RO288

PHONE (925) 284-4208
FAX (925) 284-4189
EMAIL:
johnrsutton@mindspring.com

THE SUTTON GROUP

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

3708 Mount Diablo Blvd
Suite 215
Lafayette, CA, 94549

September 8, 2004

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

Results of 8th Round 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, LOP Site No. RO0000288 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 29, 2004. This is the 8th quarterly sampling of the five wells at the former gasoline tank site and the one well at the former diesel tank site. Review of groundwater level measurements around the former gasoline tank site indicated that the water level in MW-4 being lower than in MW-5, which was different from all previous readings. The groundwater elevations in the 5 wells were checked on September 3rd, which confirmed the readings. In comparison of levels in previous months and previous years, it is noted that the elevations are all about one half foot higher than a year earlier (4th quarter) and about the same as those of the 5th quarter, last fall, and that the water level in MW-5 had fallen less than historically for the season. The gradient direction has turned several degrees but does not change our model.

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 April 18, 2003.

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. Table 1 summarizes the ground water elevation data collected and their history.

Sampling Results

Gasoline Tank Area

On July 29, 2004, water samples were collected from all 5 wells in accordance with the approved work plan. 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.

The five wells were each sampled and analyzed for gasoline, BTEX and MTBE. 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 monitoring well location is shown on Figure 1.

The well was purged and sampled, and analyzed for TPH as diesel. The presence of 90µg/l was similar to the reading last quarter (87µg/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.

Future 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. The next sampling is scheduled for October 2004

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.

Yours truly,

THE SUTTON GROUP

John R. Sutton, PE

REGISTERED PROFESSIONAL ENGINEER
JOHN R. SUTTON
LIC. No. 40324
EXP. 12/31/06
CIVIL
STATE OF CALIFORNIA

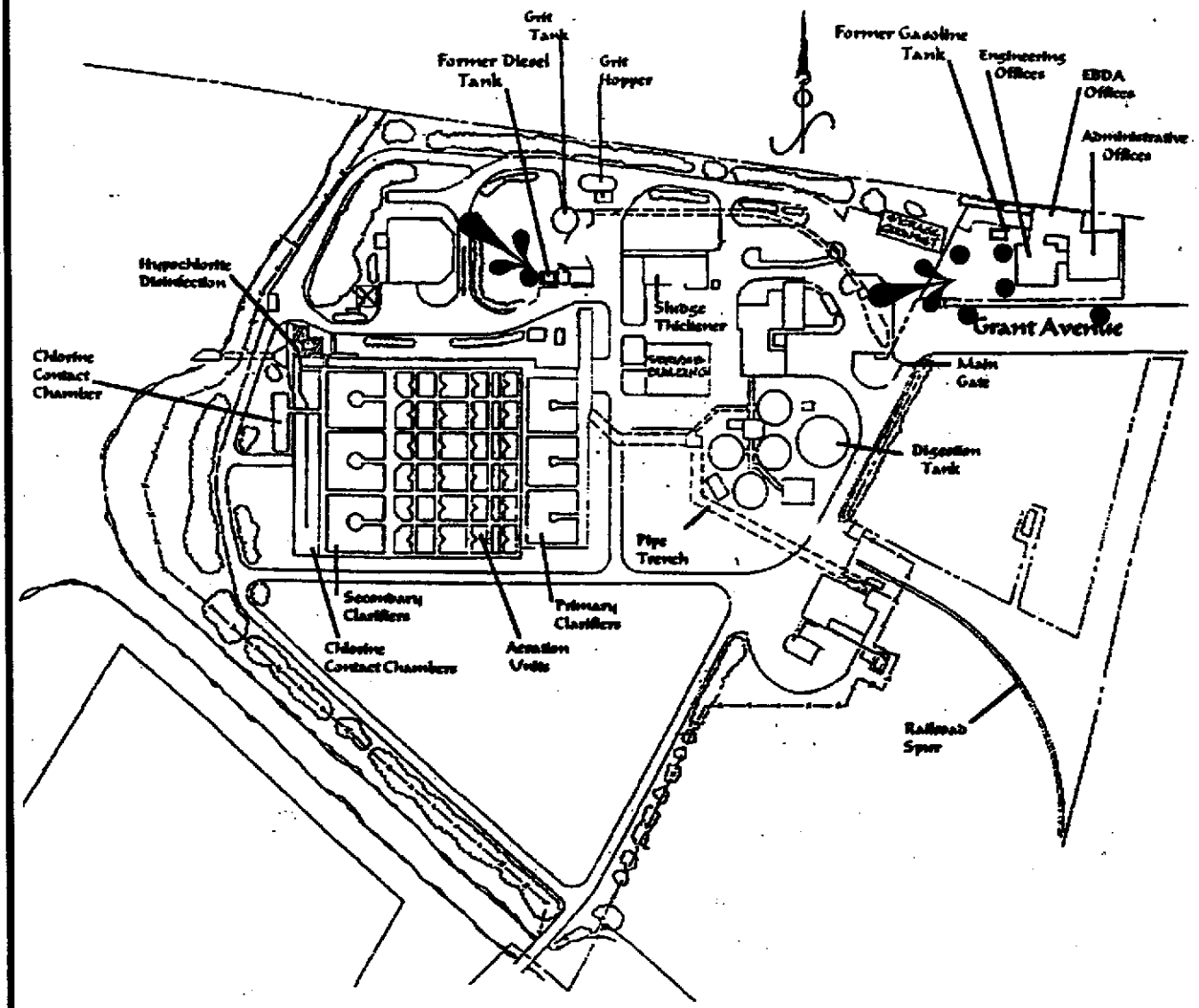
Attachments:

