PHONE (925) 284-4208 FAX (925) 284-4189

EMAIL:

johnrsutton@mindspring.com

SOILS, FOUNDATIONS, DRAINAGE, SLOPES, CONTAINMENTS CIVIL, GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING 3708 Mount Diablo Blvd Suite 215 Lafayette, CA, 94549

November 20, 2006

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

Results of 17<sup>th</sup> Quarterly Round of Sampling of Ground Water Monitoring Wells Site of the Former Gasoline Tank 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 in the area of the former gasoline tank, conducted on October 26, 2006. This is the 17<sup>th</sup> quarterly sampling of wells in the gasoline tank area.

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, as amended.

Figure 1 is a plan of the District's facilities at the foot of Grant Avenue in San Lorenzo. It shows the relative locations of the former gasoline and diesel tanks to the sewage treatment plant and the District's offices.

### **Groundwater Monitoring**

Review of groundwater level measurements around the former gasoline tank site indicates a leveling of ground water elevation typical of late summer conditions. The gradients are very flat. A minor mounding effect may be interpreted. Table 1 is a cumulative tabulation of groundwater data. Figure 2 shows the gradient direction as calculated on Figure 2A.

## Sampling Results

### **Gasoline Tank Area**

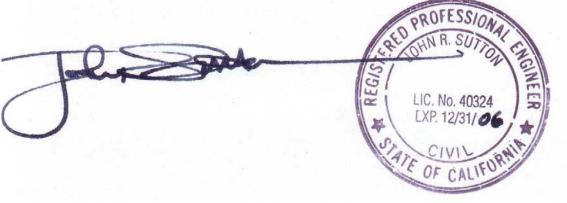
On October 26, 2006, water samples were collected from the three onsite wells in accordance with the approved work plan. The samples were collected by bailing.

All five wells were sounded and then sampled. Each sample was analyzed for gasoline, BTEX and MTBE. Table 2 is a summary of the results of the current round 302210, Qtr #17 rept G 04-2006 sig.doc

of analytical results for hydrocarbons. Table 2A is a compilation of all test results for gasoline-related hydrocarbon constituents in the gasoline tank area since well sampling began in 1999. Laboratory certificates and field sampling logs are attached.

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

### **Attachments:**

Figure 1	Site Plan
Figure 2	Well Location Plan, Former Gasoline Tank Area
Figure 2A	Gradient calculation sheet
Table 1	Ground Water Elevations, Former Gasoline Tank Area
Table 2	Summary of Current Water Sample Analyses for Gasoline and
	constituents, Former Gasoline Tank Area
Table 2A	Cumulative Summary of Water Sample Analyses, Gas Tank Area

Analytical Laboratory Reports (McCampbell) Field sampling Reports (Blaine Tech)

Copy uploaded to Geotracker

Copy uploaded to Alameda Co web site.

Copy sent by email to Mr. Steven Plunkett at Alameda County Health Dept.

Copy sent by email to Mr. Ken Ross

Copy sent by email to Mr. Tim Becker

302210, Qtr #17 rept G 04-2006 sig.doc

# TABLE 1 GROUND WATER ELEVATIONS

All measurements are in feet

Monitoring Well ID	MW 1	MW 2	MW 3	MW 4	MW 5	Estima	ted Net
Well Cover Rim Elevn*	8.65	8.75	10.19	9.68	8.92	Flow Direction	Gradient ft/ft
Groundwater Elevation			ļ.		ļ.		
Initial Sampling 10/21/02	1.72	2.04	3.21	3.58	2.84	S21°E	0.016
2 <sup>nd</sup> 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
4 <sup>th</sup> Quarterly, 7/25/03	0.45	2.35	3.44	3.58	3.52	S18°W	0.027
5 <sup>th</sup> Quarterly, 10/30/03	1.82	2.75	3.61	4.18	4.09	S26°E	0.014
6 <sup>th</sup> 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	1.55	2.43	3.77	4.11	4.14	S52°W	0.006
9th Quarterly, 10/28/2004	-0.08	0.98	4.17	4.50	4.69	S63°E	0.087
Special Sampling, 12/8/2004	-0.74	-0.83	Not Meas.	Not Meas.	Not Meas.	Not Meas.	Not Meas.
10th Quarterly, 1/24/2005	0.79	2.75	5.64	5.83	4.74	S27°E	0.03
11th Quarterly,4/28/2005	1.37	3.02	5.15	5.19	4.52	S40°E	0.023
12th Quarterly,7/19/2005	1.18	2.37	4.31	4.48	4.32	S59°E	0.063
13th Quarterly10/26/2005	0.79	1.72	3.69	4.10	4.20	S64°E	0.065
14th Quarterly1/30/2006	1.72	3.17	4.85	4.92	4.24	S73°E	0.05
15th Quarterly4/18/2006	2.17	3.44	5.94	5.09	4.25	S78°E	0.025
16th Quarterly7/19/2006	1.55	2.88	4.41	4.57	4.13	S69E	0.048
Current (17th) reading on 10/26	/2006				•	•	•
Groundwater Depth	7.48	6.12	6.72	5.76	3.54		
Groundwater Elevation	1.17	2.63	3.47	3.92	5.38	A: S30W	0.054*
Change Since 7/19/2006	-0.38	-0.25	-0.94	-0.65	1.25	B: S76E	0.087*
Change since same Qtr, last year	0.38	0.91	-0.22	-0.18	1.18		

<sup>\*</sup> 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.

