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ENVIRONMENTAL ENGINEERING, INC
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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

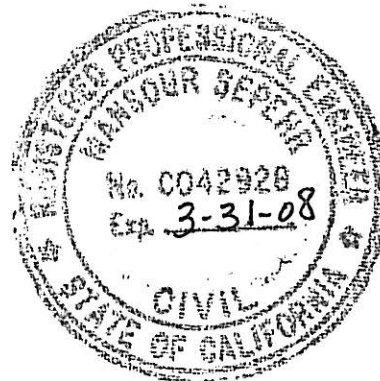
Dear Mr. Wickham:

SOMA's "Fourth Quarter 2007 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

**Fourth Quarter 2007
Groundwater Monitoring Report**

**Wente Winery
5565 Tesla Road
Livermore, California**

December 5, 2007

Project 2841

Prepared for:

**Mr. Aris Krimetz
5565 Tesla Road
Livermore, California**



ENVIRONMENTAL ENGINEERING, INC.

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Certification Statement

Claimant

Philip R. Wentz

Name

Vice Chairman

Title

5565 Tesla Rd Livermore

Street Address

City

94550

Zip

I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report were prepared under my direction and to the best of my knowledge true and correct.



Signature

11-29-07

Date

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Aris Krimetz for Wente Winery, located at 5565 Tesla Road, Livermore, California, to comply with requirements of the Alameda County Environmental Health Services and the California Regional Water Quality Control Board for the Fourth Quarter 2007 groundwater monitoring event.



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



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- Appendix B: Table of Elevations and Coordinates for Monitoring Wells Surveyed by Harrington Surveys Inc. and Field Measurements of Physical, Chemical and Biodegradation Parameters of the Groundwater Samples at Time of Sampling
- Appendix C: Specifications for Off-site Well at 5443 Tesla Road
- Appendix D: Chain of Custody Form and Laboratory Report

1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of Mr. Aris Krimetz for Wente Winery, located at 5565 Tesla Road, Livermore, California (the Site, Figure 1).

This report summarizes results of the Fourth Quarter 2007 groundwater monitoring event conducted at the Site on October 29, 2007, and includes laboratory analysis results for the groundwater samples.

A natural attenuation study was conducted during this monitoring event, to determine whether 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 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 UST area.

1.2 Previous Activities and Investigations

1987: Two fuel USTs were removed from the Site. There is no information regarding their condition or evidence of leakage. In 1990, the ACEHS issued a notice of violation 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.

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 recognized environmental concerns. 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 shows 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 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.

May 2005: On May 5, 2005, SOMA oversaw drilling by Woodward Drilling (Woodward) of three monitoring wells, MW-1 through MW-3 (Figure 2). On May 20, 2005, Woodward developed the newly installed wells.

June 24, 2005: SOMA oversaw drilling by Woodward of 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 to the former steam-cleaning area. 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 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 a predominantly 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.

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

2. RESULTS

The following sections provide results of field measurements and laboratory analyses for the October 29, 2007 groundwater monitoring event. Based on the directive of the ACEHS in a letter dated March 26, 2007, sampling has been revised to include supply wells on a quarterly basis and sampling of the existing monitoring wells has been temporarily discontinued. This report details sampling of the supply wells.

2.1 Field Measurements

Depths to groundwater at the supply wells were not measured due to the inaccessibility of these wells. Existing pumps and caps prevented measurement of the groundwater elevations.

The field notes in Appendix B show the detailed measurements of 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.

Upon equalization of the surrounding aquifer at the well locations and termination of the purge cycle, DO concentrations at the on- and off-site supply wells were 1.14 mg/L and 1.20 mg/L, respectively. Oxygen reduction potential (ORP) showed positive redox potentials in both supply wells. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes removal of organic mass from contaminated groundwater by indigenous bacteria in the subsurface during release of the transfer of electrons.

2.2 Sampling of the Supply Wells

SOMA's field personnel extracted groundwater from both the on- and off-site supply wells, using the downhole pump within each well. The off-site supply well is located at 5443 Tesla Road. During purging activities, the groundwater was measured for parameters such as DO, pH, temperature, electrical conductivity (EC), and ORP using a Hanna HI-9828 multi-parameter instrument. Turbidity was measured using a Hanna HI-98703 portable turbidimeter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

Approximately 70 gallons of groundwater were purged from each of the two supply wells. After the purge cycle was terminated, a groundwater sample was

collected from each well. Field measurements taken from each supply well during purging activities are shown in Appendix B.

Based on the information supplied by Wentz, the total depth of the off-site supply well is 125 feet bgs. SOMA is currently obtaining information for the on-site supply well. In 1972, the pump was installed at 100 feet bgs. The water from this well is used solely for irrigation of the vineyards. The letter referencing the off-site supply well and piping diagram of the pump are included in Appendix C.

2.3 Laboratory Analysis

Historical groundwater analysis results are shown in Table 1 for the following: total petroleum hydrocarbons as gasoline (TPH-g), as diesel (TPH-d), and as motor oil (TPH-mo); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary-butyl ether (MtBE).

