

ORO LOMA SANITARY DISTRICT

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> GENERAL MANAGER Jason Warner

RECEIVED

August 9, 2011

11:19 am, Aug 11, 2011 Alameda County Environmental Health

Mr. Mark Detterman, PG, CEG Hazardous Materials Specialist Environmental Health Department 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

SUBJECT: SUBMITTAL OF GROUNDWATER MONITORING REPORT:

2010 SECOND SEMIANNUAL MONITORING EVENT.

ORO LOMA SANITARY DISTRICT,

2600 GRANT AVENUE, SAN LORENZO, CA 94580.

FUEL LEAK CASE NO. RO0000288

Dear Mr. Detterman:

Attached is the Groundwater Monitoring Report for the 2010 Second Semiannual Monitoring Event, prepared for the Oro Loma Sanitary District facility, located at 2600 Grant Avenue in San Lorenzo, California. The report was prepared by Trihydro Corporation and previously submitted (via electronic upload) to the State of California Geotracker website.

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

Please feel free to contact me at 510-481-6965 if you have any questions or need additional information.

Sincerely,

Jason Warner, P.E. General Manager



July 14, 2011

Mr. Jason Warner District Manager Oro Loma Sanitary District 2655 Grant Avenue San Lorenzo, CA 94580

RE: Groundwater Monitoring Report for the 2010 Second Semiannual Monitoring Event Oro Loma Sanitary District 2655 Grant Avenue, San Lorenzo, CA LOP Site No. RO0000288

Dear Mr. Warner:

Trihydro Corporation (Trihydro) is pleased to present the 2010 Second Semiannual Groundwater Monitoring Report for the Oro Loma Sanitary District Site (LOP Site No. RO0000288) located at 2655 Grant Avenue in San Lorenzo, California. The Oro Loma Sanitary District (District) operates the Publicly Owned Treatment Works (POTW).

This work was performed in general accordance with our Scope of Work dated December 18, 2008. Our proposal was based on a discussion with you and our review of previously quarterly monitoring reports prepared by The Sutton Group. We understand that the scope of work described by you and previously reported by the Sutton Group is in accordance to the Work Plan that was approved by the Alameda County Health Care Agency's Environmental Protection Division (ACEP) in their letter dated April 18, 2003, as amended.

The purpose of the ongoing groundwater monitoring program is to evaluate the effect that the soil excavation (source removal) has on shallow groundwater quality. In accordance with approval from ACEP, Trihydro modified the original quarterly sampling schedule to a semi-annual sampling frequency. This report presents the results of the second semiannual groundwater monitoring event for 2010.

Background

A 1,000-gallon underground storage tank (UST) was formerly located in the parking lot adjacent to the vehicle maintenance building at the District's Service Center at 2655 Grant Avenue in San Lorenzo, California. The former UST was used to store gasoline for the District's fleet vehicles and was located south of the Maintenance Building and west of the Engineering building. The site is located



Mr. Jason Warner July 14, 2011 Page 2

approximately 1,000 feet inland of the San Francisco Bay shoreline. The land located west of the former UST site to the San Francisco shoreline is associated with the District's POTW.

The former 1,000-gallon gasoline UST was installed in 1978, which replaced a similar volume UST that was installed at the same location in 1961. Inventory control suggested that the original UST may have leaked (The Sutton Group, 2002). The 1,000-gallon UST installed in 1978 was used to store leaded gasoline until 1985 when it was converted to store unleaded gasoline. The UST remained in use until it was removed in May 1995. No leakage was observed with the UST installed in 1978 (The Sutton Group, 2004).

The shallow soils (from the ground surface to approximately 15 feet below grade) consist of an engineered fill up to several feet thick placed over shoreline deposits consisting soil of thin, interbedded sand, silt and clay horizons. The native soil contains organic material, such as plant debris and peat, which causes a noticeable decaying organic odor and also causes a dark brown to black staining to the soil and groundwater.

The depth to the shallow groundwater typically ranges from 4 to 9 feet below ground surface (bgs), depending on the season. The regional groundwater flow direction is west towards the San Francisco Bay. However, because of the large underground utility and sewer piping corridor immediately south of the site (beneath Grant Avenue), the local groundwater flow appears to be to the south and is apparently influenced by the sewer pipe corridor.

Monitoring wells MW-1, MW-2, and MW-3 were installed in January 1999 after several previous investigations, using hydropunch grab groundwater samples, indicated the presence of petroleum hydrocarbons in the shallow soil and groundwater. In 2001, monitoring wells MW-4 and MW-5 were installed at the request of ACEP to further define the hydrocarbon plume. Monitoring well MW-4 was subsequently closed and removed in April 2008 because of a planned excavation to remove soil with residual petroleum hydrocarbons. In June 2008 after the excavation was complete and backfilled, monitoring well MW-6 was installed about 40 feet downgradient of the former location of MW-4 as a replacement location to monitor the effectiveness of the soil excavation on groundwater quality.

Groundwater Monitoring and Sampling

On December 27, 2010, each of the five existing monitoring wells (MW-1, MW-2, MW-3, MW-5, and MW-6) were gauged to measure groundwater levels and to check for the presence of free-phase floating hydrocarbons. As presented on Table 1, the depth to groundwater measured in the wells ranged from 3.85 feet bgs to 6.21 feet bgs. Since the similar monitoring event last year (June 3, 2009), the groundwater elevation has increased in the range of 0.57 to 1.54 feet. All groundwater levels are in a normal range.

Based on the water-level measurements, groundwater flow at the site is generally to the south-south-east with a gradient of approximately 0.022 foot/foot (ft/ft). This interpreted groundwater flow direction is consistent with the previous monitoring events, and the gradient is within the historical range.



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An oil/water interface probe was lowered into each of the five monitoring wells to check for the presence of free-phase hydrocarbons. The oil/interface probe can detect a layer of floating hydrocarbon layer 0.01-feet thick or greater. The groundwater was also visually examined in the bailers and purge water bucket to detect free-phase product less than 0.01-feet thick (referred to as a sheen). No free-phase hydrocarbons were detected in the five groundwater monitoring wells.

The groundwater in the monitoring wells was typically stained dark grey to black and exhibited a hydrogen sulfide odor. This suggests that the naturally occurring organic material (plants and peat) are biologically decomposing and creating an anaerobic condition by using the available oxygen dissolved in the groundwater. Two of the wells, MW-5 and MW-6 also exhibited a slight to moderate petroleum hydrocarbon odor.

Groundwater samples were collected from each of the five monitoring wells. Before sampling, the wells were purged of stagnant water to allow formation water to enter the well. Approximately three well casing volumes of water were purged from the well using a disposable bailer. While purging, the following groundwater parameters were measured and recorded: pH, conductivity, turbidity, dissolved oxygen, and temperature. Groundwater samples were collected from each well in three, 40-millileter volatile organic analysis (VOA) vials. The vials were labeled and placed in an ice-chilled cooler. The samples were delivered to the analytical laboratory (BC Labs in Bakersfield, CA) under chain-of-custody protocol. The samples arrived at the lab in good condition, at the appropriate temperature, and within the holding time for analysis.

Groundwater Analytical Results

The groundwater analytical results for the 2010 Second Semiannual Monitoring Event are presented on Table 2. The historical groundwater analytical results are summarized on Table 3.