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

Two Copies Sent

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

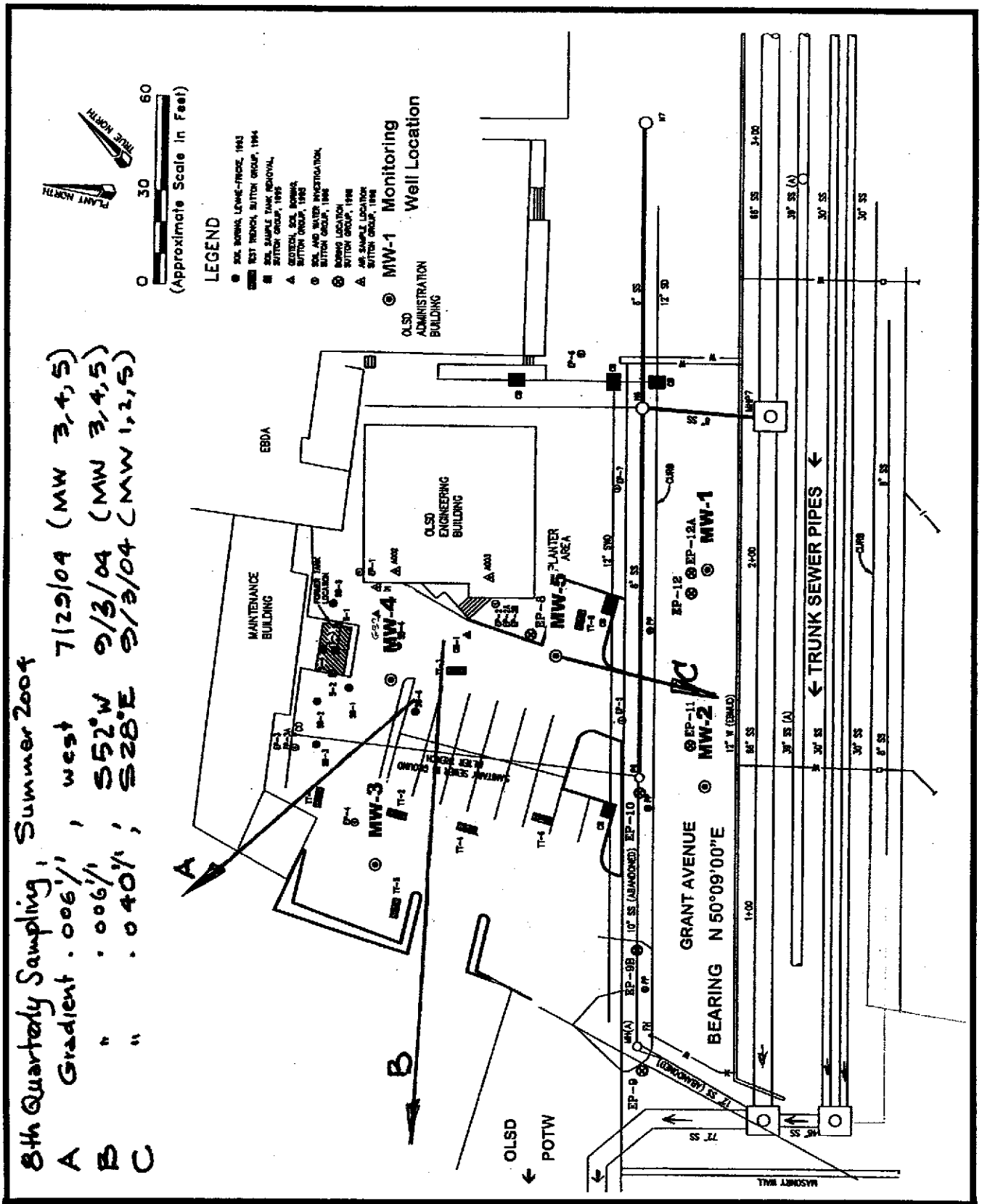


SITE PLAN

● Monitoring Well Location

SCALE 1 IN. TO 250 FEET, APPROX

THE SUTTON GROUP. *3708 Mount Diablo Blvd, Ste 215* *Lafayette, CA, 94549* *925 284-4208*	**SITE PLAN** **ORO LOMA SANITARY DISTRICT** **San Lorenzo, California**	*PROJECT No3022.10* ***FIGURE 1*** 5/21/03



THE SUTTON GROUP
Engineering and Environmental Services
3708 Mount Diablo Blvd, Suite 215
Lafayette, California, 94549
Phone: (925).284-4208
Fax: (925).284-4189

WELL LOCATION PLAN

SERVICE CENTER AREA
ORO LOMA SANITARY DISTRICT
2600 GRANT AVENUE,
SAN LORENZO, CA

PROJECT No. 3022.10

FIGURE 2

8/2/03

TABLE 1
GROUND WATER ELEVATIONS
All measurements are in feet

Monitoring Well ID	**MW 1**	**MW 2**	**MW 3**	**MW 4**	**MW 5**	***Estimated Net***	
Well Cover Rim Elevn*	**8.65**	8.75	10.19	9.68	8.92	***Flow Direction***	***Gradient ft/ft***
Initial Sampling 10/21/02	1.72	2.04	3.21	3.58	2.84	S21°E	0.016
2nd Quarterly 1/28/03	2.23	2.65	4.94	5.35	4.42	S23°E	0.033