<sup>\*</sup> Gradient is very flat. Results suggest a mound effect. "B" is the local "forced" gradient due to dewatering effect of the gravel-bedded sanitary sewer line trenches. "A" awould be the natural gradient due to the presence

## TABLE 2 LOP Site No. RO0000288

## **SUMMARY OF GROUND WATER SAMPLE ANALYS**

total petroleum hydrocarbons as gasoline, btex and mtb  ${\tt EPA\ METHOD\ 8015Cm\ /8021}$ 

results in µg/l (ppb)

Sample		<b>.</b>	_			Xylenes
Location	Sample Date	Gasoline	Benzene	Toluene	Ethyl Benzene	(total)
MW-1	10/26/2006	n/a	n/a	n/a	n/a	n/a
MW-2	10/26/2006	n/a	n/a	n/a	n/a	n/a
MW-3	10/26/2006	91	20	nd	0.55	3.5
MW-4	10/26/2006	89,000	13,000	1600	4,300	19,000
MW-5	10/26/2006	55,000	14,000	430	1,200	6,700
Trip Blank	10/26/2006	nd	nd	nd	nd	nd
Reporting Li	mits for DF=1	50	0.5	0.5	0.5	0.5

### **NOTES:**

nd Analyte not detected at stated reporting limit

n/a Not analyzed

	Dilution
MTBE	Factor
n/a	1
n/a	1
<i>4</i> 6	1
nd<800	100
nd<1,000	200
nd	1
5	

## **TABLE 2A** LOP Site No. RO0000288

## **CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES** FORMER GASOLINE TANK AREA

## total petroleum hydrocarbons as gasoline and mbtex

results in µg/l (ppb)

Sample Location	Sample Date	Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes (total)	MTBE
MW-1	2/19/1999	nd	nd	nd	nd	nd	nd
	5/10/1999	nd	nd	nd	nd	nd	nd
	8/30/1999	n/a	nd	nd	nd	nd	nd
	11/23/1999	nd	nd	nd	nd	nd	nd
dup	11/23/1999	nd	nd	nd	nd	nd	nd
	7/25/2003	nd	nd	nd	nd	nd	nd
	10/30/2003	n/a	n/a	n/a	n/a	n/a	n/a
	1/23/2004	nd	nd	nd	nd	nd	nd
	4/27/2004	n/a	n/a	n/a	n/a	n/a	n/a
	7/29/2004	nd	nd	nd	nd	nd	nd
MP	10/28/2004	NΑ	NΑ	NΑ	NΑ	NΑ	NΑ
	12/8/2004	nd	nd	nd	nd	nd	nd
MP	1/24/2005	nd	nd	nd	nd	nd	nd
	4/28/2005	NΑ	NΑ	NΑ	NΑ	NΑ	NΑ
	7/19/2005	nd	nd	nd	nd	nd	nd
	10/6/2005	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/2006	ND	ND	ND	ND	ND	ND
	4/18/2006	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2006	ND	ND	ND	ND	ND	ND
	10/26/2006	n/a	n/a	n/a	n/a	n/a	n/a
MW-2	2/19/1999	nd	nd	nd	nd	nd	nd
	5/10/1999	nd	nd	nd	nd	nd	nd
	8/30/1999	n/a	nd	nd	nd	nd	nd
	11/23/1999	nd	nd	nd	nd	nd	nd
	7/25/2003	nd	nd	nd	nd	nd	< 1
	10/30/2003	n/a					
	1/23/2004	nd	nd	nd	nd	nd	nd
	4/27/2004	n/a	n/a	n/a	n/a	n/a	n/a
	7/29/2004	nd	nd	nd	nd	nd	nd
MP	10/28/2004	ND	ND	ND	ND	ND	ND
	12/8/2004	ND	ND	ND	ND	ND	1.5
MP	1/24/2005	ND	ND	ND	ND	ND	9
	4/28/2005	n a	n a	n a	n a	n a	n a
	7/19/2005	nd	nd	nd	nd	nd	nd

ORO LOMA SANITARY DISTRICT, STID 1996 Table 2A, Page 7 302210 table 2A for Q16 03-2006:

	10/6/2005	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/2006	ND	ND	ND	ND	ND	ND
	4/18/2006	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2006	ND	ND	ND	ND	ND	ND
	10/26/2006	n/a	n/a	n/a	n/a	n/a	n/a
	707207200	.,,		11/0	.,,	,	.,,
MW-3	2/19/1999	nd	nd	nd	nd	nd	1.5
dup	2/19/1999	nd	nd	nd	nd	nd	n/a
•	5/10/1999	nd	nd	nd	nd	nd	1.5
	8/30/1999	n/a	nd	nd	nd	nd	nd
	11/23/1999	nd	nd	[.69]*	[.58]*	[1.3]*	nd
	1/6/2000	nd	nd	nd	nd	nd	3.14
Dup	1/6/2000	nd	nd	nd	nd	nd	2.64
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
	7/25/2003	nd	nd	nd	nd	nd	1.1
	10/30/2003	n/a	n/a	n/a	n/a	n/a	n/a
	1/23/2004	n/a	n/a	n/a	n/a	n/a	n/a
	4/27/2004	n/a	n/a	n/a	n/a	n/a	n/a
145	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	N/A	N/A	N/A	N/A	N/A	N/A
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	nd	4	66
	7/19/2006	140	61	ND	0.57	0.89	44
	10/26/2006	91	20	nd	0.55	3.5	46
MW-4	10/21/2002	n/a	5,800	6,200	3,500	18,000	140
	1/28/2003	n/a	7,200	3,500	2,700	15,000	130
	4/28/2003	n/a	5,700	850	ND<120	10,000	200
	7/25/2003	97,000	11,000	8,400	4,900	24,000	nd<250
	10/30/2003	77,000	12,000	9,300	3,200	16,000	nd < 200
	1/23/2004	100,000	16,000	10,000	1,100	19,000	nd < 1,200
	4/27/2004 7/29/2004	78,000 46,000	13,000 8,300	7,800 2,100	3,200 2,000	17,000 7,900	nd < 1,000 nd<500
MP	10/28/2004	80,000	15,000	7,100		14,000	
1411	12/8/2004	60,000 n/a	15,000 N/A	7,100 N/A	3,500 N/A	14,000 N/A	ND<1,000 n/a
MP	1/24/2005	70	9,900	850	2,500	11,000	ND<1,000
1411	4/28/2005	79,000	9,400	690	4000	16,000	nd<900
	7/19/2005	35,000	7,500	92	1,900	3,900	nd<500
	10/6/2005	65,000	12,000	2,100	3,200	11,000	ND<500
	1/30/2006	45,000	9,800	380	2,400	6,500	nd<130
	4/18/2006	58,000	7,100	420	3,900	13,000	nd < 500

\*1

\*2

\*3 \*4 \*4

ORO LOMA SANITARY DISTRICT, STID 1996 Table 2A, Page 7 302210 table 2A for Q16 03-2006:

	7/19/2006	71,000	10,000	520	4,900	18,000	ND<500
	10/26/2006	89,000	13,000	1600	4,300	19,000	nd< 800
MW-5	10/21/2002	65,000	12,000*	20,000*	1,600*	7,100*	ND<100
	1/28/2003	n/a	9,100	6,600	720	4,000	ND<100
	4/28/2003	n/a	12,000	8,300	ND<250	2,100	ND<250
	7/25/2003	62,000	13,000	14,000	1,300	5,200	nd<250
	10/30/2003	33,000	7,500	2,200	490	1,600	nd < 100
	1/23/2004	97,000	18,000	20,000	ND<120	7,900	nd < 1,200
	4/27/2004	39,000	12,000	11,000	920	4,300	nd < 1,000
	7/29/2004	47,000	11,000	5,500	690	2,800	nd < 1,000
MP	10/28/2004	130,000	23,000	25,000	2,000	9,700	ND<
	12/8/2004	n/a	n/a	N/A	N/A	N/A	N/A
MP	1/24/2005	150,000	22,000	25,000	2,100	12,000	nd<1,000
	4/28/2005	89,000	18,000	11,000	1,600	8,900	nd < 500
	7/19/2005	39,000	11,000	200	710	1,700	nd < 500
	10/6/2005	58,000	17,000	410	1,000	6,600	ND<500
	1/30/2006	61,000	15,000	5,500	1,100	5,600	nd < 500
	4/18/2006	36,000	13,000	490	660	3,300	nd < 500
	7/19/2006	49,000	16,000	460	ND<50	7,700	ND<500
	10/26/2006	55,000	14,000	430	1,200	6,700	nd<1,000

nd Analyte not detected at	t stated reporting limit
----------------------------	--------------------------