During this monitoring event, benzene, toluene, ethylbenzene, xylene (BTEX) and total petroleum hydrocarbons as gasoline (TPHg) were non-detect in monitoring wells MW-1 and MW-2. These results are typical for these wells. Analytical results for benzene, toluene, ethylbenzene, and xylene (BTEX) in MW-3 were also non-detect; however, $70~\mu g/L$ of TPHg was detected in MW-3. Wells MW-5 and MW-6 contained TPHg at concentrations of 15,000 micrograms per liter ($\mu g/L$, equivalent to parts per billion [ppb]) and 8,200 $\mu g/L$, respectively. These wells have historically contained very high TPHg concentrations. The current concentrations represent a decrease since the last monitoring event. TPHg concentrations detected in MW-5 is consistent with the most recent (6/3/2009, 12/30/2009, and 6/30/2010) analytical results.

Wells MW-5 and MW-6 also contain concentrations of benzene (1,300 μ g/L and 3,400 μ g/L); toluene (340 μ g/L and 78 μ g/L); and xylene (1,500 μ g/L and 1,600 μ g/L). MW-5 showed concentrations of 900 μ g/L while MW-6 was non-detect for Ethyl-Benzene these values are within the historical ranges for these constituents in these wells. Concentrations of the BTEX constituent ethylbenzene which had been decreasing since routine monitoring began showed slight change or remained constant. Concentrations of



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toluene and xylene are similar to previous results. Benzene results showed a significant decrease to previous levels.

Monitoring well MW-3 contained detectable concentrations of methyl tert-butyl ether (MTBE). The concentration of MTBE in MW-3 (23 μ g/L) is similar to previous detections. MTBE had only been previously detected in MW-2 and MW-6 prior to 2009; however, the previous laboratory reporting limits were greater than the values detected. Trihydro noted that the monitoring wells displayed analytical results that were either consistent with previous monitoring. Several of wells displayed a non-detection result where previous monitoring displayed a detection result. Trihydro believes that this is a result of changes of groundwater level.

Planned Activities for Next Semiannual (2Q 2011)

The next semiannual groundwater monitoring and sampling event is planned for June 2011. Each of the five groundwater monitoring wells will be gauged for water levels, checked for the presence of free-phase product, and sampled for testing at a California-certified analytical laboratory. Each of the groundwater samples will be tested for BTEX, TPHg, and MTBE. The quarterly monitoring and sampling results will be presented in a technical report and posted on the State of California's Geotracker website.

If you have any questions or require additional information regarding this Semiannual Groundwater Monitoring Report, please contact us at (925) 270-4674.

DAVID R. KLEESATTEL

No. 5136

Sincerely,

Trihydro Corporation

David Kleesattel, P.G. Senior Geologist

05P-001-001

Attachments

Figure 1. Oro Loma Service Center Base map
Table 1. Summary of Groundwater Elevations

Table 2. Current Summary of Groundwater Sample Analyses
Table 3. Historical Summary of Groundwater Analytical Results
Appendix: Analytical Laboratory Data Sheets (BC Analytical)

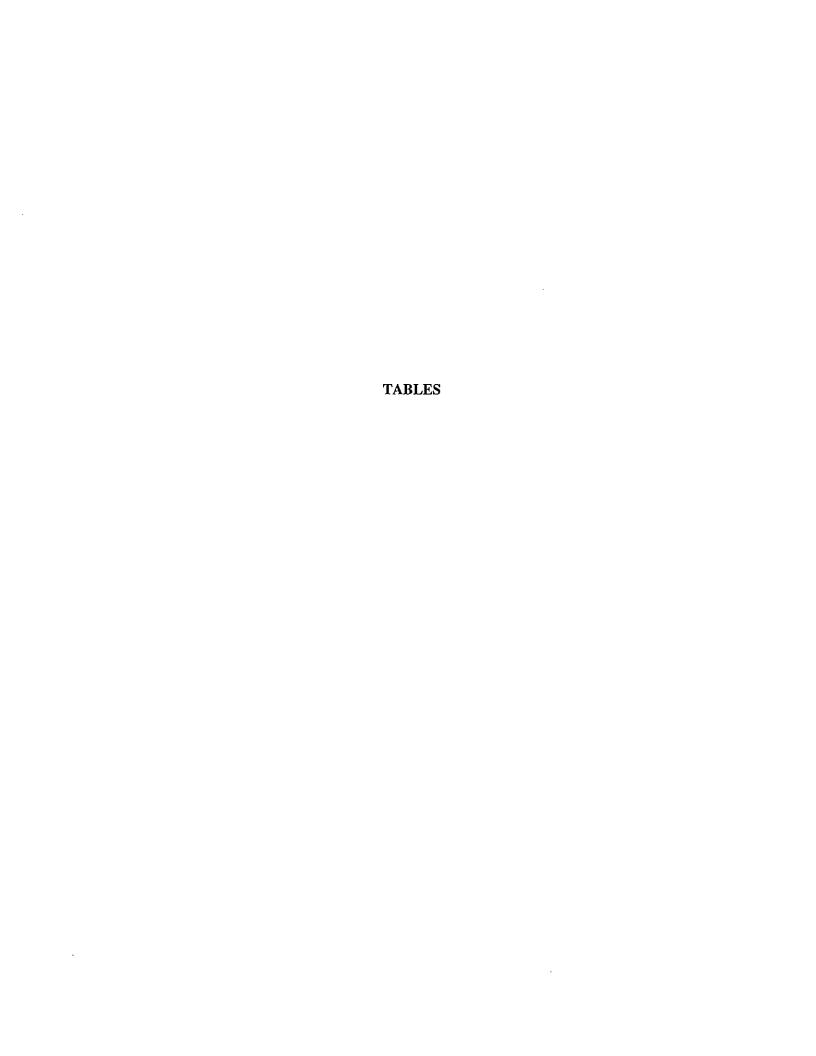


TABLE 1. SUMMARY of GROUNDWATER ELEVATIONS LOP SITE NO. RO0000288 ORO LOMA SANITARY DISTRICT 2655 GRANT AVENUE, SAN LORENZO, CA

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Casing Elevation*	8.37	8.48	10.10	9.40	8.66	8.98
Measurement Date						
10/21/2002	1.72	2.04	3.21	3.58	2.84	
1/28/2003	2.23	2.65	4.94	5.35	4.42	
4/28/2003	nm	3.16	nm	5.8	5.2	
7/25/2003	0.45	2.35	3.44	3.58	3.52	
10/30/2003	1.82	2.75	3.61	4.18	4.09	
1/23/2004	2.20	3.27	5.27	5.47	5.17	
4/27/2004	2.25	3.55	4.99	5.08	4.92	
7/29/2004	1.55	2.43	3.77	4.11	4.14	
10/28/2004	-0.08	0.96	4.17	4.5	4.69	
12/8/2004	-0.74	-0.83	nm	nm	nm	
1/24/2005	0.79	2.75	5.64	5.83	4.74	
4/28/2005	1.37	3.02	5.15	5.19	4.52	
7/19/2005	1.18	2.37	4.31	4.48	4.32	
10/26/2005	0.79	1.72	3.69	4.10	4.20	
1/30/2006	1.72	3.17	4.85	4.92	4.24	
4/18/2006	2.17	3.44	5.94	5.09	4.25	
7/19/2006	1.56	2.88	4.41	4.57	4.13	
10/26/2006	1.17	2.63	3.47	3.92	5.36	
1/15/2007	1.35	3.20	4.84	4.73	4.37	
4/19/2007	1.72	3.39	6.06	5.20	4.05	
7/19/2007	1.10	1.70	3.38	3.52	3.35	
10/17/2007	1.02	2.96	3.38	3.61	4.08	
1/15/2008	1.34	3.00	4.61	4.73	4.02	
4/15/2008	1.33	2.47	4.16	4.43	3.64	
7/17/2008	1.51	1.58	3.72	nm	3.93	4.00
10/14/2008	0.85	1.08	2.71		2.93	2.92
3/30/2009	1.89	3.28	5.32		4.45	5.15 ,
6/3/2009	1.59	1.93	4.46	~	3.75	4.40
12/30/2009	1.77	3.37	5.12	\	4.49	4.77
6/30/2010	1.96	3.16	4.83		4.14	4.67
···						
Current Reading on Dece	mber 27, 2	010				
Depth to Groundwater	6.21	5.01	4.51		3.85	3.89
Groundwater Elevation	2.16	3.47	5.59		4.81	5.09
Change since last year	0.57	1.54	1.13		1.06	0.69

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Notes:

"nm" = Not measured

[&]quot; - - - " = Well not available. MW-4 removed on 4/17/2008. Well MW-6 installed on 6/27/2008.