3rd Quarterly, 4/28/03	Not Measured	3.18	Not Measured	5.80	5.20	S22½°W	0.042
4th Quarterly, 7/25/03	0.45	2.35	3.44	3.58	3.52	S18°W	0.027
5th Quarterly, 10/30/03	1.82	2.75	3.61	4.18	4.09	S26°E	0.014
6th Quarterly, 1/23/04	2.20	3.27	5.27	5.47	5.17	S35°E	0.053
7th Quarterly, 4/27/2004	2.35	3.55	4.99	5.08	4.92	S17°E	0.017
8th Quarterly, 7/29/2004							
Groundwater Depth	6.58	5.48	6.09	5.37	4.37		
Groundwater Elevation	**2.07**	**3.27**	**4.10**	**4.31**	**4.55**	West	0.006
Change Since last reading	-0.28	-0.28	-0.89	-0.77	-0.37		
Change since 7/03	1.62	0.92	0.66	0.73	1.03		
Add'l Reading on 9/3/2004							
Groundwater Depth	7.10	6.32	6.42	5.57	4.78		
Groundwater Elevation	**1.55**	**2.43**	**3.77**	**4.11**	**4.14**	S52°W	0.006
Change Since 7/29/04	-0.52	-0.84	-0.33	-0.20	-0.41		
Change since 4th Qtly 7/03	1.10	0.08	0.33	0.53	0.62		
Change since 5th Qtly 10/03	-0.27	-0.32	0.16	-0.07	0.05		

* Basis of elevations, Alameda County bench mark "Grant–Phil" at intersection of Grant Avenue and Phil Drive.
Bench Mark Elevation = 2.175 meters, msl = 7.136 feet.

