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johnrsutton@mindspring.com

SOILS, FOUNDATIONS, DRAINAGE, SLOPES, CONTAINMENTS CIVIL, GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING

THE SUTTON GROUP

3708 Mount Diablo Blvd Suite 215 Lafayette, CA, 94549

August 6, 2003

Alameda County

AUG 1 1 2003

Mr. Michael Cortez Oro Loma Sanitary District 2600 Grant Avenue San Lorenzo, 94580

Environmental Health

Results of Quarterly Sampling of Ground Water Monitoring Wells Sites of Former Gasoline and Diesel Tanks 2600 Grant Ave., San Lorenzo, CA OLSD PO No. 4911, SG File No. 3022.9 ST ID 1996

Dear Mr. Cortez:

We attach results for the most recent round of quarterly sampling of the ground water monitoring wells, conducted on July 25, 2003. This is the 4th quarterly sampling of the two additional wells installed last October in the parking lot west of the District's Engineering Building. Additionally, at the request of Ms. Eva Chu of ACEP in the meeting on April 18, and the letter of the same date, the other three monitoring wells in this area and the monitoring well at the location of the former diesel tank were sampled.

This work has been performed in accordance with the Work Plan that was approved by Alameda County Health Care Agency's Environmental Protection Division (ACEP) in their letter dated August 27, 2002. Additionally, sampling of other wells was conducted in accordance with the request of Ms. Chu's April 18, 2003 letter.

Figure 1 is a plan of the District's facilities at the foot of Grant Avenue in San Lorenzo that shows the relative locations of the former gasoline and diesel tanks to the sewage treatment plant and the District's offices. Figure 2 is a plan of the Service Center area, which was the site of the former gasoline tank.

Sampling Results

Gasoline Tank Area

On July 25, 2003, ground water depths were measured in all 5 monitoring wells. Conditions of the wellheads appeared to have not changed from the previous sampling. The wells were each purged of three well volumes and the samples collected using dedicated bailers. Bailers were replaced in 2 of the wells due to discoloration. Water samples were collected from all 5 wells in accordance with the approved work plan.

The attached Table 1 summarizes the ground water elevation data collected 0ver the past year. The onset of summer resulted in water levels in the wells dropping by an average of 1½ feet. The wells also recharged very much more slowly. The gradient direction was calculated for various combinations of 3 wells. The range of directions, shown on Figure 2, is indicative of the influence of the gravel-filled trenches that bound the site, which act as groundwater sinks. The three wells upgradient of the Grant Avenue boundary indicate a gradient towards the Bay. Water levels in wells MW-1 and 2 in Grant Avenue indicate the strong influence of the gravel filled the trench that parallel the Grant Avenue boundary, and separates these wells from the site. Since 1997 both this firm and RWQCB Region 2 have been propounding that this trench acts as a interceptor of groundwater, controlling its gradient. On this basis, onsite gradients towards the trench would be much steeper than indicated by the measurements.

The five wells were each sampled and analyzed for gasoline, BTEX and MTBE. Additionally, all five wells were sampled for lead at ACEP's request. This is a one-time event. No lead was detected in any of the samples.

Table 2 is a summary of the results of the current round of analytical results for hydrocarbons. By the continued absence of gasoline and BTEX presence beyond the barrier trenches the results continue to demonstrate the effectiveness of the trench system in controlling water migration. The laboratory report is appended, as are sampling event field sheets. Table 2A is a compilation of all test results for gasoline-related hydrocarbons in the gasoline tank area since well sampling began in 1999.

Diesel Tank Area

The monitoring well at the location of the former diesel tank was also sampled. This well was installed and first sampled in March, 1996. The ground water depth was 3.3 feet below the rim, a fall of almost 2 feet in the quarter. This well is influenced by a dewatering pump well some 50 feet away. The monitoring well location is shown on Figure 1.

The well was purged and sampled, and analyzed for TPH as diesel. The presence of $90\mu g/l$ was similar to the reading last quarter $(87\mu g/l)$ and substantially lower than the initial 1996 reading. Table 3 is a tabulation of all sample results for this well. Historically, the well has no detection of BTEX.

Conclusions and Future Sampling

The sample from the diesel tank well shows a very low presence of diesel, which is less than 20% of the reading made in 1996. We recommend that The District petition ACEP for closure of the diesel tank site without further sampling.

The wells in the former gasoline tank area continue to indicate that the contamination is contained on the Districts property by the barrier trenches. The wells

beyond the barrier continue to show no detection of gasoline or BTEX. MTBE at 1ppb in 2 wells in the continued absence of BTEX strongly suggests an anomaly.