^{*} All depths and elevations are in feet relative to the NGS Station Loma (HT3751)

TABLE 2. SUMMARY OF GROUNDWATER SAMPLE ANALYSES LOP SITE NO. RO0000288 ORO LOMA SANITARY DISTRICT 2655 GRANT AVENUE, SAN LORENZO, CA

Sample Location	Sample Date	TPH as Gasoline	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
MW-1	12/27/2010	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
MW-2	12/27/2010	<50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
MW-3	12/27/2010	70	< 0.5	< 0.5	< 0.5	< 1.0	23
MW-5	12/27/2010	15,000	1,300	340	900	1,500	<.5
MW-6	12/27/2010	8,200	3,400	78	< 0.5	1,600	< 0.5

MTBE = Methyl tert Butyl Ether

Sample results reported as micrograms per liter (µg/L, equivalent to parts per billion)

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS LOP SITE NO. RO0000288 ORO LOMA SANITARY DISTRICT 2655 GRANT AVENUE, SAN LORENZO, CA

Sample Location	Sample Date	TPH as Gasoline	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE
MW-1	2/19/1999	ND	MD	ND	ND	ND	NID
INI AA - I	5/10/1999	ND	ND ND	ND	ND ND	ND	ND
	8/30/1999	ND	ND ND	ND	ND	ND	ND
	11/23/1999	ND	ND	ND ND	ND	ND	ND
dup	11/23/1999	ND			ND ND	ND	ND ND
uup	7/25/2003		ND	ND	ND	ND	ND
	10/30/2003	ND	ND	ND	ND	ND	ND
	1/23/2004	ND		ND.	ND.	AID	ALD.
	4/27/2004	ND	ND	ND	ND	ND	ND
	7/29/2004	ND			AUD.	AID.	ND.
mn			ND	ND	ND	ND	ND
mp	10/28/2004	ND.		ND	ND	ND	ND
mn	12/8/2004	ND ND	ND	ND	ND	ND	ND
mp	1/24/2005	ND	ND	ND	ND	ND	ND
	4/28/2005	ND.	NID	AUD.	ND.	ND	AUD.
	7/19/2005	ND	ND	ND	ND	ND	ND
	10/6/2005	ND.	ND.	ND	AUD.		
	1/30/2006	ND	ND	ND	ND	ND	ND
	4/18/2006	NID.	AUD.		AUD.		
	7/19/2006	ND	ND	ND	ND	ND	ND
	10/26/2006	NID.	ND	AUD	AUD.		
	1/15/2007	ND	ND	ND	ND	ND	ND
	4/19/2007	AID	AID.	NID			
	7/19/2007	ND	ND	ND	ND	ND	ND
	10/17/2007	ND.	ND.				
	1/15/2008	ND	ND	ND	ND	ND	ND
	4/15/2008	· · ·					
	7/17/2008	ND	ND	ND	ND	ND	ND
	10/14/2008						
	3/30/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
	6/3/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
	12/30/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
	6/30/2010 12/27/2010	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
	12/2//2010	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5
MW-2	2/19/1999	ND	ND	ND	ND	NID	ND
141 44-5	5/10/1999	ND	ND	ND	ND	ND	ND
	8/30/1999	ND	ND ND	ND	ND	ND	ND
	11/23/1999	ND	ND ND	ND	ND	ND	ND
	7/25/2003	ND	ND	ND ND	ND	ND ND	ND
	10/30/2003	ND	ND	ND	ND	ND	< 1
	1/23/2004	ND	ND.	MD	ND	ND.	ND.
	4/27/2004	ND	ND	ND	ND	ND	ND
	7/29/2004	ND	NID.	NID.	NID.	ND	ND.
mn	10/28/2004	ND ND	ND	ND	ND	ND ND	ND
mp	12/8/2004	ND ND	ND ND	ND	ND	ND ND	ND
mn	1/24/2004	ND ND	ND ND	ND	ND	ND	1.5
mp	4/28/2005		ND	ND	ND	ND	9
		ND.	ND.	NID.	AID		ND
	7/19/2005	ND	ND	ND	ND	ND	ND

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS LOP SITE NO. R00000288

ORO LOMA SANITARY DISTRICT 2655 GRANT AVENUE, SAN LORENZO, CA

Camula	Commis	TUNEO, CA	T-4-1				
Sample	Sample	TPH as	_		Ethyl-	Total	
Location	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
	10/6/2005						
	1/30/2006	ND	ND	ND	ND	ND	ND
	4/18/2006						
	7/19/2006	ND	ND	ND	ND	ND	ND
	10/26/2006						
	1/15/2007	ND	ND	1.3	ND	ND	ND
	4/19/2007						
	7/19/2007	ND	ND	ND	ND	ND	ND
	10/17/2007						
	1/15/2008	ND	ND	ND	ND	ND	ND
	4/15/2008			 -			
	7/17/2008	ND	ND	ND	ND	ND	ND
	10/14/2008						
	3/30/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	0.5
	6/3/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	0.57
	12/30/2009	51	< 0.5	< 0.5	< 0.5	< 1.0	0.54
	6/30/2010	<50	< 0.5	< 0.5	< 0.5	< 1.0	0.76
	12/27/2010	<50	< 0.5	< 0.5	< 0.5	< 1.0	0.76
				1 3.5	10.0	1110	-
MW-3	2/19/1999	ND	ND	ND	ND	ND	1.5
dup	2/19/1999	ND	ND	ND	ND	ND	
	5/10/1999	ND	ND	ND	ND	ND	1.5
	8/30/1999		ND	ND	ND	ND	ND
	11/23/1999	ND	ND	ND	0.69	0.58	1.3
	1/6/2000	ND	ND	ND	ND	ND	ND
dup	1/6/2000	ND	ND	ND	ND	ND	3.14
trip blank	2/10-22/99	ND	ND	ND	ND	ND	2.64
trip biarit	5/8-20/99	110		ND	ND	ND	2.04
	8/27-31/99						
	7/25/2003	ND	ND	ND	ND	ND	
	10/30/2003	ND	ND	ND	ND	ND	1.1
	1/23/2004						
	4/27/2004				,		
		NID.	6.4	 NID	ND	ND	
ma na	7/29/2004	ND	6.4	ND	ND	ND	8.8
mp	10/28/2004	390	170	0.7	ND	2.4	57
	12/8/2004						
mp	1/24/2005	520	260	0.53	ND	1.9	89
	4/28/2005	220	110	ND	ND	0.63	54
	7/19/2005	760	370	0.68	ND	2.6	92
	10/6/2005	190	71	ND	ND	ND	49
	1/30/2006	300	130	0.74	ND	2.5	71
	4/18/2006	380	190	1.0	ND	4.0	66
	7/19/2006	140	61	ND	0.57	0.89	44
	10/26/2006	91	20	ND	0.55	3.5	46
	1/15/2007	ND	3.8	ND	ND	ND	32
	4/19/2007	52	2.9	ND	ND	ND	57
	7/19/2007	ND	2.6	ND	ND	ND	47
	10/17/2007	55	1.5	ND	ND	1.3	42