n/a Not analyzed

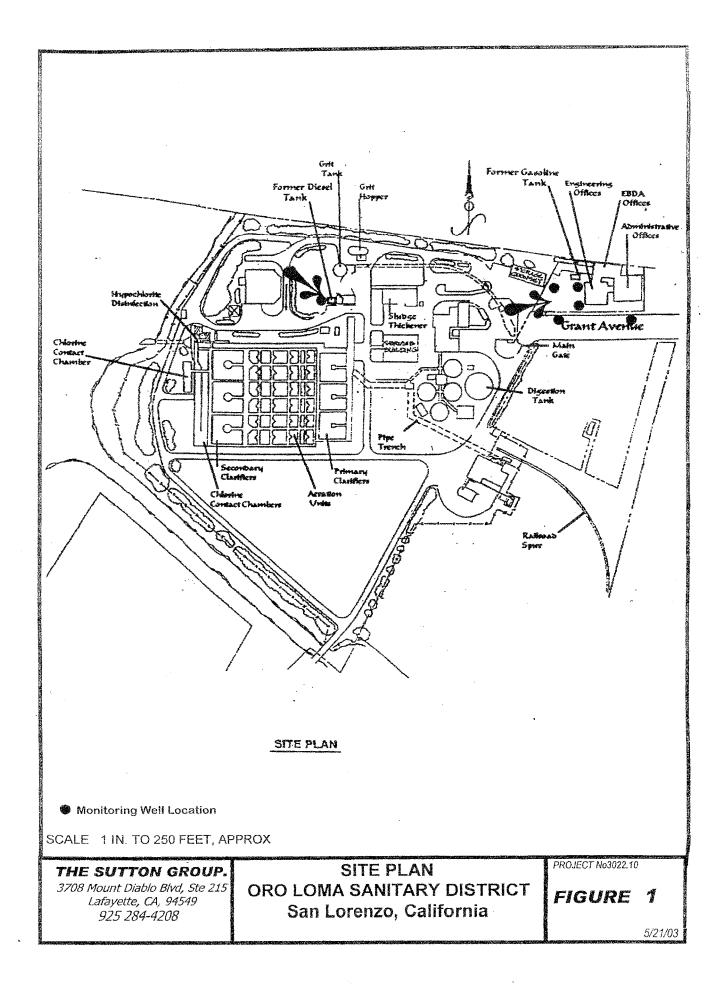
u/n Unless otherwise noted (Reporting limit)
MP Sampling by Micro Purge technique

<sup>\*1</sup> Analyzed by EPA method 8260B, reporting limit was 1 µg/l.

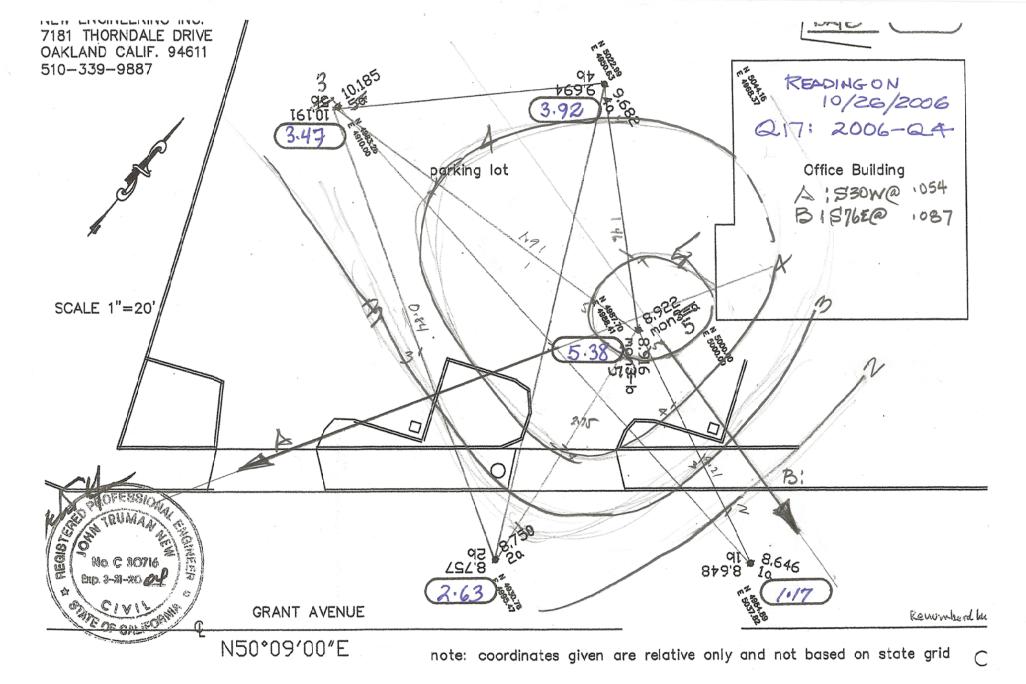
<sup>\*2</sup> Estimated value below method reporting limit of 2 μg/l.

<sup>\*3</sup> Inconsistent contaminant pattern. Sample result spurious, re-sampled

<sup>\*4</sup> Reporting limit at 2.5 μg/l.