We were recently informed that ACEP's Ms. Chu has been re-assigned and that no new case officer has been assigned to this case. No response to our informational calls has been received. We previously expressed concern to the Agency over the changing of case officers, each with a different opinion, each has demanded additional tests. Ms. Chu was the case officer for only one quarter. On behalf of the District, I will request a meeting with the Agency's management to resolve long-unanswered requests for site closure. You will recall that the April meeting with Ms. Chu was to have included the division's supervisor. However, to Ms. Chu's surprise, the supervisor failed to attend.

We appreciate the opportunity to be of continued service to The District. Please call me if you have questions or if I can assist you in any other way.



THE SUTTON GROUP

John R. Sutton, PE

Geotechnical Engineer No 812 License valid through 12/31/2006

Attachments:

Figure 1 Site Plan

Figure 2 Well Location Plan, Former Gasoline Tank Area

Table 1 Ground Water Elevations, Former Gasoline Tank Area

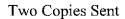
Table 2 Summary of Current Water Sample Analyses, Gas Tank Area

Table 2A Cumulative Summary of Water Sample Analyses, Gas Tank Area

Table 3 Summary of Water Sample Analyses, Former Diesel Tank Area

Analytical Laboratory Reports

Field sampling reports



One copy sent to Ms. Eva Chu at Alameda County Health Dept.

302210, Qtr #4 rept 080603



TABLE 1 GROUND WATER ELEVATIONS

All measurements are in feet

Monitoring Rim Well ID Elevation		Sampling, I		3 rd Quarterly 4/28/03	4 th Quarterly Sampling, 7/25/03		
	*	Ground Water Elev'n	Ground Water Elev'n.	G Water Elev'n.	G Water Depth G Water Elev'n.	Change Since Prev. Reading	
MW 1	8.65	1.72	2.23	Not Measured	0.45	- 1.78	
MW 2	8.75	2.04	2.65	3.18	6.40	- 0.83	
MW 3	10.19	3.21	4.94	Not Measured	6.75	-1.50	
MW 4	9.68	3.58	5.35	5.80	6.10 3.58	-1.22	
MW 5	8.92	2.84	4.42	5.20	3.52	-1.68	
Gradient, Direction		\$21°E @ .016 ft/ft	\$23°E @ .033 ft/ft	\$22½°W @ .042 FT/FT	S18°W @ .027 ft/ft		

^{*} Basis of elevations, Alameda County bench mark "Grant –Phil" at intersection of Grant Avenue and Phil Drive.

Elevation = 2.175meters, msl = 7.136 feet.

ORO LOMA SANITARY DISTRICT

3022.10 Q3 TABLE 1 elev Gwater 0703

TABLE 2

SUMMARY OF GROUND WATER SAMPLE ANALYSES

Samples Collected on July 25, 2003

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

EPA METHOD 8015M /8260, 8020

results in µg/i (ppb)

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	Toluene	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
MW-1	7/25/03	ND	ND	ND	ND	ND	ND < 0.5
MW-2	7/25/03	ND	ND	ND	ND	ND	0.95
MW-3	7/25/03	ND	ND	ND	ND	ND	1.1
MW-4	7/25/03	97,000	11,000	8,400	4,900	24,000	ND < 250
MW-5	7/25/03	62,000	13,000	14,000	1,300	5,200	ND < 250
MW-D 1	7/25/03	DIESEL: 90	ND	ND	ND	ND	NA
REPORTING LIMITS		1	0.5	0.5	0.5	0.5	0.5

NOTES:

ND Analyte not detected at stated reporting limit

N/A Not analyzed

TABLE 2A CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE EPA METHOD 8015M/8020M (SAMPLES BEFORE 2001) EPA METHOD 8015M/8260 (SAMPLES SINCE 2002)

results in ug/L (ppb)

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
MW-1	2/19/99	ND	ND	ND	ND	ND	ND
	5/10/99	ND	ND	ND	ND	ND	ND
	8/30/99	N/A	ND	ND	ND	ND	ND
	11/23/99	ND	ND	ND	ND	ND	ND
DUP	11/23/99	ND	ND	ND	ND	ND	ND
	7/25/03	ND	ND	ND	ND	ND	ND
MW-2	2/19/99	ND	ND	ND	ND	ND	ND
	5/10/99	ND	ND	ND	ND	ND	ND
	8/30/99	N/A	ND	ND	ND	ND	ND
	11/23/99	ND	ND	ND	ND	ND	ND
	7/25/03	ND	ND	ND	ND	ND	< 1
MW-3	2/19/99	ND	ND	ND	ND	ND	1.5 1
DUP	2/19/99	ND	ND	ND	ND	ND	N/A

NOTES:

Analyte not detected at stated reporting limit ND

Not analyzed N/A

u/n

- Unless noted otherwise (Reporting Limit)
 Analyzed by EPA method 8260B, reporting limit was 1 µg/l. 1.
- Estimated value below method reporting limit of 2 µg/l. 2.
- Inconsistent contaminant pattern. Sample result spurious, re-sampled 3.
- Reporting limit at 2.5 µg/l.