During this monitoring event, all TPH-g, TPH-d, TPH-mo, BTEX, and MtBE constituents were below the laboratory-reporting limit in groundwater samples collected from supply wells.

Table 2 shows analytical results for gasoline-oxygenates and lead scavengers. During this monitoring event, all gasoline oxygenates and lead scavengers were below the laboratory-reporting limit in groundwater samples collected from supply wells.

Table 3 shows the historical concentrations of volatile organic compounds (VOCs) in the groundwater. Tetrachloroethene, 1,1,1-trichloroethane, cis-1,2-dichloro-ethene, trans-1,2-dichloroethene, vinyl chloride, 1,2-dichloropropane, and 1,1-dichloroethene were all below the laboratory-reporting limit in the groundwater samples collected from the supply wells during this monitoring event. All other VOCs were also below the laboratory-reporting limit in the supply wells.

Table 4 shows historical concentrations of metals in the groundwater. The table shows the following for the supply wells:

1. In the on-site supply well, all cadmium, chromium, lead, and nickel analytes were below the laboratory-reporting limit, and zinc was detected at 24 µg/L.
2. In the off-site supply well, all cadmium and lead analytes were below the laboratory-reporting limit. Chromium, nickel and zinc were detected at 8.7 µg/L, 7.8 µg/L and 710 µg/L, respectively.

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

3. CONCLUSIONS AND RECOMMENDATIONS

Results of the Fourth Quarter 2007 groundwater monitoring event are summarized below.

- Based on results of the bioattenuation study, indigenous bacteria have effectively removed organic mass from the impacted groundwater in the subsurface. This is evidenced by the positive redox potentials observed in the water supply wells.
- All tested analytes were below the laboratory-reporting limit in the water supply wells, with the exception of zinc in on-site water supply well and chromium, nickel and zinc in the off-site water supply well.
- Based on CRWQCB Environmental Screening Levels (ESLs) for groundwater that is used as a drinking water source, the allowable chromium, nickel and zinc concentration in groundwater are 50, 100 and 500 µg/L, respectively. Comparison of ESL values of the chromium, nickel and zinc with the present concentrations of lead and zinc in the off-site water supply indicates that only the existing concentration of zinc at 710 ug/L is higher than allowable limit. For the on-site water supply well, zinc concentration of 24 µg/L is well below the ESL value of 500 µg/L. Since the detection limit of lead (3.4 ug./L) is already higher than its ESL value (2.5 µg/L) it is difficult to comment about lead at this time for on and off-site water supply wells.
- In the past, chlorinated solvents including chloromethane and chloroethane were detected in the groundwater. During the last several monitoring events, no chlorinated solvents were detected.
- Based on the previous detection of tetrahydrofuran in the off-site supply well, on August 23, 2006 the ACEHS requested analysis of this compound to be continued. No tetrahydrofuran was detected either during this monitoring event or the several previous quarterly sampling events.

Based on the ACEHS letter dated March 26, 2007:

- SOMA plans to install groundwater monitoring wells next to the former steam-cleaning area. SOMA will conduct quarterly groundwater sampling of the wells once they are installed.