Engineering and Environmental Suite 215
3708 Mount Diablo Blvd, Suite 215
Lafayette, California, 94549
Phone: (925).284-4208
Fax: (925).284-4189 THE SUTTON GROUP Olly Plan Fig 2 30 (Approximate Scale in Feet) LEGEND SOIL BORNO, LEWNE-FROKE, 1993 TEST TREMCH, SUFTON GROUP, 1994 MAINTENANCE **EBDA** SOIL SAMPLE TANK REMOVAL SUTTON GROUP, 1995 BUILDING SCIL AND WATER INVESTIGATION, SUTTON GROUP, 1996 BORNO LOCATION SUTTON GROUP, 1996 g-4 AIR SAMPLE LOCATION SUTTON GROUP, 1996 ORO LOMA SANITARY DISTRICT MW-1 Monitoring WELL Well Location SERVICE CENTER AREA ADMINISTRATION BUILDING OLSD ENGINEERING 2600 GRANT AVENUE, SAN LORENZO, CA BUILDING LOCATION OLSD **« POTW** WW-5 PLANTER 24 0 Op-7 PLAN EP-9B (10' 65 (AEAMOONED) EP-10 8° SS EP-12 ⊗ ⊗ EP-12A 12° 50 GRANT AVENUE ⊗ EP-11 WW-2 BEARING N 50°09'00"E 12" W (EBMUD) 66° \$\$ 1+00 66° SS 3+00 6 0 PROJECT No. 3022.10 39° 55 (A) FIGURE 39° 55 (A ← TRUNK SEWER PIPES ← 30° SS 30, 22 0 30, 22 - CURB 30° SS 8° SS 8° 5\$ N



ORO LOMA SANITARY DISTRICT

2600 GRANT AVENUE

SAN LORENZO, CA

• monitoring wells (typical of 5)
note: two elevations are given at each well rim.

FIGURE 2x

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

The Sutton Group	Client Project ID: #2600 Grant Avenue	Date Sampled: 10/26/06
3708 Mt. Diablo Blvd, Ste. 215		Date Received: 10/30/06
Lafayette, CA 94549	Client Contact: John Sutton	Date Reported: 11/03/06
Europeace, Cri 7 15 17	Client P.O.:	Date Completed: 11/03/06

WorkOrder: 0610614

November 03, 2006

Dear John:

Enclosed are:

- 1). the results of 4 analyzed samples from your #2600 Grant Avenue 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.

Best regards,

Angela Rydelius, Lab Manager

0010014 **BLAINE** 

TECH SERVICES, INC.

The Sutton Group

2600 Grant Ave.

San Lorenzo, CA

TIME

9:50

9:40

9:30

TIME

10:40

DATE

DATE

10/26

10/26

CHAIN OF CUSTODY

CLIENT

SAMPLE I.D.

TB

MW-3

MW-4

MW-5

SAMPLING

COMPLETED

RELEASED BY

RELEASED BY

RELEASED BY

SHIPPED VIA

SITE

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

CONTAINERS

BTS#061026-AL1

MATRIX

S = SOILW=H<sub>2</sub>0

W

W

W

W

SAMPLING PERFORMED BY

TOTAL

23

3

3

3

		CON	DUCT	ANAL'	YSIS	TO DE	TECT	LAB McCampbell DHS#
						(H=1)		ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND  EPA  RWQCB  LIA
CONTAINERS								SPECIAL INSTRUCTIONS  Invoice and Report to: The Sutton Group
C = COMPOSITE ALL CONTAINERS	TPH-G by 8015	BTEX by 8021	MTBE by 8021					John Sutton  email results "non-certified" as "pdf" to: suttongeo@sbcglobal.net  ADD'L INFORMATION STATUS CONDITION LAB SAMPLE #
	X	X	X					ABBE INI ONIVIATION STATES CONDITION EAB SAIVILLE #
	X	X	X					
			1.7					
	X	X	X					
	X	X	X					
-								
	nd	g re	n					RESULTS NEEDED NO LATER THAN Standard TAT
ATE		1	TIME			RECE	IVED BY	DATE TIME
ATE	8/0		TIME			RECE	IVED BY	DATE / TIME,
100	136		12	45	2			10/20/0h 150
AT	1	1.	TIME	1	7	RECE	IVED BY	DATE TIME
S ATE	SEN	08 T	TIME	SENT		COOL	ER#	/ /