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS LOP SITE NO. R00000288 ORO LOMA SANITARY DISTRICT

2655 GRANT AVENUE, SAN LORENZO, CA

	2003 GITANT AVENUE, SAIT ECHENZO, CA								
Sample	Sample	TPH as			Ethyl∽	Total			
Location	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE		
.	<u> </u>				.				
	1/15/2008	ND	ND	ND	ND	ND	40		
	4/15/2008								
	7/17/2008	ND	ND	ND	ND	ND	ND		
	10/14/2008						34		
	3/30/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	39		
	6/3/2009	< 50	< 0.5	< 0.5	< 0.5	< 1.0	31		
	12/30/2009	65	< 0.5	< 0.5					
	6/30/2009				< 0.5	< 1.0	38		
		51 70	< 0.5	< 0.5	< 0.5	< 1.0	28		
	12/27/2010	70	< 0.5	< 0.5	< 0.5	< 1.0	23		
MW-4	10/21/2002		5,800	6,200	3,500	18,000	140		
101 817	1/28/2003		7,200						
	4/28/2003			3,500	2,700	15,000	130		
		07.000	5,700	850	< 120	10,000	200		
	7/25/2003	97,000	11,000	8,400	4,900	24,000	< 250		
	10/30/2003	77,000	12,000	9,300	3,200	16,000	< 200		
	1/23/2004	100,000	16,000	10,000	1,100	19,000	< 1,200		
	4/27/2004	78,000	13,000	7,800	3,200	17,000	< 1,000		
	7/29/2004	46,000	8,300	2,100	2,000	7,900	< 500		
mp	10/28/2004	80,000	15,000	7,100	3,500	14,000	< 1,000		
	12/8/2004								
mp	1/24/2005	70	9,900	850	2,500	11,000	< 1,000		
	4/28/2005	79,000	9,400	690	4,000	16,000	< 900		
	7/19/2005	35,000	7,500	92	1,900	3,900	< 500		
	10/6/2005	65,000	12,000	2,100	3,200	11,000	< 500		
	1/30/2006	45,000	9,800	380	2,400	6,500	< 130		
	4/18/2006	58,000	7,100	420	3,900	13,000	< 500		
	7/19/2006	71,000	10,000	520	4,900	18,000	< 500		
	10/26/2006	89,000	13,000	1,600	4,300	19,000	< 800		
	1/15/2007	65,000	10,000	570	3,300	13,000	< 250		
	4/19/2007	52,000	9,400	300	3,600		< 600		
	7/19/2007	21,000	4,500			8,900			
	10/17/2007			26	1,100	370	< 240		
		28,000	5,900	87	1,700	1,400	< 240		
	1/15/2008	46,000	9,200	220	2,600	5,800	< 250		
	4/15/2008	32,000	8,300	89	1,900	2,400	< 210		
		well Abando	ned/Decomm	ilssionea on	4/17/2008 for	soil excavat	ion		
MW-5	10/21/2002	65,000	12,000	20,000	1,600	7,100	< 100		
	1/28/2003		9,100	6,600	720	4,000	< 100		
	4/28/2003		12,000	8,300	< 250				
	7/25/2003	62,000				2,100	< 250		
			13,000	14,000	1,300	5,200	< 250		
	10/30/2003	33,000	7,500	2,200	490	1,600	< 100		
	1/23/2004	97,000	18,000	20,000	< 120	7,900	< 1,200		
	4/27/2004	39,000	12,000	11,000	920	4,300	< 1,000		
	7/29/2004	47,000	11,000	5,500	690	2,800	< 1,000		
mp	10/28/2004	130,000	23,000	25,000	2,000	9,700	ND		
	12/8/2004								
mp	1/24/2005	150,000	22,000	25,000	2,100	12,000	< 1,000		
	4/28/2005	89,000	18,000	11,000	1,600	8,900	< 500		

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS LOP SITE NO. RO0000288 ORO LOMA SANITARY DISTRICT 2655 GRANT AVENUE, SAN LORENZO, CA

Sample	Sample	TPH as		•	Ethyl-	Total	
Location	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
			·				
	7/19/2005	39,000	11,000	200	710	1,700	< 500
	10/6/2005	58,000	17,000	410	1,000	6,600	< 500
	1/30/2006	61,000	15,000	5,500	1,100	5,600	< 500
	4/18/2006	36,000	13,000	490	660	3,300	< 500
	7/19/2006	49,000	16,000	460	< 50	7,700	< 500
	10/26/2006	55,000	14,000	430	1,200	6,700	< 1,000
	1/15/2007	34,000	11,000	88	720	2,600	< 250
	4/19/2007	29,000	11,000	63	700	2,200	< 130
	7/19/2007	25,000	8,300	36	600	1,700	< 50
	10/17/2007	32,000	9,200	57	650	1,900	< 100
	1/15/2008	33,000	12,000	51	800	1,900	< 250
	4/15/2008	30,000	11,000	36	690	1,700	< 50
	7/17/2008	21,000	8,000	30	560	1,600	< 50
	10/14/2008	23,000	6,700	65	580	2,000	< 100
	3/30/2009	8,400	8,500	92	800	1,500	8.3
	6/3/2009	14,000	6,200	95	540	1,600	< 0.5
	12/30/2009	18,000	5,900	240	840	2,400	10.0
	6/30/2010	20,000	8,700	170	980	2,700	<.5
	12/27/2010	15,000	1,300	340	900	1,500	<.5
BAW C	7/17/0000	440,000	0.000	44.000	070	0.000	===
MW-6	7/17/2008	110,000	9,800	14,000	970	6,900	< 500
	10/14/2008	31,000	5,600	4,300	170	3,600	< 250
	3/30/2009	20,000	11,000	4,500	1,300	5,000	47
	6/3/2009	2,000	930	910	500	190	39
	12/30/2009	19,000	3,500	890	ND	2,200	92
	6/30/2010	15,000	7,000	980	690	1,600	42
	12/27/2010	8,200	3,400	78	< 5	1,600	< 5
		· · · ·				·	

Notes:

All results reported as microgram per liter (µg/L), equivalent to parts per billion