TABLE 2

SUMMARY OF GROUND WATER SAMPLE ANALYSES

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

EPA METHOD 8015Cm /8021
results in µg/l (ppb)

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE	DILUTION FACTOR
MW-1	7/29/04	ND	ND	ND	ND	ND	ND	1
MW-2	7/29/04	ND	ND	ND	ND	ND	ND	1
MW-3	7/29/04	ND	6.4	ND	ND	ND	8.8	1
MW-4	7/29/2004	46,000	8,300	2,100	2,000	7,900	ND<500	100
MW-5	7/29/04	47,000	11,000	5,500	690	2,800	ND < 1,000	200
MW-D 1	4/27/04	*DIESEL*: ND	ND	ND	ND	ND	ND	1
REPORTING LIMITS FOR DF=1	4/27/04	50	0.5	0.5	0.5	0.5	5	

NOTES:

ND Analyte not detected at stated reporting limit
N/A Not analyzed

TABLE 2A

CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
FORMER GASOLINE TANK AREA

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE
results in µg/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
	10/30/03	N/A	N/A	N/A	N/A	N/A	N/A
	1/23/04	ND	ND	ND	ND	ND	ND
	4/27/04	N/A	N/A	N/A	N/A	N/A	N/A
	7/29/04	**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

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
FORMER GASOLINE TANK AREA

Sample Location	*Sample Date*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl Benzene*	*Xylenes (total)*	*MTBE*
	7/25/03	ND	ND	ND	ND	ND	< 1
	10/30/03	N/A					
	1/23/04	ND	ND	ND	ND	ND	ND
	4/27/04	N/A	N/A	N/A	N/A	N/A	N/A
	7/29/04	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-3	2/19/99	ND	ND	ND	ND	ND	1.5 [1]
DUP	2/19/99	ND	ND	ND	ND	ND	N/A
	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
	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
	10/30/03	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
FORMER GASOLINE TANK AREA

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
	1/23/04	N/A	N/A	N/A	N/A	N/A	N/A
	4/27/04	N/A	N/A	N/A	N/A	N/A	N/A
	7/29/04	**ND**	**6.4**	**ND**	**ND**	**ND**	**8.8**
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	ND<120	10,000	200
	7/25/03	97,000	11,000	8,400	4,900	24,000	ND<250
	10/30/03	77,000	12,000	9,300	3,200	16,000	ND < 200
	1/23/04	100,000	16,000	10,000	1,100	19,000	ND < 1,200
	4/27/04	78,000	13,000	7,800	3,200	17,000	ND < 1,000
	7/29/2004	**46,000**	**8,300**	**2,100**	**2,000**	**7,900**	**ND<500**
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
	10/30/03	33,000	7,500	2,200	490	1,600	ND < 100
	1/23/04	97,000	18,000	20,000	ND<120	7,900	ND < 1,200
	4/27/04	39,000	12,000	11,000	920	4,300	ND < 1,000
	7/29/04	**47,000**	**11,000**	**5,500**	**690**	**2,800**	**ND < 1,000**

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
FORMER GASOLINE TANK AREA

Sample Location	*Sample Date*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl Benzene*	*Xylenes (total)*	*MTBE*

NOTES:

ND	Analyte not detected at stated reporting limit
N/A	Not analyzed
u/n	Unless noted otherwise (Reporting Limit)

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

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*
7/29/04	ND<50	ND
4/27/04	110	< 0.91
1/23/04	71	ND
10/30/03	87	ND
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.

McCampbell Analytical, Inc.

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

The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #3022.10; Oro Loma Sanitary Dist.	Date Sampled: 07/29/04
		Date Received: 07/30/04
	Client Contact: John Sutton	Date Reported: 08/06/04
	Client P.O.:	Date Completed: 08/06/04

WorkOrder: 0407444

August 06, 2004

Dear John:

Enclosed are:

1). the results of **6** analyzed samples from your **#3022.10; Oro Loma Sanitary Dist. 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.

Yours truly,

Angela Rydelius, Lab Manager

BLAINE TECH SERVICES, INC.

U4UT444

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 040729-041

CLIENT: The Sutton Group

SITE: ORO LOMA SANITARY DIST.
2600 GRANT AVE
SAN LORENZO, CA

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT

LAB: McCampbell

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
- ☐ EPA
- ☐ LIA
- ☐ OTHER
- ☒ RWQCB REGION

SPECIAL INSTRUCTIONS

Invoice and Report to : The Sutton Group
Attn: John Sutton Job# 3022.10

email results "non-certified" as "pdf" to:
johnrsutton@mindspring.com

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL	C	TPH-G / MBTEX (SW8021B/8015Cm)	TPH-D (SW8015C)	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	7/29/04	0922	W	3		X					
MW-2		0947				X					
MW-3		1010				X					
MW-4		1101				X					
MW-5		1203 HM60A				X					
MW-D1		1140		5		X	X				

