number: 720-22322-1

Client Sample ID	: MW1				
Lab Sample ID:	720-22322-2			Date Sar	mpled: 09/01/2009 1103
Client Matrix:	Water			Date Red	ceived: 09/02/2009 1640
	8260B/CA	_LUFTMS Volatile Organic Co	ompounds by GC	/MS	
Method: Preparation:	8260B/CA_LUFTMS 5030B	Analysis Batch: 720-57023	Instrume Lab File		SAT 3900C e:\data\200909\09030
Dilution:	1.0			eight/Volume:	
Date Analyzed:	09/03/2009 2052			eight/Volume:	
Date Prepared:	09/03/2009 2052				
Analyte		Result (ug/L)	Qualifier		RL
Benzene		7.0			0.50
Gasoline Range (	Organics (GRO)-C5-C12	1700			50
TAME		ND			0.50
Ethyl tert-butyl eth	her	ND			0.50
Toluene		2.2			0.50
Xylenes, Total		4.2			1.0
MTBE		ND			0.50
DIPE		ND			1.0
TBA		ND			5.0
Ethylbenzene		64			0.50
Surrogate		%Rec	Qualifier	Acceptar	nce Limits
Toluene-d8 (Surr)		95		70 - 130	
1,2-Dichloroethan	ie-d4 (Surr)	94		67 - 130	

Job Number: 720-22322-1

Client Sample ID	: MW3				
Lab Sample ID: Client Matrix:	720-22322-3 Water				npled: 09/01/2009 1147 eived: 09/02/2009 1640
	8260B/C	A_LUFTMS Volatile Organic Co	ompounds by GC/M	IS	
Method: Preparation: Dilution: Date Analyzed: Date Prepared:	8260B/CA_LUFTMS 5030B 1.0 09/03/2009 2117 09/03/2009 2117	Analysis Batch: 720-57023			SAT 3900C e:\data\200909\09030 40 mL 40 mL
Analyte		Result (ug/L)	Qualifier		RL
Benzene		4.7			0.50
-	Organics (GRO)-C5-C12	1400			50
TAME		ND			0.50
Ethyl tert-butyl eth	ier	ND			0.50
Toluene		ND			0.50
Xylenes, Total		1.7			1.0
MTBE		ND			0.50
DIPE		ND			1.0
TBA		ND			5.0
Ethylbenzene		0.52			0.50
Surrogate		%Rec	Qualifier	Acceptan	ce Limits
Toluene-d8 (Surr)		97		70 - 130	
1,2-Dichloroethan	e-d4 (Surr)	98		67 - 130	

Job Number: 720-22322-1

Client Sample ID	: MW5				
Lab Sample ID:	720-22322-4			Date Sampled: 09/01/2009	1230
Client Matrix:	Water			Date Received: 09/02/2009	1640
	8260B/CA	_LUFTMS Volatile Organic Co	ompounds by GC/MS	6	
Method:	8260B/CA_LUFTMS	Analysis Batch: 720-57023	Instrument I	ID: SAT 3900C	
Preparation:	5030B		Lab File ID:	e:\data\200909\09	030
Dilution:	1.0		Initial Weigh		
Date Analyzed:	09/03/2009 2142		Final Weigh	nt/Volume: 40 mL	
Date Prepared:	09/03/2009 2142				
Analyte		Result (ug/L)	Qualifier	RL	
Benzene		5.5		0.50	
Gasoline Range (	Drganics (GRO)-C5-C12	1800		50	
TAME		ND		0.50	
Ethyl tert-butyl eth	ner	ND		0.50	
Toluene		0.68		0.50	
Xylenes, Total		2.5		1.0	
MTBE		0.98		0.50	
DIPE		ND		1.0	
ТВА		ND		5.0	
Ethylbenzene		5.5		0.50	
Surrogate		%Rec	Qualifier	Acceptance Limits	
Toluene-d8 (Surr)		100		70 - 130	
1,2-Dichloroethan	e-d4 (Surr)	87		67 - 130	

Job Number: 720-22322-1

#### **Client Sample ID:** MW2 Lab Sample ID: 720-22322-5 Date Sampled: 09/01/2009 1316 **Client Matrix:** Water Date Received: 09/02/2009 1640 8260B/CA\_LUFTMS Volatile Organic Compounds by GC/MS Method: 8260B/CA\_LUFTMS Analysis Batch: 720-57085 Instrument ID: SAT 3900C Preparation: 5030B Lab File ID: e:\data\200909\09040 Dilution: 2.0 Initial Weight/Volume: 40 mL Date Analyzed: 09/04/2009 1938 Final Weight/Volume: 40 mL Date Prepared: 09/04/2009 1938 Analyte Result (ug/L) Qualifier RL