FIGURES

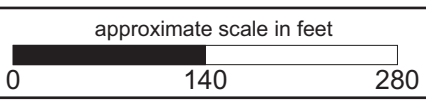
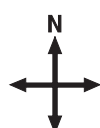
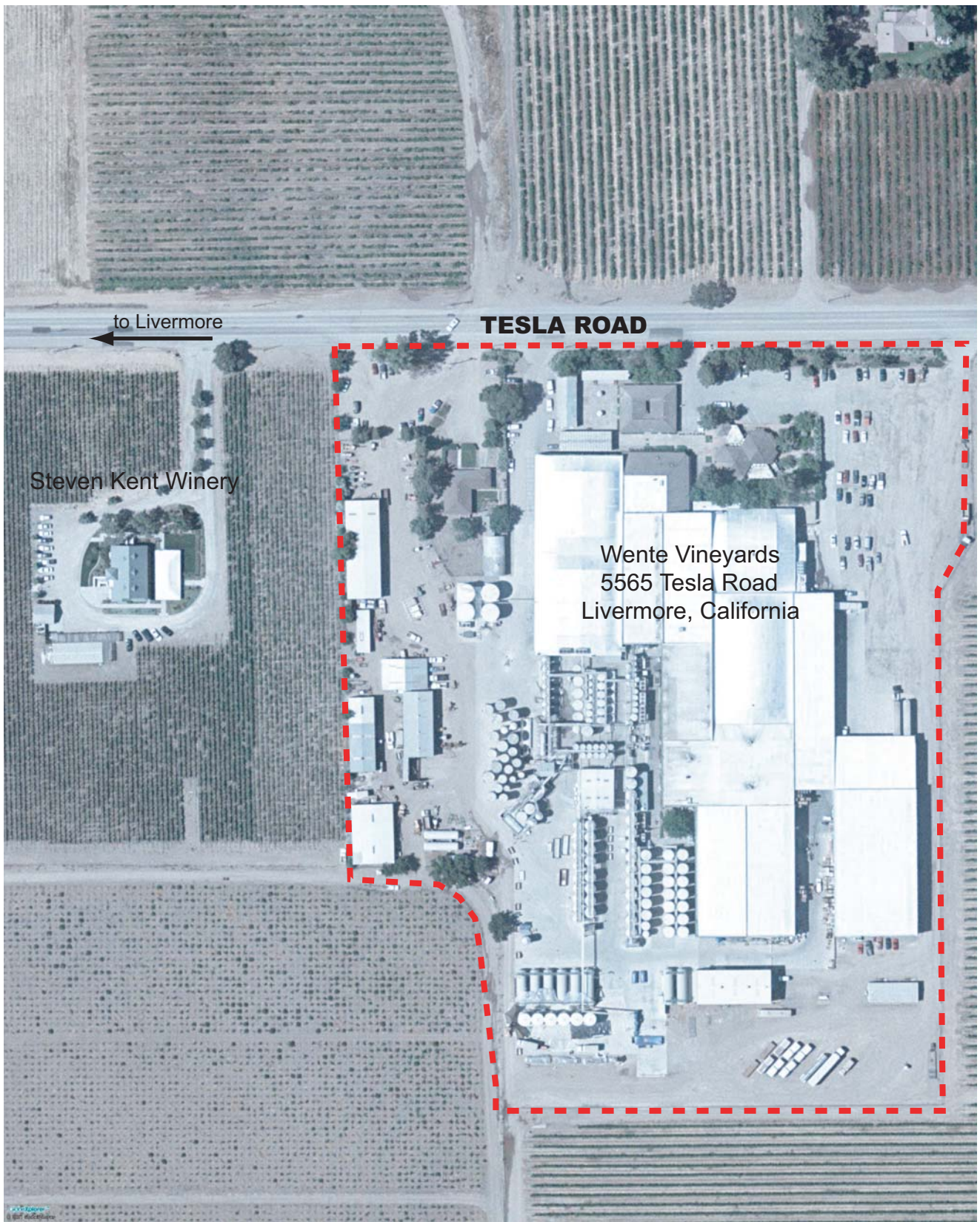







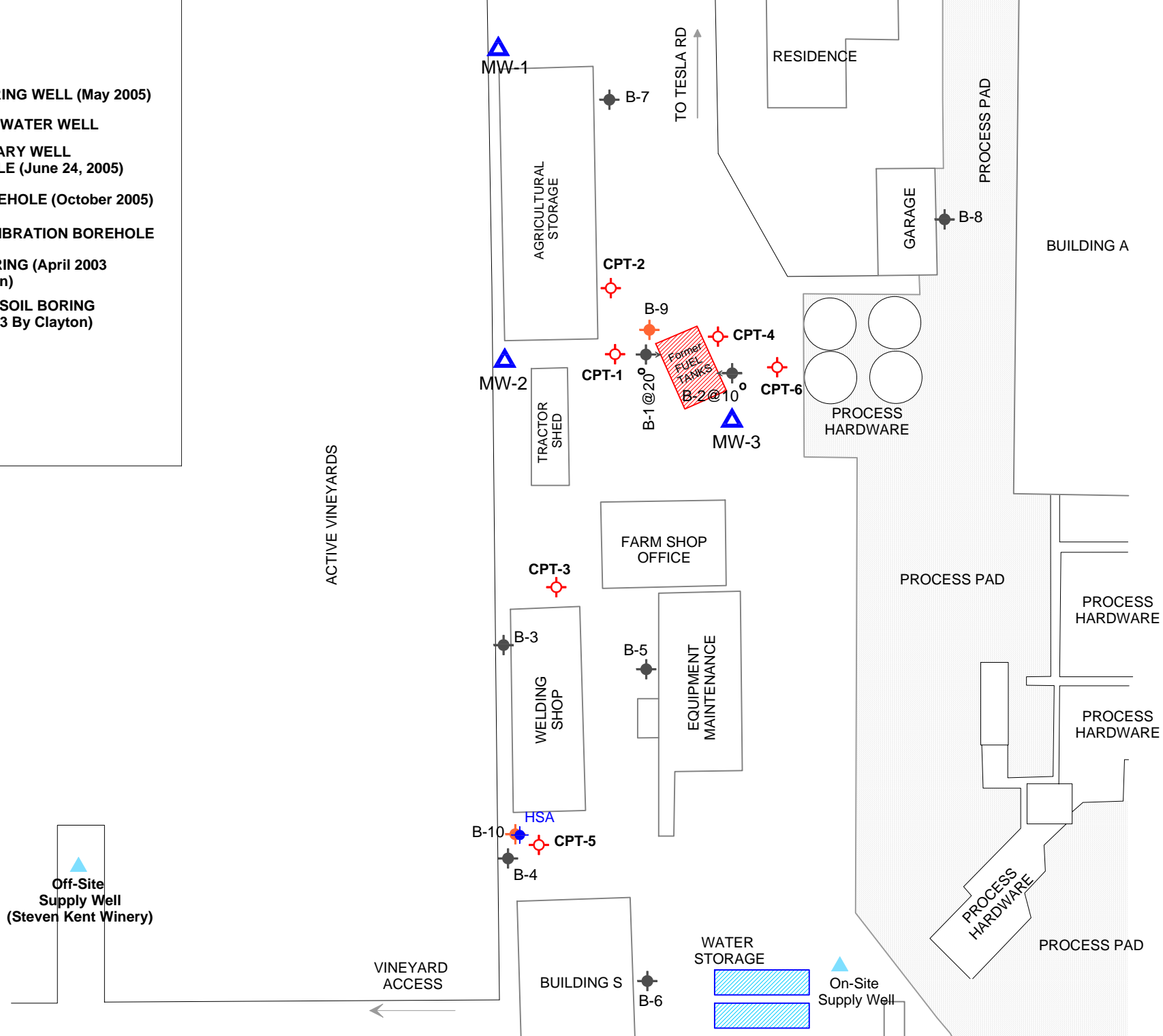
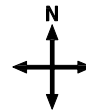