mp = Sampled using the "micro-purge" (low flow) technique

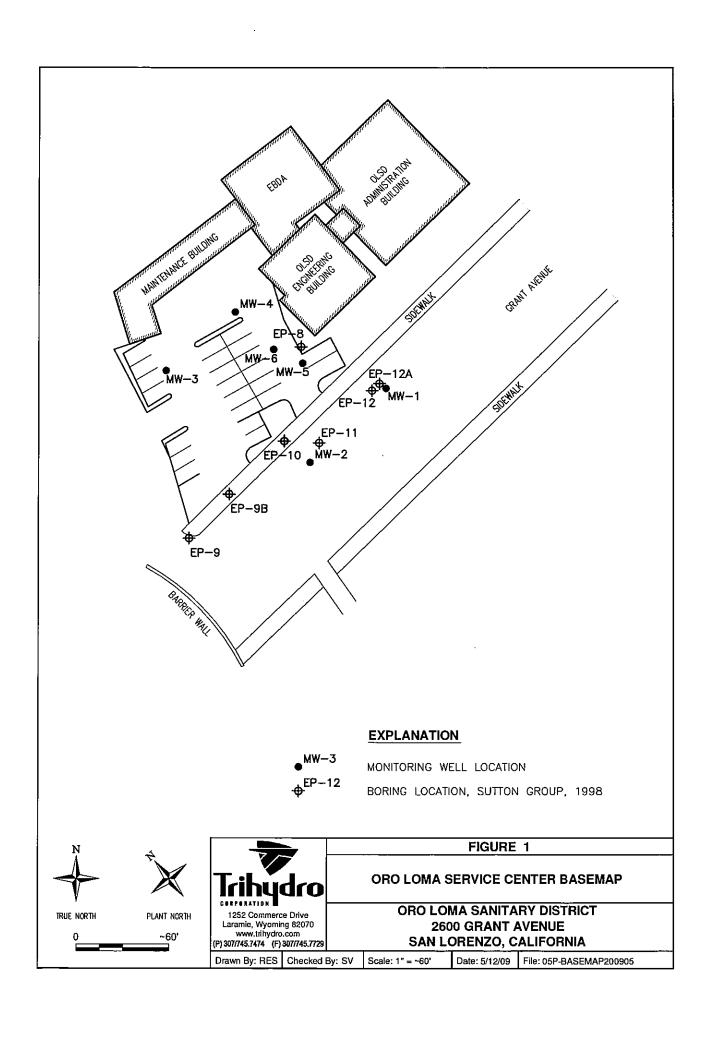
dup = Duplicate sample to evaluate analytical laboratory precision

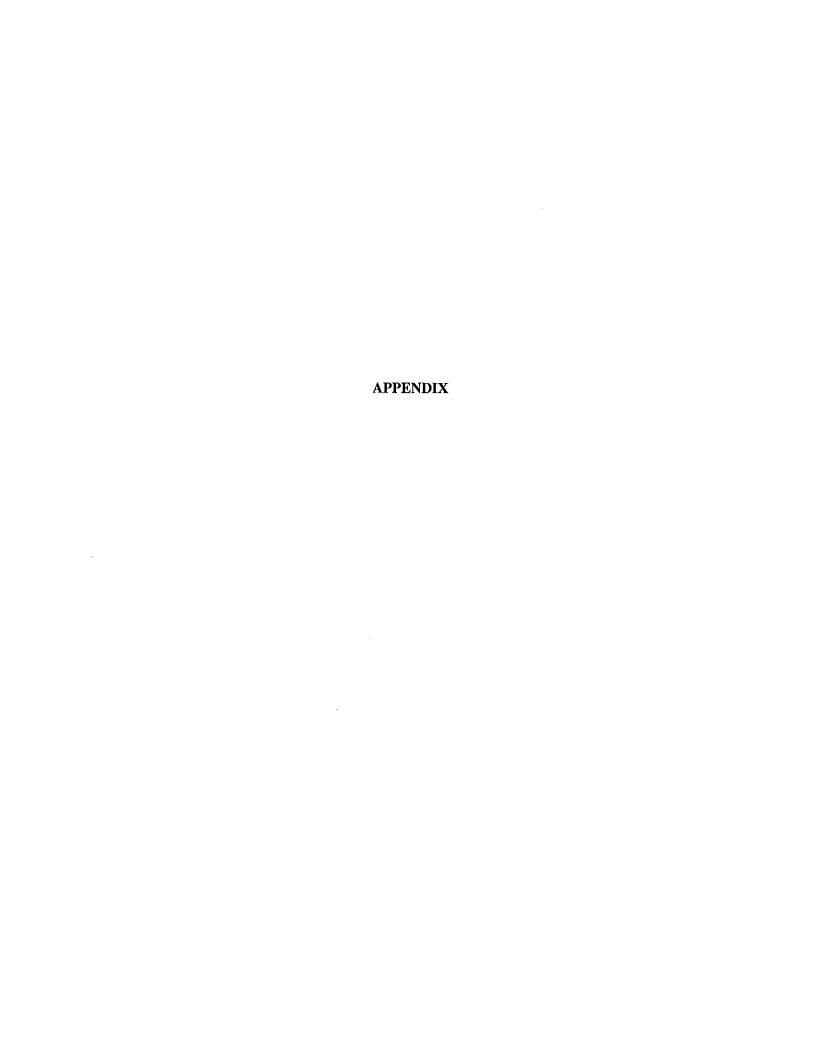
MTBE = Methyl-tert-Butyl Ether

- - - = Groundwater Sample not analyzed

ND = Groundwater sample analyzed, but constituents less than laboratory detection limits







Date of Report: 06/17/2011

Dave Kleesattel

Trihydro 2520 Stanwell Dr, Suite 200 Concord, CA 94520

Project:

Oro Loma Sanitary District

BC Work Order:

1018174

Invoice ID:

B092872

Enclosed are the results of analyses for samples received by the laboratory on 12/28/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers

Molly Meyers

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014



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Chain of Custody Form Laboratories, Inc. **Analysis Requested** Project #: 05P-00/= 00/ lient: TRIMYORO CORPORATION ttn: David Kleesarnel Comments: All Shartes Ans Project Name: @down Saulany Disat. treet Address: 2520 STAMED DR 260 Global ID #: Mente refer to the back of this UNPRESSERVED ity, State, Zip: Contons Con 94520 p#ge/ior/con/ipletic/n Sampler(s): John Burken hone: (74) 270-4624 Fax; (716) 270-4685
JEANET O THINDSON OF Mail Address: OKLES SNIILL BOTA MYORE COM Anskructions and myther Sample Matrix Are there any tests with holding times less than or equal to 48 hours? legend. Soil Single Ordinking Water Greening Water Water Water Work Order #: 10 -18174 ☐ Yes □ No ample * Standard Turnaround = 10 work days Description Date Time Sampled Sampled Notes MW-1 12 27 10 1252 NUM PRESERVED -2 3 MU.7 12 27/10 3 Mw-3 12 27 10 3 Mw.5 12 27 10 MW-6 12 27 10 6 TRIP BLANK 12 27 N 1466 PRESENTED Billing Same as above **EDF Required?** Global ID -System# (Needed for EDF) (Newton for EDT) lient . Relinquished By Yes No Time 12-28-10 1413 Send Copy to State of State _ lln: J. Received By ☐ Yes ☐ No 0#: 101115 BC Laboratorics, Inc. - 4100 Atlas Ct. - Bakersfield, CA 93308 - 661.327.4911 - Fax: 661.327.1918 - www.bclabs.com



Chain of Custody and Cooler Receipt Form for 1018174 Page 2 of 2 Ōξ SAMPLE RECEIPT FORM Page 3C LABORATORIES INC. 06/24/08 Rev. Np. 12 Submission #: SHIPPING CONTAINER SHIPPING INFORMATION Federal Express 🔲 UPS 🔾 None 🗆 Hand Delivery (1) ice Ches Des Other (Specify) BC Lab Field Service [] Other D (Specify)_ 80× 🛛 Ice B Blue Ice D None 🖸 Other 🗆 Comments: Refrigerant: Custody Seals Ice Chest 🔾 Containers 🛭 None Comments: Intact? Yes O No D Intact? Yes 🔾 No 🔾 Description(s) match COC? Yes Dio D All samples received?" Yes No O All samples containers intact? Yes > No C **COC Received** XYES. . □ NO SAMPLE NUMBERS SAMPLE CONTAINERS OT GENERAL MINERAL GENERAL PHYSICAL PT PE UNPRESERVED OT INORGANIC CHEMICAL HETALS PT INORGANIC CHEMICAL METALS PT CYANIDE PT NITROCEN FORMS PT TOTAL SULFIDE TOL NITRATE INITRITE PT TOTAL ORGANIC CARBON PT TOX PT CHEMICAL DXYGEN DEMAND PIA PHENOLICS 4001 YOA VIAL TRAVEL BLANK 1 40ml VOA VIAL OT EPA 413.1, 413.2, 418.1 PT ODOR RADIOLOGICAL BACTERIOLOGICAL 40 mt VOA VIAL 504 OT EPA SOSIGORISONO OT EPA STS, E/BLED OT EPA 525 OT EPA \$25 TRAVEL BLANK 100m1 EPA 547 100ml EPA 531.1 OT EPA 548 OT EPA SAY QTEPA 632 OT EPA JOISM OT AMBER 4 OZ JAR 11 0% JAR SOIL SLEEVE PC8 VIAL PLASTIC BAG FERROUS IRON ENCORE Comments:
Sample Numbering Completed By:
A = Actual | | | C = Gorrected 2055 [MODOCSWP80ILA8_00CSWFORMS\SANRECS.MP0]