## McCampbell Analytical, Inc.

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0610614 ClientID: TSG EDF Fax ✓ Email HardCop ThirdPart Bill t Report to: Requested TAT: 5 days Email: Accounts Payable John Sutton The Sutton Group TFI: 925-284-4208 FAX: 925-284-4189 The Sutton Group Date Received 10/30/2006 3708 Mt. Diablo Blvd, Ste. 215 ProjectNo: #2600 Grant Avenue 3708 Mt. Diablo Blvd, Ste. 215 Lafayette, CA 94549 PO: Lafayette, CA 94549 Date Printed: 10/30/2006 Requested Tests (See legend below) 2 5 8 Sample ID ClientSampID Matrix Collection Date Hold 3 6 10 11 12 MW-3 0610614-002 Water 10/26/2006 Α 0610614-003 MW-4 Water 10/26/2006 Α 0610614-004 MW-5 Water 10/26/2006 Α Test Legend: G-MBTEX\_W 2 3 4 5 7 6 9 10 8 12 Prepared by: Rosa Venegas

#### **Comments:**

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

When duality counts	refephone. orr 202 /201	1 431.720 202 7207		
The Sutton Group	Client Project ID:	#2600 Grant Avenue	Date Sampled:	10/26/06
3708 Mt. Diablo Blvd, Ste. 215			Date Received:	10/30/06
Lafayette, CA 94549	Client Contact: Jo	hn Sutton	Date Extracted:	10/31/06
2	Client P.O.:		Date Analyzed	10/31/06

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

Extraction	Extraction method SW5030B Analytical methods SW8021B/8015Cm								r: 0610	0614
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	ТВ	w	ND	ND	ND	ND	ND	ND	1	103
002A	MW-3	W	91,a	46	20	ND	0.55	3.5	1	100
003A	MW-4	W	89,000,a	ND<800	13,000	1600	4300	19,000	100	106
004A	MW-5	W	55,000,a	ND<1000	14,000	430	1200	6700	200	100
	orting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	1	μg/L
	neans not detected at or ove the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

								_
* water and vapor samples and all TCLP	& SPLI	extracts are re	ported in ug/L,	soil/sludge/solid	samples in mg/k	g, wipe sample	es in μg/wipe,	
product/oil/non-aqueous liquid samples i	n mg/L.							

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

<sup>+</sup>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; p) see attached narrative.



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## QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0610614

EPA Method: SW8021B/8015Cm Extraction: SW5030B						BatchID: 24569 Spiked Sample ID: 0610614-001					01A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			%)
, many to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex <sup>£</sup>	ND	60	105	105	0	101	92.8	8.71	70 - 130	30	70 - 130	30
MTBE	ND	10	103	93.5	9.25	91.6	98.9	7.70	70 - 130	30	70 - 130	30
Benzene	ND	10	102	103	0.575	99.7	95.7	4.12	70 - 130	30	70 - 130	30
Toluene	ND	10	93.3	96.9	3.85	91.9	87.3	5.17	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	97.6	102	4.02	98.8	97.6	1.15	70 - 130	30	70 - 130	30
Xylenes	ND	30	90.3	95	5.04	91	95	4.30	70 - 130	30	70 - 130	30
%SS:	103	10	107	101	5.54	101	101	0	70 - 130	30	70 - 130	30

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

#### BATCH 24569 SUMMARY

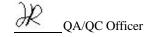
Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610614-001	10/26/06	10/31/06	10/31/06 3:35 PM	0610614-002	10/26/06 9:50 AM	10/31/06	10/31/06 4:07 PM
0610614-003	10/26/06 9:40 AM	10/31/06	10/31/06 4:39 PM	0610614-004	10/26/06 9:30 AM	10/31/06	10/31/06 3:03 PM

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.



## WELLHEAD INSPECTION CHECKLIST

Date 10	126/	06 2600	Client	Satt	un gr	7149			
Site Address	5 _0	2600	Grand	Ave	V	•	TV-5-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		1844
Job Number		061026-	AL1			chnicían	AL	indyren	
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		~							
MUZ		V							
My.3									
MW-4		<b>V</b>							
MW-5		/							
MW.DI		,							
									,
				· · · · · · · · · · · · · · · · · · ·					
					<del></del>				
NOTES:		W-D1; f	Broken los	old-ob (	vell lid	bruki	en tal	2	
		w/3; c	13 tabs	STY	red	<del> </del>		<del> </del>	
			<del></del>					<del></del>	
				· · · · · · · · · · · · · · · · · · ·					71.01.00

## WELL GAUGING DATA

Project # 061026-AC1 Date Ce/20(06 Client Swithw Grup

Site 2600 Grant Ave, San Larenze

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Immiscibles Removed		Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	7:43	2					7.48	12,32		
MW-7	7:39	2					6.72	1497		
MW-3	7:50	2					672	15.61		S
MW-3 MW-4 MW-5	7:54	ی					5.76	14.02		5
MW-5	7:50	2					4.77	13.70		<u>S</u>
MW-DI	8:05	4					3.54	14.26		5
						% <sup>1</sup> Å			,	
										*
		• • •								
		···								