Figure 1: Site vicinity map.

-  MONITORING WELL (May 2005)
-  PRIVATE WATER WELL
-  TEMPORARY WELL BOREHOLE (June 24, 2005)
-  CPT BOREHOLE (October 2005)
-  HSA CALIBRATION BOREHOLE
-  SOIL BORING (April 2003 By Clayton)
-  ANGLED SOIL BORING (April 2003 By Clayton)



approximate scale in feet

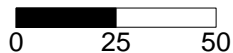


Figure 2: Map showing locations of newly installed wells, temporary well boreholes, and previous soil borings installed by Clayton group.

TABLES

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)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)
MW-1	5/20/2005	615.16	6.10	609.06	<200	<50	320 YZ	<0.5	<0.5	<0.5	<1.0	<0.5
	9/13/2005	615.16	9.19	605.97	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	11/28/2005	615.16	8.90	606.26	<50	150 YZ	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	2/13/2006	615.16	6.29	608.87	<50	<50	<250	<0.5	<2.0	<0.5	<1.0	<0.5
	5/5/2006	615.16	5.23	609.93	<50	70 HY	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	615.16	7.54	607.62	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	615.16	8.97	606.19	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	615.16	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
MW-2	5/20/2005	616.03	6.69	609.34	<200	<50	<300	<0.5	<0.5	<0.5	<1.0	<0.5
	9/13/2005	616.03	9.30	606.73	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	11/28/2005	616.03	9.20	606.83	<50	<50	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	2/13/2006	616.03	6.52	609.51	<50	76.5 D ³⁵	657 D ⁰⁶	<0.5	<2.0	<0.5	<1.0	<0.5
	5/5/2006	616.03	5.58	610.45	<50	50 HY	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	616.03	8.09	607.94	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	616.03	9.00	607.03	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	616.03	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	5/20/2005	617.32	7.04	610.28	<200	680	<300	<0.5	1.58	<0.5	<1.0	<0.5
	9/13/2005	617.32	9.61	607.71	<50	300 Y	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	11/28/2005	617.32	9.60	607.72	<50	150 YZ	<300	<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)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)
MW-3 cont	2/13/2006	617.32	7.06	610.26	<50	<50	322 ^{D06}	<0.5	<2.0	<0.5	<1.0	<0.5
	5/5/2006	617.32	5.94	611.38	<50	61 HY	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	617.32	8.53	608.79	<50	76 HY	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	617.32	9.39	607.93	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	617.32	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
B-9	6/24/2005	NA	NA	NA	1,850,000	540,000 LY	<24,000	3,820	114,000	40,400	177,700	<462
B-10	6/24/2005	NA	NA	NA	<200	<50	<300	<0.5	4.23	1.10	4.03	<0.5
Onsite Supply Well	5/20/2005	NS	NM	NC	<200	<50	<300	<0.5	0.85	<0.5	<1.0	<0.5
	11/28/2005	NS	NM	NC	<50	100 YZ	<300	<0.5	<2.0	<0.5	<1.0	<0.5
	2/13/2006	NS	NM	NC	<50	91.8	<250	<0.5	<2.0	<0.5	<1.0	<0.5
	5/5/2006	NS	NM	NC	<50	52 Y	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	NS	NM	NC	<50	95 YZ	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	4/30/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/8/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
10/29/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5	
Offsite Supply Well	5/20/2005	NS	NM	NC	<200	<50	<300	0.77	1.08	<0.5	<1.0	<0.5
	11/28/2005	NS	NM	NC	<5,380	120 YZ	<300	<53.8	<215	<53.8	<108	<53.8
	1/16/2006	NS	9.65	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	NS	NM	NC	<50	<50	<250	<0.5	<2.0	<0.5	<1.0	<0.5
	5/5/2006	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	4/30/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	8/8/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
	10/29/2007	NS	NM	NC	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<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)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)
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Notes:

- 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 storage 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.
- 7) 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

H: Heavier hydrocarbons contributed to the quantitation

L: Lighter weight hydrocarbons contributed to the quantitation

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)

As of the First Quarter 2007, supply wells are to be analyzed on a quarterly basis and sampling of monitoring wells is temporarily discontinued.

