

**ORO LOMA SANITARY DISTRICT**

2600 Grant Avenue  
 SAN LORENZO, CALIFORNIA 94580  
 (510) 276-4700  
 FAX (510) 276-1528

**LETTER OF TRANSMITTAL**

DATE	3-25-99	JOB NO.	49-26A-03
ATTENTION	Mr. AMIR GHOLAMI		
RE:	INSPECTION OF GROUND-WATER MONITORING WELLS FORMER GASOLINE TANK SITES CLOSURE		
ORO LOMA SANITARY DISTRICT			
2600 GRANT AVE., SAN LORENZO, CA			

TO ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
1131 HARBOUR BAY PARKWAY, 2ND FLOOR  
ALAMEDA, CA 94502

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:

Shop drawings     Prints     Plans     Samples     Specifications

Copy of letter     Change order     \_\_\_\_\_

COPIES	DATE	NO.	DESCRIPTION
3			REPORT FROM THE SUTTON GROUP.

THESE ARE TRANSMITTED as checked below:

For approval     Approved as submitted     Resubmit \_\_\_\_\_ copies for approval

For your use     Approved as noted     Submit \_\_\_\_\_ copies for distribution

As requested     Returned for corrections     Return \_\_\_\_\_ corrected prints

For review and comment     \_\_\_\_\_

FOR BIDS DUE \_\_\_\_\_ 19 \_\_\_\_\_     PRINTS RETURNED AFTER LOAN TO US

REMARKS: Pls. call me at (510) 276-4700 ext 131 if  
you have questions.

59 MAR 26 PM 3:07  
 PROTECTION

COPY TO \_\_\_\_\_ SIGNED: Mike Cruise

# THE SUTTON GROUP

1480 Moraga Road, Suite 1  
Moraga CA, 94556

*Engineering and Environmental Services*

PHONE (925) 631-1688  
FAX (925) 631-1371

March 16, 1999

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

**SUBJECT:      INSTALLATION OF GROUND WATER MONITORING WELLS  
FORMER GASOLINE TANK SITE CLOSURE  
2600 GRANT AVE., SAN LORENZO, CA  
OLSD PO NO. 4911,    SG FILE NO. 3022.9**

**ST ID 1996**

Dear Mike:

This firm has installed three ground water monitoring wells in the general vicinity of the District's Engineering Department office building. This work has been performed in accordance with Contract Amendment Number 6, and with the Work Plan for this project dated December 18, 1998. The Work Plan was approved by Alameda County Health Department in their letter dated January 26, 1999.

Alameda County Public Works Agency's Water Resources Section issued Drilling Permit Number 99WR048 for installing the wells, dated February 8, 1999. A copy is attached. Prior to drilling, Underground Service Alert was contacted and Clearance Ticket Number 372372 was issued for the site.

## **Borings and Monitoring Well Installation**

The three monitoring wells were installed on February 11, 1999. Figure 1, attached shows the locations of the three monitoring wells. Wells MW-1 and MW-2 are located in the paved portion of Grant Avenue, approximately in front of the Engineering Department office building. Well MW-3 is located on the far side of the Engineering Department parking lot to the north of the electric gate to the District's Treatment Plant. Borings and well construction was performed under the oversight of the undersigned California-licensed Civil and Geotechnical Engineer. A location map and the drilling logs for the three wells are appended. The wells were developed by surging and pumping on February 16, 1999.

## **Soil Samples**

Soil Samples were collected from the near-surface soils during the drilling process. Selected soil samples were submitted for testing by The District's contract analytical laboratory, Sequoia Analytical Services in accordance with the Work Plan. Results of these soil sample analyses are summarized on Table 1. The laboratory test reports are appended. The test results indicate that one soil sample, collected from 3.5 feet depth from import fill beneath the paving of Grant Avenue, in the boring for MW-2, had 1.4 parts per million (ppm) of a hydrocarbon compound. The laboratory indicates that this substance does not resemble gasoline. Associated with this result, was an indication of 0.004 ppm benzene. These results are not, in our opinion, attributable to the District's former gasoline tank.

### Water Samples

Water samples were collected from each of the wells on February 19, 1999. A duplicate sample was collected (arbitrarily) from well MW-3. This was sent to the laboratory 'blind' along with the other three samples. Additionally, a trip blank was prepared by the laboratory and accompanied the sample containers, and analyzed by the laboratory as a monitor of possible relict contamination.

Table 2 is a summary of the water sample analyses for gasoline and its key constituents. As shown in Table 2, none of the sample results reported a presence of any of the analytes.

Additionally, at the request of Alameda County, in their letter dated January 26, 1999, analysis for seven key gasoline oxygenate and additive compounds was performed on a one time basis. The water samples from monitoring wells MW-1, 2 and 3 were analyzed for TAME, DIPE, ETBE, TBA, EDB, EDC and MTBE. Additionally, the laboratory analyzed for ethanol. Results of these analyses are summarized as Table 3. As shown on Table 3, the only analyte detected was MTBE at a presence of 1.49 ppb in MW-3. This result is close to the reporting limit.

### Future Sampling

The water sampling for gasoline and key constituents will be repeated on a quarterly basis in May, August and November, 1999.

A copy of this report should be sent to Mr. Amir Gholami at Alameda County Health Agency in Alameda. Copies of the boring logs and Location Plan have been sent to Alameda County Public Works Agency per their request.

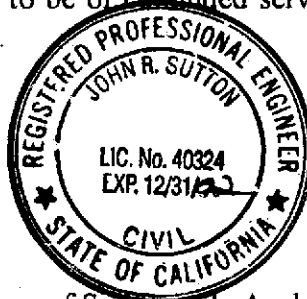
We appreciate the opportunity to be of continued service to The District. Please call me if I can assist you in any other way.

Yours truly,

**THE SUTTON GROUP**



John R. Sutton, PE/GE



- Attachments: Table 1: Summary of Soil Sample Analyses  
Table 2: Summary of Water Sample Analyses, TPH as Gasoline and BTEX  
Table 3: Summary of Water Sample Analyses, Selected Fuel Oxygenates  
Figure 1: Location Map, Ground Water Monitoring Wells  
Well Construction Permit  
Borehole Lithologic Log MW-1  
Borehole Lithologic Log MW-2  
Borehole Lithologic Log MW-3  
Analytical Reports, Sequoia Analytical, dated February 23, and March 2, 1999

Four Copies Sent

**TABLE 1**  
**SUMMARY OF SOIL SAMPLE ANALYSES**  
**TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BTEX**

EPA METHOD 8015/8020M

RESULTS IN  $\mu\text{g}/\text{kg}$  (ppb)

SAMPLES COLLECTED FEBRUARY 12, 1999

SAMPLE ID, DEPTH	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)
30229-MW-1 1-1 <b>BORING 1 @ 3.5-4'</b>	ND	ND	ND	ND	ND
30229-MW-2 2-1 <b>BORING 2 @ 3.5-4'</b>	<b>1,350</b>	<b>3.98</b>	ND	ND	ND
30229-MW-2 2-2 <b>BORING 2 @ 5.5-6'</b>	ND	ND	ND	ND	ND
30229-MW-3 3-1 <b>BORING 3 AT 3.5-4'</b>	ND	ND	ND	ND	ND
30229-MW-3 3-2 <b>BORING 3 AT 6-6.5'</b>	ND	ND	ND	ND	ND
<b>REPORTING LIMITS</b>	400	2.00	2.00	2.00	4.00

ORO LOMA SANITARY DISTRICT

30229 R TABLE 1 soil.doc 3/16/99

**TABLE 2**  
**SUMMARY OF WATER SAMPLE ANALYSES**  
**TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BTEX**

EPA METHOD 8015M/8020M

RESULTS IN  $\mu\text{g}/\text{l}$  (ppb)

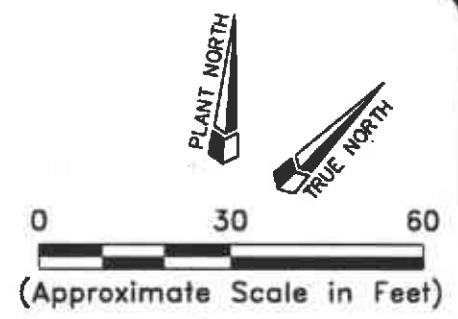
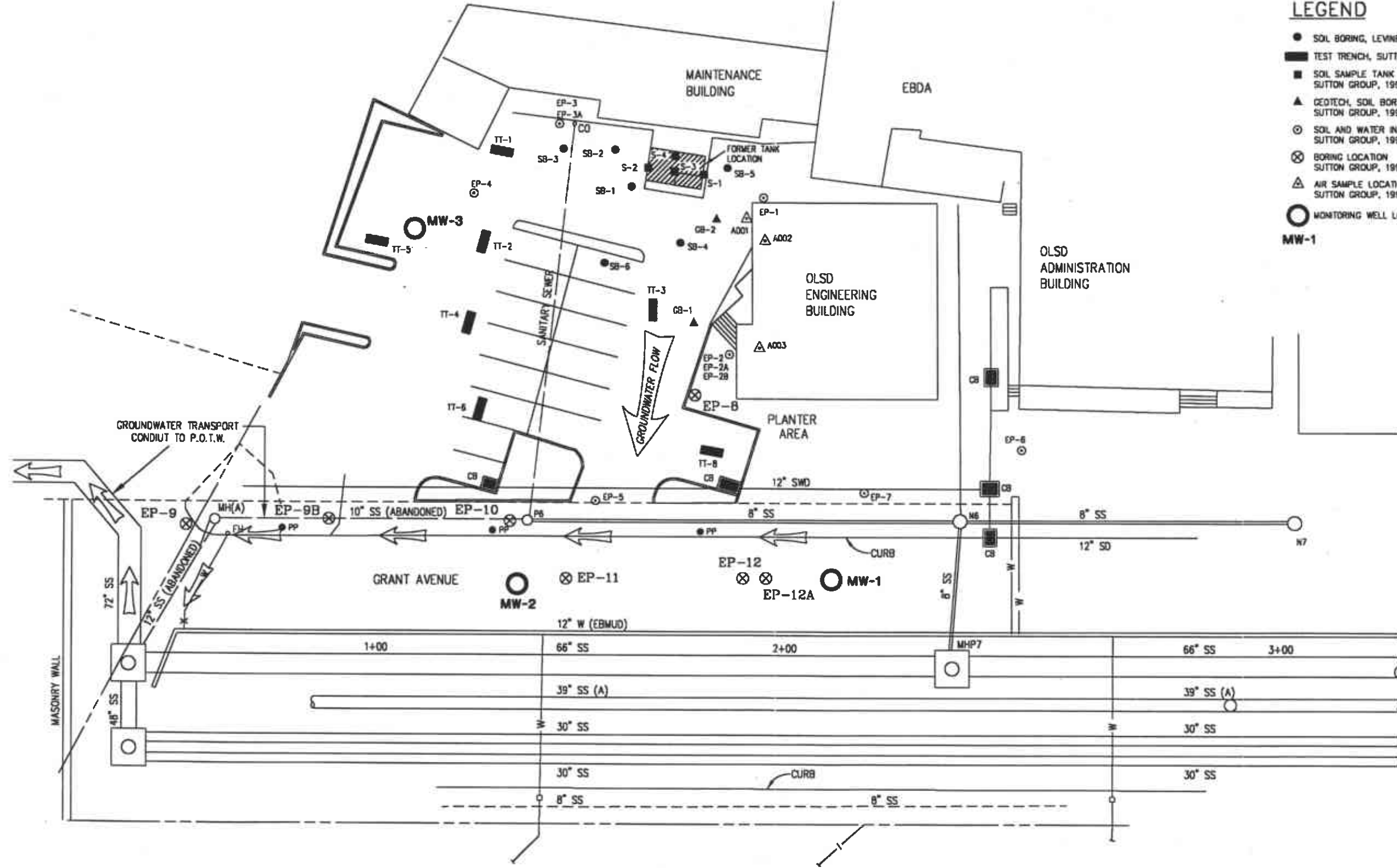
SAMPLE DATE	SAMPLE ID/ LOCATION,	GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	XYLENES (TOTAL)
2/19/99	MW-1 021999A	ND	ND	ND	ND	ND
2/19/99	MW-2 021999B	ND	ND	ND	ND	ND
2/19/99	MW-3 021999C	ND	ND	ND	ND	ND
2/19/99	DUP MW-3 021999D (DUP)	ND	ND	ND	ND	ND
2/10-22/99	TB TRIP BLANK	ND	ND	ND	ND	ND
	REPORTING LIMITS	50.0	0.500	0.500	0.500	0.500

ORO LOMA SANITARY DISTRICT

30229 R TABLE 2 water gas btex.doc 3/16/99

**TABLE 3**  
**SUMMARY OF WATER SAMPLE ANALYSES**  
**SELECTED FUEL OXYGENATES AND ADDITIVES**  
**EPA METHOD 8015M/8020M**  
**RESULTS IN  $\mu\text{g/l}$  (ppb)**

Sample ID/ loc'n.	TERT-AMYL METHYL ETHER (TAME)	TERT-BUTYL ALCOHOL (TBA)	DI-ISOPROPYL ETHER (DIPE)	1,2 DIBROMO ETHANE (EDB)	1,2 DICHLORO ETHANE (EDC / 1,2 DCA)	ETHANOL	ETHYL TERT BUTYL ETHER (ETBE)	METHYL TERT- BUTYL ETHER (MTBE)
021999A MW-1	ND	ND	ND	ND	ND	ND	ND	ND
021999b MW-2	ND	ND	ND	ND	ND	ND	ND	ND
021999c MW-3	ND	ND	ND	ND	ND	ND	ND	1.49
REPORTING LIMITS	1.00	20.0	1.00	0.500	0.500	100	1.00	1.00



**LEGEND**

- SOIL BORING, LEVINE-FRICKE, 1993
  - TEST TRENCH, SUTTON GROUP, 1994
  - SOIL SAMPLE TANK REMOVAL, SUTTON GROUP, 1995
  - ▲ GEOTECH. SOIL BORING, SUTTON GROUP, 1995
  - ⊙ SOIL AND WATER INVESTIGATION, SUTTON GROUP, 1996
  - ⊗ BORING LOCATION, SUTTON GROUP, 1998
  - △ AIR SAMPLE LOCATION, SUTTON GROUP, 1998
  - MONITORING WELL LOCATION
- MW-1

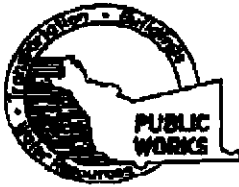
**THE SUTTON GROUP**  
 Engineering and Environmental Services  
 1480 Moraga Road, Suite 1  
 Moraga, California 94556  
 Phone (925) 631-1688  
 fax (925) 631-1371

**Location Map**  
**Ground Water Monitoring Wells**  
 1,000 Gallon Gasoline Tank Area  
 ORO LOMA SANITARY DISTRICT  
 SAN LORENZO, CALIFORNIA

PROJECT NO. 3022.9  
**FIGURE 1**  
 3/15/99

APR-29-'98 WED 15:52 ID:ALAMEDA CO PUBLIC WK FAX NO:510/578-5262

#228 P02



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
951 TURNER COURT, SUITE 306, HAYWARD, CA 94545-2651  
PHONE (510) 678-5575 ANDREAS GOFFREY FAX (510) 678-5262  
(510) 678-5148 ALVIN KAN

## DRILLING PERMIT APPLICATION

### FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2600 GRANT AV  
SAN LORENZO  
(EAST OF GRANT AV.)  
California Coordinates Source USGS San Lorenzo Accuracy ± ft.  
CCN 430,000 R. CCE 1,521,000 ft.  
APN \_\_\_\_\_

CLIENT ORD LOMA SANITARY DISTRICT  
Name THE SUTTON GROUP  
Address 2600 GRANT AV Phone (510) 284-709  
City SAN LORENZO Zip 94550

APPLICANT Name THE SUTTON GROUP POC 915-231-1371  
Address MORAGA RD. DE Phone 925-68-1668  
City MORAGA CA Zip 94556

TYPE OF PROJECT  
Well Construction  Geotechnical Investigation   
Cathodic Protection  General   
Water Supply  Contamination   
Monitoring  Well Destruction

PROPOSED WATER SUPPLY WELL USE  
New Domestic  Replacement Domestic   
Municipal  Irrigation   
Industrial  Other \_\_\_\_\_

DRILLING METHOD:  
Mud Rotary  Air Rotary  Auger   
Cable  Other

DRILLER'S LICENSE NO. CS7: 554979 (Walt/Hagant)

WELL PROJECTS  
Drill Hole Diameter 8 in. Maximum Depth 20 ft.  
Casing Diameter 3 in. Number 3  
Surface Seal Depth 3 ft. \* 6' w/ out 6'

GEOTECHNICAL PROJECTS  
Number of Borings \_\_\_\_\_ Maximum Depth \_\_\_\_\_ ft.  
Hole Diameter \_\_\_\_\_ in.

ESTIMATED STARTING DATE 2/11/99 DRILL  
ESTIMATED COMPLETION DATE 2/12/99 DEVEL

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-62.

APPLICANT'S SIGNATURE [Signature] DATE 2/5/99

### FOR OFFICE USE

PERMIT NUMBER 99WR 048  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

### PERMIT CONDITIONS

Circled Permit Requirements Apply

- A. GENERAL**
  1. A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
  2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
  3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
  2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**  
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- E. CATHODIC**  
Fill hole above grade zone with concrete placed by tremie.
- F. WELL DESTRUCTION**  
See attached.
- G. SPECIAL CONDITIONS**

APPROVED Andreas Goffrey DATE 2/8/99



# BOREHOLE LITHOLOGIC LOG

Project No. 3022.9

Boring No **MW - 1**

DATE DRILLED	February 11, 1999	DRILLING COMPANY	West Hazmat Drilling Corp.
CLIENT	Oro Loma Sanitary District	DRILLER	Ruben, 3-man crew
SITE NAME	Gas Tk. Area Monitoring Wells	RIG MODEL	CME-75HT
CITY/TOWN	San Lorenzo, CA	DRILLING METHOD	Hollow stem auger
LOGGED BY	J. Sutton	BOREHOLE DIAMETER	8" dia.
SURFACE ELEV'N	8.8' approx. DATUM: msl	SAMPLING METHOD	Calif split barrel, 2" ID liners
GRD WATER DEPTH	8.40 on 2/19/99		

Depth (ft)	Graphic Symbol	USCS Symbol	Soil Description	Sample Location/		PID ppm	Well Construction Details*
				Blows	N		
0			<b>Pavement:</b> Asphalt (4") over base course <b>GRAVEL</b> , very sandy, silty, brown (GM). (12" auger to 1.5')				
1.5		CH and GP	<b>FILL:</b> CLAY (Bay Mud), stiff with layers of quarry <b>GRAVEL</b> , very dense, green and black.				
5			@ 3.8: Less dense @ 4.5: Concrete debris. Advanced past w/ Hand auger	45 18 13	31	0	
7		CH	<b>CLAY</b> , stiff highly plastic very moist, black and green (Bay Mud)	9 5 8	13	0	
10		CH/Pt	At 10: up to 30% Peat, strong organic odor Very moist, green and brown	2 5 3	8	1	
15			Total Depth 15.0 ft.				

<b>WELL CONSTRUCTION DETAILS:</b>	
0 Christy box, locking seal cap	
0- 5' Blank pipe	0-3' cement slurry
5'-15' .010" screen	3'-3.8' bentonite chips
15' Bottom cap	3.8'-15' #2/12 sand

ww/sg/olsd/30229 Boring Log MW1.doc 03/18/99 11:33 AM

**THE SUTTON GROUP**  
 1480 Moraga Road, Suite 1,  
 Moraga, CA 94556  
 (925) 631-1688 FAX (925) 631-1371

**MW - 1**

# BOREHOLE LITHOLOGIC LOG

Project No. 3022.9

Boring No **MW - 2**

DATE DRILLED	February 11, 1999	DRILLING COMPANY	West Hazmat Drilling Corp.
CLIENT	Oro Loma Sanitary District	DRILLER	Ruben, 3-man crew
SITE NAME	Gas Tk. Area Monitoring Wells	RIG MODEL	CME-75HT
CITY/TOWN	San Lorenzo, CA	DRILLING METHOD	Hollow stem auger
LOGGED BY	J. Sutton	BOREHOLE DIAMETER	8" dia.
SURFACE ELEV/N	8.8' approx. DATUM: msl	SAMPLING METHOD	Calif split barrel, 2" ID liners
GRD WATER DEPTH	6.8' on 2/19/99		

Depth (ft)	Graphic Symbol	USCS Symbol	Soil Description	Sample Location/Blows N	PID ppm	Well Construction Details*
0 1.0		GC	<b>Pavement: Asphalt (4") over base course</b> <b>GRAVEL, v.sandy, silty, brown (GM) 12" auger to 1'</b> <b>FILL: GRAVEL, clayey, dense, very moist</b>  <b>@ 4': CLAY (Bay Mud) w/ quarry gravel/rubble</b>	8 18		
4.3 5		ML	<b>SILT, slightly sandy, moist, black, strong organic odor (Bay Mud)</b>	43	(61)	
5.5		SM	<b>SAND, fine, silty, wet, gray-brown (Bay Mud)</b>	9 5 5	10	
10		CH	<b>CLAY, silty, med. Stiff wet. Strong organic odor Black (Bay Mud)</b>	2 2 3	5	
15			<b>Total Depth 16.5 ft.</b>	2 2 5	7	

**WELL CONSTRUCTION DETAILS:**

- 0 Christy box, locking seal cap
- 0- 5' Blank pipe                      0-3' cement slurry
- 5'-15' .010" screen                      3'-4' bentonite chips
- 15' Bottom cap                      4'-16.5' #2/12 sand

ww/sg/olsd/30229 Boring Log MW2.doc March 16, 1999 11:25 AM

**THE SUTTON GROUP**

1480 Moraga Road, Suite 1,  
Moraga, CA 94556  
(925) 631-1688 FAX (925) 631-1371

**MW - 2**

# BOREHOLE LITHOLOGIC LOG

Project No. 3022.9

Boring No **MW - 3**

DATE DRILLED	February 11, 1999	DRILLING COMPANY	West Hazmat Drilling Corp.
CLIENT	Oro Loma Sanitary District	DRILLER	Ruben, 3-man crew
SITE NAME	Gas Tk. Area Monitoring Wells	RIG MODEL	CME-75HT
CITY/TOWN	San Lorenzo, CA	DRILLING METHOD	Hollow stem auger
LOGGED BY	J. Sutton	BOREHOLE DIAMETER	8" dia.
SURFACE ELEV'N	9.6' approx. DATUM: msl	SAMPLING METHOD	Calif split barrel, 2" ID liners
GRD WATER DEPTH	4.7' on 2/19/99		

Depth (ft)	Graphic Symbol	USCS Symbol	Soil Description	Sample Location/ Blows N	PID ppm	Well Construction Details*	
0			<b>Pavement:</b> Asphalt (2") over 8" base course 2" asphalt over				
1.0			<b>FILL:</b> GRAVEL, v. sandy, silty, brown (GM) 12" auger to 1'				
3.4			<b>FILL:</b> GRAVEL, medium, angular, v. sandy, dry Green/grey (Leona quarry rhyolite) (Sample tip: Clay w/ gravel, black, slt. org. odor)	34 13			
4.5		ML	<b>SILT,</b> sandy, very moist, black (Bay Mud) Moderate organic odor.	12	25		
5				5 7			
				8	15		0
10		CH	<b>CLAY,</b> very silty, med. Stiff, wet black (Bay Mud)	2 3			
				5	8		0
15			Total Depth 15 ft.				

**WELL CONSTRUCTION DETAILS:**

- 0 Christy box, locking seal cap
- 0- 5' Blank pipe                      0-3' cement slurry
- 5'-15' .010" screen                      3'-4' bentonite chips
- 15' Bottom cap                              4'-15' #2/12 sand

ww/sg/olsd/30229 Boring Log MW3.doc March 16, 1999 11:25 AM

**THE SUTTON GROUP**

1480 Moraga Road, Suite I,  
Moraga, CA 94556  
(925) 631-1688 FAX (925) 631-1371

**MW - 3**



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite B  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600  
(925) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (925) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

February 23, 1999

John Sutton, PE  
The Sutton Group  
51 Shuey Dr.  
Moraga, CA 94556-2620

RE: Oro Loma Sanitation District/P902425

Dear John Sutton, PE

Enclosed are the results of analyses for sample(s) received by the laboratory on February 16, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Forbes  
Project Manager

CA ELAP Certificate Number 2245





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229 Project Manager: John Sutton, PE	Sampled: 2/11/99 Received: 2/16/99 Reported: 2/23/99
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**ANALYTICAL REPORT FOR P902425**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
302229-MW-1 1-1	P902425-01	Soil	2/11/99
302229-MW-2 2-1	P902425-02	Soil	2/11/99
302229-MW-2 2-2	P902425-03	Soil	2/11/99
302229-MW-3 3-1	P902425-04	Soil	2/11/99
302229-MW-3 3-2	P902425-05	Soil	2/11/99





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229 Project Manager: John Sutton, PE	Sampled: 2/11/99 Received: 2/16/99 Reported: 2/23/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M  
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b><u>302229-MW-1 1-1</u></b>				<b><u>P902425-01</u></b>			<b><u>Soil</u></b>	
Gasoline	9020465	2/22/99	2/22/99		400	ND	ug/kg	
Benzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
Xylenes (total)	"	"	"		4.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	-		102	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	-		70.0	"	
<b><u>302229-MW-2 2-1</u></b>				<b><u>P902425-02</u></b>			<b><u>Soil</u></b>	
Gasoline	9020465	2/22/99	2/22/99		400	1350	ug/kg	1
Benzene	"	"	"		2.00	3.98	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
Xylenes (total)	"	"	"		4.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	-		114	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	-		51.7	"	2
<b><u>302229-MW-2 2-2</u></b>				<b><u>P902425-03</u></b>			<b><u>Soil</u></b>	
Gasoline	9020465	2/22/99	2/22/99		400	ND	ug/kg	
Benzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
Xylenes (total)	"	"	"		4.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	-		104	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	-		72.3	"	
<b><u>302229-MW-3 3-1</u></b>				<b><u>P902425-04</u></b>			<b><u>Soil</u></b>	
Gasoline	9020465	2/22/99	2/22/99		400	ND	ug/kg	
Benzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
Xylenes (total)	"	"	"		4.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	-		99.0	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	-		84.0	"	
<b><u>302229-MW-3 3-2</u></b>				<b><u>P902425-05</u></b>			<b><u>Soil</u></b>	
Gasoline	9020465	2/22/99	2/22/99		400	ND	ug/kg	
Benzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	ND	"	
Xylenes (total)	"	"	"		4.00	ND	"	





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229 Project Manager: John Sutton, PE	Sampled: 2/11/99 Received: 2/16/99 Reported: 2/23/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M  
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>302229-MW-3 3-2 (continued)</b>				<b>P902425-05</b>			<b>Soil</b>	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	9020465	2/22/99	2/22/99	-		102	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		76.0	"	





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229 Project Manager: John Sutton, PE	Sampled: 2/11/99 Received: 2/16/99 Reported: 2/23/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9020465</b>	<b>Date Prepared: 2/22/99</b>			<b>Extraction Method: EPA 5030 soils</b>						
<b>Blank</b>	<b>9020465-BLK1</b>									
Gasoline	2/22/99			ND	ug/kg	400				
Benzene	"			ND	"	2.00				
Toluene	"			ND	"	2.00				
Ethylbenzene	"			ND	"	2.00				
Xylenes (total)	"			ND	"	4.00				
Surrogate: a,a,a-Trifluorotoluene	"	300		329	"		110			
Surrogate: 4-Bromofluorobenzene	"	300		273	"		91.0			
<b>LCS</b>	<b>9020465-BS1</b>									
Gasoline	2/22/99	2000		1890	ug/kg		94.5			
Surrogate: 4-Bromofluorobenzene	"	300		275	"		91.7			
<b>Matrix Spike</b>	<b>9020465-MS1</b>		<b>P902425-01</b>							
Gasoline	2/22/99	2000	ND	1540	ug/kg		77.0			
Surrogate: 4-Bromofluorobenzene	"	300		198	"		66.0			
<b>Matrix Spike Dup</b>	<b>9020465-MSD1</b>		<b>P902425-01</b>							
Gasoline	2/22/99	2000	ND	1550	ug/kg		77.5		0.647	
Surrogate: 4-Bromofluorobenzene	"	300		201	"		67.0			







The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229 Project Manager: John Sutton, PE	Sampled: 2/11/99 Received: 2/16/99 Reported: 2/23/99
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### Notes and Definitions

#	Note
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- 1 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
  - 2 Low surrogate recovery confirmed as a matrix effect by a second analysis.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference



Reporting Information:

# THE SUTTON GROUP

Engineering and Environmental Services  
51 Shuey Drive  
Moraga, California, 94556-2620  
phone (510) 631-1688 fax (510) 631-1371

1. Client: ORO LOMA SANITARY DISTRICT  
Address: 2600 Grant Avenue  
San Lorenzo CA, 94580  
Contact: Michael Cortez  
Alt. Contact: \_\_\_\_\_

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: \_\_\_\_\_  
Lab Destination: \_\_\_\_\_  
Date Samples Shipped: 2/11/99  
Lab Contact: M/M @ Sequoia  
Date Results Required: 2/26 (FAX)  
Date Report Required: \_\_\_\_\_  
Client Phone No.: 925-631-1688  
Client FAX No.: -1371

Address Report To:

Send Invoice To:

2. John Sutton, PE  
The Sutton Group  
51 Shuey Drive  
Moraga, CA, 94556-2620

3. Oro Loma Sanitary District  
2600 Grant Ave  
San Lorenzo, CA, 94580  
Att. Mr. Michael Cortez

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: \_\_\_\_\_ Client Project I.D. No.: SG30229

Sample Team Member (s) John Sutton

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS	Comments / Hazards
	<u>30229-MW-1 1-13-5-4-0</u>	<u>10.50</u>	<u>2/11/99</u>	<u>8</u>	<u>None</u>	<u>1</u>	<u>2x6"</u>	<u>P902 25-01</u>	
	<u>30229-MW-2 2-1</u>	<u>4-4.5</u>		<u>8</u>	<u> </u>	<u>1</u>		<u>02</u>	<u>RWOCB Required</u> <u>Test Procedures</u>
	<u>MW-2 2-2</u>	<u>6-6.5</u>		<u>8</u>	<u> </u>	<u>1</u>		<u>07</u>	
	<u>MW-3 3-1</u>	<u>4-4.5</u>	<u>2/11</u>	<u>8</u>	<u> </u>	<u>1</u>		<u>01</u>	
	<u>30229-MW-3 3-2</u>	<u>6-6.5</u>	<u>2/11/99</u>	<u>8</u>	<u> </u>	<u>1</u>		<u>04</u>	
			<u>JULY CUSTODY SEALS INTACT <input type="checkbox"/> NOT INTACT <input checked="" type="checkbox"/></u>				<u>NO Contaminants Expected</u>		
			<u>COOLER TEMPERATURE <u>5</u> °C</u>				<u>PID=0</u>		
Relinquished by: <u>[Signature]</u>					DATE: <u>2/11/99</u>	TIME: <u>1330</u>	Received by: _____		
Relinquished by: <u>[Signature]</u>					DATE: _____	TIME: _____	Received by: <u>[Signature]</u>		
Relinquished by: <u>[Signature]</u>					DATE: <u>2/12/99</u>	TIME: _____	Received by: _____		
Method of Shipment					Lab Comments: <u>[Signature]</u> <u>2/12/99</u> <u>1420</u>				

\*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter  
4) PVC filter, diam. \_\_\_\_\_ pore size \_\_\_\_\_ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample  
10) Other \_\_\_\_\_ 11) Other \_\_\_\_\_  
2x6 Braintuber



# Sequoia Analytical

680 Chesapeake Drive  
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Redwood City, CA 94063  
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(925) 988-9600  
(916) 921-9600  
(707) 792-1865

FAX (650) 364-9233  
FAX (925) 988-9673  
FAX (916) 921-0100  
FAX (707) 792-0342

March 2, 1999

John Sutton, PE  
The Sutton Group  
51 Shuey Dr.  
Moraga, CA 94556-2620

RE: Oro Loma Sanitation District/P902562

Dear John Sutton, PE

Enclosed are the results of analyses for sample(s) received by the laboratory on February 22, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Forbes  
Project Manager

CA ELAP Certificate Number 2245





**Sequoia  
Analytical**

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The Sutton Group  
51 Shuey Dr.  
Moraga, CA 94556-2620

Project: Oro Loma Sanitation District  
Project Number: SG30229/Oro Loma  
Project Manager: John Sutton, PE

Sampled: 2/19/99  
Received: 2/22/99  
Reported: 3/2/99

### ANALYTICAL REPORT FOR P902562

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
021999A	P902562-01	Water	2/19/99
021999B	P902562-02	Water	2/19/99
021999C	P902562-03	Water	2/19/99
021999D (Dup)	P902562-04	Water	2/19/99
TB	P902562-05	Water	2/19/99





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M  
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>021999A</b>				<b><u>P902562-01</u></b>			<b><u>Water</u></b>	<b><u>1</u></b>
Gasoline	9030007	3/1/99	3/1/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	-		101	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		105	"	
<b>021999B</b>				<b><u>P902562-02</u></b>			<b><u>Water</u></b>	<b><u>1</u></b>
Gasoline	9030007	3/1/99	3/1/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	-		103	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		105	"	
<b>021999C</b>				<b><u>P902562-03</u></b>			<b><u>Water</u></b>	<b><u>1</u></b>
Gasoline	9030007	3/1/99	3/1/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	-		101	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		103	"	
<b>021999D (Dup)</b>				<b><u>P902562-04</u></b>			<b><u>Water</u></b>	<b><u>1</u></b>
Gasoline	9030006	3/1/99	3/1/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	"	"	"	-		103	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		104	"	
<b>TB</b>				<b><u>P902562-05</u></b>			<b><u>Water</u></b>	
Gasoline	9030006	3/1/99	3/1/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	





The Sutton Group	Project: Oro Loma Sanitation District	Sampled: 2/19/99
51 Shuey Dr.	Project Number: SG30229/Oro Loma	Received: 2/22/99
Moraga, CA 94556-2620	Project Manager: John Sutton, PE	Reported: 3/2/99

**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M  
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>TB (continued)</b>				<b>P902562-05</b>				
Surrogate: <i>a,a,a-Trifluorotoluene</i>	9030006	3/1/99	3/1/99	-		104	%	
Surrogate: <i>4-Bromofluorobenzene</i>	"	"	"	-		103	"	





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Volatile Organic Compounds by EPA Method 8260B  
Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>021999A</b>				<b><u>P902562-01</u></b>			<b><u>Water</u></b>	
Tert-amyl methyl ether	9020614	3/1/99	3/1/99		1.00	ND	ug/l	
Tert-butyl alcohol	"	"	"		20.0	ND	"	
Di-isopropyl ether	"	"	"		1.00	ND	"	
1,2-Dibromoethane (EDB)	"	"	"		0.500	ND	"	
1,2-Dichloroethane	"	"	"		0.500	ND	"	
Ethanol	"	"	"		100	ND	"	
Ethyl tert-butyl ether	"	"	"		1.00	ND	"	
Methyl tert-butyl ether	"	"	"		1.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	86.0-118		98.0	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	80.0-120		115	"	
Surrogate: Toluene-d8	"	"	"	88.0-110		97.0	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	86.0-115		90.8	"	
<b>021999B</b>				<b><u>P902562-02</u></b>			<b><u>Water</u></b>	
Tert-amyl methyl ether	9020614	3/1/99	3/1/99		1.00	ND	ug/l	
Tert-butyl alcohol	"	"	"		20.0	ND	"	
Di-isopropyl ether	"	"	"		1.00	ND	"	
1,2-Dibromoethane (EDB)	"	"	"		0.500	ND	"	
1,2-Dichloroethane	"	"	"		0.500	ND	"	
Ethanol	"	"	"		100	ND	"	
Ethyl tert-butyl ether	"	"	"		1.00	ND	"	
Methyl tert-butyl ether	"	"	"		1.00	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	86.0-118		101	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	80.0-120		109	"	
Surrogate: Toluene-d8	"	"	"	88.0-110		96.4	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	86.0-115		94.4	"	
<b>021999C</b>				<b><u>P902562-03</u></b>			<b><u>Water</u></b>	
Tert-amyl methyl ether	9020614	3/1/99	3/1/99		1.00	ND	ug/l	
Tert-butyl alcohol	"	"	"		20.0	ND	"	
Di-isopropyl ether	"	"	"		1.00	ND	"	
1,2-Dibromoethane (EDB)	"	"	"		0.500	ND	"	
1,2-Dichloroethane	"	"	"		0.500	ND	"	
Ethanol	"	"	"		100	ND	"	
Ethyl tert-butyl ether	"	"	"		1.00	ND	"	
Methyl tert-butyl ether	"	"	"		1.00	1.49	"	
Surrogate: Dibromofluoromethane	"	"	"	86.0-118		98.4	%	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	80.0-120		102	"	
Surrogate: Toluene-d8	"	"	"	88.0-110		94.6	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	86.0-115		90.4	"	





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9030006</b>		<b>Date Prepared: 3/1/99</b>		<b>Extraction Method: EPA 5030 waters</b>						
<b>Blank</b> <b>9030006-BLK1</b>										
Gasoline	3/1/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Surrogate: a,a,a-Trifluorotoluene	"	300		306	"		102			
Surrogate: 4-Bromofluorobenzene	"	300		302	"		101			
<b>LCS</b> <b>9030006-BS1</b>										
Gasoline	3/1/99	1000		999	ug/l		99.9			
Surrogate: 4-Bromofluorobenzene	"	300		306	"		102			
<b>Matrix Spike</b> <b>9030006-MS1 P902561-01</b>										
Gasoline	3/1/99	1000	292	1260	ug/l		96.8			
Surrogate: 4-Bromofluorobenzene	"	300		293	"		97.7			
<b>Matrix Spike Dup</b> <b>9030006-MSD1 P902561-01</b>										
Gasoline	3/1/99	1000	292	1240	ug/l		94.8		2.09	
Surrogate: 4-Bromofluorobenzene	"	300		300	"		100			
<b>Batch: 9030007</b>		<b>Date Prepared: 3/1/99</b>		<b>Extraction Method: EPA 5030 waters</b>						
<b>Blank</b> <b>9030007-BLK1</b>										
Gasoline Range Organics	3/1/99			ND	ug/l	50.0				
Gasoline	"			ND	"	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Surrogate: a,a,a-Trifluorotoluene	"	300		304	"		101			
Surrogate: 4-Bromofluorobenzene	"	300		298	"		99.3			
<b>LCS</b> <b>9030007-BS1</b>										
Gasoline	3/1/99	1000		1060	ug/l		106			
Surrogate: 4-Bromofluorobenzene	"	300		304	"		101			
<b>Matrix Spike</b> <b>9030007-MS1 P902455-06</b>										
Gasoline	3/1/99	1000	ND	1060	ug/l		106			
Surrogate: 4-Bromofluorobenzene	"	300		304	"		101			







The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<u>Matrix Spike Dup</u>	<u>9030007-MSD1</u>		<u>P902455-06</u>							
Gasoline	3/1/99	1000	ND	1060	ug/l		106		0	
Surrogate: 4-Bromofluorobenzene	"	300		301	"		100			





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Volatile Organic Compounds by EPA Method 8260B/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9020614</b>			<b>Date Prepared: 2/27/99</b>			<b>Extraction Method: EPA 5030 waters</b>				
<b>Blank</b>			<b>9020614-BLK1</b>							
Tert-amyl methyl ether	2/27/99			ND	ug/l	1.00				
Tert-butyl alcohol	"			ND	"	20.0				
Di-isopropyl ether	"			ND	"	1.00				
1,2-Dibromoethane (EDB)	"			ND	"	0.500				
1,2-Dichloroethane	"			ND	"	0.500				
Ethanol	"			ND	"	100				
Ethyl tert-butyl ether	"			ND	"	1.00				
Methyl tert-butyl ether	"			ND	"	1.00				
Surrogate: Dibromofluoromethane	"	5.00		4.88	"	86.0-118	97.6			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.22	"	80.0-120	104			
Surrogate: Toluene-d8	"	5.00		4.91	"	88.0-110	98.2			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.70	"	86.0-115	94.0			
<b>Blank</b>			<b>9020614-BLK2</b>							
Tert-amyl methyl ether	3/1/99			ND	ug/l	1.00				
Tert-butyl alcohol	"			ND	"	20.0				
Di-isopropyl ether	"			ND	"	1.00				
1,2-Dibromoethane (EDB)	"			ND	"	0.500				
1,2-Dichloroethane	"			ND	"	0.500				
Ethanol	"			ND	"	100				
Ethyl tert-butyl ether	"			ND	"	1.00				
Methyl tert-butyl ether	"			ND	"	1.00				
Surrogate: Dibromofluoromethane	"	5.00		4.77	"	86.0-118	95.4			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		4.95	"	80.0-120	99.0			
Surrogate: Toluene-d8	"	5.00		4.79	"	88.0-110	95.8			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.78	"	86.0-115	95.6			
<b>LCS</b>			<b>9020614-BS1</b>							
Methyl tert-butyl ether	2/27/99	5.00		4.80	ug/l	70.0-130	96.0			
Surrogate: Dibromofluoromethane	"	5.00		4.71	"	86.0-118	94.2			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.01	"	80.0-120	100			
Surrogate: Toluene-d8	"	5.00		4.71	"	88.0-110	94.2			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.56	"	86.0-115	91.2			
<b>LCS</b>			<b>9020614-BS2</b>							
Methyl tert-butyl ether	3/1/99	5.00		4.87	ug/l	70.0-130	97.4			
Surrogate: Dibromofluoromethane	"	5.00		4.75	"	86.0-118	95.0			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.06	"	80.0-120	101			
Surrogate: Toluene-d8	"	5.00		4.61	"	88.0-110	92.2			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.57	"	86.0-115	91.4			





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Volatile Organic Compounds by EPA Method 8260B/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike</b>	<b>9020614-MS1</b>		<b>P902446-08</b>							
Methyl tert-butyl ether	2/27/99	5.00	8.78	13.6	ug/l	70.0-130	96.4			
Surrogate: Dibromofluoromethane	"	5.00		5.02	"	86.0-118	100			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.40	"	80.0-120	108			
Surrogate: Toluene-d8	"	5.00		4.68	"	88.0-110	93.6			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.61	"	86.0-115	92.2			
<b>Matrix Spike Dup</b>	<b>9020614-MSD1</b>		<b>P902446-08</b>							
Methyl tert-butyl ether	2/27/99	5.00	8.78	13.3	ug/l	70.0-130	90.4	15.0	6.42	
Surrogate: Dibromofluoromethane	"	5.00		4.95	"	86.0-118	99.0			
Surrogate: 1,2-Dichloroethane-d4	"	5.00		5.39	"	80.0-120	108			
Surrogate: Toluene-d8	"	5.00		4.72	"	88.0-110	94.4			
Surrogate: 4-Bromofluorobenzene	"	5.00		4.78	"	86.0-115	95.6			





The Sutton Group 51 Shuey Dr. Moraga, CA 94556-2620	Project: Oro Loma Sanitation District Project Number: SG30229/Oro Loma Project Manager: John Sutton, PE	Sampled: 2/19/99 Received: 2/22/99 Reported: 3/2/99
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**Notes and Definitions**

#	Note
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- 1 Insufficient preservative to reduce the sample pH to less than 2. Sample was analyzed within 14 days of sampling, but beyond the 7 days recommended for Benzene, Toluene, and Ethylbenzene.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference



Reporting Information:

1. Client: ORO LOMA SANITARY DISTRICT  
 Address: 2600 Grant Avenue  
San Lorenzo CA, 94580  
 Contact: Michael Cortez  
 Alt. Contact: \_\_\_\_\_

# THE SUTTON GROUP

Engineering and Environmental Services  
 51 Shuey Drive  
 Moraga, California, 94556-2620  
 phone (510) 631-1688 fax (510) 631-1371

P902562

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: \_\_\_\_\_  
 Lab Destination: SEQUOIA ANALYTICAL  
 Date Samples Shipped: 2/19/99  
 Lab Contact: MIKI  
 Date Results Required: 2/11/99  
 Date Report Required: 3/5/99  
 Client Phone No.: (925) 631-1688  
 Client FAX No.: (925) 631-1371

Address Report To:

2. John Sutton, PE  
The Sutton Group  
51 Shuey Drive  
Moraga, CA, 94556-2620

Send Invoice To:

3. Oro Loma Sanitary District  
2600 Grant Ave  
San Lorenzo, CA, 94580  
Att. Mr. Michael Cortez

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: \_\_\_\_\_ Client Project I.D. No.: SG30224

Sample Team Member (s) \_\_\_\_\_

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS	Comments / Hazards
	<u>021999A</u>		<u>02/19/1998</u>	<u>7</u>	<u>HCR</u>	<u>4</u>	<u>VOA</u>	GAS BTEX* OX 9.74 OX 8 parts	<u>P902562-01</u>
	<u>021999B</u>		<u>02/19/1320</u>	<u>1</u>	<u> </u>	<u>4</u>	<u> </u>		<u>-02</u>
	<u>021999C</u>		<u>02/19/1330</u>	<u>1</u>	<u> </u>	<u>4</u>	<u> </u>		<u>-03</u>
	<u>021999D (Dup)</u>		<u>02/19/1340</u>	<u>1</u>	<u> </u>	<u>3</u>	<u> </u>		<u>-04</u>
	<u>TB</u>								<u>-05</u>

COOLER CUSTODY SEALS INTACT  NOT INTACT   
 COOLER TEMPERATURE 12 °C

10 \*GAS BTEX By RWDC B Region 2 procedure  
 Oxygen per RWDC B.

Relinquished by: <u>John Sutton</u> (Signature)	DATE <u>2/19/99</u> TIME <u>1350</u>	Received by: _____ (Signature)	DATE _____ TIME _____
Relinquished by: <u>TOOLSD FRIDGE</u> (Signature)	DATE <u>2/19/99</u> TIME <u>1350</u>	Received by: <u>Steve Ter</u> (Signature)	DATE <u>2/19/99</u> TIME _____
Relinquished by: <u>Steve Ter</u> (Signature)	DATE <u>2/19/99</u> TIME _____	Received by: <u>Anna DeMa</u> (Signature)	DATE <u>2/19/99</u> TIME <u>1706</u>
Method of Shipment <u>N. Mainan 2/22 10:30</u>		Lab Comments <u>Steve Termann</u>	DATE <u>2/22</u> TIME <u>16:30</u>

\*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter  
 4) PVC filter, diam. \_\_\_\_\_ pore size \_\_\_\_\_ 5) Charcoal tube 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample  
 10) Other \_\_\_\_\_ 11) Other \_\_\_\_\_