Project #: (	061026	-AL]	<u> </u>	Client: Sutton Group					
Sampler:	٨	deren		Date:	(0/20	6/06	<del> </del>		
Well I.D.:	MW-3	J.		Well Diameter: ② 3 4 6 8					
Total Well I	Depth (TD	); { <i>¿</i>	5.6	Depth	to Water	r (DTW):	6.	72	
Depth to Fre	ee Product	·•		Thickr	ness of F	ree Produc			
Referenced	to:	PVC	Clade		Meter (if		· · · · · · · · · · · · · · · · · · ·	YSI HACH	
DTW with 8	30% Recha	arge [(H	leight of Water	Colum	n x 0.20)	) + DTW]:	: 8	r, 49	
Purge Method:	Bailer Disposable Ba Positive Air D Electric Subm	Displaceme		Waterra Peristaltic tion Pump		Sampling M	Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing	
Case Volume	Gals.) XSpecif	5 fied Volum	= 4.2 nes Calculated Vo	1	Well Diamete	0.04 0.16 0.37	Well D 4" 6" Other	Diameter Multiplier 0.65 1.47 radius² * 0.163	
Time	Temp <b>(F</b> or °C)	рН	Cond. (658 or µS)	1	bidity TUs)	Gals. Rem	ioved	Observations	
9:00	69.2	73	12.76	7 6	<del>51</del>	1,5			
9703	69.5	6.7	25.50	17	13	3.0			
9.06	68.4	6.8	28.22	> u	100	4.5	_		
well	declar	ed	@ 5 gal						
9:47	67.9	6.9	23.08	2	12				
Did well dev	water?	Yes	No	Gallon	s actuall	y evacuate	<del></del> ed:	~	
Sampling Da	ate: 10/2	26/06	Sampling Time	e: 975	D	Depth to	Water	1: 13.19 sit	
Sample I.D.:	: Mus-	3		Labora	itory:	Kiff Cals	Science		
Analyzed fo	r: THG	B(TEX	MABE TPH-D	Oxygen	ates (5)	Other:			
EB I.D. (if a	pplicable)	:	@ Time	Duplic	ate I.D.	(if applica	ble):		
Analyzed fo	r: TPH-G	втех	МТВЕ ТРН-D	Oxygen	ates (5)	Other:			
D.O. (if req'o	d): Pr	e-purge:		mg/L	P	ost-purge:		mg/ <sub>[.</sub>	
O.R.P. (if re	q'd): Pr	e-purge:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	mV	P	ost-purge:		mV	

Project #: 061026 - AL1					Client: Soutton Group					
Sampler:	1 Lmd	9161		Date: 10/26/06						
Well I.D.:	MW-4		Well Diameter: 2 3 4 6 8							
Total Well I	Depth (TD	.02	Depth 1	to Water	· (DTW):	2′.	76			
Depth to Fre	ee Product	•		Thickn	ess of Fi	ree Produ	ct (fee	t):		
Referenced	to:	PVC	(Tage	D.O. M	leter (if	req'd):		YSI HACH		
DTW with 8	30% Recha	arge [(H	eight of Water	Colum	n x 0.20)	+ DTW]	l: 7.	લ		
8.26	Bailer Disposable Ba Positive Air D Electric Subm	isplaceme		Waterra Peristaltic tion Pump	Well Diamete	Sampling  Multiplier	Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing		
1 Case Volume		3 fied Volum	$= \frac{\zeta_{c}Q}{\text{Calculated Vo}}$	Gals.	1" 2" 3"	0.04 0.16 0.37	4" 6" Other	0.65 1.47 radius <sup>2</sup> * 0.163		
Time	Temp (°F or ° <b>O</b> )	рН	Cond. (m) or μS)		oidity (TUs)	Gals. Rei	noved	Observations		
8:48	71.2	67	13.64	7 U	OVI	1.3		ager		
8:51	71.0	6.7	30.56	> 1	000	7.6		11		
well de	where	10	2.9 g	a\						
9:37	71.4	6-8	5174 ps	5	6					
		<i>/</i> .								
Did well dev	water?	Yes	No	Gallon	s actuall	y evacua	ted:	2.0		
Sampling D	ate: W/Z	6/06	Sampling Time	e: 9;4	Ø	Depth to	Wate	r: 5,44		
Sample I.D.	: MW-1	4		Labora	tory:	Kiff Ca	Science	Other McCamp Ger		
Analyzed fo	т: трпз	KTEX	NTBE TPH-D	Oxygen	ates (5)	Other:				
EB I.D. (if a	pplicable)	:	@ Time	Duplic	ate I.D.	(if applic	able):			
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygen		Other:	<u> </u>			
D.O. (if req'	d): Pr	e-purge:		mg/L	Р	ost-purge:		mg/L		
O.R.P. (if re	eg'd): Pr	e-purge:		mV	Р	ost-purge:		mV		

