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March 29, 2006

Project: 2841

Mr. Jerry Wickham Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Fuel Leak Case No. RO0002585, Wente Winery Site Located at 5565 Tesla Road, Livermore, California

Dear Mr. Wickham:

SOMA's "First Quarter 2006 Groundwater Monitoring Report" for the subject site has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE Principal Hydrogeologist

cc: Mr. Aris Krimetz w/report enclosure





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### First Quarter 2006 Groundwater Monitoring Report

### WENTE WINERY

#### 5565 Tesla Road

#### Livermore, California

March 29, 2006

Project 2841

Prepared for

Mr. Aris Krimetz 5565 Tesla Road Livermore, California

Prepared by

SOMA Environmental Engineering, Inc. 6620 Owens Drive, Suite A Pleasanton, California

#### CERTIFICATION

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Aris Krimetz, for Wente Winery, which is located at 5565 Tesla Road, Livermore, California to comply with the requirements of the Alameda County Environmental Health Services and the California Regional Water Quality Control Board for the First Quarter 2006 groundwater monitoring event.

Mansour Sepehr, Ph.D., P.E. Principal Hydrogeologist



**SOMA** Environmental Engineering, Inc.

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#### 1.0 INTRODUCTION

This monitoring report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Aris Krimetz, for Wente Winery, which is located at 5565 Tesla Road, Livermore, California. Figure 1 shows the location of the Site.

This report summarizes the results of the First Quarter 2006 groundwater monitoring event conducted at the Site on February 13, 2006. This report also includes the laboratory analytical results on the groundwater samples.

A natural attenuation study was conducted during this monitoring event. The objective of the natural attenuation study was to evaluate whether the petroleum hydrocarbons found in the groundwater were biodegrading.

These activities were performed in accordance with the general guidelines of the California Regional Water Quality Control Board (CRWQCB) and the Alameda County Environmental Health Services (ACEHS). Appendix A details the groundwater monitoring procedures used during this monitoring event.

#### 1.1 Site Description

West of the winery buildings is an enclosed maintenance and agricultural storage area with a former underground storage tank (UST) pit that contained one gasoline and one diesel UST. The USTs were replaced with three aboveground storage tanks (ASTs), with a total capacity of 4,000 gallons. An on-site potable water supply well provides backup potable drinking water and processed water for the winery facility. This water supply well is located south of and presumably upgradient from the former USTs area.

#### **1.2 Previous Activities and Investigations**

In 1987, two fuel USTs were removed from the Site. There is no information regarding the condition of the tank or evidence of leakage. In 1990, the ACEHS issued a notice of violation (NOV) for discharging waste sludge into an open ditch adjacent to a former steam-cleaning bay.

Clayton Environmental Consultants (Clayton) conducted a Phase I Environmental Site Assessment of the maintenance and storage areas. The Phase I study revealed the existence of the former USTs, former waste discharge area, and a number of agricultural storage areas.

In 2003, Clayton performed a subsurface investigation at the Site to implement the recommendations of the Phase I report. As shown in Figure 2, boreholes were advanced near the ASTs and near other RECs. The study indicated that a fuel release in the former UST area impacted the groundwater. In the former steam-cleaning bay, gasoline and motor oil-range petroleum hydrocarbons were detected in the groundwater. Figure 2 illustrates the locations of the soil borings.

Wente then retained SOMA to review Clayton's report. SOMA subsequently submitted a workplan that included a vicinity well survey, a regional hydrogeologic study, and an additional site characterization. The site characterization included sampling and evaluating the water quality of the on-site water supply well, installing monitoring wells, and additional lithologic characterization to better define the shallow/perched water-bearing zone.

On May 5, 2005, SOMA oversaw Woodward Drilling (Woodward) install three monitoring wells, MW-1 through MW-3, as shown in Figure 2. On May 20, 2005, Woodward developed the newly installed wells.

On June 24, 2005, SOMA oversaw Woodward drill two confirmatory boreholes (B-9 and B-10). The purpose of this investigation was to confirm the presence of petroleum hydrocarbons in the soil and groundwater next to the former USTs and to evaluate the current soil and groundwater conditions in close proximity of the former steam cleaning area. The results of this investigation are presented in SOMA's report entitled, "Phase I: Soil and Groundwater Investigation, Wente Winery, at 5565 Tesla Road, Livermore, California," dated July 25, 2005.

#### 1.3 Regional Hydrogeologic Features

The subject site is located in the Livermore Valley Groundwater Basin (LVGB). The LVGB consists of a structural trough that is an important source of irrigation water for the Livermore Valley. In the western part of the basin up to 40 feet of clay caps these water-bearing sediments. The water-bearing zone is predominantly a permeable unit consisting of sand and gravel in a clayey sand matrix. The potentiometric surface of valley-fill groundwater near the Site is at approximately 20 to 30 feet below ground surface (bgs).

The groundwater flow in the valley-fill and underlying Livermore Formations is to the northwest/north. The nearby water supply wells west of and presumably downgradient from the Site are potentially exposed to the on-site contaminant plume.

There is one on-site well and five wells in the properties immediately west of and presumably downgradient from the Site. North/northeast of and presumably up/cross gradient from the subject site there are seven wells within 2,000 feet of the investigation area. Approximately 1,800 feet south of the Site there is another water supply well. Available records indicate that six of the seven wells located north/northeast of and within 2,000 feet of the Site may be used as drinking water wells.

#### 2.0 Results

The following sections provide the results of the field measurements and laboratory analyses for the February 13, 2006 groundwater monitoring event.

#### 2.1 Field Measurements

Table 1 presents the depths to groundwater, as well as the corresponding groundwater elevations for the monitoring wells. The depths to groundwater ranged from 6.29 feet in well MW-1 to 7.06 feet in well MW-3. The corresponding groundwater elevations ranged from 608.87 feet in well MW-1 to 610.26 feet in well MW-3.

The groundwater elevation contour map is displayed in Figure 3. The groundwater flows north to northwesterly across the Site, at a gradient of approximately 0.007 feet/feet. The gradient and flow direction are consistent with the previous monitoring event.

Refer to Table 1 for the historical site-wide groundwater elevation trends.

The field notes in Appendix B show the detailed measurements of the physical and chemical parameters of the groundwater for each well during this monitoring event. The more positive the redox potential of an electron acceptor, the more energetically favorable is the reaction utilizing that electron acceptor. The most energetically preferred electron acceptor for redox reactions is dissolved oxygen (DO). Evaluating the distribution of electron acceptors can provide evidence of where and to what extent hydrocarbon biodegradation is occurring.

DO concentrations ranged from 7.60 mg/L in well MW-3 to 17.50 mg/L in the offsite supply well. However, the DO concentration in the off-site supply well may be erroneous. The purging of the off-site supply well was conducted using an active downhole pump. The high DO level in this well could be the result of this active pumping station within the well.

Oxygen reduction potential (ORP) showed positive redox potentials throughout the Site. As previously noted, positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

#### 2.2 Sampling of Off-Site Well at 5443 Tesla Road

On February 13, 2006, SOMA contacted Wente Vineyards (Wente) to inform them that the off-site well needed to be sampled. The field personnel at Wente, as well as SOMA, began extracting groundwater from the well using an on-site pump. Water passed through a flow cell during purging; within the flow cell, measurements for dissolved oxygen, pH, temperature, electrical conductivity, turbidity, and oxygen reduction potential were recorded using a U-22 meter. This method reduced the intrusion of oxygen from ambient air into the groundwater samples. A groundwater sample was collected when all of the field parameters stabilized. This occurred when approximately 36 gallons of groundwater had been

purged.

The field measurements and piping diagram of the pump are shown in Appendix A. Based on the information supplied by Wente, the total depth of this well is 125 feet bgs. The pump was installed at 100 feet bgs in the year of 1972. The water from this well is used solely for irrigation of the vineyards. The letter referencing the off-site supply well is included in Appendix D.

#### 2.3 Laboratory Analysis

The historical total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), total petroleum hydrocarbons as motor oil (TPH-mo), benzene, toluene, ethylbenzene, total xylenes (BTEX), and Methyl tertiary Butyl Ether (MtBE) groundwater analytical results are shown in Table 1.

All TPH-g, BTEX, and MtBE constituents were below the laboratory reporting limit throughout the Site. TPH-d was below the laboratory reporting limit in wells MW-1, MW-3, and the off-site supply well. The highest TPH-d concentration was detected in the on-site supply well at 91.8 ug/L. TPH-mo was below the laboratory reporting limit in well MW-1 and the on and off-site supply wells. The highest TPH-mo concentration was detected in well MW-2 at 657 ug/L. No iso-concentration figure was drawn for either TPH-d or TPH-mo.

The TPH-d result in well MW-2 and the TPH-mo results in wells MW-2 and MW-3 may have been misrepresentative. The TPH-d result in well MW-2 displayed several discrete peaks during testing. The TPH-mo chromatographic pattern did not resemble the standard fuel pattern. Refer to Appendix C for further detailed information for both TPH-d and TPH-mo.

Table 2 shows the analytical results for gasoline oxygenates and lead scavengers. All gasoline oxygenates and lead scavengers were below the laboratory reporting limit in all of the groundwater samples collected during this monitoring event.

Table 3 shows the historical concentrations of volatile organic compounds (VOCs) in the groundwater. Tetrachloroethene, 1,1,1-Trichloroethane, Cis-1,2-dichloroethene, Trans-1,2-dichloroethene, vinyl chloride, 1,2-Dichloropropane, and 1,1-Dichloroethene were all below the laboratory reporting limit in all of the groundwater samples collected during this monitoring event.

Based on the results of this monitoring event, chloromethane was detected in wells MW-1, MW-2, MW-3, and the on-site supply well at 4.03 ug/L, 3.68 ug/L, 3.39 ug/L, and 3.58 ug/L, respectively. Chloroethane was detected in wells MW-1, MW-2, MW-3, and the on-site supply well at 1.03 ug/L, 0.59 ug/L, 0.61 ug/L, and 0.50 ug/L, respectively. Chloromethane was detected in the off-site supply well at 3.02 ug/L. These compounds are referenced in the laboratory report in Appendix C.

Table 4 shows the historical concentrations of metals in the groundwater. Cadmium, chromium, lead, and nickel were all below the laboratory reporting limit in the samples collected from both supply wells. Zinc was below the laboratory reporting limit in the on-site supply well and detected in the off-site supply well at 1,700 ug/L.

Appendix C includes the laboratory report and chain-of-custody (COC) form for this monitoring event.

#### 3.0 Conclusions and Recommendations

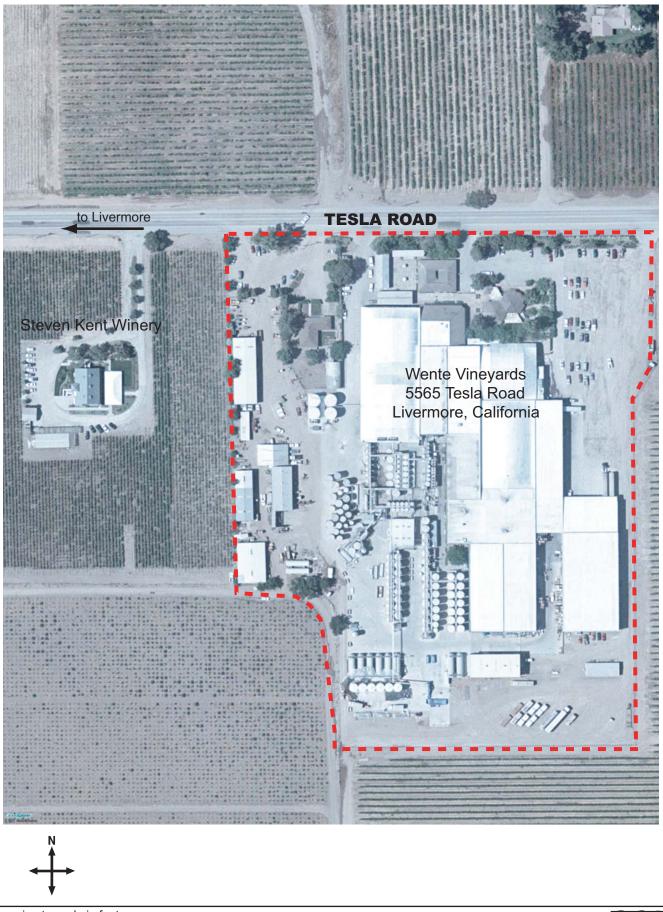
The results of the First Quarter 2006 groundwater monitoring event can be summarized as follows:

- The groundwater flow direction appears to be north to northwesterly across the Site, at a gradient of 0.007 feet/feet. The groundwater flow direction and gradient have remained consistent.
- Based on the results of the bio-attenuation study, indigenous bacteria have effectively removed organic mass from any impacted groundwater in the subsurface during the release of the transfer of electrons. This is evidenced by the high DO levels and positive redox potentials observed throughout the Site.
- Both TPH-d and TPH-mo were detected at low levels, however, the sample results may have been misrepresentative. The highest constituent was zinc.
- As the hydrocarbon concentrations have been limited and contained, the more observable constituent appears to be chlorinated solvents. Both chloromethane and chloroethane were detected site wide. Chloroethane and chloromethane are widely used as industrial solvents and refrigerants.

Based on the results from this monitoring event, SOMA recommends the following action items:

- Continuing of the quarterly monitoring events to further understand the seasonal variations in the groundwater quality conditions; and
- In-situ bioremediation to avoid increased levels of chloroethane and chloromethane, as well as, to avoid future chlorinates from impacting the groundwater.