TABLE 2A, Continued CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
MW-3 CONT'D	5/10/99	ND	ND	ND	ND	ND	1.5 ²
	8/30/99	N/A	ND	ND	ND	ND	ND
	11/23/99	ND	ND	[0.69] ³	$[0.58]^3$	[1.3] ³	ND
	1/6/00	ND	ND	ND	ND	ND	3.1 ⁴
DUP	1/6/00	ND	ND	ND	ND	ND	2.6 ⁴
TRIP BLANK	2/10-22/99	ND	ND	ND	ND	ND	N/A
	5/8-20/99	N/A	N/A	N/A	N/A	N/A	N/A
and the second s	8/27-31/99	N/A	N/A	N/A	N/A	N/A	N/A
	7/25/03	ND	ND	ND	ND	ND	1.1
MW-4	10/21/2002	N/A	5,800	6,200	3,500	18,000	140
	1/28/03	N/A	7,200	3,500	2,700	15,000	130
	4/28/03	N/A	5,700	850	N D<120	10,000	200
	7/25/03	97,000	11,000	8,400	4,900	24,000	ND<250
MW-5	10/21/2002	65,000	12,000*	20,000*	1,600*	7,100*	ND<100
	1/28/03	N/A	9,100	6,600	720	4,000	ND<100
	4/28/03	N/A	12,000	8,300	ND<250	2,100	ND<250
	7/25/03	62,000	13,000	14,000	1,300	5,200	ND<250
REPORTING LIMITS		50.0	0.50	0.50	0.50	0.50	2.00 U/N

ORO LOMA SANITARY DISTRICT, STID 1996 302210 TABLE 2A for 0703:

TABLE 3

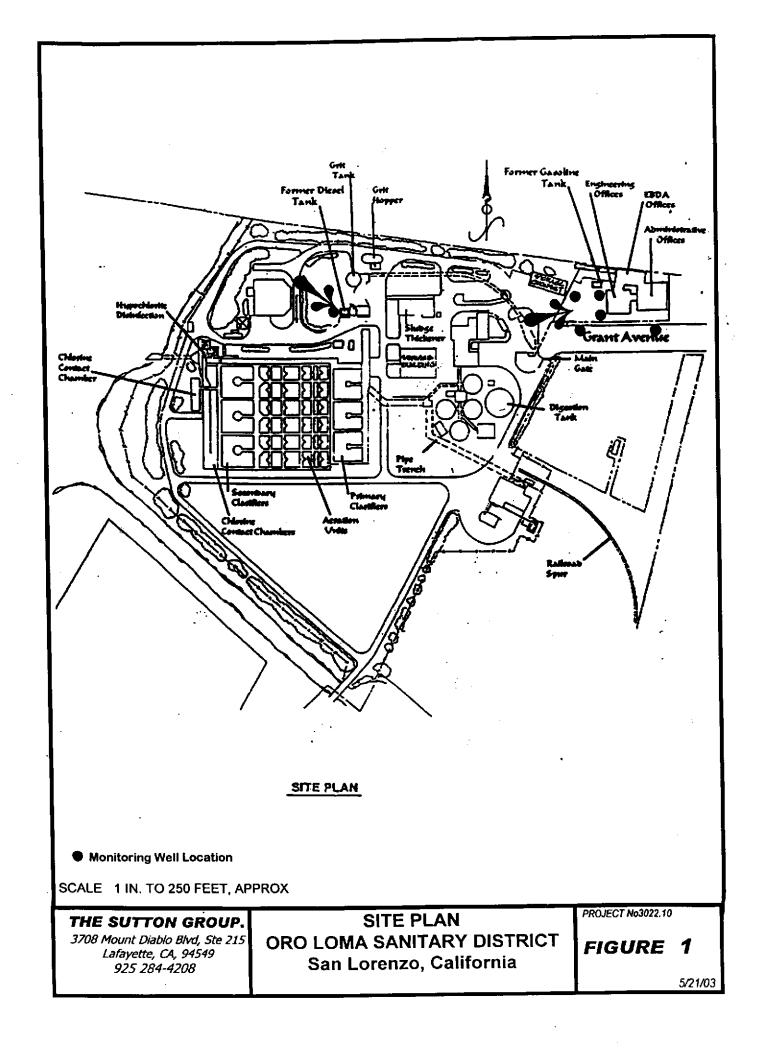
SUMMARY OF WATER SAMPLE ANALYSES: FORMER DIESEL TANK AREA MONITORING WELL

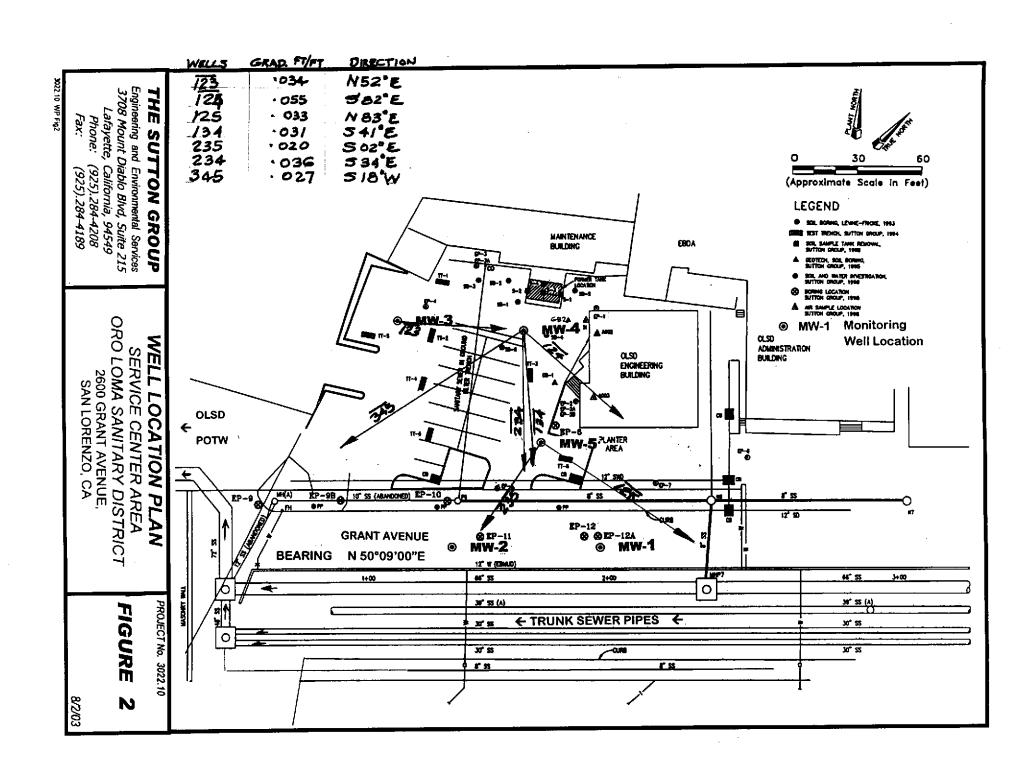
TOTAL PETROLEUM HYDROCARBONS AS DIESEL, EPA METHOD 8015C, 8021

RESULTS IN µg/L (ppb)

Sample Date	TPH as DIESEL	BTEX
7/25/03	90*	ND*
4/28/2003	87	ND
3/ 8/1996	340	ND
2/1/95	380	ND
6/15/94	170	ND
3/15/94	200	ND
12/1/93	300	ND

For reporting limits refer to laboratory certificates appended.





The Sutton Group	Client Project ID: #3022.10	Date Sampled: 07/25/03
3708 Mt. Diablo Blvd, Ste. 215		Date Received: 07/25/03
Lafayette, CA 94549	Client Contact: John Sutton	Date Reported: 07/31/03
	Client P.O.:	Date Completed: 07/31/03

WorkOrder: 0307458

July 31, 2003

Dear John:

Enclosed are:

- 1). the results of 6 analyzed samples from your #3022.10 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Angela Rydelius, Lab Manager

McCampbell Analytical In	nc
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The Sutton Group	Client Project ID: #3022.10	Date Sampled: 07/25/03
3708 Mt. Diablo Blvd, Ste. 215	·	Date Received: 07/25/03
Lafayette, CA 94549	Client Contact: John Sutton	Date Extracted: 07/29/03-07/31/03
	Client P.O.:	Date Analyzed: 07/29/03-07/31/03

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline *

straction method: SW5030B		Analy	Work Order:	0307458	
Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	MW-1 0725	w	ND	1	98.2
002A	MW-2 0725	w	ND	1	103
003A	MW-3 0725	w	ND	1	102
004A	MW-4 0725	w	97,000,a	200	104
005A	MW-5 0725	w	62,000,a	330	98.9
006A	MW-D1 0725	w	ND	1	98.0
	 				
	TING DE 1				
ND mean	g Limit for DF =1; s not detected at or he reporting limit	S	50 NA		g/L NA

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in µg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

McCampbell	Analytical	Inc
•	-	

The Sutton Group	Client Project ID: #3022.10	Date Sampled: 07/25/03
3708 Mt. Diablo Blvd, Ste. 215		Date Received: 07/25/03
Lafayette, CA 94549	Client Contact: John Sutton	Date Extracted: 07/31/03
Daily otto, Cri 545	Client P.O.:	Date Analyzed: 07/31/03

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0307458 Client ID Matrix TPH(g) MTBE Lab ID Benzene Toluene Ethylbenzene Xylenes DF % SS 006A MW-D1 0725 W ND ND ND ND 98.0 1

					<u> </u>				
Reporting Limit for DF=1; ND means not detected at or	w	50	5.0	0.5	0.5	0.5	0.5	1	μg/L
above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mo/Ko

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in μg/kg, wipe samples in μg/wipe, product/oil/non-aqueous liquid samples in mg/L.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

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The Sutton Group	Client Project ID: #3022.10	Date Sampled: 07/25/03
3708 Mt. Diablo Blvd, Ste. 215		Date Received: 07/25/03
Lafayette, CA 94549	Client Contact: John Sutton	Date Extracted: 07/25/03
Dulayotte, Off 91019	Client P.O.:	Date Analyzed: 07/27/03

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

xtraction method: SV	W3510C		Analytical methods: SW8015C	Work Order:	030745
Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0307458-006C	MW-D1 0725	w	90,ь	ī	99.0
				:	·
			~		
					-
	——————————————————————————————————————				
		 			
Reporting I	Limit for DF =1; not detected at or	w	50	μ	g/L
	reporting limit	S	NA	Ŋ	IA.

^{*} water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / SPLP / TCLP extracts are reported in µg/L.

DHS Certification No. 1644

_ Angela Rydelius, Lab Manager

[#] cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

 The Sutton Group
 Client Project ID: #3022.10
 Date Sampled: 07/25/03

 3708 Mt. Diablo Blvd, Ste. 215
 Date Received: 07/25/03

 Lafayette, CA 94549
 Client Contact: John Sutton
 Date Extracted: 07/28/03-07/30/03

 Client P.O.:
 Date Analyzed: 07/28/03-07/30/03

	_			Work Ord	er: 0307458	
0307458-001B	0307458-002B	0307458-003B	0307458-004B			
MW-1 0725	MW-2 0725	MW-3 0725	MW-4 0725			
W	w	W	W	DF =1		
1	1	1	500	S	w	
	Conce	entration		ug/kg	μg/L	
ND	ND	ND	11,000	NA	0.5	
ND	ND	ND	4900	NA	0.5	
ND	0.95	1.1	ND<250	NA	0.5	
ND	ND	ND	8400	NA	0.5	
ND	ND	ND	24,000	NA	0.5	
Surre	ogate Recoveries	s (%)				
98.9	97.2	93.6	98.6			
98.4	97.3	90.0	99.1			
95.6	95.9	98.3	96.1			
	ND ND ND ND Surre 98.9	ND ND ND ND ND ND ND ND	MW-1 0725 MW-2 0725 MW-3 0725 W W W 1 1 1 Concentration ND ND ND Surrogate Recoveries (%) 98.9 97.2 93.6 98.4 97.3 90.0	Main	ND ND ND ND ND ND ND ND	

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in μg/L, soil/sludge/solid samples in μg/kg, wipe samples in μg/wipe, product/oil/non-aqueous liquid samples in mg/L.

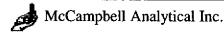


Comments

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

[#] surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



The Sutton Group	Client Project II	D: #3022.10	Date Sampled: 07/	/25/03	
3708 Mt. Diablo Blvd, Ste. 215			Date Received: 07/	/25/03	
Lafayette, CA 94549	Client Contact:	John Sutton	Date Extracted: 07/	/28/03-07/3	0/03
Larayette, CA 54545	Client P.O.:		Date Analyzed: 07/	Reporting DF S ug/kg NA NA NA	0/03
Extraction Method: SW5030B		E and BTEX by GC/MS* alytical Method: SW8260B		Work Ord	er: 0307458
Lab ID	0307458-005B				
Client ID	MW-5 0725			Reporting	Limit for
Matrix	w			DF	=1
DF	500			S	w
Compound		Concentration		ug/kg	μg/L
Велгене	13,000			NA	0.5
Ethylbenzene	1300			NA	0.5
Methyl-t-butyl ether (MTBE)	ND<250			NA	0.5
Toluene	14,000			NA	0.5

Surrogate Recoveries (%)

%SS1:	90.4	
%SS2:	101	
%SS3:	94.3	
Comments		

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in μg/L, soil/sludge/solid samples in μg/kg, wipe samples in μg/wipe, product/oil/non-aqueous liquid samples in mg/L.