2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported:

06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Laboratory / Client Sample Cross Reference

Laboratory

Client Sample Information

1018174-01

COC Number:

Project Number:

Oro Loma

Sampling Location:

Sampling Point: Sampled By:

MW-1

THCL

Receive Date:

12/28/2010 19:45 12/27/2010 12:52

Sampling Date:

Sample Depth:

Lab Matrix:

Sample Type:

Water Water

Delivery Work Order:

Global ID:

Location ID (FieldPoint): MW-1

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1018174-02

COC Number: Project Number:

Oro Loma

Sampling Location:

Sampling Point: Sampled By:

MW-2 THCL

Receive Date:

12/28/2010 19:45

Sampling Date: Sample Depth:

12/27/2010 12:16

Lab Matrix:

Water Water

Sample Type: Delivery Work Order:

Global ID:

Location ID (FieldPoint): MW-2

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1018174-03

COC Number:

Project Number:

Sampling Location:

Oro Loma

Sampling Point: Sampled By:

MW-3 THCL

Receive Date: Sampling Date: 12/28/2010 19:45

12/27/2010 13:19

Sample Depth:

Lab Matrix: Sample Type: Water Water

Delivery Work Order:

Global ID:

Location ID (FieldPoint): MW-3

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

2520 Stanwell Dr., Suite 200 Concord, CA 94520

Reported:

06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information 12/28/2010 19:45 Receive Date: 1018174-04 **COC Number:** 12/27/2010 14:35 Sampling Date: Oro Loma **Project Number:** Sample Depth: Sampling Location: Water MW-5 Lab Matrix: Sampling Point: Water THCL Sample Type: Sampled By: Delivery Work Order: Global ID: Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID: 12/28/2010 19:45 Receive Date: 1018174-05 **COC Number:** 12/27/2010 13:53 Sampling Date: Oro Loma **Project Number:** Sample Depth: Sampling Location: Water MW-6 Lab Matrix: Sampling Point: Water THCL Sample Type: Sampled By: Delivery Work Order: Global ID: Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID: 12/28/2010 19:45 1018174-06 **COC Number:** Receive Date: 12/27/2010 14:45 Oro Loma Sampling Date: Project Number: Sample Depth: Sampling Location: Water Trip Blank Lab Matrix: Sampling Point: Water THCL Sample Type: Sampled By: Delivery Work Order: Global ID: Location ID (FieldPoint): QCTB Matrix: W Sample QC Type (SACode): CS Cooler ID:

2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID:	1018174-01	Client Sampl	e Name:	Oro Loma, MW-1, 1	Oro Loma, MW-1, 12/27/2010 12:52:00PM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#	
Benzene		ND	ug/L	0.50	EPA-8260	ND		1	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1	
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1	
Toluene		ND	ug/L	0.50	EPA-8260	ND		1	
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1	
Total Purgeable Petroleur Hydrocarbons	n	ND	ug/L	50	Luft-GC/MS	ND		1	
1,2-Dichloroethane-d4 (Si	urrogate)	114	%	76 - 114 (LCL - UCL)	EPA-8260			1	
Toluene-d8 (Surrogate)		99.9	%	88 - 110 (LCL - UCL)	EPA-8260			1	
4-Bromofluorobenzene (S	urrogate)	106	%	86 - 115 (LCL - UCL)	EPA-8260			1	

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260	01/03/11	01/03/11 12:31	JCC	MS-V4	1	BTL1948

2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID: 1018174-02	Client Samp!	e Name:	Oro Loma, MW-2, 1	Oro Loma, MW-2, 12/27/2010 12:16:00PM				
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run#	
Benzene	ND	ug/L	0.50	EPA-8260	ND		1	
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1	
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1	
Toluene	ND	ug/L	0.50	EPA-8260	ND		1	
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND	•	1	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1	
1,2-Dichloroethane-d4 (Surrogate)	100	%	76 - 114 (LCL - UCL)	EPA-8260			1	
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)	EPA-8260	····	· · ·	1	
4-Bromofluorobenzene (Surrogate)	99.9	%	86 - 115 (LCL - UCL)	EPA-8260			1	

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260	01/03/11	01/03/11 13:00	JCC	MS-V4	1	BTL1948	

2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID: 1018174-03	Client Sampl	Client Sample Name:		Oro Loma, MW-3, 12/27/2010 1:19:00PM					
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run#		
Benzene	ND	ug/L	0.50	EPA-8260	ND		1		
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1		
Methyl t-butyl ether	23	ug/L	0.50	EPA-8260	ND		1		
Toluene	ND	ug/L	0.50	EPA-8260	ND		1		
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1		
Total Purgeable Petroleum Hydrocarbons	70	ug/L	50	Luft-GC/MS	ND		1		
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)	EPA-8260	· 		1		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260			1		
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)	EPA-8260			1		

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260	01/03/11	01/03/11 13:28	JCC	MS-V4	1	BTL1948

2520 Stanwell Dr, Suite 200 Concord, CA 94520 Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID: 1018174-0	4 Client Sample	e Name:	Oro Loma, MW-5, 1	2/27/2010 2:35:0	OOPM .		
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene	1300	ug/L	50	EPA-8260	ND	A01	1
Ethylbenzene	900	ug/L	5,0	EPA-8260	ND	A01	2
Methyl t-butyl ether	ND	ug/L	5.0	EPA-8260	ND	A01	2
Toluene	340	ug/L	5.0	EPA-8260	ND	A01	2
Total Xylenes	1500	ug/L	20	EPA-8260	ND	A01	3
Total Purgeable Petroleum Hydrocarbons	15000	ug/L	500	Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	112	%	76 - 114 (LCL - UCL)	EPA-8260			1
1,2-Dichloroethane-d4 (Surrogate)	84.1	%	76 - 114 (LCL - UCL)	EPA-8260			2
1,2-Dichloroethane-d4 (Surrogate)	92.6	%	76 - 114 (LCL - UCL)	EPA-8260			3
Toluene-d8 (Surrogate)	97.4	%	88 - 110 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	95.3	%	88 - 110 (LCL - UCL)	EPA-8260		-	2
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)	EPA-8260			3
4-Bromofluorobenzene (Surrogate)	110	%	86 - 115 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)	EPA-8260			2
4-Bromofluorobenzene (Surrogate)	99.4	%	86 - 115 (LCL - UCL)	EPA-8260	·····		3

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260	12/30/10	01/03/11 18:07	JSK	НРСНЕМ	100	BTL1923	
2	EPA-8260	12/30/10	12/30/10 19:58	KEA	MS-V12	10	BTL1912	
3	EPA-8260	01/06/11	01/06/11 19:06	JSK	HPCHEM	20	BTL1923	