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates & Lead Scavengers
Wente Vineyards
5565 Tesla Road, Livermore, California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-1	9/13/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	2/13/2006	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	5/5/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA
MW-2	9/13/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	2/13/2006	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	5/5/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates & Lead Scavengers
Wente Vineyards
5565 Tesla Road, Livermore, California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3	9/13/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	2/13/2006	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	5/5/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA
Onsite Supply Well	11/28/2005	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	2/13/2006	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	5/5/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/30/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/8/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5
10/29/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
Offsite Supply Well	11/28/2005	<269	<53.8	<53.8	<215	<53.8	<215
	1/16/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	<2.5	<0.5	<0.5	<2.0	<0.5	<2.0
	5/5/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/30/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5
8/8/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
10/29/2007	<10	<0.5	<0.5	<0.5	<0.5	<0.5	

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates & Lead Scavengers
Wente Vineyards
5565 Tesla Road, Livermore, California

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

- 1) A grab sample was collected after well development on May 20, 2005.
- 2) 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.

As of the First Quarter 2007, supply wells are to be analyzed on a quarterly basis and sampling of monitoring wells is temporarily discontinued.

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 3
Historical Analytical Results For Volatile Organic Compound
Analyses in Groundwater Samples
Wente Vineyards
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	9/13/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	5/5/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA	NA
MW-2	9/13/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	5/5/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA	NA
MW-3	9/13/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	5/5/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	NA	NA	NA	NA	NA	NA	NA

Table 3
Historical Analytical Results For Volatile Organic Compound
Analyses in Groundwater Samples
Wente Vineyards
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)
Onsite Supply Well	11/28/2005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2/13/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	5/5/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/15/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	11/2/2006	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/30/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	4/30/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	8/8/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	10/29/2007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Offsite Supply Well	11/28/2005	<53.8	<53.8	<53.8	<53.8	<53.8	<53.8
1/16/2006		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2/13/2006		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
5/5/2006		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
8/15/2006		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
11/2/2006		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/30/2007		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4/30/2007		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
8/8/2007		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
10/29/2007		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical Analytical Results For Volatile Organic Compound
Analyses in Groundwater Samples
Wente Vineyards
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)
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Notes:

- 1) A grab sample was collected after well development on May 20, 2005. However, the first time volatile organic compounds (VOCs) were analyzed was during the Third Quarter 2005 monitoring event.
 - 2) 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.

As of the First Quarter 2007, supply wells are to be analyzed on a quarterly basis and monitoring wells are analyzed semi-annually.

Volatile organic compounds (VOCs)

PCE:	tetrachloroethene	TCE:	1,1,1-trichloroethane
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 4
Historical Groundwater Analytical Results
Metals
Wente 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	9/13/2005	<5.0	<10	<3.0	<20	27
MW-2	9/13/2005	<5.0	<10	<3.0	<20	23
MW-3	9/13/2005	<5.0	<10	<3.0	<20	<20
B-10	6/24/2005	12	930	82	3,600	800
Onsite Supply Well	11/28/2005	<5.0	<10	<3.0	<20	62
	2/13/2006	<5.0	<10	<3.0	<20	<20
	5/5/2006	<5.0	<10	26	<20	<20
	8/15/2006	<5.0	<10	<3.0	34	60
	11/2/2006	<5.0	<10	<3.0	<20	<20
	1/30/2007	<1.0	2.30	<1.0	1.9	31
	4/30/2007	<5.0	<5.0	<3.0	<5.0	<20
	8/8/2007	<5.0	<5.0	<3.0	<5.0	610
	10/29/2007	<5.0	<5.0	<3.4	<5.0	24

Table 4
Historical Groundwater Analytical Results
Metals
Wente Vineyards
5565 Tesla Road, Livermore, California

Monitoring Well	Date	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)
Offsite Supply Well	11/28/2005	<5.0	<10	<3.0	<20	830
	1/16/2006	<5.0	<10	8.30	<20	650
	2/13/2006	<5.0	15	<3.0	<20	1700
	5/5/2006	<5.0	<10	26	<20	750
	8/15/2006	<5.0	<10	<3.0	<20	1,200
	11/2/2006	<5.0	<10	<3.0	<20	1,300
	1/30/2007	<1.0	<1.0	<1.0	4.0	7,200
	4/30/2007	<5.0	<5.0	<3.0	<5.0	720
	8/8/2007	<5.0	<5.0	3	<5.0	570
	10/29/2007	<5.0	8.7	<3.4	7.8	710

Notes:

- 1) Metals were tested at boring B-10 on June 24, 2005.
 - 2) 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

Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Field Activities

On October 29, 2007, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the Alameda County Environmental Health Services and the California Regional Water Quality Control Board. Figure 2 shows the locations of the wells.

Water Level Measurements

On October 29, 2007, field measurements and grab groundwater samples were collected from an on-site and an off-site supply well.

Prior to sample collection, each supply well was purged using an active downhole pump within each well. During the purging activities, the groundwater was measured for parameters such as DO, pH, temperature, EC, and the ORP using a Hanna HI-9828 multi-parameter instrument. Turbidity was measured using a Hanna HI-98703 portable turbidimeter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer. At the supply wells, groundwater was extracted using an active pump within the well.