5200



0.5

NA

Xylenes

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

[#] surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.

McCampbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

The Sutton Group	Client Project ID: #3022.10	Date Sampled: 07/25/03
3708 Mt. Diablo Blvd, Ste. 215		Date Received: 07/25/03
Lafayette, CA 94549	Client Contact: John Sutton	Date Extracted: 07/25/03
Latayono, Oli 7 to to	Client P.O.:	Date Analyzed: 07/28/03-07/29/03

Lead by Graphite Furnace Atomic Absorption*

Extraction method: E2	00.9		Analytical	methods: E200.9	Work Order:	0307458
Lab ID	Client ID	Matrix	Extraction	Lead	DF	% SS
0307458-001C	MW-1 0725	w	TTLC	ND<0.05,z	10	N/A
0307458-002C	MW-2 0725	w	TTLC	ND<0.1,z	20	N/A
0307458-003C	MW-3 0725	w	TTLC	ND<0.05,z	10	N/A
0307458-004C	MW-4 0725	w	TTLC	ND<0.05,z	10	N/A
0307458-005C	MW-5 0725	w	TTLC	ND<0.05,z	10	N/A
						-
					<u> </u>	
			1			}

Reporting Limit for DF =1; ND means not detected at or	w	TTLC	0.005	mg/L
above the reporting limit	S	TTLC	NA	mg/kg

*water/product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate recovery outside of acceptance range due to matrix interference; & means low or no surrogate due to matrix interference; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

Analytical Methods: EPA 6010C/200.7 for all elements except: 200.9 (water/liquid- Sb, As, Pb, Se, Tl); 245.1 (Hg); 7010 (sludge/soil/solid/oil/product/wipe/filter - As, Se, Tl); 7471B (Hg).

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations; j) reporting limit raised due to insufficient sample amount; k) results are reported by dry weight; y) estimated values due to low surrogate recovery; z) reporting limit raised due to matrix interference.

4

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0307458

EPA Method: SW80)21B/8015Cm E	extraction:	SW5030B	3	BatchID:	7958	Spiked Sample ID: 0307458-001A			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	111	109	1.99	103	106	3.19	70	130
МТВЕ	ND	10	100	107	5.83	101	98.1	3.02	70	130
Benzene	ND	10	99.1	98.8	0.228	102	104	2.30	70	130
Toluene	ND	10	92.3	92.1	0.257	96.2	98.1	2.01	70	130
Ethylbenzene	ND	10	100	98.2	2.24	103	105	1.83	70	130
Xylenes	ND	30	95	91	4.30	95.7	99.7	4.10	70	130
%SS:	98.2	100	98.6	98.7	0.0475	98.9	99	0.161	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

[£] TPH(btex) = sum of BTEX areas from the FID.

[#] cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QC SUMMARY REPORT FOR SW8015C

Matrix: W

WorkOrder: 0307458

EPA Method: SW8015C	E	extraction:	SW35100	SW3510C BatchID: 7952			S	piked Sample ID: N/A		
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	95.3	99.4	4.26	70	130
%SS:	N/A	100	N/A	N/A	N/A	91.8	105	13.0	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QC SUMMARY REPORT FOR SW8260B

Matrix: W

WorkOrder: 0307458

EPA Method: SW8260B	E	Extraction:	SW5030E	3	BatchID:	7956	s				
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)	
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High	
Benzene	ND	10	119	116	2.64	120	114	4.96	70	130	
Methyl-t-butyl ether (MTBE)	ND	10	123	122	1.01	123	117	5.31	70	130	
Toluene	ND	10	124	120	3.43	126	121	4.56	70	130	
%SS1:	88.3	100	108	108	0	106	104	2.08	70	130	
%SS2:	87.6	100	98.9	97.7	1.29	98.5	98.6	0.152	70	130	
%SS3:	95.8	100	99.9	95.8	4.15	102	97.8	4.51	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

QC SUMMARY REPORT FOR E200.9

Matrix: W

WorkOrder: 0307458

EPA Method: E200.9	E	Extraction:	E200.9		BatchID:	2: 7948 Spiked Sample ID: N/A					
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)	
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High	
Lead	N/A	0.010	N/A	N/A	N/A	95.6	100	4.70	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent

N/A = not applicable to this method.