2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID: 1018174-	Client Sampl	Client Sample Name:		2/27/2010 1:53:0	00PM		
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene	3400	ug/L	50	EPA-8260	ND	A01	1
Ethylbenzene	ND	ug/L	50	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	ug/L	50	EPA-8260	ND	A01	1
Toluene	78	ug/L	50	EPA-8260	ND	A01	1
Total Xylenes	1600	ug/L	100	EPA-8260	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	8200	ug/L	5000	Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	98.8	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	108	%	86 - 115 (LCL - UCL)	EPA-8260			1

		Run		QC	
Run # Method Prep Date Date/Time Analyst Instrument Dilution Batch ID	Method Pre	Prep Date Date/Tim	e Analyst Instrument	Dilution Batch ID	
1 EPA-8260 12/30/10 01/03/11 17:46 JSK HPCHEM 100 BTL1923	EPA-8260 12/	12/30/10 01/03/11 17	:46 JSK HPCHEM	100 BTL1923	



2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

BCL Sample ID: 1018174-06	Client Sampl	le Name:	Oro Loma, Trip Blar	nk, 12/27/2010 2	:45:00PM		
Constituent	Result	_ Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene	ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	EPA-8260	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.3	%	86 - 115 (LCL - UCL)	EPA-8260			1

	_		Run				QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID			
1	EPA-8260	01/03/11	01/03/11 12:02	JCC	MS-V4	1	BTL1948			

2520 Stanwell Dr, Suite 200 Concord, CA 94520 Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTL1912	· · · · · · · · · · · · · · · · · · ·					
Ethylbenzene	BTL1912-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BTL1912-BLK1	ND	ug/L	0.50		
Toluene	BTL1912-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BTL1912-BLK1	ND	ug/L	50		
1,2-Dichtoroethane-d4 (Surrogate)	BTL1912-BLK1	91.3	%	76 - 11	4 (LCL - UCL)	
Toluene-d8 (Surrogate)	BTL1912-BLK1	95.9	%	88 - 11	0 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BTL1912-BLK1	101	%	86 - 11	5 (LCL - UCL)	
QC Batch ID: BTL1923						-
Велхепе	BTL1923-BLK1	ND	ug/L	0.50		
Ethylbenzene	BTL1923-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BTL1923-BLK1	ND	ug/L	0.50		
Toluene	BTL1923-BLK1	ND	ug/L	0.50		
Total Xylenes	BTL1923-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BTL1923-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BTL1923-BLK1	105	%	76 - 11	4 (LCL - UCL)	
Toluene-d8 (Surrogate)	BTL1923-BLK1	98.2	%	88 - 11	0 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BTL1923-BLK1	106	%	86 - 11	5 (LCL - UCL)	
QC Batch ID: BTL1948						
Benzene	BTL1948-BLK1	ND	ug/L	0.50		
Ethylbenzene	BTL1948-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BTL1948-BLK1	ND	ug/L	0.50		
Toluene	BTL1948-BLK1	ND	ug/L	0.50		
Total Xylenes	BTL1948-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BTL1948-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BTL1948-BLK1	99.8	%	76 - 11	4 (LCL - UCL)	
Foluene-d8 (Surrogate)	BTL1948-BLK1	101	%	88 - 11	0 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BTL1948-BLK1	97.9	%	86 - 11:	5 (LCL - UCL)	

2520 Stanwell Dr, Suite 200 Concord, CA 94520

Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

							Control L		
QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
BTL1912-BS1	LCS	21.810	25.000	ug/L	87.2		70 - 130		
BTL1912-BS1	LCS	8.9800	10.000	ug/L	89.8		76 - 114		
BTL1912-BS1	LCS	9.6600	10.000	ug/L	96.6		88 - 110		
BTL1912-BS1	LCS	10.210	10.000	ug/L	102		86 - 115	- n.u n.u.== / =	
BTL1923-BS1	LCS	27.010	25.000	ug/L	108		70 - 130		
BTL1923-BS1	LCS	27.240	25.000	ug/L	109		70 - 130		
BTL1923-B\$1	LCS	10.640	10.000	ug/L	106		76 - 114		
BTL1923-BS1	LCS	9.7100	10.000	ug/L	97.1		88 - 110		
BTL1923-BS1	LCS	10.240	10.000	ug/L	102		86 - 115		
BTL1948-BS1	LCS	25.940	25.000	ug/L	104		70 - 130		
BTL1948-BS1	LCS	26.970	25.000	ug/L	108		70 - 130		
BTL1948-BS1	LCS	10.690	10.000	ug/L	107		76 - 114		
BTL1948-BS1	LCS	10.110	10.000	ug/Ĺ	101		88 - 110		
BTL1948-B\$1	LCS	9.9600	10.000	ug/L	99.6		86 - 115		
	BTL1912-BS1 BTL1912-BS1 BTL1912-BS1 BTL1912-BS1 BTL1923-BS1 BTL1923-BS1 BTL1923-BS1 BTL1923-BS1 BTL1923-BS1 BTL1923-BS1 BTL1948-BS1 BTL1948-BS1 BTL1948-BS1 BTL1948-BS1	BTL1912-BS1 LCS BTL1912-BS1 LCS BTL1912-BS1 LCS BTL1912-BS1 LCS BTL1923-BS1 LCS BTL1948-BS1 LCS BTL1948-BS1 LCS BTL1948-BS1 LCS BTL1948-BS1 LCS BTL1948-BS1 LCS	BTL1912-BS1 LCS 21.810 BTL1912-BS1 LCS 8.9800 BTL1912-BS1 LCS 9.6600 BTL1912-BS1 LCS 10.210 BTL1923-BS1 LCS 27.010 BTL1923-BS1 LCS 27.240 BTL1923-BS1 LCS 9.7100 BTL1923-BS1 LCS 9.7100 BTL1923-BS1 LCS 9.7100 BTL1948-BS1 LCS 10.240 BTL1948-BS1 LCS 10.240 BTL1948-BS1 LCS 10.690 BTL1948-BS1 LCS 10.690 BTL1948-BS1 LCS 10.110	GC Sample ID Type Result Level BTL1912-BS1 LCS 21.810 25.000 BTL1912-BS1 LCS 8.9800 10.000 BTL1912-BS1 LCS 9.6600 10.000 BTL1912-BS1 LCS 10.210 10.000 BTL1923-BS1 LCS 27.010 25.000 BTL1923-BS1 LCS 27.240 25.000 BTL1923-BS1 LCS 10.640 10.000 BTL1923-BS1 LCS 9.7100 10.000 BTL1923-BS1 LCS 10.240 10.000 BTL1948-BS1 LCS 25.940 25.000 BTL1948-BS1 LCS 26.970 25.000 BTL1948-BS1 LCS 10.690 10.000 BTL1948-BS1 LCS 10.110 10.000	QC Sample ID Type Result Level Units BTL1912-BS1 LCS 21.810 25.000 ug/L BTL1912-BS1 LCS 8.9800 10.000 ug/L BTL1912-BS1 LCS 9.6600 10.000 ug/L BTL1912-BS1 LCS 10.210 10.000 ug/L BTL1923-BS1 LCS 27.010 25.000 ug/L BTL1923-BS1 LCS 27.240 25.000 ug/L BTL1923-BS1 LCS 10.640 10.000 ug/L BTL1923-BS1 LCS 9.7100 10.000 ug/L BTL1923-BS1 LCS 10.240 10.000 ug/L BTL1948-BS1 LCS 25.940 25.000 ug/L BTL1948-BS1 LCS 26.970 25.000 ug/L BTL1948-BS1 LCS 10.690 10.000 ug/L BTL1948-BS1 LCS 10.690 10.000 ug/L	QC Sample ID Type Result Level Units Recovery BTL1912-BS1 LCS 21.810 25.000 ug/L 87.2 BTL1912-BS1 LCS 8.9800 10.000 ug/L 89.8 BTL1912-BS1 LCS 9.6600 10.000 ug/L 96.6 BTL1912-BS1 LCS 10.210 10.000 ug/L 102 BTL1923-BS1 LCS 27.010 25.000 ug/L 108 BTL1923-BS1 LCS 27.240 25.000 ug/L 109 BTL1923-BS1 LCS 10.640 10.000 ug/L 106 BTL1923-BS1 LCS 9.7100 10.000 ug/L 97.1 BTL1923-BS1 LCS 10.240 10.000 ug/L 102 BTL1948-BS1 LCS 25.940 25.000 ug/L 104 BTL1948-BS1 LCS 26.970 25.000 ug/L 108 BTL1948-BS1 LCS 10.690 10.000	QC Sample ID Type Result Level Units Recovery RPD BTL1912-BS1 LCS 21.810 25.000 ug/L 87.2 BTL1912-BS1 LCS 8.9800 10.000 ug/L 89.8 BTL1912-BS1 LCS 9.6600 10.000 ug/L 96.6 BTL1912-BS1 LCS 10.210 10.000 ug/L 102 BTL1923-BS1 LCS 27.010 25.000 ug/L 108 BTL1923-BS1 LCS 27.240 25.000 ug/L 106 BTL1923-BS1 LCS 10.640 10.000 ug/L 97.1 BTL1923-BS1 LCS 9.7100 10.000 ug/L 97.1 BTL1923-BS1 LCS 10.240 10.000 ug/L 102 BTL1948-BS1 LCS 25.940 25.000 ug/L 104 BTL1948-BS1 LCS 26.970 25.000 ug/L 108 BTL1948-BS1 LCS 10.690	QC Sample ID Type Result Spike Level Units Percent Recovery RPD Percent Recovery BTL1912-BS1 LCS 21.810 25.000 ug/L 87.2 70 - 130 BTL1912-BS1 LCS 8.9800 10.000 ug/L 89.8 76 - 114 BTL1912-BS1 LCS 9.6600 10.000 ug/L 96.6 88 - 110 BTL1912-BS1 LCS 10.210 10.000 ug/L 102 86 - 115 BTL1923-BS1 LCS 27.010 25.000 ug/L 108 70 - 130 BTL1923-BS1 LCS 27.240 25.000 ug/L 109 70 - 130 BTL1923-BS1 LCS 10.640 10.000 ug/L 106 76 - 114 BTL1923-BS1 LCS 9.7100 10.000 ug/L 97.1 88 - 110 BTL1923-BS1 LCS 10.240 10.000 ug/L 102 86 - 115 BTL1948-BS1 LCS 25.940 25.000 ug/L	QC Sample ID Type Result Level Units Recovery RPD Recovery RPD BTL1912-BS1 LCS 21.810 25.000 ug/L 87.2 70 - 130 70 - 130 BTL1912-BS1 LCS 8.9800 10.000 ug/L 89.8 76 - 114 10 BTL1912-BS1 LCS 9.6600 10.000 ug/L 96.6 88 - 110 88 - 110 BTL1912-BS1 LCS 10.210 10.000 ug/L 102 86 - 115 BTL1923-BS1 LCS 27.010 25.000 ug/L 109 70 - 130 BTL1923-BS1 LCS 27.240 25.000 ug/L 106 76 - 114 BTL1923-BS1 LCS 10.640 10.000 ug/L 97.1 88 - 110 BTL1923-BS1 LCS 10.240 10.000 ug/L 102 86 - 115 BTL1948-BS1 LCS 25.940 25.000 ug/L 104 70 - 130 BTL1948-BS1 LCS