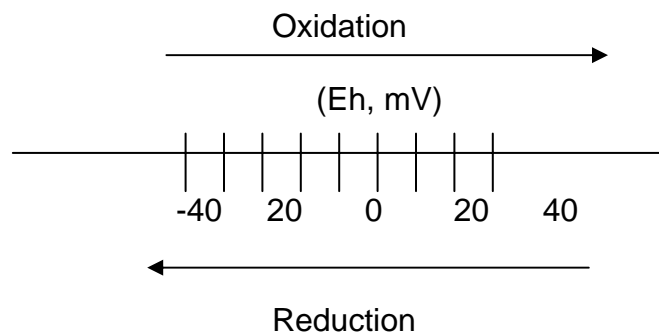
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater conductivity (EC) is directly related to the concentration of ions in solution.

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 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 O₂ in water is low (9 mg/L at 25 °C and 11 mg/L at 5 °C), and because the rate of O₂ 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 O₂ in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO₃⁻, MnO₂, Fe (OH)₃, SO₄²⁻ and others (Freeze and Cherry, 1979). As these oxidizing agents are consumed, the

groundwater environment becomes more and more reduced. If the process advances far enough, the environment may become so strongly reduced that the petroleum hydrocarbons 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.

Sampling

On October 29, 2007, for sampling purposes, after purging the groundwater samples from the supply wells were collected using the active downhole pumps.

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 1-L non-preserved amber glass container. The groundwater samples from each supply well were further transferred into two 250-mL poly containers. All groundwater samples were placed in an ice chest along with a COC form. On November 1, 2007, upon completion of the monitoring event, SOMA's field crew delivered the groundwater samples to Curtis & Tompkins in Berkeley, California.

Laboratory Analysis

Curtis & Tompkins, a California state-certified laboratory, analyzed the groundwater samples collected from the supply wells for TPH-g, TPH-d, TPH-mo, BTEX, MtBE, gasoline oxygenates, lead scavengers, VOCs, and metals.

EPA Method 5030B was used to prepare the samples for TPH-g, BTEX, MtBE, gasoline oxygenates, lead scavengers, and VOCs, which were analyzed using EPA Method 8260B. EPA Method 3520C was used to prepare the samples for TPH-d and TPH-mo, which were analyzed using Method 8015B.

Metals, which included cadmium, chromium, lead, nickel, and zinc were prepared using EPA Method 3010A and analyzed using EPA Method 6010B.

APPENDIX B

Table of Elevations and Coordinates for Monitoring
Wells Surveyed by Harrington Survey Inc.
and
Field Measurements of Physical, Chemical,
and 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)788-7359 E-Mail (ben5132@pacbell.net)

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

JUNE 05, 2005

ATTN: ELENA

5565 TESLA ROAD,
LIVERMORE CA.

SURVEY REPORT

CONTROLLING 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, ZONE 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.

FIELD SURVEY: JUNE 03, 2005.

BEN HARRINGTON
PLS 5132





ENVIRONMENTAL ENGINEERING, INC

Well No.: Offsite Supply Well Project No.: 2841
 Casing Diameter: _____ inch Address: Wente Vineyards
 Depth of Well: 125 ft 5565 Tesla Rd, Livermore
 Top of Casing Elevation: NS ft Date: October 29, 2007
 Depth to Groundwater: NM ft Sampler: Lizzie Hightower
 Groundwater Elevation: NC ft
 Water Column Height: NM ft
 Purged Volume: _____ gallons

Purging Method: Bailer Pump Active Well
 Sampling Method: Bailer Pump Active Well
 Color: No Yes Describe Brownish
 Sheen: No Yes Describe
 Odor: No Yes Describe

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
<u>2:00 PM</u>	<u>Started purging well</u>						
<u>2:20 PM</u>	<u>18</u>	<u>1.37</u>	<u>8.20</u>	<u>20.53</u>	<u>1334</u>	<u>180</u>	<u>+2.8</u>
<u>2:26 PM</u>	<u>32</u>	<u>1.20</u>	<u>8.22</u>	<u>20.51</u>	<u>1334</u>	<u>130</u>	<u>+2.7</u>
<u>2:31 PM</u>	<u>58</u>	<u>1.33</u>	<u>8.09</u>	<u>17.34</u>	<u>1387</u>	<u>65</u>	<u>+14.7</u>
<u>2:36 PM</u>	<u>88</u>	<u>1.20</u>	<u>8.06</u>	<u>18.96</u>	<u>1322</u>	<u>1.5</u>	<u>+15.6</u>
<u>2:39 PM</u>	<u>Sampled</u>						

Notes:



ENVIRONMENTAL ENGINEERING, INC

Well No.: onsite supply well
 Casing Diameter: — inch
 Depth of Well: NM ft
 Top of Casing Elevation: NS ft
 Depth to Groundwater: NM ft
 Groundwater Elevation: NC ft
 Water Column Height: NM ft
 Purged Volume: _____ gallons