ICE/T _____
GOOD CONDITION _____ APPROPRIATE
HEAD SPACE ABSENT _____ CONTAINERS _____
DECHLORINATED IN LAB _____ PRESERVED IN LAB _____

PRESERVATION	VOAS	O&G	METALS	OTHER
	✓			

SAMPLING COMPLETED	DATE	TIME
	7/29/04	1215

SAMPLING PERFORMED BY: David Atlbat

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
David Atlbat	7/30/04	2:20PM		07/30/04	2:20pm
Scott Brown	07/30/04	5:00		7/30	5:00

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0407444 **ClientID: TSG**

Report to:
John Sutton
The Sutton Group
3708 Mt. Diablo Blvd, Ste. 215
Lafayette, CA 94549
TEL: 925-284-4208
FAX: 925-284-4189
ProjectNo: #3022.10; Oro Loma Sanitary Dist.
PO:

Bill to:
Accounts Payable
The Sutton Group
3708 Mt. Diablo Blvd, Ste. 215
Lafayette, CA 94549

Requested TAT: 5 days
Date Received: 7/30/04
Date Printed: 7/30/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0407444-001	MW-1	Water	7/29/04 9:22:00 AM	☐	A														
0407444-002	MW-2	Water	7/29/04 9:47:00 AM	☐	A														
0407444-003	MW-3	Water	7/29/04 10:10:00	☐	A														
0407444-004	MW-4	Water	7/29/04 11:01:00	☐	A														
0407444-005	MW-5	Water	7/29/04 12:03:00	☐	A														
0407444-006	MW-D1	Water	7/29/04 11:40:00	☐	A	B													

Test Legend:

1	G-MBTEX_W	2	TPH(D)_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

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.

McCampbell Analytical, Inc.

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Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #3022.10; Oro Loma Sanitary Dist.	Date Sampled: 07/29/04
		Date Received: 07/30/04
	Client Contact: John Sutton	Date Extracted: 08/03/04-08/05/04
	Client P.O.:	Date Analyzed: 08/03/04-08/05/04

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0407444

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	94.1
002A	MW-2	W	ND	ND	ND	ND	ND	ND	1	98.7
003A	MW-3	W	ND	8.8	6.4	ND	ND	ND	1	94.9
004A	MW-4	W	46,000,a	ND<500	8300	2100	2000	7900	100	102
005A	MW-5	W	47,000,a	ND<1000	11,000	5500	690	2800	200	,102
006A	MW-D1	W	ND	ND	ND	ND	ND	ND	1	105

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/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 ~1 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; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
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The Sutton Group 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549	Client Project ID: #3022.10; Oro Loma Sanitary Dist.	Date Sampled: 07/29/04
		Date Received: 07/30/04
	Client Contact: John Sutton	Date Extracted: 07/30/04
	Client P.O.:	Date Analyzed: 08/05/04

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

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0407444

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0407444-006B	MW-D1	W	ND	1	97.6

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* 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 / STLC / SPLP / TCLP extracts are reported in µg/L.

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 ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0407444

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 12571 Spiked Sample ID: 0408001-001A

	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	97.3	96.3	1.02	95.7	95.9	0.244	70	130
MTBE	ND	10	106	104	2.50	103	105	2.31	70	130
Benzene	ND	10	114	109	4.75	110	104	5.17	70	130
Toluene	ND	10	113	109	3.42	106	105	1.19	70	130
Ethylbenzene	ND	10	113	108	4.57	109	104	4.52	70	130
Xylenes	ND	30	100	95.3	4.78	96	91	5.35	70	130
%SS:	84.1	10	107	105	1.75	103	102	1.04	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 / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or 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.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8015C

Matrix: W WorkOrder: 0407444

EPA Method: SW8015C	Extraction: SW3510C	BatchID: 12544	Spiked 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	110	111	1.00	70	130
%SS:	N/A	2500	N/A	N/A	N/A	120	113	5.67	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 / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the 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.