Environmental Testing Laboratory Since

Trihydro 2520 Stanwell Dr, Suite 200 Concord, CA 94520 Reported: 06/17/2011 9:30

Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BTL1912	Use	ed client samp	ole: N		· · · · · · · · · · · · · · · · · · ·						
Toluene	 MS	1016633-83	ND	25.010	25.000	ug/L		100		70 - 130	
	MSD	1016633-83	ND	26.470	25.000	ug/L	5.7	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1016633-83	ND	8.8000	10.000	ug/L		88.0		76 - 114	
	MSD	1016633-83	ND	8.8600	10.000	ug/L	0.7	88.6		76 - 114	
Toluene-d8 (Surrogate)	MS	1016633-83	ND	9.7500	10.000	ug/L	-	97.5		88 - 110	
	MSD	1016633-83	ND	9.6700	10.000	ug/L	0.8	96.7		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1016633-83	ND	10.580	10.000	ug/L		106	• •	86 - 115	
	MSD	1016633-83	ND	10.390	10.000	ug/L	1.8	104		86 - 115	
QC Batch ID: BTL1923	Use	d client samp	le: N								
Benzene	J MS	1016633-85	ND	26.570	25.000	ug/L		106		70 - 130	
	MSD	1016633-85	ND	27.760	25.000	ug/L	4.4	111	20	70 - 130	
Toluene	MS	1016633-85	ND	27.580	25.000	ug/L		110		70 - 130	
	MSD	1016633-85	ND	27.760	25.000	ug/L	0.7	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1016633-85	ND	10.930	10.000	ug/L		109		76 - 114	
	MSD	1016633-85	ND	10.620	10.000	ug/L	2.9	106		76 - 114	
Toluene-d8 (Surrogate)	MS	1016633-85	ND	10.220	10.000	ug/L		102		88 - 110	
	MSD	1016633-85	ND	9.9400	10.000	ug/L	2.8	99.4		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1016633-85	ND	10.130	10.000	ug/L		101		86 - 115	
	MSD	1016633-85	ND	10.200	10.000	ug/L	0.7	102		86 - 115	
QC Batch ID: BTL1948	Use	d client samp	le: N								
Benzene	_ мs	1016633-81	ND	24.360	25.000	ug/L		97.4		70 - 130	
	MSD	1016633-81	ND	26.210	25.000	ug/L	7.3	105	20	70 - 130	
Toluene	MS	1016633-81	ND	27.410	25.000	ug/L		110		70 - 130	
	MSD	1016633-81	ND	26.450	25.000	ug/L	3.6	106	20	70 - 130	
,2-Dichloroethane-d4 (Surrogate)	MS	1016633-81	ND	9.5800	10.000	ug/L		95.8		76 - 114	
	MSD	1016633-81	ND	9.6000	10.000	ug/L	0.2	96.0		76 - 114	
Foluene-d8 (Surrogate)	MS	1016633-81	ND	10.260	10.000	ug/L		103		88 - 110	
	MSD	1016633-81	ND	9.9500	10.000	ug/L	3.1	99.5		88 - 110	
1-Bromofluorobenzene (Surrogate)	MS	1016633-81	ND	10.370	10.000	ug/L		104		86 - 115	
	MSD	1016633-81	ND	10.420	10.000	ug/ L	0.5	104		86 - 115	



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Project: Oro Loma Sanitary District

Project Number: [none]

Project Manager: Dave Kleesattel

Notes And Definitions

Concord, CA 94520

2520 Stanwell Dr, Suite 200

Trihydro

A01

MDL Method Detection Limit

ND Analyte Not Detected at or above the reporting limit

PQL Practical Quantitation Limit
RPD Relative Percent Difference

PQL's and MDL's are raised due to sample dilution.