Project No.: 2841
 Address: Wente Vineyards
 5565 Tesla Rd, Livermore
 Date: October 29, 2007
 Sampler: Lizzie Hightower

Purging Method: Bailer

Pump Active Pump

Sampling Method: Bailer

Pump Active Pump

Color: No Yes Describe _____

Sheen: No Yes Describe _____

Odor: No Yes Describe _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
3:15 pm	Started purging well						
3:21 pm	17	1.19	7.86	15.91	1375	0.85	+4.8
3:30 pm	33	1.20	7.83	17.02	1341	1.5	+10.3
3:35 pm	50	1.15	7.52	17.91	1317	1.4	+16.8
3:45 pm	70	1.14	7.55	18.06	1313	1.0	+17.9
3:48 pm	Sampled						

Notes:

APPENDIX C

Specifications for Off-site well at 5443 Tesla Road

Mansour Sepehr

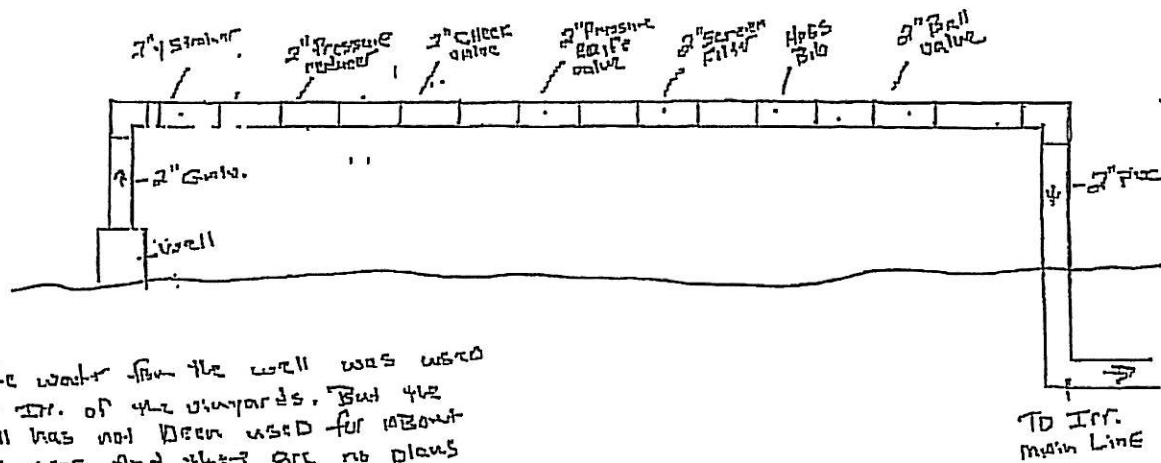
From: Aris Krimeiz [aris@wanlevineyards.com]
Sent: Thursday, February 16, 2006 5:06 PM
To: Mansour Sepehr (E-mail)
Subject: 5445 Tesla Road

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 Krimeiz
Director of Engineering
Wanle Vineyards
5565 Tesla Road
Livermore, CA 94550
Office: 925 456 2313
Call: 925 518 8010
aris.k@wanlevineyards.com
www.wanlevineyards.com

2/17/2006



The water from the well was used for irr. of the vineyards. But the well has not been used for about one year. And there are no plans to use the well in the near future

A.I. For Irr. in 2001

DATE: 11/11/01

11/11/01

APPENDIX D

Chain of Custody Form and Laboratory Report

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 08-Aug-07
Revision: 3 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 198895 Date Received: 11/1 Number of Coolers: 1
Client: SOMA Project: 5565 Tesla Rd

A. Preliminary Examination Phase

Date Opened: 11/1 By (print): Ken W. [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES NO

How many and where? _____ Seal date: _____ Seal name: _____

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO NA

4. Were custody papers dry and intact when received?..... YES NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO

6. Did you sign the custody papers in the appropriate place?..... YES NO

7. Was project identifiable from custody papers?..... YES NO

If YES, enter project name at the top of this form.

8. Describe type of packing in cooler: bags on ice

9. If required, was sufficient ice used? Samples should be ≤ 6 degrees C. YES NO

Type of ice: wet Temperature: no temp blank, cold on arrival.

10. Were Encore sampling devices present in the cooler?..... YES NO

If YES, enter time they were transferred to the freezer _____

B. Login Phase

Date Logged In: 11/1 By (print): K Wellbrock (sign) [signature]

1. Did all bottles arrive unbroken?..... YES NO

2. Were labels in good condition and complete (ID, date, time, signature, etc.)?... YES NO

3. Did bottle labels agree with custody papers?..... YES NO

4. Were appropriate containers used for the tests indicated?..... YES NO

5. Were correct preservatives added to samples?..... YES NO

6. Was sufficient amount of sample sent for tests indicated?..... YES NO

7. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES NO

8. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

BS: Added HNO₃ (619025) to 4 metal poly containers to achieve correct pH range.



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Laboratory Job Number 198895
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2841
Location : 5565 Tesla Rd, Livermore
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
OFF-SITE SUPPLY WELL	198895-001
ON-SITE SUPPLY WELL	198895-002

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. This report may be reproduced only in its entirety.