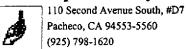
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

[%] Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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			PACHE	CO. CA 9/											TUJ	RN	AF	O	UN	D 7	FIN	Æ		[i.					i	Ţ	3	≱ K
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			SAM	PLING		ners	_	MA	TRIX	X.			OD OD	2 (S	(8015)	õ	Total Petroleum Hydrocarbons (418.1)		EPA (EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 /8260		PAH's / PNA's by EPA	2	7240/7421/239 2/6010)							
	SAMPLE ID	LOCATION			Containers	Type Containers								PH 23	Ş.	Total Petroleum	oleun	/8010	BTEX ONLY (EPA	EPA 608 / 8080	/ 808	/ 824	EPA 625 / 8270	NA.	CAM-17 Metals	5 Metals 7240/742							
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McCampbell Analytical Inc.



CHAIN-OF-CUSTODY RECORD

Page I of 1

WorkOrder: 0307458

Client:

The Sutton Group

3708 Mt. Diablo Blvd, Ste. 215

Lafayette, CA 94549

TEL:

925-284-4208

FAX:

925-284-4189

ProjectNo:

#3022.10

PO:

Date Received:

7/25/03

Date Printed:

7/25/03

							Re	quested Test	S	
Sample ID	ClientSamplD	Matrix	Collection Date	Hold	E200_9	SW8015C	V8021B/8015C	SW8260B		
0307458-001	MW-1 0725	Water	7/25/03 12:00:00 PM		С		A	В		
0307458-002	MW-2 0725	Water	7/25/03 1:15:00 PM		С		A	В		
0307458-003	MW-3 0725	Water	7/25/03 2:00:00 PM		С		Α	В		
0307458-004	MW-4 0725	Water	7/25/03 2:50:00 PM		С		Α	В		
0307458-005	MW-5 0725	Water	7/25/03 4:30:00 PM		С		Α	В		
0307458-006	MW-D1 0725	Water	7/25/03 4:05:00 PM			С	Α	B		

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

SAMPLE COLLECTION LOG

<u> </u>	GRANT
Project Name	OLSD
Project Number	3022.10
Sampler Name	Sulfon
Date of Sample Collection	7/24/03 FREDRY
Sample Number	MW- 072903 115-1215
Sample Location	(1)00
Sample Media Site Conditions	Soil Water other
Site Collettions	Swary, 100 mgs bing
	Water depth below Rim. 8.20
	TD = 13 0 ? will bailor.
Sample Collection Depth	
Sample Container	3x 40ml VOR
Sample Container	1x 26 mg
Intact or Disturbed Sample	(7.124)
Sample Material Description	greenest that usodar
	0
Collection Procedure	Deducated Bailer jammed in bottom of well
	String broke - Could not recover it
ph 6150 x	13-8.2=4.8, 20=3016 gayar = 0.89
1 = 1 (4.0	2 Aught: 3000 = 2.3322.
C= 134 us an	Set new bailer on new string.
5330	
* Jemp mober keeked aga	mit calibrated themonotor and of day Checked a.
Proposed Lab. Analysis	GARREMINE Lead

SAN	IPLE COLLECTION LOG
Project Name	OLSD
Project Number	302.10
Sampler Name	Sutton
Date of Sample Collection	7/25/03 FM
Sample Number	MW-2072503 1230-15
Sample Location	GRANT AV.
Sample Media	Soi (Water/ other
Site Conditions	
Sample Collection Depth	We 6:40 ft V PIM 16:10 @ 0.16 gre/ft = 1.6 x 3 = 4.8 gre 0 100 0 100
Sample Container	1 x 500ml plaké
Intact or Disturbed Sample	
Sample Material Description	gray cloudy, some Buy Musi blecky
Collection Procedure	edicated baler
DP-7.75	
1=80,7°F	
C= 6460 MSKN	1
	+
· · · · · · · · · · · · · · · · · · ·	
Proposed Lab. Analysis	Gas BEXMINE plend

SAMPLE COLLECTION LOG

Project Name	OLSD
Project Number	3022110
Sampler Name	Sutton
Date of Sample Collection	7/25/03 FRIDAY 15-23
Sample Number	MW-3072503
Sample Location	Age to TWIN gate forming glos.
	0
Sample Media	Soil/(Water/ other
Site Conditions	Strang Jos 100 Breeze
	D'Etvel
	When @ 6:45 D = 16,D = 912
Sample Collection Depth	X. K. BY
Sample Conceden 20pm	2 x 10 1/01 = 41/09/2
Sample Container	TATOMA VOR
	1 x soom plaske
Intact or Disturbed Sample	
Sample Material Description	Li green - no odar
Collection Procedure	A Classification of the control of t
M = 7.15	V. Slow lecovery
	Sampleager Stages of
= 600	
2550	
(=5500	to the total
	By the Your Hade @ base (BMW)
	1000 CI
	\$ (0 m) (subst \$ 8 TMy (netone sample)
Proposed Lab. Analysis	GasBIEX MIKE, Low

SAM	IPLE COLLECTION LOG	ර	0	188
Project Name	Q1 SD		O	0
Project Number	3012.10			
Sampler Name	Sulton		<u></u>	
Date of Sample Collection	7/25/03	3,17	- M -	305
	K I A I A Critical		() 50 m	a)
Sample Number	OVC Port 1 heavent 1000	NR.		
Sample Location	110 200			
Sample Media	Soil/ Water/ other			
Site Conditions	Surry, Woods & B			
Sample Collection Depth Sample Container	6:10 TD = 14.9	, D	$= 8.8$ $\times 16 \times 3 =$	4.390
Campie Contains.	~~~			
Intact or Disturbed Sample	grevelue odor			-
Sample Material Description	(4			1
Collection Procedure				1
T2/8:8				1
C=3400/15/				
		<u> </u>		1

Proposed Lab. Analysis

SAN	MPLE COLLECTION LOG	١		
		2	<u> </u>	^ ^
Project Name	OLSD.	 	EW	2 [[
Project Number	302510	© 5		
Sampler Name	sutton)	$\Box \phi$	
Date of Sample Collection	July 25, 2003 4200mg			
		0111	1	15
Sample Number	MW5071503	- 2	()4	7 F
Sample Location	E sue of they can our	s lary	Moon	رس
	Alan M	INO /	<u> </u>	
Sample Media	Soil Water/ other			
Site Conditions				
	1			
Sample Collection Depth	6110 14.5D =	a,	246	
	5.40 - 14.510-	1/3-	1 5	-0
Sample Container	X-	/(x)=	4.7	٤.
Intact or Disturbed Sample				
Sample Material Description	spoolne order (less thants A), Jurbid we	ter grant	(net)	
			\mathcal{A}	
Collection Procedure	Dedicated Parlot			
11 7.18				
7/1				
74.6 6				
17.0				
(14.200				
1112				
2				
Proposed Lab. Analysis	POTAL ATTE	1	,0	
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SAMPLE COLLECTION LOG

Project Name Project Number Sample Name Date of Sample Collection Sample Number Sample Location Sample Media Site Conditions Sample Collection Depth Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure A Collection Procedure Proposed Lab. Analysis			
Sample Number Sample Location Sample Media Site Conditions Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure A Collection Procedure A Collection Depth A Collection Procedure A Collection Procedur	Project Name	0150	
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Sample Number Sample Location Water other Sample Media Site Conditions Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure A 190 A 200 A 2	Sampler Name	Suttan	
Sample Media Site Conditions Sample Collection Depth Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure The Collection Procedure	Date of Sample Collection	July 25, 2003 (FU)	يس ا
Sample Media Site Conditions Sample Collection Depth Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure The Collection Procedure		340-74	13
Sample Media Site Conditions Sample Collection Depth Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure 3 40 ml 24 4 2 collection or Material Sample Proposed Lab. Analysis		/ 100	- /
Sample Media Site Conditions Sample Collection Depth Sample Collection Depth Water & 3.30	Sample Location	Tankare (40°	pmy
Site Conditions Swell		MM D COL	
Site Conditions Swell			
Sample Collection Depth Sample Container Sample Container Intact or Disturbed Sample Sample Material Description Collection Procedure A 190 Deducted Sample A 20 M 10 A 2		Soll/ Water/ otner	
Sample Collection Depth Sample Container Water @ 3.30 D = 15.3 = 12 halar Sample Container @ 0.37gpf Intact or Disturbed Sample Sample Material Description Collection Procedure	Site Conditions		
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Sample Collection Depth Sample Container Water @ 3.30 D = 15.3 = 12 halar Sample Container @ 0.37gpf Intact or Disturbed Sample Sample Material Description Collection Procedure		A W CX Load	}
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Intact or Disturbed Sample Sample Material Description Collection Procedure A 190 Deductor Bullon To 190 A 190 Deductor Bullon Proposed Lab. Analysis	Sample Concention Depth	Water@ 5:30' [D=15:5=12"	aler
Collection Procedure Collection Procedure	Sample Container	@0.37gpf	3
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Proposed Lab. Analysis	Sample Material Description	X X amber Stars	1 .0.
Proposed Lab. Analysis		1/	4
Proposed Lab. Analysis	Collection Procedure	2 × 1200 0 \M	-
Proposed Lab. Analysis	M = 1.90	Sharm von	†
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