100
1.0
1.0
1.0
2.0
1.0
2.0
10
1.0
Acceptance Limits
70 - 130
67 - 130

#### DATA REPORTING QUALIFIERS

Lab Section

Qualifier

Description

Job Number: 720-22322-1

#### Client: Streamborn

### **QC Association Summary**

Lak Camala ID		Report Basis			Deen Detek
Lab Sample ID	Client Sample ID	Dasis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-57	023				
LCS 720-57023/2	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCSD 720-57023/1	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
MB 720-57023/3	Method Blank	Т	Water	8260B/CA_LUFT	
720-22322-1	MW4	Т	Water	8260B/CA_LUFT	
720-22322-2	MW1	Т	Water	8260B/CA_LUFT	
720-22322-3	MW3	Т	Water	8260B/CA_LUFT	
720-22322-4	MW5	Т	Water	8260B/CA_LUFT	
Analysis Batch:720-57	085				
LCS 720-57085/2	Lab Control Sample	Т	Water	8260B/CA_LUFT	
LCSD 720-57085/1	Lab Control Sample Duplicate	Т	Water	8260B/CA_LUFT	
MB 720-57085/3	Method Blank	Т	Water	8260B/CA_LUFT	
720-22322-5	MW2	Т	Water	8260B/CA_LUFT	

#### Report Basis

T = Total

#### Client: Streamborn

#### Method Blank - Batch: 720-57023

Lab Sample ID:MB 720-57023/3Client Matrix:WaterDilution:1.0Date Analyzed:09/03/20091501Date Prepared:09/03/20091501

Analysis Batch: 720-57023 Prep Batch: N/A Units: ug/L

#### **Quality Control Results**

Job Number: 720-22322-1

#### Method: 8260B/CA\_LUFTMS Preparation: 5030B

Instrument ID: Varian 3900C Lab File ID: e:\data\200909\090309\mb Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
ТАМЕ	ND		0.50
Ethyl tert-butyl ether	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
МТВЕ	ND		0.50
DIPE	ND		1.0
ТВА	ND		5.0
Ethylbenzene	ND		0.50
Surrogate	% Rec	Acceptance Limits	3
Toluene-d8 (Surr)	98	70 - 130	
1,2-Dichloroethane-d4 (Surr)	88	67 - 130	

#### **Quality Control Results**

Method: 8260B/CA\_LUFTMS

Preparation: 5030B

Final Weight/Volume:

Lab File ID:

Instrument ID: Varian 3900C

Initial Weight/Volume: 40 mL

Job Number: 720-22322-1

e:\data\200909\090309\ls-v

40 mL

# Lab Control Sample/

#### Lab Control Sample Duplicate Recovery Report - Batch: 720-57023

Date Prepared:	09/03/2009 1526					-		
LCSD Lab Sample	e ID: LCSD 720-57023/1	Analy	sis Batch:	720-57023	Ins	trument ID:	Varian 3900	С
Client Matrix:	Water	Prep	Batch: N/A		Lat	File ID: e:\	data\200909	\090309\ld-wa
Dilution:	1.0	Units	: ug/L		Init	ial Weight/Volu	ıme: 40 m	L
Date Analyzed:	09/03/2009 1551				Fin	al Weight/Volu	me: 40 m	L
Date Prepared:	09/03/2009 1551							
		c	% Rec.					
Analyte		LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene		96	88	72 - 120	10	20		
Gasoline Range C	Organics (GRO)-C5-C12	76	71	36 - 130	6	20		
Toluene		90	86	59 - 120	5	20		
MTBE		101	100	64 - 130	1	20		
Surrogate		L	CS % Rec	LCSD %	Rec	Accep	otance Limits	
Toluene-d8 (Surr)		1	00	96		7	0 - 130	
1,2-Dichloroethan	e-d4 (Surr)	7	'8	119		6	7 - 130	

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Analysis Batch: 720-57023

Prep Batch: N/A

Units: ug/L

Client: Streamborn

Client Matrix:

Date Analyzed:

Dilution:

LCS Lab Sample ID: LCS 720-57023/2

Water

09/03/2009 1526

1.0

#### Quality Control Results

Job Number: 720-22322-1

#### Method: 8260B/CA\_LUFTMS Preparation: 5030B

Instrument ID: Varian 3900C Lab File ID: e:\data\200909\090409\mb Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

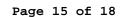
Analyte	Result	Qual	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
TAME	ND		0.50
Ethyl tert-butyl ether	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
DIPE	ND		1.0
ТВА	ND		5.0
Ethylbenzene	ND		0.50
Surrogate	% Rec	Acceptance Limi	ts
Toluene-d8 (Surr)	94	70 - 130	
1,2-Dichloroethane-d4 (Surr)	94	67 - 130	

Method Blank - Batch: 720-57085

Client: Streamborn

Lab Sample ID:MB 720-57085/3Client Matrix:WaterDilution:1.0Date Analyzed:09/04/20091252Date Prepared:09/04/20091252

Analysis Batch: 720-57085 Prep Batch: N/A Units: ug/L



#### **Quality Control Results**

Job Number: 720-22322-1

# Lab Control Sample/

#### Lab Control Sample Duplicate Recovery Report - Batch: 720-57085

Client: Streamborn

Client Matrix:

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

Dilution:

LCS Lab Sample ID: LCS 720-57085/2

Water

1.0

Date Analyzed: Date Prepared:	09/04/2009 1316 09/04/2009 1316	Crinco				al Weight/Volum		mL
LCSD Lab Sample Client Matrix: Dilution: Date Analyzed: Date Prepared:	e ID: LCSD 720-57085/1 Water 1.0 09/04/2009 1340 09/04/2009 1340	Prep	rsis Batch: 7 Batch: N/A : ug/L	720-57085	Lat		me: 40 m	)\090409\ld-w≀ 1L
		c	% Rec.					
Analyte		LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene		77	81	72 - 120	5	20		
Gasoline Range C	Organics (GRO)-C5-C12	64	65	36 - 130	1	20		
Toluene		70	77	59 - 120	9	20		
MTBE		88	86	64 - 130	2	20		
Surrogate		L	.CS % Rec	LCSD %	Rec	Accept	ance Limits	6

94

92

Analysis Batch: 720-57085

Prep Batch: N/A

Units: ug/L

94

101

Method: 8260B/CA\_LUFTMS Preparation: 5030B

> Instrument ID: Varian 3900C Lab File ID: e:\data\200909\090409\ls-v Initial Weight/Volume: 40 mL Final Weight/Volume: 40 mL

> > 70 - 130

67 - 130

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118777

STREAMBORN

Chain-of-Custody Form

Project Name: 2440 East Eleventh Street	Project Location: 2440 East Eleventh Street, Oakland CA	Project Number: P279
Sampler: Alex S. Bowerman	Laboratory: TestAmerica	Laboratory Number: 925-484-1919

				1	Matr	ix	Ty	pe		Containers			Tu	marc	ound	A	nalyses		
	Sample Designation	Date	Time	Soil	Water	Vapor	Grab	Composite	Quantity	Type	Preservative (in addition to icc)	Field Filtration	48-Hour	5- Working Days	10-Working Days	TPH-gasoline/ BTEX/fuel oxgenates (EPA 8260)		Sampler Comments	Laboratory Comments
21	MW4	1-Sep-09	10:01		x	1.	x		3	40 mL VOA	HCI	None			x	x			
	MWI	1-Sep-09	11:03		x		x		3	40 mL VOA	HCI	None			x	x			
3	MW3	1-Sep-09	11:47		x	1	x		3	40 mL VOA	HCI	None			x	x			
	MW5	1-Sep-09	12:30		x		x		3	40 mL VOA	HCI	None			x	x			
10 C 10 C	MW2	1-Sep-09	1:16		x		x		3	40 mL VOA	HCI	None			x	x			
	- 14																		
-					-		_						-	-	-				

Note: Sampler and laboratory to observe preservative, condition, integrity, etc. of samples and record (under "Comments") any exceptions from standard protocols.

Relinquished By: May Bar 1	Received By:		P)	Date: 9/4/0 9	Time: /325
Relinquished By: Mulling	Received By:	Table H.	(TASF)	Date: 9/2/09	Time:/640
STREAMBORN Mail: PO Box 8330, Berkeley CA	94707-8330 Offi	( ice: 900 Santa Fe Ave, A	lbany CA 94706 510	-528-4234 Fax: 528-2613	3.8°C

STREAMBORN Mail: PO Box 8330, Berkeley CA 94707-8330 Office: 900 Santa Fe Ave, Albany CA 94706 510-528-4234 Fax: 528-2613

Report results to information@streamborn.com

Prepare EDF for Geotracker Upload? Yes Global ID: T0600100858 Streamborn Logcode: SBA

720-22322

#### Client: Streamborn

#### Login Number: 22322 Creator: Hoang, Julie List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

Job Number: 720-22322-1

#### List Source: TestAmerica San Francisco

# ATTACHMENT 3

Geotracker Survey



Virgil Chavez Land Surveying 721 Tuolumne Street Vallejo, California, 94590 (707) 553-2476 • Fax (707) 553-8698

September 10, 2009 Project No.: 3018-02

Juli Brady Streamborn P.O. Box 8330 Berkeley, CA 94707

Subject: Monitoring Well Survey 2440 East Eleventh Street Oakland, CA

Dear Juli:

This is to confirm that we have proceeded at your request to survey the ground water monitoring wells located at the above referenced location. The survey was completed on August 28, 2009. The benchmark for this survey was a pin in monument well located at centerline of International Boulevard and Miller Avenue. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83).

Benchmark Elevation = 28.59 feet (NAVD 88). NAVD 88 - NGVD 29 = 2.726 ft. (0.831m)

<u>Latitude</u>	Longitude [Variable]	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	Desc.
				24.51	GRD MW1
37.7801530	-122.2358181	2111185.46	6060041.62	24.14	TOC MW1
				24.21	GRD MW2
37.7800499	-122.2358522	2111148.11	6060031.07	23.92	TOC MW2
				23.06	GRD MW3
37.7800410	-122.2361722	2111146.58	6059938.56	22.69	TOC MW3
				23.12	GRD MW4
37.7799066	-122.2361136	2111097.36	6059954.58	22.45	TOC MW4
				22.59	GRD MW5
37.7800613	-122.2363355	2111154.85	6059891.48	21.94	TOC MW5



Sincerely.

Virgil D. Chavez, PLS 6323