DHS Certification No. 1644

V. P. QA/QC Officer

WELLHEAD INSPECTION CHECKLIST

Date 7/29/04 Client The Sutton Group

Site Address 2600 Grant Ave. San Lorenzo, CA

Job Number 040729-DA1 Technician DA

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1							1,2,	
MW-2							1,2,	
MW-3							1,2,	
MW-4							2	
MW-5							1,2,	
MW-D1							2	

NOTES: 1. Bad Cap 2. No/Bad lock

WELL GAUGING DATA

Project # 040729-DA1 Date 7/29/04 Client The Sutton Group

Site 2600 Grant Ave. San Lorenzo, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2					6.58	14.63	TOB	
MW-2	2					5.48	15.49		
MW-3	2					6.09	15.62		
MW-4	2	O				5.37	13.93		
MW-5	2					4.37	13.78		
MW-D1	4					2.87	14.51		

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: Sutton Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 14.63	Depth to Water (DTW): 6.58
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer; X Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1.3 (Gals.) X 3 = 3.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0915	69.6	6.4	38.33	27	1.5	clear,
0917	69.4	6.6	52.19	30	3	"
0919	69.0	6.7	56.97	39	4	grey tint; H_2S odor

Did well dewater? Yes (No) Gallons actually evacuated: 4

Sampling Date: 7/29/04 Sampling Time: 0922 Depth to Water: —

Sample I.D.: MW-1 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: The Sutton Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 15.49	Depth to Water (DTW): 5.48
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer / ✓ Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other____

Sampling Method: Bailer / ✕ Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

1.6 (Gals.) X 3 = 4.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0940	72.1	7.3	9452	623	2	grey, H_2S oder cloudy
0942	70.5	7.4	8803	>1000	4	"
0944	69.2	7.1	9121	>1000	5	"

Did well dewater? Yes (No) Gallons actually evacuated: 5

Sampling Date: 7/29/04 Sampling Time: 0947 Depth to Water: —

Sample I.D.: MW-2 Laboratory: Kiff CalScience Other Mc Campbell

Analyzed for: (TPH-G BTEX) MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: The Sutton Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-3	Well Diameter: ② 3 4 6 8 ____
Total Well Depth (TD): 15.62	Depth to Water (DTW): 6.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method:
- Bailer
- X Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

1.5 (Gals.) X 3 = 4.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1003	71.8	6.9	9997(µS)	254	1.5	grey; cloudy, H₂S odor
1005	69.3	6.9	22.32	201	3	"
1007	68.9	6.9	26.48	173	4.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 7/29/04 Sampling Time: 1010 Depth to Water: —

Sample I.D.: MW-3 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G BTEX) MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: The Sutton Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-4	Well Diameter: ② 3 4 6 8 ____
Total Well Depth (TD): 13.93	Depth to Water (DTW): 5.37
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer; Disposable Bailer (x); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer (x); Extraction Port; Dedicated Tubing; Other: _____

1.4 (Gals.) X	3	= 4.2 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1051	74.5	7.1	9999(µS)	7000	1.5	grey, cloudy, odor
1053	72.4	6.8	29.06	7000	3	"
1055	70.7	6.8	31.89	7000	4.5	dark grey, cloudy, sheen

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 7/29/04 Sampling Time: 1101 Depth to Water: —

Sample I.D.: MW-4 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G BTEX) MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: The Sutton Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 13.78	Depth to Water (DTW): 4.37
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.25	

Purge Method: Bailer; * Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; x Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

1.5 (Gals.) X	3	= 4.5 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
(2")	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1030	71.7	7.1	21.00	85	1.5	grey, cloudy, H2S odor, no sheen
1032	69.4	6.8	35.93	230	3	"
1032	well dewatered @ 3g.					"
1200	72.9	6.4	25.14	121	-	

Did well dewater? (Yes) No Gallons actually evacuated: 3

Sampling Date: 7/29/04 Sampling Time: 1203 Depth to Water: 9.40 @ site departure

Sample I.D.: MW-5 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 040729-DA1	Client: The Sutter Group
Sampler: DA	Date: 7/29/04
Well I.D.: MW-01	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 14.51	Depth to Water (DTW): 2.87
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, X Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other ____

Sampling Method: Bailer, X Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ____

7.6 (Gals.) X 3 = 22.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1134	74.2	7.6	5594	552	8	grey, cloudy
1135	74.3	7.7	7119	587	16	"
1137	74.2	7.7	7621	601	23	"

Did well dewater? Yes (No) Gallons actually evacuated: 23

Sampling Date: 7/29/04 Sampling Time: 1140 Depth to Water: —

Sample I.D.: MW-01 Laboratory: Kiff CalScience Other McCampbell

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV