RO288

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THE SUTTON GROUP

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

3708 Mount Diablo Blvd
Suite 215
Lafayette, CA, 94549

February 28, 2006

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

Results of 14th Quarterly Round of 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 January 30, 2006. This is the 14th quarterly round of sampling of the five wells at the former gasoline tank site and the one well at the former diesel tank site.

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 which 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 ground water elevation rise, consistent with the wet early winter conditions.. The groundwater conditions are similar to those of past readings for the same quarter, as presented on Table 1, the cumulative tabulation of groundwater data. Figure 2 shows the gradient direction as calculated on Figure 2A.

Sampling Results

Gasoline Tank Area

On January 30, 2006, water samples were collected from all five 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 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.

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 sampled using a bailer, and analyzed for TPH as diesel and BTEX. Table 4D is a tabulation of all sample results for this well. Historically, the well has no detection of BTEX.

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

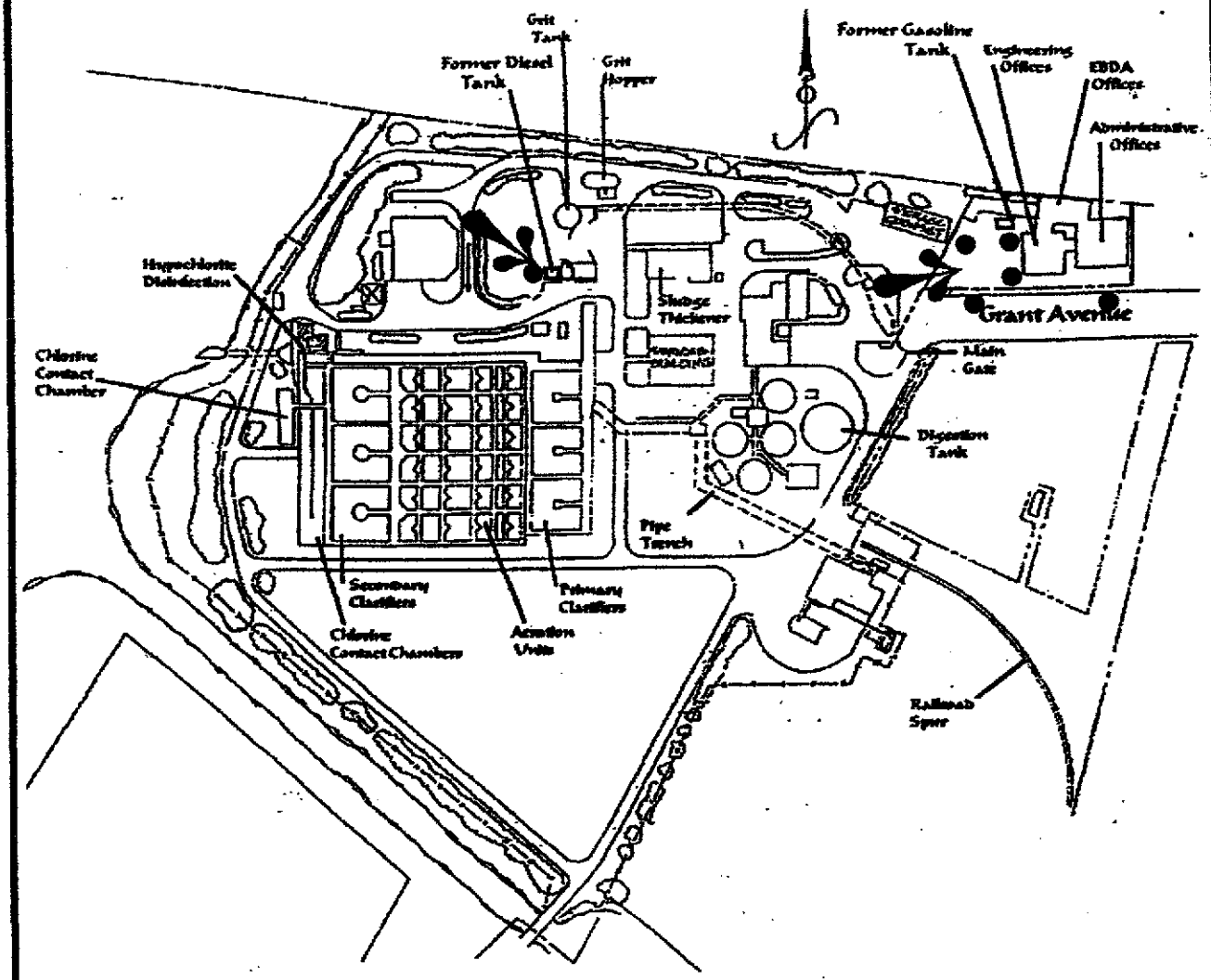
John R. Sutton, PE

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
Table 3	Not included
Table 4D	Summary of Water Sample Analyses, Former Diesel Tank Area

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

Copy sent to Mr. Amir Gholami at Alameda County Health Dept.

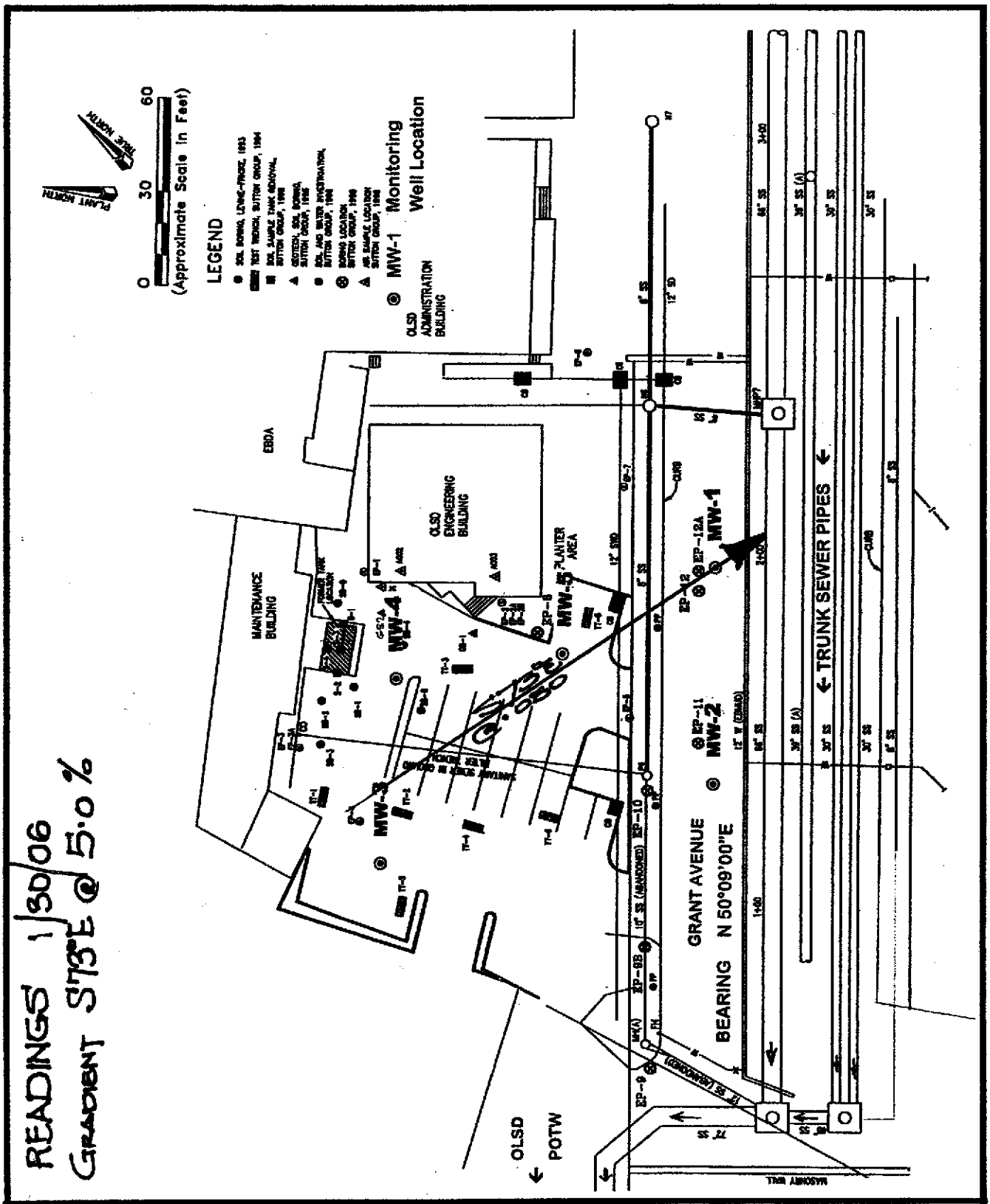


SITE PLAN

● 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

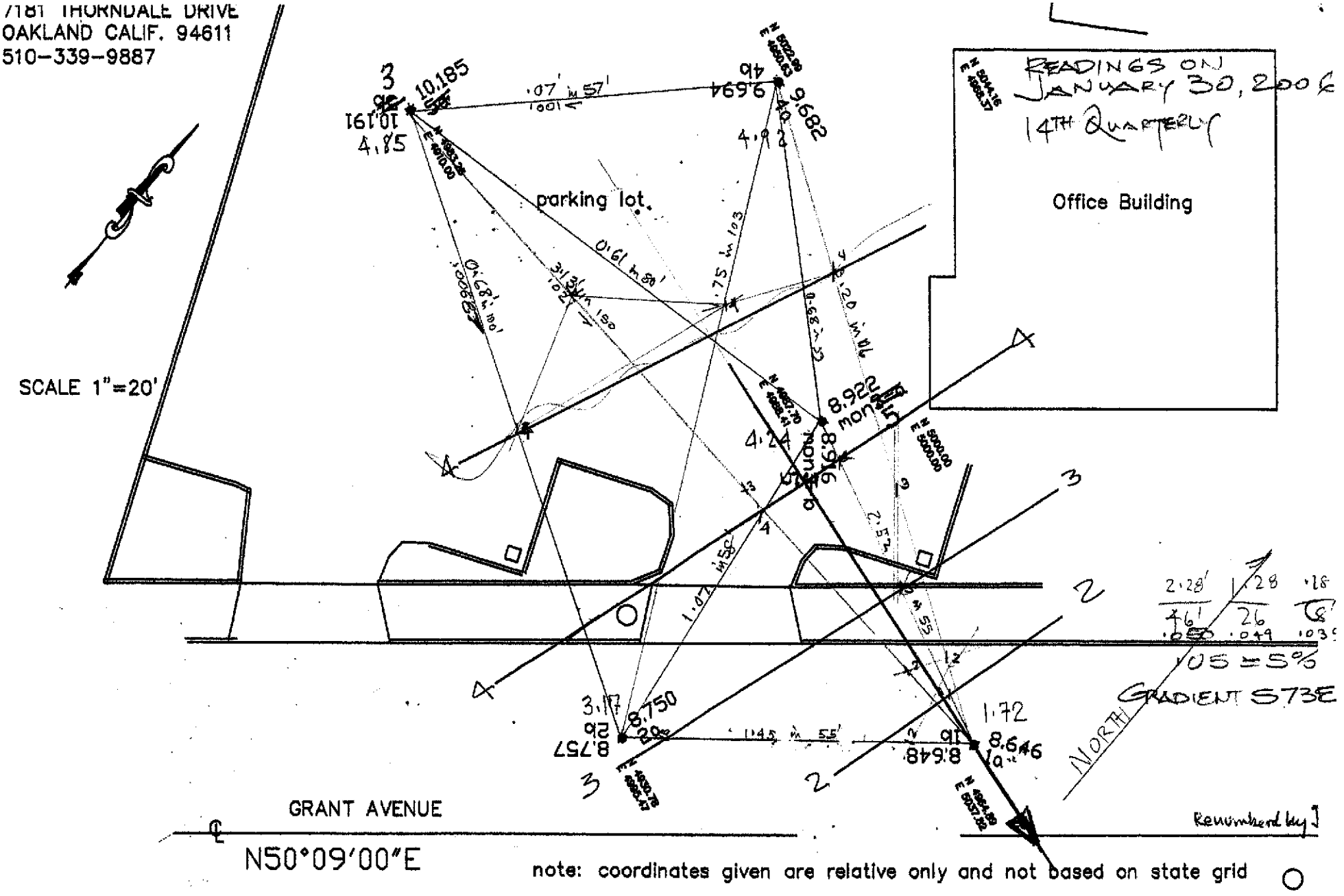


READINGS 1/30/06
GRADIENT S73°E @ 5.0 %

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

3022.10 City Plan Fig 2

7181 THORNDALE DRIVE
OAKLAND CALIF. 94611
510-339-9887



note: coordinates given are relative only and not based on state grid

ORO LOMA SANITARY DISTRICT

2600 GRANT AVENUE

SAN LORENZO, CA

• monitoring wells (typical of 5)

note: two elevations are given at each well rim.

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***
Groundwater Elevation							
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	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
Current reading on 1/30/2006							
Groundwater Depth	6.93	5.58	5.34	4.76	4.68		
Groundwater Elevation	**1.72**	**3.17**	**4.85**	**4.92**	**4.24**	**S73°E**	**0.05**
Change Since10/26/2005	0.93	1.45	1.16	0.82	0.04		
Change since same Qtr, last year	0.93	0.42	-0.79	-0.91	-0.50		

* 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	*1/30/06*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1
MW-2	*1/30/06*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1
MW-3	*1/30/06*	300	130	0.74	ND	2.5	71	1
MW-4	*1/30/06*	45,000	9,800	380	2,400	6,500	ND<130	10
MW-5	*1/30/06*	61,000	15,000	5,500	1,100	5,600	ND < 500	100
MW-D 1	*1/30/06*	*DIESEL*: 120	ND	ND	ND	ND	ND	1
TRIP BLANK	*1/30/06*	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*	1
REPORTING LIMITS FOR DF=1		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
MP	10/28/04	N A	N A	N A	N A	N A	N A
	12/8/04	ND	ND	ND	ND	ND	ND
MP	1/24/05	ND	ND	ND	ND	ND	ND
	4/28/05	N A	N A	N A	N A	N A	N A
	7/19/05	*ND*	*ND*	*ND*	*ND*	*ND*	*ND*

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

FORMER GASOLINE TANK AREA

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
	10/06/05	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/06	***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
	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
MP	10/28/04	ND	ND	ND	ND	ND	ND
	12/8/04	ND	ND	ND	ND	ND	1.5
MP	1/24/05	ND	ND	ND	ND	ND	9.0
	4/28/05	N A	N A	N A	N A	N A	N A
	7/19/05	***ND***	***ND***	***ND***	***ND***	***ND***	***ND***

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

FORMER GASOLINE TANK AREA

Sample Location	*Sample Date*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl Benzene*	*Xylenes (total)*	*MTBE*
	10/06/05	N/A	N/A	N/A	N/A	N/A	N/A
	1/30/06	***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
	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

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

FORMER GASOLINE TANK AREA

SAMPLE LOCATION	SAMPLE DATE	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)	MTBE
	7/29/04	ND	6.4	ND	ND	ND	8.8
MP	10/28/04	390	170	0.70	ND	2.4	57
	12/8/04	N/A	N/A	N/A	N/A	N/A	N/A
MP	1/24/05	520	260	0.53	ND	1.9	89
	4/28/05	220	110	ND	ND	.63	54
	7/19/05	760	370	.68	ND	2.6	92
	10/06/05	190	71	ND	ND	ND	49
	1/30/06	***300***	***130***	***0.74***	***ND***	***2.5***	***71***
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

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

FORMER GASOLINE TANK AREA

Sample Location	*Sample Date*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl Benzene*	*Xylenes (total)*	*MTBE*
MP	10/28/04	80,000	15,000	7,100	3,500	14,000	ND<1,000
	12/8/04	N/A	N/A	N/A	N/A	N/A	N/A
MP	1/24/05	70.000	9,900	850	2,500	11,000	ND<1,000
	4/28/05	79,000	9,400	690	4000	16,000	ND<900
	7/19/05	35,000	7,500	92	1,900	3,900	ND<500
	10/06/05	65,000	12,000	2,100	3,200	11,000	ND<500
	1/30/06	***45,000***	***9,800***	***380***	***2,400***	***6,500***	***ND<130***
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
MP	10/28/04	130,000	23,000	25,000	2,000	9,700	ND< 1,700

TABLE 2A, Continued
CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSES
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, BTEX AND MTBE

FORMER GASOLINE TANK AREA

Sample Location	*Sample Date*	*Gasoline*	*Benzene*	*Toluene*	*Ethyl Benzene*	*Xylenes (total)*	*MTBE*
	12/8/04	N/A	N/A	N/A	N/A	N/A	N/A
MP	1/24/05	150,000	22,000	25,000	2,100	12,000	ND<1,000
	4/28/05	89,000	18,000	11,000	1,600	8,900	ND < 500
	7/19/05	39,000	11,000	200	710	1,700	ND < 500
	10/06/05	58,000	17,000	410	1,000	6,600	ND<500
	1/30/06	***61,000***	***15,000***	***5,500***	***1,100***	***5,600***	***ND < 500***

NOTES:

ND	Analyte not detected at stated reporting limit
N/A	Not analyzed
u/n	Unless noted otherwise (Reporting Limit)
MP	Sampling by micro-purge technique

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 4

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*
1/30/06	***120***	***ND***
10/06/05	340	ND
7/19/05	53	ND
4/28/05	70	ND
1/24/05	77	ND
10/28/04	58	ND
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/ 96	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 table 2 and laboratory certificates appended.

WELLHEAD INSPECTION CHECKLIST

Date 1/30/06 Client The Sutton Group

Site Address 2600 Grant Ave., San Lorenzo CA

Job Number 060130-DR1 Technician DR

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		X					X [redacted]	
MW-2		X					X Y	
MW-3							X	
MW-4							X	
MW-5							X	
MW-D1							X	

NOTES: All wells have no locks.

MW-2 tabs broken - Y

WELL GAUGING DATA

Project # 060130-DR1 Date 1/30/06 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					6.93	14.62		
MW-2	2					5.58	15.52		
MW-3	2					5.34	15.80		
MW-4	2	odor				4.76	13.98		
MW-5	2					4.68	13.69		
MW-D1	4					2.56	14.33	✓	

WELL MONITORING DATA SHEET

Project #: 060130 - DR1	Client: Sutter Group
Sampler: DR	Start Date: 1/30/06
Well I.D.: MW-1	Well Diameter: ② 3 4 6 8 ____
Total Well Depth: 14.62	Depth to Water: 6.93
Before: ——— After: ———	Before: ——— After: ———
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC (Grade)	D.O. Meter (if req'd): YSI HACH

DTW 80% = 8.47

8.45

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:_____

1.2 (Gals.) X 3 = 3.6 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	Conductivity (mS or (µS))	Turbidity (NTU)	Gals. Removed	Observations
900	63.0	6.5	50120	38	1.2	clear
903	64.1	6.6	~~595~~ 55130	553	2.4	Dark grey/gas odor
↓	well dewatered at 2.5 gal.					
1245	61.8	6.6	51900	158	———	light cloudy/odor

Did well dewater? (Yes) No		Gallons actually evacuated: 2.5	
Sampling Time: 1245		Sampling Date: 1/30/06	
Sample I.D.: MW-1		Laboratory: McCampbell STL	
Analyzed for: (TPH-G) ~~BTEX~~ (MTBE) TPH-D		Other:	
Equipment Blank I.D.:	@ Time	Duplicate I.D.:	
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:	
D.O. (if req'd):	Pre-purge: mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge: mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 060130 - 3R1	Client: Sutton Group
Sampler: DR	Date: 1/30/06
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 15.52	Depth to Water (DTW): 5.58
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]: 7.57	

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: ____

1.6 (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
917	62.7	7.1	6818	339	1.6	cloudy
921	64.7	7.1	7523	320	3.2	"
925	65.1	7.1	8550	533	4.8	"
@ well dewatered at 5.8 gal.						
1305	63.9	7.2	11950	80	—	clear

Did well dewater? (Yes) No — Gallons actually evacuated: 5.8

Sampling Date: 1/30/06 — Sampling Time: 1305 — Depth to Water: 7.43

Sample I.D.: MW-2 — 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 #: 060130 - DR1	Client: Sutton Group
Sampler: DA	Date: 1/30/06
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 15.80	Depth to Water (DTW): 5.34
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]: 7.43	

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: ____

1.7 (Gals.) X 3 = 5.1 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 (uS))	Turbidity (NTUs)	Gals. Removed	Observations
942	62.3	6.9	6033	297	1.7	light cloudy
946	63.1	6.8	11250	814	3.4	Cloudy
950	64.6	6.7	22690	> 1000	5.1	silt/odor
@ well	dewatered		at 6 gal.			
1155	60.9	7.0	22420	125	—	light cloudy

Did well dewater? (Yes) No — Gallons actually evacuated: 6

Sampling Date: 1/30/06 — Sampling Time: 1155 — Depth to Water: 5.38

Sample I.D.: DR — 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 #: 060130 - DR1	Client: Sullen Group
Sampler: DR	Date: 1/30/06
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 13.98	Depth to Water (DTW): 4.76
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]: 6.60	

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
1022	62.6	6.9	6513	> 1000	1.5	cloudy / odor / sheen
1025	64.6	6.8	11630	> 1000	3.0	" " "
1028	66.5	6.8	26720	> 1000	4.5	" " "
⊗ well	dewatered	at 5 gal.				
1220	61.2	7.0	10800	509	—	—

Did well dewater? Yes No Gallons actually evacuated: 5.0

Sampling Date: 1/30/06 Sampling Time: 1220 Depth to Water: 4.89

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

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: 8260B

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 #: 060130-DR1	Client: Sutter Group
Sampler: DR	Date: 1/30/06
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 13.69	Depth to Water (DTW): 4.68
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]: 6.48	

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: _____

1.4 (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
1007	62.3	6.8	13490	> 1000	1.4	cloudy
1010	64.2	6.8	29020	> 1000	2.8	" / odor
* well	dewatered		at 3 gal.			
1315	62.2	7.0	22850	240	—	light cloudy

Did well dewater? (Yes) No Gallons actually evacuated: 3.0

Sampling Date: 1/30/06 Sampling Time: 1315 Depth to Water: 6.27

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 #: 060130 - DR1	Client: Sutton Group
Sampler: DR	Date: 1/30/06
Well I.D.: MW-D1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 14.33	Depth to Water (DTW): 2.56
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]: 4.91	

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: ____

7.7 (Gals.) X 3 = 23.1 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
1056	62.9	7.9	5571	~~>1000~~	7.7	cloudy grey/odor
1102	64.4	7.8	4773	>1000	15.4	" "
1108	64.9	7.8	~~4~~527	>1000	23.1	" "

Did well dewater? Yes (No) Gallons actually evacuated: 23.1

Sampling Date: 1/30/06 Sampling Time: 1115 Depth to Water: 2.61

Sample I.D.: MW-D1 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

BLAINE
TECH SERVICES, INC.

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

CHAIN OF CUSTODY BTS # 060130-DR1

CLIENT: The Sutton Group

SITE: 2600 Grant Ave.
San Lorenzo, CA

CONDUCT ANALYSIS TO DETECT

LAB: McCampbell | DHS #

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

SPECIAL INSTRUCTIONS

Invoice and Report to : The Sutton Group

email results "non-certified" as "pdf" to:
johnrsutton@mindspring.com or
suttongeo@sbcglobal.net

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	TPH-G by 8015	BTEX by 8021	MTBE by 8021	TPH-D	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	1/30/06	1245	W	3		X	X	X					
MW-2	"	1305	W	3		X	X	X					
MW-3	"	1155	W	3		X	X	X					
MW-4	"	1220	W	3		X	X	X					
MW-5	"	1315	W	3		X	X	X					
MW-D1	"	1115	W	5			X	X	X				
TB	1/30/06	—	W	2		X	X	X		On hold per email 1/31/06			

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY
	1/30/06	1415	Devin Rayna

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	1/30/06	1415	[signature] STONE COSTOMER	1/30/06	1534
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

BLAINE
TECH SERVICES, INC

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

CHAIN OF CUSTODY BTS # 060130 DA1

CLIENT: The Sutton Group

SITE: 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 ☒ RWQCB ☐ LIA ☐ OTHER

SPECIAL INSTRUCTIONS

Invoice and Report to : The Sutton Group

email results "non-certified" as "pdf" to:
johnrsutton@mindspring.com or
suttongeo@sbcglobal.net

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H2O	CONTAINERS TOTAL	C	TPH-G by 8015	BTEX by 8021	MTBE by 8021	TPH-D	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	1/30/06	1245	W	3		X	X	X					
MW-2	"	1309	W	3		X	X	X					
MW-3	"	1155	W	3		X	X	X					
MW-4	"	1220	W	3		X	X	X					
MW-5	"	1315	W	3		X	X	X					
MW-D1	"	1115	W	5			X	X	X				
TB	1/30/06	—	W	2		X	X	X		On hold 1/30/06			

ICE/# ✓
GOOD CONDITION ✓ APPROPRIATE ✓
HEAD SPACE ABSENT ✓ CONTAINERS ✓
DECHLORINATED IN LAB ✓ PRESERVED IN LAB ✓

PRESERVATION	VOAS	O&G	METALS	OTHER

SAMPLING COMPLETED	DATE	TIME
	1/30/06	1415

SAMPLING PERFORMED BY: Devin Reyna

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	1/30/06	1415	Blaine courier	1/30/06	1534
Blaine courier	1/30/06	1438		1/30/06	1438
	1/30/06	1700	MVOC		

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: 0601473 **ClientID: TSG** **EDF: NO**

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: 2600 Grant Ave. San Lorenzo, CA
PO:

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

Requested TAT: **5 days**

Date Received: **01/31/2006**
Date Printed: **01/31/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0601473-001	MW-1	Water	1/30/06 12:45:00		A											
0601473-002	MW-2	Water	1/30/06 1:09:00 PM		A											
0601473-003	MW-3	Water	1/30/06 11:55:00		A											
0601473-004	MW-4	Water	1/30/06 12:20:00		A											
0601473-005	MW-5	Water	1/30/06 1:15:00 PM		A											
0601473-006	MW-D1	Water	1/30/06 11:15:00		A	B										
0601473-007	TB	Water	1/30/06		A											

Test Legend:

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

Prepared by: Melissa Valles

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.

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: 2600 Grant Ave. San Lorenzo, CA	Date Sampled: 01/30/06
		Date Received: 01/31/06
	Client Contact: John Sutton	Date Extracted: 02/01/06-02/03/06
	Client P.O.:	Date Analyzed: 02/01/06-02/03/06

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0601473

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	92
002A	MW-2	W	ND	ND	ND	ND	ND	ND	1	94
003A	MW-3	W	300,a	71	130	0.74	ND	2.5	1	110
004A	MW-4	W	45,000,a	ND<130	9800	380	2400	6500	10	107
005A	MW-5	W	61,000,a	ND<500	15,000	5500	1100	5600	100	94
006A	MW-D1	W	---	ND	ND	ND	ND	ND	1	98
007A	TB	W	ND	ND	ND	ND	ND	ND	1	98

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
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: 2600 Grant Ave. San Lorenzo, CA	Date Sampled: 01/30/06
		Date Received: 01/31/06
	Client Contact: John Sutton	Date Extracted: 01/31/06
	Client P.O.:	Date Analyzed: 02/01/06

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

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0601473

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0601473-006B	MW-D1	W	120,b	1	100

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

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0601473

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 20124 Spiked Sample ID 0601473-007A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	102	105	2.63	92.1	93.4	1.34	70 - 130	70 - 130
MTBE	ND	10	108	106	1.79	93.9	93.1	0.850	70 - 130	70 - 130
Benzene	ND	10	98.3	94.4	4.07	88.4	94.1	6.21	70 - 130	70 - 130
Toluene	ND	10	96.3	94	2.40	86.6	92.8	6.99	70 - 130	70 - 130
Ethylbenzene	ND	10	98.7	96.8	1.91	93.7	98.3	4.85	70 - 130	70 - 130
Xylenes	ND	30	100	99.7	0.334	90.3	91	0.735	70 - 130	70 - 130
%SS:	98	10	99	96	2.69	89	96	8.49	70 - 130	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

BATCH 20124 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0601473-001A	1/30/06 12:45 PM	2/02/06	2/02/06 5:58 PM	0601473-002A	1/30/06 1:09 PM	2/02/06	2/02/06 6:28 PM
0601473-003A	1/30/06 11:55 AM	2/01/06	2/01/06 7:09 PM	0601473-004A	1/30/06 12:20 PM	2/01/06	2/01/06 8:13 PM
0601473-004A	1/30/06 12:20 PM	2/02/06	2/02/06 7:28 PM	0601473-005A	1/30/06 1:15 PM	2/02/06	2/02/06 12:44 AM
0601473-006A	1/30/06 11:15 AM	2/03/06	2/03/06 4:46 PM	0601473-007A	1/30/06	2/01/06	2/01/06 7:38 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.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0601473

EPA Method: SW8015C	Extraction: SW3510C	BatchID: 20096	Spiked Sample ID N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	104	103	0.930	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	98	98	0	N/A	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

BATCH 20096 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0601473-006B	1/30/06 11:15 AM	1/31/06	2/01/06 3:26 AM				

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 _____QA/QC Officer