## **FIGURES**



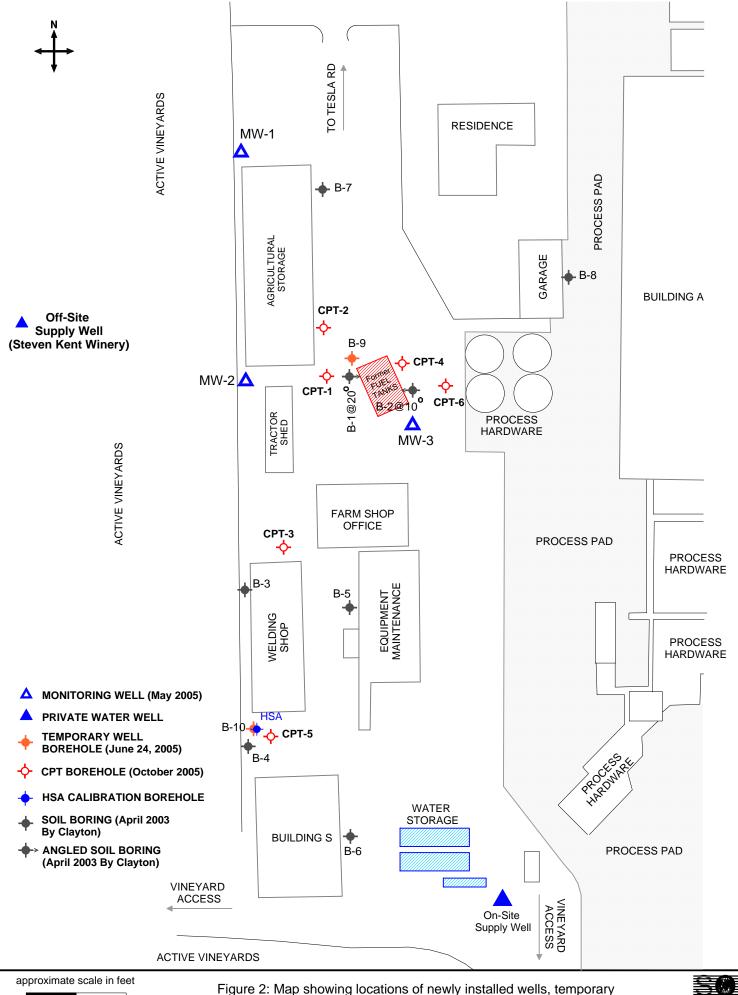
approximate scale in feet

0

50 100

Figure 1: Site vicinity map.

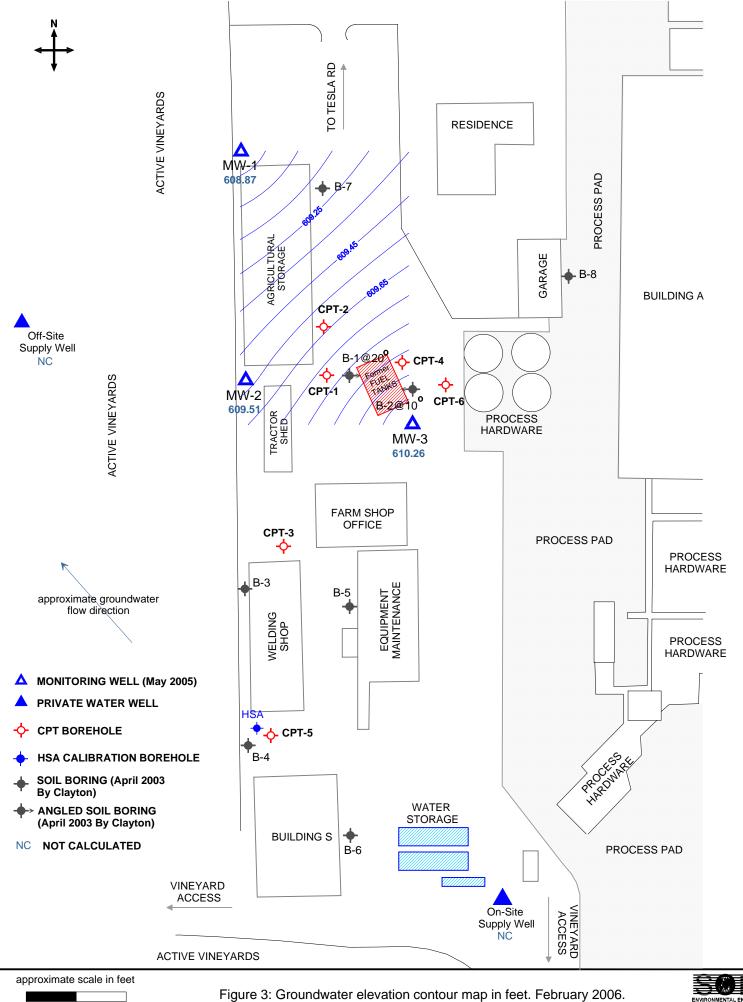




0 25 50

Figure 2: Map showing locations of newly installed wells, temporary well boreholes, and previous soil borings installed by Clayton group.





0

25

50

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## TABLES

SOMA Environmental Engineering, Inc.

# Table 1Historical Groundwater Elevation Data & Analytical ResultsHydrocarbons, BTEX, & MtBEWente Vineyards5565 Tesla Road, Livermore, California

Monitoring Well	Date	Top of Casing (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (μg/L)	TPH-d (μg/L)	TPH-mo (μg/L)	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (μg/L)	Total Xylenes (μg/L)	MtBE (μg/L)
MW-1	May-05	615.16	6.10	609.06	<200	<50	320 YZ	<0.5	<0.5	<0.5	<1.0	<0.5
	Sep-05	615.16	9.19	605.97	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	615.16	8.90	606.26	<50	150 YZ	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Feb-06	615.16	6.29	608.87	<50	<50	<250	<0.5	<2.0	<0.5	<1.0	<0.5
MW-2	May-05	616.03	6.69	609.34	<200	<50	<300	<0.5	<0.5	<0.5	<1.0	<0.5
	Sep-05	616.03	9.30	606.73	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	616.03	9.20	606.83	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Feb-06	616.03	6.52	609.51	<50	76.5 D35	657 <sup>D06</sup>	<0.5	<2.0	<0.5	<1.0	<0.5
						•						
MW-3	May-05	617.32	7.04	610.28	<200	680	<300	<0.5	1.58	<0.5	<1.0	<0.5
	Sep-05	617.32	9.61	607.71	<50	300 Y	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	617.32	9.60	607.72	<50	150 YZ	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Feb-06	617.32	7.06	610.26	<50	<50	322 D06	<0.5	<2.0	<0.5	<1.0	<0.5
B-9	Jun-05	NA	NA	NA	1,850,000	540,000 LY	<24,000	3,820	114,000	40,400	177,700	<462
						•	•			•		
B-10	Jun-05	NA	NA	NA	<200	<50	<300	<0.5	4.23	1.10	4.03	<0.5
						•	•	-		•		
Onsite Supply Well	May-05	NS	NM	NC	<200	<50	<300	<0.5	0.85	<0.5	<1.0	<0.5
	Nov-05	NS	NM	NC	<50	100 YZ	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	Feb-06	NS	NM	NC	<50	91.8	<250	<0.5	<2.0	<0.5	<1.0	<0.5
						•	•	-		•		
Offsite Supply Well	May-05	NS	NM	NC	<200	<50	<300	0.77	1.08	<0.5	<1.0	<0.5
	Nov-05	NS	NM	NC	<5,380	120 YZ	<300	<53.8	<215	<53.8	<108	<53.8
	Jan-06	NS	9.65	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	NS	NM	NC	<50	<50	<250	<0.5	<2.0	<0.5	<1.0	<0.5

# Table 1 Historical Groundwater Elevation Data & Analytical Results Hydrocarbons, BTEX, & MtBE Wente Vineyards 5565 Tesla Road, Livermore, California

Monitoring Well	Date	Top of Casing (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (μg/L)	TPH-d (μg/L)	TPH-mo (μg/L)	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (μg/L)	Total Xylenes (μg/L)	MtBE (μg/L)
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- 1) The wells were installed on May 5, 2005 and developed by Woodward Drilling on May 20, 2005.
- 2) A grab sample was collected after the well development on May 20, 2005.
- 3) A grab sample was also collected from the water well, southeast of the water stoarge units on May 20, 2005.
- 4) The wells were surveyed by Harrington Surveys of Walnut Creek, CA on June 5, 2005.
- 5) A grab sample was collected from the borings on June 24, 2005.
- 6) The groundwater elevation for the May 2005 sampling was based on the survey data of Harrington Surveys.
- The supply wells were first added to the quarterly events in the Fourth Quarter 2005.
   The off-site water supply well was re-sampled on January 16, 2006, based on the directive of Alameda County Environmental Health Dpt.
   Tetrahydrofuran was detected at 19,700 ug/L and chloroethane was detected at 380 ug/L during the 4Q05 Monitoring Event.
- NA: Not Applicable. B-9 and B-10 are boring locations and are not surveyed.
- NC: Not calculated.
- NM: Not Measured
- NS: Not surveyed. The onsite well is a private well.
- TPH-d: Total hydrocarbons as diesel
- TPH-g: Total hydrocarbons as gasoline
- TPH-mo:Total hydrocarbons as motor oil
- L: Lighter weight hydrocarbons contributed to the quanitation
- Y: Sample exhibits chromatographic pattern which does not resemble standard
- Z: Sample exhibits unknown single peaks or peaks.
- <: Not Detected above the laboratory reporting limit.
- D35: Sample does not display fuel pattern. Sample contains several discrete peaks. (1Q06 diesel)
- D06: Sample chromatographic pattern does not resemble fuel standard used for quantitation. (1Q06, motor oil)

#### Table 2

#### Historical Groundwater Analytical Results Gasoline Oxygenates & Lead Scavengers Wente Vineyards 5565 Tesla Road, Livermore, California

Monitoring	Date	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
Well	Date	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
MW-1	Sep-05	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	Feb-06	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
MW-2	Sep-05	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	Feb-06	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
MW-3	Sep-05	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	Feb-06	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
Onsite	Nov-05	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
Supply Well	1107 00	-2.0			-2:0	10.0	12.0
	Feb-06	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
Offsite	Nov-05	<269	<53.8	<53.8	<215	<53.8	<215
Supply Well	1407-00	~203	~00.0	~00.0	~210	<b>~00.0</b>	~210
	Jan-06	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0

# Table 2Historical Groundwater Analytical ResultsGasoline Oxygenates & Lead Scavengers<br/>Wente Vineyards5565 Tesla Road, Livermore, California

Monitoring	Data	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
Well	Date	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)

Notes:

1) A grab sample was collected after well development on May 20, 2005.

 Based on the approval of the Alameda County Environmental Health Services since gasoline oxygenates were not detected, further analysis was not required for wells MW-1 to MW-3. The only time gasoline oxygenates were tested for wells MW-1 to MW-3 was in the Third Quarter 2005.

3) The supply wells were first added to the quarterly events in the Fourth Quarter 2005. The off-site water supply well was re-sampled on January 16, 2006, based on the directive of Alameda County Environmental Health Dpt. Tetrahydrofuran was detected at 19,700 ug/L and chloroethane was detected at 380 ug/L during the 4Q05 Monitoring Event.

<: Not Detected above the laboratory reporting limit.

Gasoline Oxygenates:

TBA: tertiary Butyl Alcohol DIPE: Di-Isopropyl Ether ETBE: Ethyl tertiary Butyl Ether TAME: Methyl tertiary Amyl Ether Lead Scavengers: EDB: 1,2-Dibromoethane 1,2-DCA: 1,2-Dichloroethane

# Table 3Historical Analytical Results For Volatile Organic Compound<br/>Analyses in Groundwater Samples<br/>Wente Vineyards<br/>5565 Tesla Road, Livermore, California

Monitoring Well	Date	PCE (μg/L)	TCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	Vinyl Chloride (μg/L)	1,2-DCP (μg/L)	1,1-DCE (μg/L)
MW-1	Sep-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	Sep-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	Sep-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Onsite Supply Well	Nov-05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Feb-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Offsite Supply Well	Nov-05	<53.8	<53.8	<53.8	<53.8	<53.8	<53.8	<53.8
	Jan-06 <b>Feb-06</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>	<0.5 <b>&lt;0.5</b>

# Table 3Historical Analytical Results For Volatile Organic Compound<br/>Analyses in Groundwater Samples<br/>Wente Vineyards5565 Tesla Road, Livermore, California

Monitoring Well	Date	PCE (μg/L)	TCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	Vinyl Chloride (μg/L)	1,2-DCP (μg/L)	1,1-DCE (μg/L)	
Notes:	lotes:								
1) A grab sam	nple was col	lected after	well develo	pment on May 20	), 2005. However, the	first time			
volatile orga	anic compo	unds (VOCs	) were anal	yzed was during	the Third Quarter 200	5 monitoring event.			
2) Based on t	he approval	of the Alam	eda County	Environmental H	Health Services				
since VOCs	s were not c	letected, fur	ther analysi	s was not require	ed for wells MW-1 to N	/W-3.			
The only tir	ne VOCs w	ere tested in	wells MW-	1 to MW-3 was in	n the Third Quarter 20	005.			
3) The supply	wells were	first added t	the quarte	erly events in the	Fourth Quarter 2005.				
The off-site	water supp	ly well was	re-sampled	on January 16, 2	2006, based on the dir	rective			
of Alameda	County En	vironmental	Health Dpt.	Tetrahydrofuran	was detected at 19,70	00 ug/L			
and chloroe	ethane was	detected at	380 ug/L dı	uring the 4Q05 M	onitoring Event.	-			
<: Not detecte	ed above the	e laboratory	reporting lir	nit.	-				
		-							
Volatile organic	Volatile organic compounds (VOCs)								
PCE:	PCE: tetrachloroethene TCE: 1,1,1-trichloroethane								
cis-1,2-DCE:	cis-1,2-DCE: cis-1,2-dichloroethene trans-1,2-DCE: trans-1,2-dichloroethene								
vinyl chloride				1,2-DCP:	1,2-dichloropropane				

1,1-DCE: 1,1-dichloroethene

# Table 4Historical Groundwater Analytical ResultsMetalsWente Vineyards

#### 5565 Tesla Road, Livermore, California

Monitoring Well	Date	Cadmium (µg/L)	Chromium (μg/L)	Lead (µg/L)	Nickel (μg/L)	Zinc (μg/L)
MW-1	Sep-05	<5.0	<10	<3.0	<20	27
MW-2	Sep-05	<5.0	<10	<3.0	<20	23
MW-3	Sep-05	<5.0	<10	<3.0	<20	<20
B-10	Jun-05	12	930	82	3,600	800
Onsite Supply Well	Nov-05	<5.0	<10	<3.0	<20	62
	Feb-06	<5.0	<10	<3.0	<20	<20
Offsite Supply Well	Nov-05	<5.0	<10	<3.0	<20	830
	Jan-06 <b>Feb-06</b>	<5.0 <b>&lt;5.0</b>	<10 <b>15</b>	8.30 <b>&lt;3.0</b>	<20 <b>&lt;20</b>	650 <b>1700</b>

Notes:

1) Metals were tested at boring B-10 on June 24, 2005.

- Due to the results from B-10, the Alameda County Environmental Health Services requested that SOMA further analyze the wells for metals in a letter dated Sept. 19, 2005.
   SOMA collected grab samples from the wells on September 29, 2005.
- 3) The only time metals were tested in wells MW-1 to MW-3 was in the Third Quarter 2005.
- 4) The supply wells were first added to the quarterly events in the Fourth Quarter 2005. The off-site water supply well was re-sampled on January 16, 2006, based on the directive of Alameda County Environmental Health Dpt.Tetrahydrofuran was detected at 19,700 ug/L and chloroethane was detected at 380 ug/L during the 4Q05 Monitoring Event.
- <: Not Detected above the laboratory reporting limit.

# Appendix A

SOMA's Groundwater Monitoring Procedures

#### **Field Activities**

On February 13, 2006, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the CRWQCB and the ACEHCS. During this groundwater monitoring event a total of three monitoring wells (MW-1 to MW-3) and two supply wells were monitored. Figure 2 shows the locations of the wells.

The depth to groundwater in each monitoring well was measured from the top of the casing to the nearest 0.01 foot using an electric sounder. Harrington Surveys Inc., of Walnut Creek, surveyed the Site on June 3, 2005. The survey datum was based on an elevation of 566.57 NAVD 88. Top of casing elevation data and the depth to groundwater in each monitoring well was used to calculate the groundwater elevation.

The survey data is included in Appendix B for the monitoring wells. The survey was conducted to comply with EDF requests for electronic reporting of data to the State Water Resources Control Board (SWRCB) Database.

Prior to collecting samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC). During the purging activities, in order to obtain accurate measurements of groundwater parameters and especially to avoid the intrusion of oxygen from ambient air into the groundwater samples, field measurements were conducted in-situ (i.e., down-hole inside each monitoring well). The groundwater parameters such as DO, pH, temperature, EC, turbidity, and the ORP were measured in-situ using a Horiba, Model U-22 multi-parameter instrument. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

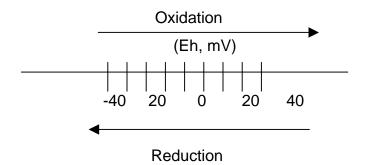
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater conductivity (EC) is directly related to the concentration of ions in solution.

There is a strong correlation between the turbidity level and the biological oxygen demand of natural water bodies. The main purpose for checking the turbidity level is to provide a general overview of the extent of the suspended solids in the groundwater.

ORP (oxidation reduction potential) is the measure of the potential for an oxidation or reduction process to occur. In the oxidation process a molecule or ion loses one or several electrons. In the reduction process a molecule or ion gains one or several electrons. The unit of the redox potential is the Volt or m-Volt. The most important redox reaction in petroleum contaminated groundwater is the oxidation of petroleum hydrocarbons in the presence of bacteria and free molecular oxygen. Because the solubility of  $O_2$  in water is low (9 mg/L at 25 °C and 11 mg/L at 5 °C), and because the rate of  $O_2$  replenishment in subsurface environments is limited,

DO can be entirely consumed, when the oxidation of only a small amount of petroleum hydrocarbons occurs.

Oxidation of petroleum hydrocarbons can still occur, when all the dissolved  $O_2$  in the groundwater is consumed, however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO<sup>-</sup><sub>3</sub>, MnO<sub>2</sub>, Fe (OH)<sub>3</sub>, SO<sub>4</sub><sup>2-</sup> and others (Freeze and Cherry, 1979). As these oxidizing agents are consumed, the groundwater environment becomes more and more reduced. If the process proceeds far enough, the environment may become so strongly reduced that the petroleum hydrocarbons may undergo anaerobic degradation, resulting in the production of methane and carbon dioxide. The concept of oxidation and reduction in terms of changes in oxidation states is illustrated below.



The purging of the wells continued until the parameters for DO, pH, temperature, EC, turbidity, and redox stabilized or three casing volumes were purged. A disposable polyethylene bailer was used to collect sufficient samples from each well for laboratory analyses.

The groundwater sample was transferred to four 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. The groundwater sample was also transferred into a one-liter non-preserved amber glass container. All groundwater samples were placed in an ice chest along with a chain of custody (COC) form. On February 13, 2006, SOMA's field crew delivered the samples to Pacific Analytical Laboratory (PAL) in Alameda, California.

#### Laboratory Analysis

The groundwater samples for both the monitoring wells and supply wells were analyzed for TPH-g, TPH-d, TPH-mo, BTEX, MtBE, gasoline oxygenates, lead scavengers, and volatile organic compounds (VOCs). Metals were analyzed at the supply wells.

Pacific Analytical Laboratory, a state certified laboratory, analyzed the samples for TPH-g, TPH-d, TPH-mo, BTEX, MtBE, gasoline oxygenates, lead scavengers, and VOCs. EPA Method 5030B was used to prepare the samples for TPH-g, BTEX, MtBE, gasoline oxygenates, lead scavengers, and VOCs measurements, and

analyzed using Method 8260B. EPA Method 8015 modified was used to analyze TPH-d and TPH-mo.

Samples for metals were subcontracted through Curtis and Tompkins, Ltd in Berkeley, CA. Metal measurements were prepared using EPA Method 3010A and analyzed using EPA Method 6010B.

## Appendix B

Table of Elevations & Coordinates on Monitoring Wells Measured by Harrington Surveys, Inc.,

and

Field Measurements of Physical, Chemical, & Biodegradation Parameters of the Groundwater Samples at Time of Sampling

#### Harrington Surveys Inc.

Land Surveying & Mapping 2278 Larkey Lane, Walnut Creek, Ca. 94597 Phone (925)935-7228 Fax (925)935-5118 Cell (925)786-7359 E-Mail (ben5132@pacbelLnet)

SOMA ENVIRONMENTAL ENGINEERING 2680 BISHOP DR. # 203 SAN RAMON, CA. 94583 JUNE 05, 2005

ATTN: ELENA

#### 5565 TESLA ROAD, LIVERMORE CA.

#### SURVEY REPORT

CONTROLING POINTS FOR SURVEY:

CALIFORNIA HPGN MONUMENT 04 FL, CALIFORNIA COORDINATE SYSTEM, ZONE 3. NAD 83. NORTH 2,085,087.52 - EAST 6,213,127.18, LAT. N37'42'56.31172" W121'42'18.00018". ELEVATION 566.57, NAVD 88,

CALIFORNIA HPGN MONUMENT 04 FK, CALIFORNIA COORDINATE SYSTEM, 20NE 3. NORTH 2,055,842.44 - EAST 6,189,298.07, LAT N37"38'02.07933", W121"47"09.51080" ELEVATION 637.80NAVD 88.

INSTRUMENTATION: TRIMBLE GPS, MODEL 5800 AND LEICA TCA 1800, 1° HORZ. & VERT. OBSERVATION: EPOCH = 180.

RELD SURVEY: JUNE 03, 2005.

BEN HARRINGTON PLS 5132



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3	2055842 44	6189298 07	1837.78	37ø38'02 07930'N	121e47'09.51084'W	FD 4 FK HPGN	
6	2053842 43	6189298.07	637.82	37ø3802 07924 N	121ø47'09.51088'W	FD 4 FK HPGN	
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Ģ	2046206.93	6206470.18	616 (4	3703952.75518 N	121ø43'37.82678'W	SET 6.0 NW YARO	
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ENVIRONMENTAL ENGINEERING, INC

Well No.: Casing Diameter: Depth of Well: Top of Casing Elevation: Depth to Groundwater: Groundwater Elevation: Water Column Height: Purged Volume:

 $\frac{1}{1} \frac{2}{5} \frac{1}{5} \frac{1}$ 

Project No.: 2841 Address: Wente Vineyards 5565 Tesla Rd, Livermore Date: 2/13/06 Sampler: Mehran Nowroozi Peny Perman

Purging Method:	Bailer 🗆		Pump I (BC promp)
Sampling Method:	Bailer ⊡∽		Pump 🗆
Color:	No 🗹	Yes 🗆	Describe
Sheen:	No 🗹	Yes 🗆	Describe
Odor:	No 🖾	Yes 🗆	Describe

#### Field Measurements:

Time	Volume (galions)	D.O. p mg/L	K Temp °C	E.C. Turb. (µS/cm) NTU	ORP
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1:02 PM	1.0	7.40 6.4	8 15.21	- 1570 999	141
1:05 PR1	4	8.52 6.9.	3 15.01	1530 414	141
1:05 Pm	7	5.82 6.9	1 15.01	1530 236	140
140 811	Samp	Kep			
					a constante de la constante de



1716-2 Well No.: 2 **Casing Diameter:** inch 15 Depth of Well: ft 616.03 Top of Casing Elevation: ft 6.52 ft Depth to Groundwater: 609.51 ft Groundwater Elevation: Water Column Height: 8.48 ft **Purged Volume:** gallons

Project No.: 2841 Address: Wente Vineyards 5565 Tesla Rd, Livermore Date: 2/13/06 Sampler: Mehran Nowroozi TENY PURIM

Purging Method:	Bailer 🗆		Pump Br BC Printy
Sampling Method:	Bailer 🗠		Pump 🗆
Color:	No 🛛	Yes 🗆	Describe
Sheen:	No 🗠	Yes 🗆	Describe
Odor:	No 🖙	Yes 🗆	Describe

#### Field Measurements:

Time	Voiume (galions)	D.O. mg/L	рН	Temp °C	E.C. (µS/cm)	Turb. NTU	ORF
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1 21 1,24	2.0	7.90	6.71	15-60	1500	960	137
1:23 f.M	J.C	2.80	6.85	15.49	154	407	137
1:25 819	7.0	2.80	4.81	15 +1	130	517	137
1.27 62	Score	des					
	57						a construction to be



M111-3 Well No.: Project No.: 2841 **Casing Diameter:** 2 inch Address: Wente Vineyards 13 39 Depth of Well: 5565 Tesla Rd, Livermore ft 617.32 ft Top of Casing Elevation: Date: 2/13/06 Depth to Groundwater: 7.06 ft Sampler: Mehran Nowroozi 7014 PERINT 610.26 Groundwater Elevation: ft Water Column Height: 6.33 ft 4 Purged Volume: gallons Bailer 🗆 Purging Method: Pump 🖃 🗇

Sampling Method:	Baile	r 🗗		Pump 🗆
Color:	No		Yes	Describe
Sheen:	No		Yes	Describe
Odor:	No	ত্র	Yes	Describe

#### Field Measurements:

Time	Volume D.C. pH (galions) mg/L	TempE.C.Turb.ORP°C(μS/cm)NTU
1:41 fin	Stanks punging well	
1543 PM	2.0 7.80 6.80	
1:45 PM	4.0 2.60 6.80	16.49 1580 474 135
1.47 p.m	Samples	
	<i>y</i>	



Well No.: Casing Diameter: Depth of Well: Top of Casing Elevation: Depth to Groundwater: Groundwater Elevation: Water Column Height: Purged Volume:

cit sit suff	y well
6	inch
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Project No.: 2841 Address: Wente Vineyards 5565 Tesla Rd, Livermore Date: 2/13/06 Sampler: Mehran Nowroozi 7erty ricking

Purging Method:	Bailer [			Pump & anste gung
Sampling Method:	Bailer [			Pump 🗹
Color:	No 🖸	3	Yes	Describe
Sheen:	No E	1	Yes	Describe
Odor:	No 🖻	z	Yes	Describe

#### Field Measurements:

Time	Volume	D.G.	pН	Temp	E.C.	Turb.	ORP
	(galions)	mg/L		°C	(µS/cm)	NTU	
11:25 1/24	Starks 1	1.1 0pl 9 0	cell				
11-24 Am	5	7.90	7.32	16.94	1590	236	106
11:31- APC.	16	5.58	7-62	15.60	1600	277	111
11.25 Am	24	9.50	7.18	15.20	1540	264	105
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	r.						

Notes:

VM: not meanined vs. not send in not cal ulter



ENVIRONMENTAL ENGINEERING, INC

Well No.: **Casing Diameter:** Depth of Well: **Top of Casing Elevation:** Depth to Groundwater: Groundwater Elevation: Water Column Height: Purged Volume:

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NC	_ft
36	gallons

Project No.: 2841 Address: Wente Vineyards 5565 Tesla Rd, Livermore Date: 2/13/06 Sampler: Mehran Nowroozi Tuly PERIAL

Purging Method:	Bailer			Pump of cultite proving
Sampling Method:	Bailer			Pump I cuistic prompt
Color:	No		Yes	Describe
Sheen:	No	0	Yes	Describe
Odor:	No	ď	Yes	Describe

#### Field Measurements:

Time	Volume (galions)	D.O. mg/L	рH	Temp °C	Ξ.C. (μS/cm)	Turb. NTU	ORF
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10:49 7121	5	17.20	7.52	1891	1610	+ 70	129
153 1767	12	17.35	7-40	18 43	1620	186	129
10:58 11-1	20	15.83	7.33	18.67	1570	4.87	127
11:04 Amg	28	1-25	7.20	13.76	1650	336	115
11:08 Am	36	17.50	7.17	15 75	1540	310	110
11:10 Aut	54.932	12/00					

#### Notes:

NM. not nuclearing No not calculates Vi not surveyes

## Appendix C

Laboratory Report and Chain of Custody Form for the First Quarter 2006 Monitoring Event



01 March 2006

Mansour Sepehr SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton, CA 94588

RE: 5565 Tesla Rd, Livermore

Work Order Number: 6020012

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,

Mapd Ach

Maiid Akhavan Laboratorv Director

# **CHAIN OF CUSTODY FORM**

Page \_/ of \_/

**PAL** Pacific Analytical Laboratory 851 West Midway Ave., Suite 201B Alameda, CA 94501 510-864-0364 Telephone 510-864-0365 Fax

PAL Login# 6020012

Proje	ct No: 2841			Sa	mple	er: I	Mehran Nowi	roozi	17	lon	4 1	PERINI		,	Anal	yses	/Me	thod		÷
Proje	ct Name: 5565 Tes	la Rd, Liv	ermore	Re	port	To:	Tony Perin	i					260B		st)					
				Co	mp	any:	SOMA En	viror	nme	ntal	Eng	ineering, Inc.	BE	0	DB II					
Turn	around Time: Star	ndard		Te Fa			5-734-6400 5-734-6401		,				EX, Mt	TPH-mo	ull 8260					
		Sampling	, Date/Time	N	1atri	x	# of Containers	1	Prese	rvati	ives		TPHg, BTEX, MtBE 8260B	, b-HqT	VOCs (full 8260B list)	metals				
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H <sub>2</sub> So4	NONE	ICE	Field Notes								
	MW-1	2/3/06	1:10 PM		x		1 L Amber 4 VOAs	x		х	x	Grab Sample	X	X				1		
	MW-2		1:10 PM 1:27 PM		×		1 L Amber 4 VOAs	x		х	x	Grab Sample	X	X						
	MW-3		1:47 pm		x		1 L Amber 4 VOAs	x		х	x	Grab Sample	X	x						
	Off-site supply well		1110 Am		X		1 L Amber 4 VOAs 250 ml poly	×		x	x	Grab Sample, HNO <sub>3</sub>	X	X	X	×				
	On-site supply well	1	1138 Am		X		1 L Amber 4 VOAs 250 ml poly	×		x	x	Grab Sample, HNO3	×	x	x	X		+		
Sam	pler Remarks:						Relinquis					te/Time: Received by:		-		Date	_			
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SOMA Environmental Engineering Inc.Project: 5565 Tesla Rd, Livermore6620 Owens Drive, Suite AProject Number: 2841Reported:Pleasanton CA, 94588Project Manager: Mansour Sepehr01-Mar-06 11:29

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6020012-01	Water	13-Feb-06 13:10	13-Feb-06 16:02
MW-2	6020012-02	Water	13-Feb-06 13:27	13-Feb-06 16:02
MW-3	6020012-03	Water	13-Feb-06 13:47	13-Feb-06 16:02
Off-site supply well	6020012-04	Water	13-Feb-06 11:10	13-Feb-06 16:02
On-site supply well	6020012-05	Water	13-Feb-06 11:38	13-Feb-06 16:02



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588 Project: 5565 Tesla Rd, Livermore Project Number: 2841 Project Manager: Mansour Sepehr

#### Extractable Petroleum Hydrocarbons by 8015 DRO

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6020012-01) Water Sa	mpled: 13-Feb-06 13:10 Rec	eived: 13-Feb-0	6 16:02						
Diesel (C10-C24)	ND	50.0	ug/l	1	BB62102	13-Feb-06	21-Feb-06	EPA 8015M	
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		94.6 %	50	-140	"	"	"	"	
MW-2 (6020012-02) Water Sa	ampled: 13-Feb-06 13:27 Rec	eived: 13-Feb-0	6 16:02						
Diesel (C10-C24)	76.5	50.0	ug/l	1	BB62102	13-Feb-06	21-Feb-06	EPA 8015M	D-35
Motor Oil (C24-C36)	657	250	"	"	"	"	"	"	D-06
Surrogate: Pentacosane		83.6 %	50	-140	"	"	"	"	
MW-3 (6020012-03) Water Sa	ampled: 13-Feb-06 13:47 Rec	eived: 13-Feb-0	6 16:02						
Diesel (C10-C24)	ND	50.0	ug/l	1	BB62102	13-Feb-06	21-Feb-06	EPA 8015M	
Motor Oil (C24-C36)	322	250	"	"	"	"	"	"	D-06
Surrogate: Pentacosane		91.8 %	50	-140	"	"	"	"	
Off-site supply well (6020012-0	4) Water Sampled: 13-Feb-0	6 11:10 Receiv	ed: 13-F	eb-06 16:02					
Diesel (C10-C24)	ND	50.0	ug/l	1	BB62102	13-Feb-06	21-Feb-06	EPA 8015M	
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		62.6 %	50	-140	"	"	"	"	
On-site supply well (6020012-05	5) Water Sampled: 13-Feb-0	6 11:38 Receiv	ed: 13-Fe	eb-06 16:02					
Diesel (C10-C24)	91.8	50.0	ug/l	1	BB62102	13-Feb-06	21-Feb-06	EPA 8015M	
Motor Oil (C24-C36)	ND	250	"	"	"	"	"	"	
Surrogate: Pentacosane		99.0 %	50	-140	"	"	"	"	



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

Tachic Analytical Laboratory										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
MW-1 (6020012-01) Water S	ampled: 13-Feb-06 13:10 Rece	eived: 13-Feb-0	6 16:02							
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B		
1,1,1-Trichloroethane	ND	0.500	"	"	"	"		"		
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"	"		"		
1,1,2-Trichloroethane	ND	2.00	"	"	"	"		"		
1,1,2-Trichloroethene	ND	0.500	"	"	"	"		"		
1,1-Dichloroethane	ND	0.500	"	"	"	"		"		
1,1-Dichloroethene	ND	0.500	"	"	"	"		"		
ETBE	ND	0.500	"	"	"	"		"		
1,2,3-Trichlorobenzene	ND	0.500		"				"		
TBA	ND	2.50		"				"		
1,2,4-Trichlorobenzene	ND	0.500		"				"		
1,2,4-Trimethylbenzene	ND	2.00		"			"			
1,2-Dibromo-3-Chloropropane	ND	2.00		"				"		
1,2-Dibromoethan	ND	2.00		"			"	"		
1,2-Dichlorobenzene	ND	0.500		"				"		
Ethanol	ND	1000		"				"		
1,2-dichloroethane	ND	0.500		"				"		
1,2-Dichloropropane	ND	0.500		"				"		
1,3,5-Trimethylbenzene	ND	0.500		"				"		
1,3-dichlorobenzene	ND	0.500		"				"		
1,3-dichloropropane	ND	0.500	"	"	"	"		"		
1,4-Dichlorbenzene	ND	0.500		"				"		
2,2-Dichloropropane	ND	2.00		"				"		
2-Chlorotoluene	ND	0.500		"				"		
2-nitropropane	ND	2.00		"				"		
4-Chlorotoluene	ND	0.500		"				"		
4-Isopropyltoluene	ND	0.500		"				"		
ACETONE	ND	5.00		"				"		
Acetonitrile	ND	0.500		"				"		
Acrylonitrile	ND	2.50	"	"	"	"		"		
Alylchloride	ND	2.50		"			"			
Benzene	ND	0.500		"			"			
Bromobenzene	ND	0.500		"			"			
Bromochloromethane	ND	0.500		"			"			
Bromoform	ND	5.00		"	"		"	"		
Butan-2-one( MEK)	ND	2.00		"				"		
Carbon bisulfide	ND	0.500		"				"		
careon obunido		0.500								

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
MW-1 (6020012-01) Water	Sampled: 13-Feb-06 13:10 Rec	ceived: 13-Feb-0	6 16:02							
Chlorobenzene	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B		
Chloroform	ND	0.500	"	"	"	"		"		
Chloroprene	ND	0.500	"	"	"	"		"		
cis-1,2 dichloroethene	ND	0.500	"	"	"	"		"		
cis-1,3-Dichloro-1-Propene	ND	0.500		"	"	"		"		
CIS-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"		"		
Dibromochloromethane	ND	2.00		"	"			"		
Diethylether	ND	0.500		"	"			"		
Ethyl methacrylate	ND	0.500		"	"					
Ethylbenzene	ND	0.500		"				"		
Freon 113	ND	0.500	"	"						
Hexachloro-1,3-Butadiene	ND	2.00	"	"		"		"		
Idomethane	ND	2.00		"				"		
Isopropylbenzene	ND	0.500		"	"					
m&p-Xylene	ND	1.00		"	"					
Methyl methacrylate	ND	8.50		"	"					
Methylene dichloride	ND	10.0								
Naphthene	ND	0.500								
n-Butylbenzene	ND	0.500								
n-Propylbenzene	ND	0.500	"			"				
o-xylene	ND	0.500								
Pentachloroethane	ND	1.00						"		
sec-Butylbenzene	ND	0.500		"				"		
Styrene	ND	2.00						"		
tert-Butylbenzene	ND	2.00 0.500								
Tetrachlorocarbon	ND	0.500								
				"						
Tetrachloroethene	ND	0.500		"						
Tetrahydrofuran	ND	5.00								
Toluene	ND	2.00		"						
MTBE	ND	0.500				"				
trans-1,4-Dichloro-2-butene	ND	2.50				"				
Trans-Di-1,2-Chloroethylene	ND	0.500				"				
Methyl isobutyl ketone	ND	0.500		"		"				
Chloromethane	4.03	0.500	"					"		
Bromomethane	ND	2.00	"	"	"	"	"	"		
Nitrobenzene	ND	10.0	"	"	"	"	"	"		
Vinyl chloride	ND	0.500	"	"	"	"		"		

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6020012-01) Water Sampled: 13-	-Feb-06 13:10 Recei	ved: 13-Feb-0	6 16:02						
Bromodichloromethane	ND	0.500	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	
Dibromomethane	ND	0.500	"	"	"	"		"	
Dichlorodifluoromethane	ND	2.00	"	"	"	"		"	
Vinyl acetate	ND	2.00	"	"	"	"		"	
Trichlorofluoromethane	ND	2.00	"	"	"	"		"	
Chloroethane	1.03	0.500		"	"	"		"	
DIPE	ND	0.500		"	"	"		"	
1,1-dichloropropene	ND	0.500	"	"	"	"		"	
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"		"	
1,2,3-Trichloropropane	ND	2.00	"	"	"	"		"	
2-Hexanone	ND	2.00	"	"	"	"		"	
TAME	ND	2.00	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	70	-130	"	"	"	"	
Surrogate: Dibromofluoromethane		101 %	70	-130	"	"	"	"	
Surrogate: Perdeuterotoluene		98.2 %	70	-130	"	"	"	"	
Gasoline (C6-C12)	ND	50.0	"	"	"	"	"	EPA 8015M	
MW-2 (6020012-02) Water Sampled: 13-	-Feb-06 13:27 Recei	ved: 13-Feb-0	6 16:02						
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	

1,1,1-TrichloroethaneND0.500"""""""1,1,2,2-TetrachloorethaneND2.00"""""""1,1,2-TrichloroethaneND0.500"""""""1,1,2-TrichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,2,3-TrichlorobenzeneND0.500"""""""TBAND2.50"""""""1,2,4-TrichlorobenzeneND0.500""""""	EPA 8260B
1,1,2-TrichloroethaneND2.00""""""1,1,2-TrichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,1-DichloroethaneND0.500"""""""1,2,3-TrichlorobenzeneND0.500""""""TBAND2.50""""""	"
1,1,2-Trichloroethane       ND       0.500       "	"
1,1-DichloroethaneND0.500""""""1,1-DichloroethaneND0.500"""""""ETBEND0.500""""""""1,2,3-TrichlorobenzeneND0.500"""""""TBAND2.50"""""""	"
1,1-DichloroetheneND0.500""""""ETBEND0.500"""""""1,2,3-TrichlorobenzeneND0.500""""""TBAND2.50""""""	"
ETBEND0.500"""""1,2,3-TrichlorobenzeneND0.500"""""TBAND2.50"""""	"
1,2,3-Trichlorobenzene     ND     0.500     "     "     "     "       TBA     ND     2.50     "     "     "     "	"
TBA ND 2.50 " " " " "	"
	"
1,2,4-Trichlorobenzene ND 0.500 " " " " "	"
	"
1,2,4-Trimethylbenzene ND 2.00 " " " " "	"
1,2-Dibromo-3-Chloropropane ND 2.00 " " " " "	"
1,2-Dibromoethan ND 2.00 " " " " "	"
1,2-Dichlorobenzene ND 0.500 " " " " "	"
Ethanol ND 1000 " " " " "	"
1,2-dichloroethane ND 0.500 " " " " "	"
1,2-Dichloropropane ND 0.500 " " " " "	"
1,3,5-Trimethylbenzene ND 0.500 " " " " "	"

Pacific Analytical Laboratory



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

## Pacific Analytical Laboratory

		Dementione	J		v				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (6020012-02) Water	Sampled: 13-Feb-06 13:27 Recei	ived: 13-Feb-0	6 16:02						
1,3-dichlorobenzene	ND	0.500	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	
1,3-dichloropropane	ND	0.500	"	"	"	"		"	
1,4-Dichlorbenzene	ND	0.500	"	"	"	"		"	
2,2-Dichloropropane	ND	2.00	"	"	"	"		"	
2-Chlorotoluene	ND	0.500	"	"	"	"		"	
2-nitropropane	ND	2.00	"	"	"	"		"	
4-Chlorotoluene	ND	0.500	"	"	"	"		"	
4-Isopropyltoluene	ND	0.500	"	"	"				
ACETONE	ND	5.00		"	"	"		"	
Acetonitrile	ND	0.500	"	"	"	"		"	
Acrylonitrile	ND	2.50	"	"	"	"		"	
Alylchloride	ND	2.50	"	"	"	"		"	
Benzene	ND	0.500	"	"	"	"		"	
Bromobenzene	ND	0.500	"	"	"	"		"	
Bromochloromethane	ND	0.500	"	"	"	"		"	
Bromoform	ND	5.00	"	"	"	"		"	
Butan-2-one( MEK)	ND	2.00	"	"	"	"		"	
Carbon bisulfide	ND	0.500	"	"	"	"		"	
Chlorobenzene	ND	2.00	"	"	"	"		"	
Chloroform	ND	0.500	"	"	"	"		"	
Chloroprene	ND	0.500		"	"			"	
cis-1,2 dichloroethene	ND	0.500		"	"			"	
cis-1,3-Dichloro-1-Propene	ND	0.500		"	"			"	
CIS-1,4-Dichloro-2-butene	ND	2.50		"	"			"	
Dibromochloromethane	ND	2.00		"	"			"	
Diethylether	ND	0.500		"	"			"	
Ethyl methacrylate	ND	0.500		"	"			"	
Ethylbenzene	ND	0.500		"	"			"	
Freon 113	ND	0.500		"				"	
Hexachloro-1,3-Butadiene	ND	2.00		"				"	
Idomethane	ND	2.00		"				"	
Isopropylbenzene	ND	0.500		"					
m&p-Xylene	ND	1.00		"					
Methylene dichloride	ND	10.0		"					
Naphthene	ND	0.500		"					
n-Butylbenzene	ND	0.500		"			"	"	
n-Propylbenzene	ND	0.500		"		"		"	
		0.200							

Pacific Analytical Laboratory



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

		Reporting	-						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (6020012-02) Water	Sampled: 13-Feb-06 13:27 Re	eceived: 13-Feb-0	6 16:02						
o-xylene	ND	0.500	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	
Pentachloroethane	ND	1.00	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Styrene	ND	2.00	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Tetrachlorocarbon	ND	0.500	"	"	"	"		"	
Tetrachloroethene	ND	0.500	"	"	"	"		"	
Tetrahydrofuran	ND	5.00	"	"	"	"		"	
Toluene	ND	2.00	"	"	"	"		"	
MTBE	ND	0.500	"	"	"	"	"	"	
trans-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"	"	"	
Trans-Di-1,2-Chloroethylene	ND	0.500	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	0.500	"	"	"	"	"	"	
Chloromethane	3.68	0.500	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
Nitrobenzene	ND	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.500	"	"	"	"	"	"	
Bromodichloromethane	ND	0.500	"	"	"	"	"	"	
Dibromomethane	ND	0.500	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.00	"	"	"	"	"	"	
Vinyl acetate	ND	2.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.00	"	"	"	"	"	"	
Chloroethane	0.590	0.500	"		"	"	"	"	
DIPE	ND	0.500	"	"	"	"	"	"	
1,1-dichloropropene	ND	0.500	"	"	"	"	"	"	
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.00	"	"	"	"	"	"	
2-Hexanone	ND	2.00	"	"	"	"	"	"	
TAME	ND	2.00	"		"	"	"	"	
Surrogate: 4-Bromofluorobenz	ene	97.0 %	70-	130	"	"	"	"	
Surrogate: Dibromofluorometh		102 %	70-	130	"	"	"	"	
Surrogate: Perdeuterotoluene		98.0 %	70-	130	"	"	"	"	
Gasoline (C6-C12)	ND	50.0	"	"	"	"	"	EPA 8015M	

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

		n actific 7 th	•		•				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (6020012-03) Water S	Sampled: 13-Feb-06 13:47 Re	ceived: 13-Feb-0	6 16:02						
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	
1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"	"		"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"		"	
1,1,2-Trichloroethene	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.500	"	"		"		"	
1,1-Dichloroethene	ND	0.500	"	"		"		"	
ETBE	ND	0.500	"	"		"		"	
1,2,3-Trichlorobenzene	ND	0.500	"	"		"		"	
TBA	ND	2.50	"	"		"		"	
1,2,4-Trichlorobenzene	ND	0.500	"	"		"		"	
1,2,4-Trimethylbenzene	ND	2.00	"	"	"			"	
1,2-Dibromo-3-Chloropropane	ND	2.00	"	"		"		"	
1.2-Dibromoethan	ND	2.00	"	"		"		"	
1,2-Dichlorobenzene	ND	0.500	"	"		"		"	
1,2-dichloroethane	ND	0.500	"	"		"		"	
Ethanol	ND	1000	"	"		"		"	
1,2-Dichloropropane	ND	0.500	"	"		"		"	
1,3,5-Trimethylbenzene	ND	0.500	"	"		"		"	
1,3-dichlorobenzene	ND	0.500	"	"		"		"	
1,3-dichloropropane	ND	0.500	"	"		"		"	
1,4-Dichlorbenzene	ND	0.500	"	"		"		"	
2,2-Dichloropropane	ND	2.00	"	"		"		"	
2-Chlorotoluene	ND	0.500	"	"		"		"	
2-nitropropane	ND	2.00	"	"		"		"	
4-Chlorotoluene	ND	0.500	"	"		"		"	
4-Isopropyltoluene	ND	0.500	"	"		"		"	
ACETONE	ND	5.00	"	"				"	
Acetonitrile	ND	0.500	"	"		"		"	
Alylchloride	ND	2.50	"	"		"		"	
Benzene	ND	0.500	"	"		"		"	
Bromobenzene	ND	0.500	"	"		"	"	"	
Bromochloromethane	ND	0.500	"	"		"	"	"	
Bromoform	ND	5.00	"	"		"	"	"	
Butan-2-one( MEK)	ND	2.00	"	"		"	"	"	
Carbon bisulfide	ND	0.500	"	"					
Chlorobenzene	ND	2.00	"	"					
Chiorobolizene	NB	2.00							

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

Prosting										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
MW-3 (6020012-03) Water Sampled	d: 13-Feb-06 13:47 Receiv	ved: 13-Feb-0	6 16:02							
Chloroform	ND	0.500	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B		
Chloroprene	ND	0.500		"	"	"	"	"		
cis-1,2 dichloroethene	ND	0.500	"	"	"	"		"		
cis-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"		"		
CIS-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"		"		
Dibromochloromethane	ND	2.00	"	"	"	"		"		
Diethylether	ND	0.500	"	"	"			"		
Ethyl methacrylate	ND	0.500		"	"					
Ethylbenzene	ND	0.500		"	"			"		
Freon 113	ND	0.500		"	"					
Hexachloro-1,3-Butadiene	ND	2.00		"	"			"		
Idomethane	ND	2.00	"	"						
Isopropylbenzene	ND	0.500	"	"						
m&p-Xylene	ND	1.00		"				"		
Methylene dichloride	ND	10.0		"				"		
Naphthene	ND	0.500		"	"			"		
n-Butylbenzene	ND	0.500		"	"			"		
n-Propylbenzene	ND	0.500		"	"			"		
o-xylene	ND	0.500		"	"			"		
Pentachloroethane	ND	1.00		"	"					
sec-Butylbenzene	ND	0.500		"						
Styrene	ND	2.00		"						
tert-Butylbenzene	ND	0.500		"		"				
Tetrachlorocarbon	ND	0.500		"		"				
Tetrachloroethene	ND	0.500		"						
Tetrahydrofuran	ND	5.00		"						
Toluene	ND	2.00		"		"				
MTBE	ND	0.500		"				"		
trans-1,4-Dichloro-2-butene	ND	2.50		"				"		
Trans-Di-1,2-Chloroethylene	ND	0.500						"		
Methyl isobutyl ketone	ND	0.500								
Chloromethane	ND 3.39	0.500								
Bromomethane	3.39 ND	0.500 2.00								
Nitrobenzene	ND	10.0								
Vinyl chloride	ND	0.500								
Bromodichloromethane	ND	0.500		"						
Dibromomethane	ND	0.500		"		"				

Pacific Analytical Laboratory



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

			•		v					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
MW-3 (6020012-03) Water Sampled: 13-Fe	b-06 13:47 Recei	ved: 13-Feb-0	6 16:02							
Dichlorodifluoromethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B		
Vinyl acetate	ND	2.00	"	"	"	"	"	"		
Trichlorofluoromethane	ND	2.00	"	"	"	"	"	"		
Chloroethane	0.610	0.500	"	"	"	"		"		
DIPE	ND	0.500	"	"	"	"		"		
1,1-dichloropropene	ND	0.500	"	"	"	"		"		
1,2,3-Trichloropropane	ND	2.00	"	"	"	"	"	"		
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"		"		
2-Hexanone	ND	2.00	"	"	"	"		"		
TAME	ND	2.00	"	"			"			
Surrogate: 4-Bromofluorobenzene		98.0 %	70	-130	"	"	"	"		
Surrogate: Dibromofluoromethane		102 %	70	-130	"	"	"	"		
Surrogate: Perdeuterotoluene		98.2 %	70	-130	"	"	"	"		
Gasoline (C6-C12)	ND	50.0	"	"		"	"	EPA 8015M		
Off-site supply well (6020012-04RE1) Water Sampled: 13-Feb-06 11:10 Received: 13-Feb-06 16:02										
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	23-Feb-06	EPA 8260B		
1,1,1-Trichloroethane	ND	0.500	"	"	"		"			
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"		"			

1,1,1-Trichloroethane	ND	0.500	"	"	"	"	"	"	
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethene	ND	0.500		"	"	"	"	"	
1,1-Dichloroethane	ND	0.500		"	"	"	"	"	
1,1-Dichloroethene	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500		"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.500		"	"	"	"	"	
TBA	ND	2.50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.00	"	"	"	"	"	"	
1,2-Dibromo-3-Chloropropane	ND	2.00	"	"	"	"	"	"	
1,2-Dibromoethan	ND	2.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.500	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.500	"	"	"	"	"	"	
1,3-dichlorobenzene	ND	0.500	"	"	"	"	"	"	
1,3-dichloropropane	ND	0.500	"	"	"	"	"	"	

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

## Pacific Analytical Laboratory

Parating												
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
Off-site supply well (6020012-04RE1) Water	Sampled: 13-Feb	o-06 11:10 R	eceived: 1	3-Feb-06 16	:02							
1,4-Dichlorbenzene	ND	0.500	ug/l	1	BB62201	13-Feb-06	23-Feb-06	EPA 8260B				
2,2-Dichloropropane	ND	2.00	"	"	"	"		"				
2-Chlorotoluene	ND	0.500	"	"	"	"		"				
2-nitropropane	ND	2.00	"	"	"	"		"				
4-Chlorotoluene	ND	0.500	"	"	"	"		"				
4-Isopropyltoluene	ND	0.500	"	"	"							
ACETONE	ND	5.00		"	"	"		"				
Acetonitrile	ND	0.500		"	"	"		"				
Alylchloride	ND	2.50	"	"	"	"		"				
Benzene	ND	0.500	"	"	"	"		"				
Bromobenzene	ND	0.500	"	"	"	"		"				
Bromochloromethane	ND	0.500	"	"	"	"		"				
Bromoform	ND	5.00	"	"	"	"		"				
Butan-2-one(MEK)	ND	2.00		"	"							
Carbon bisulfide	ND	0.500		"	"	"		"				
Chlorobenzene	ND	2.00		"	"	"		"				
Chloroform	ND	0.500		"	"	"		"				
Chloroprene	ND	0.500		"	"	"		"				
cis-1,2 dichloroethene	ND	0.500		"	"	"		"				
cis-1,3-Dichloro-1-Propene	ND	0.500		"	"	"		"				
CIS-1,4-Dichloro-2-butene	ND	2.50	"	"		"		"				
Dibromochloromethane	ND	2.00	"	"		"		"				
Diethylether	ND	0.500	"	"		"		"				
Ethyl methacrylate	ND	0.500	"	"		"		"				
Ethylbenzene	ND	0.500	"	"		"		"				
Freon 113	ND	0.500	"	"		"		"				
Hexachloro-1,3-Butadiene	ND	2.00	"	"		"		"				
Idomethane	ND	2.00	"	"		"		"				
Isopropylbenzene	ND	0.500		"		"		"				
m&p-Xylene	ND	1.00		"		"		"				
Methylene dichloride	ND	10.0		"		"	"	"				
Naphthene	ND	0.500		"		"	"	"				
n-Butylbenzene	ND	0.500		"		"	"	"				
n-Propylbenzene	ND	0.500		"		"		"				
o-xylene	ND	0.500		"		"		"				
Pentachloroethane	ND	1.00		"								
sec-Butylbenzene	ND	0.500		"								
see Butyroenzene		0.500										

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

## Pacific Analytical Laboratory

		Reporting	•		•				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Off-site supply well (6020012-04RE1) Water	Sampled: 13-Fel	o-06 11:10 R	eceived:	13-Feb-06 16	5:02				
Styrene	ND	2.00	ug/l	1	BB62201	13-Feb-06	23-Feb-06	EPA 8260B	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Tetrachlorocarbon	ND	0.500	"	"	"	"	"		
Tetrachloroethene	ND	0.500	"	"	"	"	"		
Tetrahydrofuran	ND	5.00	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"		
MTBE	ND	0.500	"	"	"	"	"		
trans-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"	"		
Trans-Di-1,2-Chloroethylene	ND	0.500	"	"	"	"	"		
Methyl isobutyl ketone	ND	0.500	"	"	"	"	"		
Chloromethane	3.02	0.500	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"		
Nitrobenzene	ND	10.0	"	"	"	"	"		
Vinyl chloride	ND	0.500	"	"	"	"	"		
Bromodichloromethane	ND	0.500	"	"	"	"	"		
Dibromomethane	ND	0.500	"	"	"		"	"	
Dichlorodifluoromethane	ND	2.00	"	"	"	"	"		
Vinyl acetate	ND	2.00	"	"	"	"	"		
Trichlorofluoromethane	ND	2.00	"	"	"	"	"		
Chloroethane	ND	0.500	"	"	"	"	"		
DIPE	ND	0.500	"	"	"	"	"		
1,1-dichloropropene	ND	0.500	"	"	"	"	"		
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"	"		
1,2,3-Trichloropropane	ND	2.00	"	"	"	"	"		
2-Hexanone	ND	2.00	"	"	"	"	"		
TAME	ND	2.00	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.6 %	70	-130	"	"	"	"	
Surrogate: Dibromofluoromethane		103 %	70	-130	"	"	"	"	
Surrogate: Perdeuterotoluene		97.0 %	70	-130	"	"	"	"	
Gasoline (C6-C12)	ND	50.0	"	"	"	"	"	EPA 8015M	



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

## Pacific Analytical Laboratory

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
On-site supply well (6020012-05) Water	Sampled: 13-Feb-06 11:38	Receiv	ed: 13-Feb	<b>-06 16:02</b>								
1,1,1,2-Tetrachloroethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B				
1,1,1-Trichloroethane	ND	0.500	"	"	"	"		"				
1,1,2,2-Tetrachloorethane	ND	2.00	"	"	"	"		"				
1,1,2-Trichloroethane	ND	2.00	"	"	"	"		"				
1,1,2-Trichloroethene	ND	0.500	"	"	"	"		"				
1,1-Dichloroethane	ND	0.500	"	"	"	"	"	"				
1,1-Dichloroethene	ND	0.500	"	"	"	"		"				
ETBE	ND	0.500	"	"	"	"		"				
1,2,3-Trichlorobenzene	ND	0.500		"		"		"				
TBA	ND	2.50		"		"		"				
1,2,4-Trichlorobenzene	ND	0.500	"	"	"			"				
1,2,4-Trimethylbenzene	ND	2.00	"	"	"	"		"				
1,2-Dibromo-3-Chloropropane	ND	2.00		"		"		"				
1,2-Dibromoethan	ND	2.00	"		"	"		"				
1,2-Dichlorobenzene	ND	0.500	"	"	"	"		"				
Ethanol	ND	1000	"	"	"	"		"				
1,2-dichloroethane	ND	0.500	"	"	"	"		"				
1,2-Dichloropropane	ND	0.500	"	"	"	"		"				
1,3,5-Trimethylbenzene	ND	0.500	"	"	"	"		"				
1,3-dichlorobenzene	ND	0.500	"	"	"	"		"				
1,3-dichloropropane	ND	0.500	"		"	"		"				
1,4-Dichlorbenzene	ND	0.500	"		"	"		"				
2,2-Dichloropropane	ND	2.00	"		"	"		"				
2-Chlorotoluene	ND	0.500		"		"		"				
2-nitropropane	ND	2.00	"		"	"		"				
4-Chlorotoluene	ND	0.500	"		"	"		"				
4-Isopropyltoluene	ND	0.500	"		"	"		"				
ACETONE	ND	5.00		"		"		"				
Acetonitrile	ND	0.500				"		"				
Alylchloride	ND	2.50				"		"				
Benzene	ND	0.500				"		"				
Bromobenzene	ND	0.500				"						
Bromochloromethane	ND	0.500				"		"				
Bromoform	ND	5.00					"					
Butan-2-one( MEK)	ND	2.00				"	"					
Carbon bisulfide	ND	0.500			"	"	"	"				
Chlorobenzene	ND	2.00			"	"	"	"				
Chieferen		2.00										

Pacific Analytical Laboratory



Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

# Pacific Analytical Laboratory

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
On-site supply well (6020012-05) Water	Sampled: 13-Feb-06 11:38	Receiv	ed: 13-Feb	-06 16:02								
Chloroform	ND	0.500	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B				
Chloroprene	ND	0.500	"	"	"	"		"				
cis-1,2 dichloroethene	ND	0.500	"	"	"	"		"				
cis-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"		"				
CIS-1,4-Dichloro-2-butene	ND	2.50	"	"	"	"		"				
Dibromochloromethane	ND	2.00	"		"	"		"				
Diethylether	ND	0.500	"		"	"		"				
Ethyl methacrylate	ND	0.500	"		"	"		"				
Ethylbenzene	ND	0.500	"	"	"	"		"				
Freon 113	ND	0.500	"	"	"	"		"				
Hexachloro-1,3-Butadiene	ND	2.00	"		"	"		"				
Idomethane	ND	2.00	"		"	"		"				
Isopropylbenzene	ND	0.500	"		"	"		"				
m&p-Xylene	ND	1.00	"			"		"				
Methylene dichloride	ND	10.0	"			"		"				
Naphthene	ND	0.500	"			"		"				
n-Butylbenzene	ND	0.500	"			"		"				
n-Propylbenzene	ND	0.500	"			"		"				
o-xylene	ND	0.500	"			"		"				
Pentachloroethane	ND	1.00	"			"		"				
sec-Butylbenzene	ND	0.500	"	"	"	"		"				
Styrene	ND	2.00	"	"	"	"		"				
tert-Butylbenzene	ND	0.500	"			"		"				
Tetrachlorocarbon	ND	0.500	"			"		"				
Tetrachloroethene	ND	0.500	"			"		"				
Tetrahydrofuran	ND	5.00	"			"		"				
Toluene	ND	2.00	"			"		"				
MTBE	ND	0.500	"			"		"				
trans-1.4-Dichloro-2-butene	ND	2.50	"			"		"				
Trans-Di-1,2-Chloroethylene	ND	0.500	"			"		"				
Methyl isobutyl ketone	ND	0.500	"			"		"				
Chloromethane	3.58	0.500	"			"		"				
Bromomethane	ND	2.00	"			"		"				
Nitrobenzene	ND	10.0				"		"				
Vinyl chloride	ND	0.500				"		"				
Bromodichloromethane	ND	0.500	"			"	"					
Dibromomethane	ND	0.500	"			"	"					
Dioromoniculanc		0.500										

Pacific Analytical Laboratory



SOMA Environmental Engineering Inc. 6620 Owens Drive, Suite A Pleasanton CA, 94588

Project Number: 2841 Project Manager: Mansour Sepehr **Reported:** 01-Mar-06 11:29

# Volatile Organic Compounds by EPA Method 8260B

Project: 5565 Tesla Rd, Livermore

#### Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
On-site supply well (6020012-05) Water	Sampled: 13-Feb-06 11	:38 Receiv	ed: 13-Feb	-06 16:02					
Dichlorodifluoromethane	ND	2.00	ug/l	1	BB62201	13-Feb-06	21-Feb-06	EPA 8260B	
Vinyl acetate	ND	2.00	"	"	"	"		"	
Trichlorofluoromethane	ND	2.00	"	"	"	"		"	
Chloroethane	0.500	0.500	"	"	"	"		"	
DIPE	ND	0.500	"	"	"	"		"	
1,1-dichloropropene	ND	0.500	"	"	"	"		"	
trans-1,3-Dichloro-1-Propene	ND	0.500	"	"	"	"		"	
1,2,3-Trichloropropane	ND	2.00	"	"	"	"			
2-Hexanone	ND	2.00	"	"	"	"		"	
TAME	ND	2.00	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	70-1	130	"	"	"	"	
Surrogate: Dibromofluoromethane		103 %	70-1	130	"	"	"	"	
Surrogate: Perdeuterotoluene		99.0 %	70-1	130	"	"	"	"	
Gasoline (C6-C12)	ND	50.0	"	"	"	"	"	EPA 8015M	



SOMA Environmental Engineering Inc.	Project:	5565 Tesla Rd, Livermore	
6620 Owens Drive, Suite A	Project Number:	2841	Reported:
Pleasanton CA, 94588	Project Manager:	Mansour Sepehr	01-Mar-06 11:29

## Extractable Petroleum Hydrocarbons by 8015 DRO - Quality Control

# Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB62102 - EPA 3510B										
Blank (BB62102-BLK1)				Prepared &	Analyzed:	21-Feb-06				
Surrogate: Pentacosane	27.8		ug/l	50.0		55.6	50-140			
Diesel (C10-C24)	ND	50.0	"							
Motor Oil (C24-C36)	ND	250	"							
LCS (BB62102-BS1)				Prepared &	Analyzed:	21-Feb-06				
Surrogate: Pentacosane	46.0		ug/l	50.0		92.0	50-140			
Diesel (C10-C24)	714	50.0	"	1000		71.4	50-130			
LCS Dup (BB62102-BSD1)				Prepared &	Analyzed:	21-Feb-06				
Surrogate: Pentacosane	39.4		ug/l	50.0		78.8	50-140			
Diesel (C10-C24)	692	50.0	"	1000		69.2	50-130	3.13	40	

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SOMA Environmental Engineering Inc.	Project: 5565 Tesla Rd, Livermore	
6620 Owens Drive, Suite A	Project Number: 2841	Reported:
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	01-Mar-06 11:29

## **Pacific Analytical Laboratory**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch BB62201 - EPA 5030 Water MS										
Blank (BB62201-BLK1)				Prepared &	k Analyzed:	22-Feb-06				
Surrogate: 4-Bromofluorobenzene	50.4		ug/l	50.0		101	70-130			
Surrogate: Dibromofluoromethane	50.4		"	50.0		101	70-130			
Surrogate: Perdeuterotoluene	49.7		"	50.0		99.4	70-130			
1,1,1,2-Tetrachloroethane	ND	2.00	"							
1,1,1-Trichloroethane	ND	0.500	"							
1,1,2,2-Tetrachloorethane	ND	2.00	"							
1,1,2-Trichloroethane	ND	2.00	"							
1,1,2-Trichloroethene	ND	0.500								
1,1-Dichloroethane	ND	0.500								
1,1-Dichloroethene	ND	0.500								
ETBE	ND	0.500								
1,2,3-Trichlorobenzene	ND	0.500								
TBA	ND	2.50	"							
1,2,4-Trichlorobenzene	ND	0.500	"							
1,2,4-Trimethylbenzene	ND	2.00	"							
1,2-Dibromo-3-Chloropropane	ND	2.00	"							
1,2-Dibromoethan	ND	2.00	"							
1,2-Dichlorobenzene	ND	0.500								
Ethanol	ND	1000								
1,2-dichloroethane	ND	0.500								
1,2-Dichloropropane	ND	0.500								
1,3,5-Trimethylbenzene	ND	0.500								
1,3-dichlorobenzene	ND	0.500								
1,3-dichloropropane	ND	0.500	"							
1,4-Dichlorbenzene	ND	0.500	"							
2,2-Dichloropropane	ND	2.00								
2-Chlorotoluene	ND	0.500								
2-nitropropane	ND	2.00								
4-Chlorotoluene	ND	0.500								
4-Isopropyltoluene	ND	0.500								
ACETONE	ND	5.00	"							
Acetonitrile	ND	0.500	"							
Acrylonitrile	ND	2.50	"							
Alylchloride	ND	2.50	"							
Benzene	ND	0.500								
Bromobenzene	ND	0.500								

Pacific Analytical Laboratory

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SOMA Environmental Engineering Inc.	Project: 5565 Tesla Rd, Livermore	
6620 Owens Drive, Suite A	Project Number: 2841	Reported:
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	01-Mar-06 11:29

# Pacific Analytical Laboratory

		Pacific An	alytical	Laborat	tory					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB62201 - EPA 5030 Water MS										
Blank (BB62201-BLK1)				Prepared &	& Analyzed:	22-Feb-06				
Bromochloromethane	ND	0.500	"							
Bromoform	ND	5.00	"							
Butan-2-one( MEK)	ND	2.00	"							
Carbon bisulfide	ND	0.500	"							
Chlorobenzene	ND	2.00	"							
Chloroform	ND	0.500	"							
Chloroprene	ND	0.500	"							
cis-1,2 dichloroethene	ND	0.500	"							
cis-1,3-Dichloro-1-Propene	ND	0.500	"							
CIS-1,4-Dichloro-2-butene	ND	2.50	"							
Dibromochloromethane	ND	2.00	"							
Diethylether	ND	0.500	"							
Ethyl methacrylate	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Freon 113	ND	0.500	"							
Hexachloro-1,3-Butadiene	ND	2.00	"							
domethane	ND	2.00	"							
sopropylbenzene	ND	0.500	"							
n&p-Xylene	ND	1.00	"							
Methyl methacrylate	ND	8.50	"							
Methylene dichloride	ND	10.0	"							
Naphthene	ND	2.00	"							
n-Butylbenzene	ND	0.500	"							
n-Propylbenzene	ND	0.500	"							
p-xylene	ND	0.500	"							
Pentachloroethane	ND	1.00	"							
sec-Butylbenzene	ND	0.500	"							
Styrene	ND	2.00	"							
ert-Butylbenzene	ND	0.500	"							
Fetrachlorocarbon	ND	0.500	"							
Fetrachloroethene	ND	0.500	"							
Fetrahydrofuran	ND	5.00	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							
rans-1.4-Dichloro-2-butene	ND	2.50								
T Di 10 Chi	ND	2.50								

ND

0.500

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Pacific Analytical Laboratory

Trans-Di-1,2-Chloroethylene

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SOMA Environmental Engineering Inc.	Project: 5565 Tesla Rd, Livermore	
6620 Owens Drive, Suite A	Project Number: 2841	Reported:
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	01-Mar-06 11:29

## **Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB62201 - EPA 5030 Water MS										

Blank (BB62201-BLK1)			Prepared & Analyzed: 22-Feb-06						
Methyl isobutyl ketone	ND	0.500	ug/l						
Chloromethane	ND	0.500	"						
Bromomethane	ND	2.00							
Nitrobenzene	ND	10.0	"						
Vinyl chloride	ND	0.500	"						
Bromodichloromethane	ND	0.500							
Dibromomethane	ND	0.500							
Dichlorodifluoromethane	ND	2.00	"						
Vinyl acetate	ND	2.00	"						
Trichlorofluoromethane	ND	2.00	"						
Chloroethane	ND	0.500	"						
DIPE	ND	0.500	"						
1,1-dichloropropene	ND	0.500	"						
trans-1,3-Dichloro-1-Propene	ND	0.500	"						
1,2,3-Trichloropropane	ND	2.00	"						
2-Hexanone	ND	2.00	"						
TAME	ND	2.00	"						
Gasoline (C6-C12)	ND	50.0	"						
LCS (BB62201-BS1)				Prepared & Anal	yzed: 22-Feb-06				
Surrogate: 4-Bromofluorobenzene	49.0		ug/l	50.0	98.0	70-130			
Surrogate: Dibromofluoromethane	46.7		"	50.0	93.4	70-130			
Surrogate: Perdeuterotoluene	47.6		"	50.0	95.2	70-130			
1,1,2-Trichloroethene	90.2	0.500	"	100	90.2	70-130			
1,1-Dichloroethane	126	0.500		100	126	70-130			
1,1-Dichloroethene	105	0.500	"	100	105	70-130			
TBA	384	2.50		500	76.8	70-130			
1,2-dichloroethane	97.6	0.500		100	97.6	70-130			
	95.6	0.500	"	100	95.6	70-130			
Benzene	95.6 106	0.500 2.00		100 100	95.6 106	70-130 70-130			
Benzene Chlorobenzene									
Benzene Chlorobenzene Chloroform	106	2.00		100	106	70-130			
Benzene Chlorobenzene Chloroform Tetrachloroethene	106 91.6	2.00 0.500	"	100 100	106 91.6	70-130 70-130			
Benzene Chlorobenzene Chloroform Tetrachloroethene Toluene MTBE	106 91.6 91.2	2.00 0.500 0.500	"	100 100 100	106 91.6 91.2	70-130 70-130 70-130			

Pacific Analytical Laboratory

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SOMA Environmental Engineering Inc.	Project:	5565 Tesla Rd, Livermore	
6620 Owens Drive, Suite A	Project Number:	2841	Reported:
Pleasanton CA, 94588	Project Manager:	Mansour Sepehr	01-Mar-06 11:29

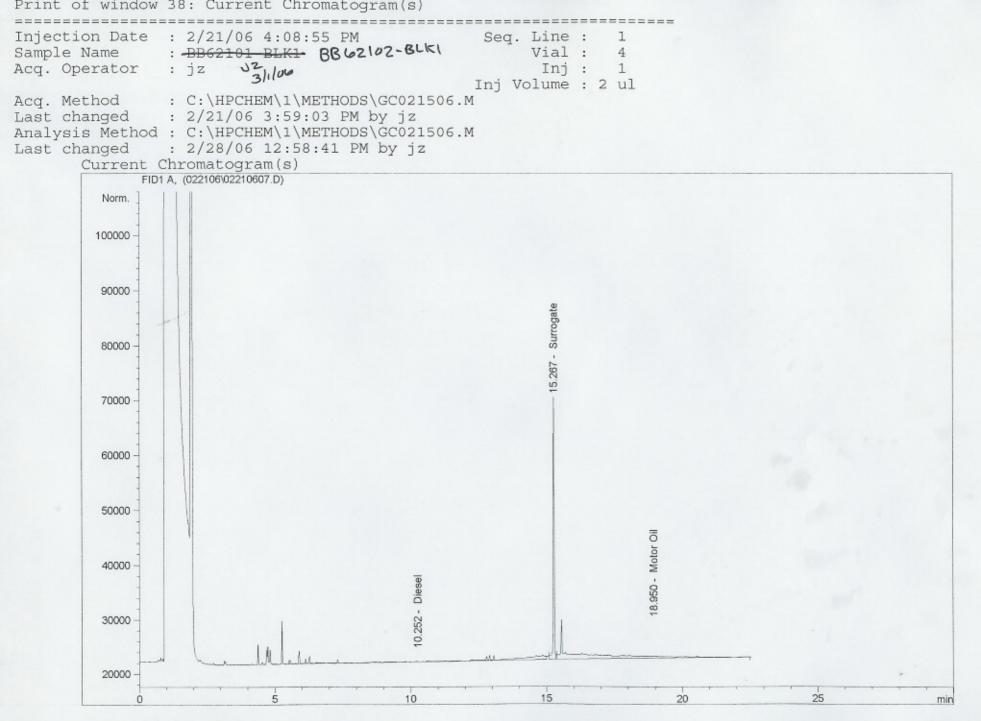
## **Pacific Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB62201 - EPA 5030 Water MS										
LCS Dup (BB62201-BSD1)				Prepared &	Analyzed:	22-Feb-06				
Surrogate: 4-Bromofluorobenzene	49.1		ug/l	50.0		98.2	70-130			
Surrogate: Dibromofluoromethane	47.4		"	50.0		94.8	70-130			
Surrogate: Perdeuterotoluene	47.5		"	50.0		95.0	70-130			
1,1,2-Trichloroethene	99.3	0.500	"	100		99.3	70-130	9.60	20	
1,1-Dichloroethane	135	0.500	"	100		135	70-130	6.90	20	A-0
1,1-Dichloroethene	109	0.500	"	100		109	70-130	3.74	20	
TBA	416	2.50	"	500		83.2	70-130	8.00	20	
1,2-dichloroethane	105	0.500	"	100		105	70-130	7.31	20	
Benzene	105	0.500	"	100		105	70-130	9.37	20	
Chlorobenzene	112	2.00	"	100		112	70-130	5.50	20	
Chloroform	98.9	0.500	"	100		98.9	70-130	7.66	20	
Tetrachloroethene	97.9	0.500	"	100		97.9	70-130	7.09	20	
Toluene	103	2.00	"	100		103	70-130	8.29	20	
MTBE	110	0.500	"	100		110	70-130	5.61	20	
Gasoline (C6-C12)	1850	50.0	"	2000		92.5	70-130	32.6	20	QR-02

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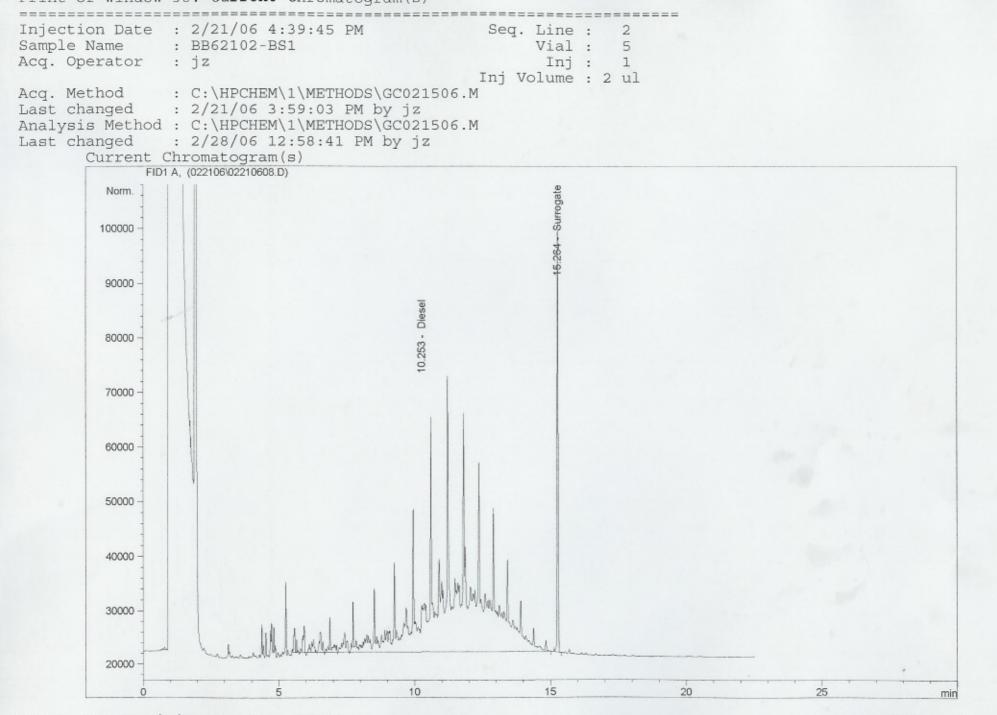


6620 C	Environmental Engineering Inc. Wens Drive, Suite A	Project: 5565 Tesla Rd, Livermore Project Number: 2841	Reported:				
Pleasar	nton CA, 94588	Project Manager: Mansour Sepehr	01-Mar-06 11:29				
		Notes and Definitions					
QR-02	The RPD result exceeded the QC control were accepted based on percent recoverie	l limits; however, both percent recoveries were acceptable. Sample results for thes and completeness of QC data.	ne QC batch				
D-35	D-35 Sample does not display a fuel pattern. Sample contains several discreet peaks.						
D-06	D-06 The sample chromatographic pattern does not resemble the fuel standard used for quantitation.						
A-01	Analyte recovery exceeded QC limits; he	owever, this analyte was not found to be present in any of the samples.					
DET	Analyte DETECTED						
ND	Analyte NOT DETECTED at or above the rep	porting limit					
NR	Not Reported						
dry	Sample results reported on a dry weight basis						
RPD	Relative Percent Difference						



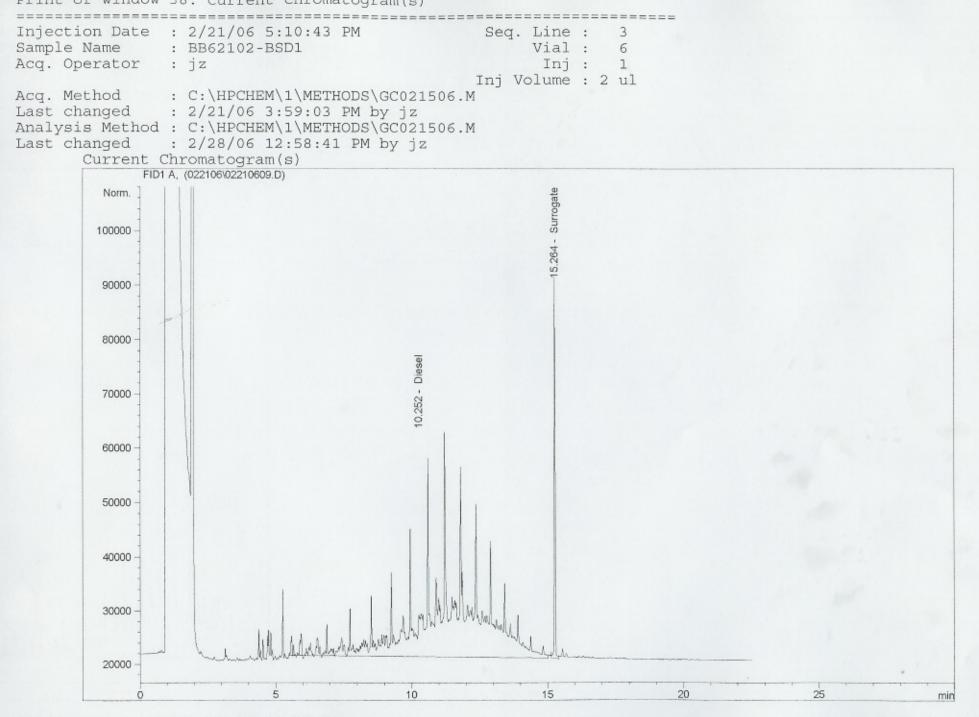
Instrument 1 3/1/06 11:46:49 AM jz

Page 1 of 1



#### Instrument 1 3/1/06 11:47:11 AM jz

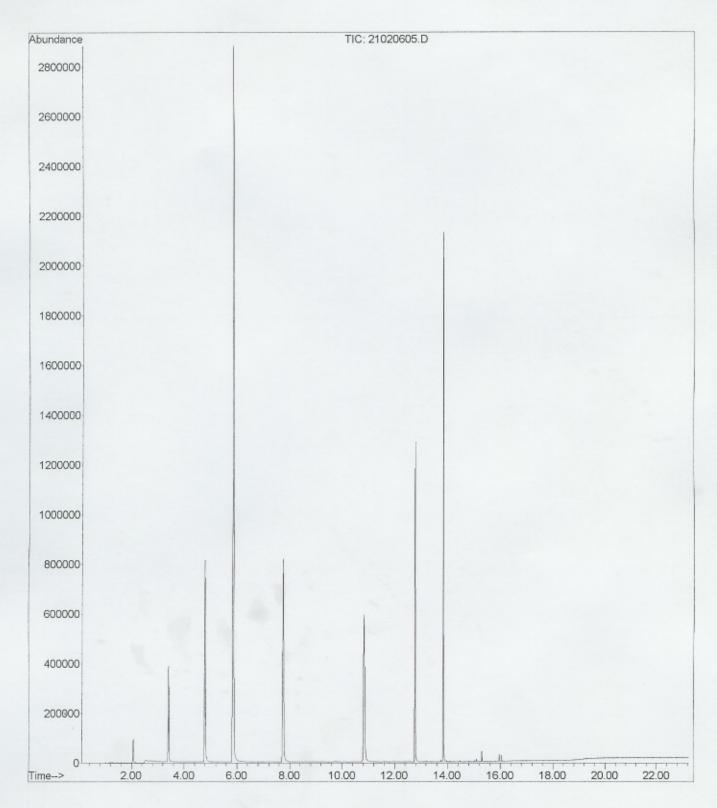
Page 1 of 1



Instrument 1 3/1/06 11:47:29 AM jz

Page 1 of 1

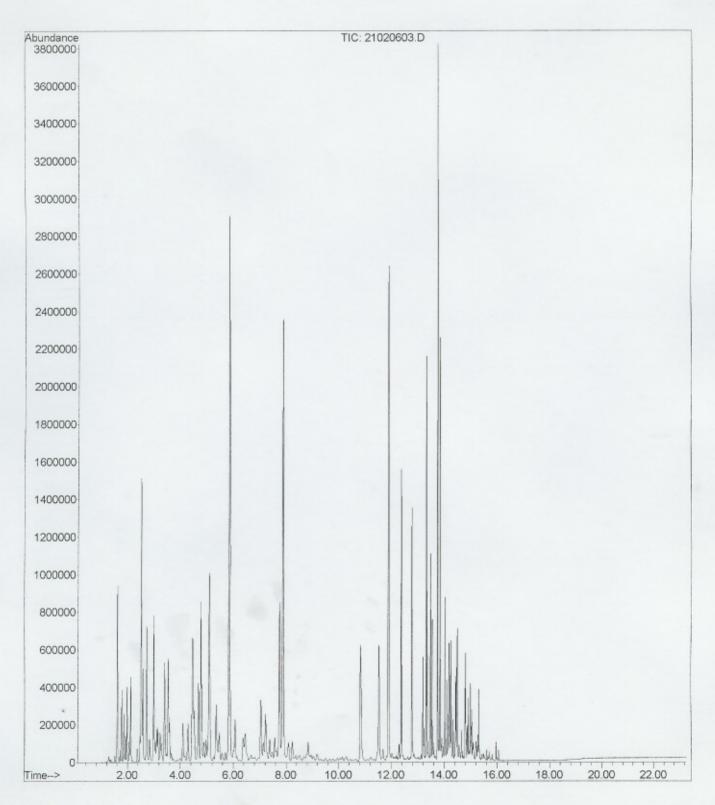
```
File :C:\MSDChem\1\DATA\2006-Feb-21-0924.b\21020605.D
Operator :
Acquired : 21 Feb 2006 11:41 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB62201-BLK1
Misc Info :
Vial Number: 5
```



```
File :C:\MSDChem\1\DATA\2006-Feb-21-0924.b\21020602.D
Operator :
Acquired : 21 Feb 2006 10:08 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB62201-BS1@voc
Misc Info :
Vial Number: 2
```



File	:C:\MSDChem\1\DATA\2006-Feb-21-0924.b\21020603.D
Operator	
Acquired	: 21 Feb 2006 10:39 am using AcqMethod OXY21506.M
Instrument	: PAL GCMS
Sample Name	: BB62201-BS1@gas
Misc Info	:
Vial Number	: 3





#### ANALYTICAL REPORT

Prepared for:

Pacific Analytical Laboratory 851 West Midway Ave Suite 201B Alameda, CA 94501

Date: 27-FEB-06 Lab Job Number: 184918 Project ID: STANDARD Location: 5565 Tesla Rd.

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:	Project Manager
Reviewed by:	Operations Manager

This package may be reproduced only in its entirety.

NELAP # 01107CA



#### CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received:

184918 Pacific Analytical Laboratory 5565 Tesla Rd. 02/14/06 02/14/06

This hardcopy data package contains sample and QC results for two water samples, requested for the above referenced project on 02/14/06. The samples were received on ice and intact.

Metals (EPA 6010B):

No analytical problems were encountered.

# **CHAIN OF CUSTODY FORM**

Page \_/ of \_/

**PAL** Pacific Analytical Laboratory 851 West Midway Ave., Suite 201B Alameda, CA <u>94501</u> 510-864-0364 Telephone 510-864-0365 Fax

PAL Login# 6020012

18

Proje	roject No: 2841 Sampler: Mehran Nowroozi / Teny PERINI							ERINI	Analyses/Method											
Proje	ct Name: 5565 Tesl	a Rd, Live	ermore		-		Tony Perin						BE 8260B		ist)		0/00			
				Co	mp	any:	SOMA En	viror	me	ntal	Eng	neering, Inc.		ł		4	T.			
Turn	around Time: Star	ndard		Te	l:	925	5-734-6400	<u> </u>					Ĩ.	F		2	:			
					Fax: 925-734-6401								Æ		m	<b>\</b>	1			
		Sampling	Date/Time		latri:	x	# of Containers Preservatives						10 files	- P-HdT	VDr.s (Intervened List)	metals	2			
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H <sub>2</sub> So4	NONE	ICE	Field Notes								
						<u> </u>	1 L Amber						X	k	1	-			+	
	MVV-1	2/13/06	1:10 PM		x		4 VOAs	X		X	X	Grab Sample								
		ļ				<b>†</b>	1 L Amber						<b>X</b>	I X			ł			
	MW-2		1.27 PM		X		4 VOAs	X		X	X	Grab Sample								
	MW-3				x		1 L Amber 4 VOAs	x		×	×	Grab Sample	X	X	1-	+			1	
			VEY7 FM				1										Ì			
-1	Off-site supply well		1110 Am		x		1 L Amber 4 VOAs 250 ml poly	x		x	x	Grab Sample, HNO₃	×	X		X		1		
-2	On-site supply well		1138 Am		X		1 L Amber 4 VOAs 250 ml poly	x		x	x	Grab Sample, HNO₃	*	*	ţ,	X		 *		
Sam	pler Remarks:			<u> </u>	1		Relinguis	hed	by:	I	Dat	e/Time: Received by:		- <u> </u>	1.	Da	te/T	ime:	<b>_</b>	<u> </u>
EDF		De Guid	Ambient		tact		Dr. M	te.	<u>,</u>	فعم	3	113/06 3:4 Fa	r				3.4	1500	n	
L							James	zun	igi	¥	2/1	1/06 1:00pm Jace Que	pe	m		2	114	13/11. 706	, _/	1:00 pm

# Lisa Brooker

From:"Majid Akhavan" <makhavan@pal-lab.net>To:"Lisa Brooker" <lisa@ctberk.com>Sent:Wednesday, February 15, 2006 10:46 AMSubject:Re: 5565 Tesla Rd. - C&T Login Summary (184918)

Hi Lisa,

Please analyze for following metals:

Cd, Cr, Zn, Pb, and Ni

Thanks,

Majid Akhavan Pacific Analytical Laboratory 851 W. Midway Ave. Suite 201B Alameda, CA 94501 Phone:(510) 864-0364

----- Original Message -----From: Lisa Brooker To: makhavan@pal-lab.net Cc: jzaininger@pal-lab.net Sent: Wednesday, February 15, 2006 10:19 AM Subject: 5565 Tesla Rd. - C&T Login Summary (184918)

Hi, The COC says metals. I am assuming you would like the Title 26 metals aka Cam 17 list. Is this correct? Thanks, Lisa

# **C&T Login Summary for 184918**

<b>Project:</b> STANDARD	Report To: Pacific Analytical Laboratory	Bill To: Pacific Analytic
Site: 5565 Tesla Rd.		851 West Midw
<b>Lab Login #:</b> 184918	Suite 201B	Suite 201B
<b>Report Due:</b> 02/22/06	Alameda, CA 94501	Alameda, CA 9
PO#:	ATTN: Majid Akhavan	ATTN: Majid A
C&T Proj Mgr: Lisa Brooker	(510) 864-0364	(510) 864-0364

Client ID	Lab ID	Sampled	Received	Matrix	Analyses	COC #	Comments
OFF-SITE SUPPLY WELL	001	02/13	02/14			6020012	
				Water	EDF		
				Water	T26 MET		
ON-SITE SUPPLY WELL	002	02/13	02/14			6020012	
				Water	T26 MET		



I b. H	104010	California	LUFT Metals	5565 Tesla Rd.
	184918	•		
	Pacific Analytical L	aboratory	Prep:	EPA 3010A
Project#: S			Analysis:	EPA 6010B
Matrix:	Water		Sampled:	02/13/06
Units:	ug/L		Received:	02/14/06
Diln Fac:	1.000		Prepared:	02/15/06
Batch#:	110475		Analyzed:	02/15/06
Field ID: Type:	OFF-SITE SUPPL SAMPLE	Y WELL	Lab ID:	184918-001
	Analyte	Result	R	L
Cadmium		ND		5.0
Chromium		15		10
Lead		ND		3.0
Nickel		ND		20
Zinc		1,700		20
Field ID: Type:	ON-SITE SUPPLY SAMPLE	WELL	Lab ID:	184918-002
	Analyte	Result	R	r
Cadmium		ND		5.0
Chromium		ND		10
Lead		ND		3.0
Nickel		ND		20
Zinc		ND		20
Type:	BLANK		Lab ID:	QC328123
	Analyte	Result	R	L
Cadmium		ND		5.0
Chromium		ND		10
Lead		ND		3.0
Nickel		ND		20
Zinc		ND		20
	······			2 V

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

		Califor	nia LUFT Metals	
Lab #:	184918		Location:	5565 Tesla Rd.
Client:	Pacific Analytical	Laboratory	Prep:	EPA 3010A
Project#:	STANDARD		Analysis:	EPA 6010B
Matrix:	Water		Batch#:	110475
Units:	ug/L		Prepared:	02/15/06
Diln Fac:	1.000		Analyzed:	02/15/06

.

Туре:	BS	Lab ID:	QC32	8124	
	Analyte	Spiked	Result	%REC	Limits
Cadmium		50.00	51.91	104	80-120
Chromium		200.0	198.0	·99	80-120
Lead		100.0	94.93	95	76-124
Nickel		500.0	497.6	100	80-120
Zinc		500.0	514.8	103	80-120

_			
Type	:		

BSD

Lab ID: QC328125

Analyte	Spiked	Result	%REC	Limits	RPI	) Lim
Cadmium	50.00	51.74	103	80-120	0	20
Chromium	200.0	197.9	99	80-120	0	20
Lead	100.0	93.13	93	76-124	2	20
Nickel	500.0	496.1	99	80-120	0	20
Zinc	500.0	516.0	103	80-120	0	20



Batch QC Report

	Californi	a LUFT Metals	
Lab #: 1	184918	Location:	5565 Tesla Rd.
Client: 1	Pacific Analytical Laboratory	Prep:	EPA 3010A
Project#: S	STANDARD	Analysis:	EPA 6010B
Field ID:	ON-SITE SUPPLY WELL	Batch#:	110475
MSS Lab ID	: 184918-002	Sampled:	02/13/06
Matrix:	Water	Received:	02/14/06
Units:	ug/L	Prepared:	02/15/06
Diln Fac:	1.000	Analyzed:	02/15/06

Type:

MS

Lab ID:

QC328126

Analyte	MSS Result	Spiked	Result	%RE(	2 Limits
Cadmium	<0.5500	50.00	48.84	98	80-120
Chromium	2.937	200.0	192.3	95	80-120
Lead	<0.5698	100.0	83.26	83	61-135
Nickel	1.766	500.0	463.7	92	77-120
Zinc	18.09	500.0	501.7	97	75-124

Type: MSD

Lab ID: QC328127

Analyte	Spiked	Result	%REC	Limits	RPI	) Lim
Cadmium	50.00	49.77	100	80-120	2	20
Chromium	200.0	195.6	96	80-120	2	20
Lead	100.0	84.44	84	61-135	1	23
Nickel	500.0	475.2	95	77-120	2	20
Zinc	500.0	504.6	97	75-124	1	20

# **Appendix D**

Specifications for Off-site well at 5443 Tesla Road

# Mansour Sepehr

From: Aris Krimetz [aris@wentevineyards.com]

- Sent: Thursday, February 16, 2006 5:06 PM
- To: Mansour Sepehr (E-mail)

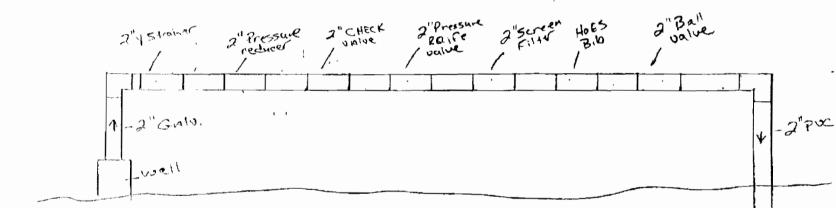
Subject: 5443 Tesla Road

#### Mansour-

According to documents provided by the previous owner, the total depth of the well is 125', and the pump is at 100'. It was installed about 1972 by the previous owner. We only re-piped on the well discharge side and connected it to the irrigation system, removing it from the potable system when we purchased the property in 1995/96. The potable water for the property is supplied from a municipal source.

## Aris Krimetz

Director of Engineering Wente Vineyards 5565 Tesla Road Livermore, CA 94550 Office: 925 456 2313 Cell: 925 519 9010 arisk@wentevineyards.com www.wentevineyards.com



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The water from the well was used for the of the vinyards. But the well has not Deen used for ABONT one year. And there are no plans to use the well in the near future

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TO IT.

MAIN LINE