Project #:	Project #: 06/026-AL1					Client: Suffer Crup					
Sampler:	ALN	n dyr	=1	Date:		26/06	<u></u>				
Well I.D.:	MW-5	- 1		Well Diameter: 2 3 4 6 8							
Total Well 1	Depth (TD	): [3	,.70	Depth to	Water	(DTW):	4.7	7			
Depth to Fro	ee Product	•		Thickne	ss of F	ree Produ					
Referenced	to:	PVC	Grade	D.O. Me		<del></del>		YSI HACH			
DTW with 8	80% Recha	arge [(H	leight of Water	Column	x 0.20)	+ DTW]	: (	355			
Purge Method: \$\chi_1 93\$	Bailer Disposable Ba Positive Air I Electric Subm	Displaceme		Waterra Peristaltic tion Pump		Sampling I	Method:	Bailer Disposable Bailer Extraction Port Dedicated Tubing			
Case Volume	Juis.) Zi	5 fied Volum	= <u>U.Z</u> nes <u>Calculated Vo</u>	_ Gals.	Vell Diameter 1" 2" 3"	n Multiplier 0.04 0.16 0.37	Well D 4" 6" Other	iameter Multiplier 0.65 1.47 radius <sup>2</sup> * 0.163			
Time	Temp (°F or °C)	рН	Cond. (1603 or μS)	Turbi (NTI	-	Gals. Ren	ıoved	Observations			
8.33	68.5	6.6	23,38	74.		1.5		oder			
8:36	69.0	6.7	28-91	7 10	90	3.0		ч			
well de	watered	<u> </u>	3.5 gal								
9:27	66.1	7.0	18,71	108	)						
						] :					
Did well de	water?	(es)	No			y evacuat	ed:	3, 5			
Sampling D	ate: 18/2	4/06	Sampling Time	e: 9:30	)	Depth to	Water	: 11.19 site			
Sample I.D.	: MW<	5		Laborate	ory:	Kiff Cal	Science	Other Mc Campsell			
Analyzed fo	r: TAG	IE X	MTBE TPH-D	Oxygenat	es (5)	Other:					
EB I.D. (if a	pplicable)	:	(a) Time	Duplicat	Duplicate I.D. (if applicable):						
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenat	es (5)	Other:					
D.O. (if req'	d): Pr	e-purge:		$^{ m mg}/_{ m L}$	P	ost-purge:		<sup>mg</sup> /L			
O.R.P. (if re	eq'd): Pr	e-purge:		mV	P	ost-purge:		mV			

Project #:	061026	AC I		Client: Sutton Group					
Sampler:	ALM	dyrer	<b></b>	Date: (0/20	6/06				
Well I.D.:	MW-[	40		Well Diameter: 2 3 4 6 8					
Total Well I	Depth (TD	): 14.	26	Depth to Wate	Depth to Water (DTW): 3.54				
Depth to Fre	ee Product	:			Free Product (fee				
Referenced	to:	PVC	Grapte	D.O. Meter (if	·	YSI HACH			
DTW with 8	80% Recha	arge [(H	eight of Water	Column x 0.20	) + DTW]:				
Purge Method: (ひ, 7と	Bailer Disposable Ba Positive Air E Electric Subm	Displaceme	nt Extrac Other	Waterra Peristaltic etion Pump	Sampling Method: Other:	Bailer  Disposable Bailer   Extraction Port  Dedicated Tubing			
		, , , , , , , , , , , , , , , , , , ,		Well Diamet	ter Multiplier Well D 0.04 4"	iameter Multiplier 0.65			
Case Volume	Gals.) X Speci	3 fied Volum	$\frac{1}{\text{les}} = \frac{2}{\text{Calculated Vo}}$	_ Gals.	0.16 6" 0.37 Other	1.47 radius² * 0.163			
Time	Temp For °C)	рН	Cond. (ms or µs)	Turbidity (NTUs)	Gals. Removed	Observations			
8.16	65.4	7.1	14.16	7 600	フ	agol			
well de	watere	10	T ga						
9:13	66.	7.5	15.40	236					
			~ <u>~</u>						
Did well de	water?	Yes	No	Gallons actual	ly evacuated:	8			
Sampling D	ate: 10/20	06	Sampling Tim	ie: 9:15	Depth to Wate	r: 3.48			
Sample I.D.	: MW-	D L	0	Laboratory:	Kiff CalScience	Other McCampoe 4			
Analyzed for	or: TPHG	BTEX	MTE TPH-D	Oxygenates (5)	Other:				
EB I.D. (if a	applicable)	):	@ Time	Duplicate I.D. (if applicable):					
Analyzed for	or: TPH-G	BTEX	МТВЕ ТРН-D	Oxygenates (5)	Other:				
D.O: (if req	'd): P	re-purge:		mg/L	Post-purge:	mg/L			
O.R.P. (if re	eg'd): P	re-purge:		mV	Post-purge:	mV			