Signature: 
Project Manager

Date: 11/08/2007

Signature: 
Operations Manager

Date: 11/09/2007

CASE NARRATIVE

Laboratory number: 198895
Client: SOMA Environmental Engineering Inc.
Project: 2841
Location: 5565 Tesla Rd, Livermore
Request Date: 11/01/07
Samples Received: 11/01/07

This hardcopy data package contains sample and QC results for two water samples, requested for the above referenced project on 11/01/07. The samples were received on ice and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Metals (EPA 6010B):

No analytical problems were encountered.

Total Extractable Hydrocarbons			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2841	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	10/29/07
Units:	ug/L	Received:	11/01/07
Diln Fac:	1.000	Prepared:	11/03/07
Batch#:	131293	Analyzed:	11/06/07

Field ID: OFF-SITE SUPPLY WELL Lab ID: 198895-001
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	89	61-133

Field ID: ON-SITE SUPPLY WELL Lab ID: 198895-002
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	61-133

Type: BLANK Lab ID: QC413619

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	127	61-133

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2841	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	131293
Units:	ug/L	Prepared:	11/03/07
Diln Fac:	1.000	Analyzed:	11/06/07

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC413620

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,795	72	58-128

Surrogate	%REC	Limits
Hexacosane	89	61-133

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC413621

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,992	80	58-128	10	29

Surrogate	%REC	Limits
Hexacosane	98	61-133

RPD= Relative Percent Difference

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Field ID:	OFF-SITE SUPPLY WELL	Batch#:	131302
Lab ID:	198895-001	Sampled:	10/29/07
Matrix:	Water	Received:	11/01/07
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Ethanol	ND	1,000
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Field ID:	OFF-SITE SUPPLY WELL	Batch#:	131302
Lab ID:	198895-001	Sampled:	10/29/07
Matrix:	Water	Received:	11/01/07
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5
Tetrahydrofuran	ND	100

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	105	74-137
Toluene-d8	95	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Field ID:	ON-SITE SUPPLY WELL	Batch#:	131302
Lab ID:	198895-002	Sampled:	10/29/07
Matrix:	Water	Received:	11/01/07
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Ethanol	ND	1,000
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Field ID:	ON-SITE SUPPLY WELL	Batch#:	131302
Lab ID:	198895-002	Sampled:	10/29/07
Matrix:	Water	Received:	11/01/07
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5
Tetrahydrofuran	ND	100

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	109	74-137
Toluene-d8	95	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC413646	Batch#:	131302
Matrix:	Water	Analyzed:	11/05/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Ethanol	ND	1,000
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC413646	Batch#:	131302
Matrix:	Water	Analyzed:	11/05/07
Units:	ug/L		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5
Tetrahydrofuran	ND	100

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	103	74-137
Toluene-d8	94	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	131302
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC413647

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	112.3	90	59-149
Isopropyl Ether (DIPE)	25.00	22.27	89	59-120
Ethyl tert-Butyl Ether (ETBE)	25.00	22.43	90	65-134
Methyl tert-Amyl Ether (TAME)	25.00	22.39	90	67-132
1,1-Dichloroethene	25.00	24.72	99	80-133
Benzene	25.00	23.10	92	80-120
Trichloroethene	25.00	25.82	103	80-120
Toluene	25.00	22.82	91	80-122
Chlorobenzene	25.00	23.06	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	100	74-137
Toluene-d8	92	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC413648

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	120.8	97	59-149	7	20
Isopropyl Ether (DIPE)	25.00	22.42	90	59-120	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	22.29	89	65-134	1	20
Methyl tert-Amyl Ether (TAME)	25.00	22.35	89	67-132	0	20
1,1-Dichloroethene	25.00	26.17	105	80-133	6	20
Benzene	25.00	23.17	93	80-120	0	20
Trichloroethene	25.00	25.73	103	80-120	0	20
Toluene	25.00	22.77	91	80-122	0	20
Chlorobenzene	25.00	23.05	92	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-122
1,2-Dichloroethane-d4	100	74-137
Toluene-d8	94	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2841	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	131302
Units:	ug/L	Analyzed:	11/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC413649

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,039	104	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	102	74-137
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC413650

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,018	102	70-130	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	104	74-137
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Metals Analytical Report

Lab #: 198895	Location: 5565 Tesla Rd, Livermore
Client: SOMA Environmental Engineering Inc.	Prep: EPA 3010A
Project#: 2841	Analysis: EPA 6010B
Matrix: Water	Sampled: 10/29/07
Units: ug/L	Received: 11/01/07
Diln Fac: 1.000	Prepared: 11/06/07
Batch#: 131350	Analyzed: 11/06/07

Field ID: OFF-SITE SUPPLY WELL Lab ID: 198895-001
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	8.7	5.0
Lead	ND	3.4
Nickel	7.8	5.0
Zinc	710	20

Field ID: ON-SITE SUPPLY WELL Lab ID: 198895-002
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	3.4
Nickel	ND	5.0
Zinc	24	20

Type: BLANK Lab ID: QC413857

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	3.4
Nickel	ND	5.0
Zinc	ND	20

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Metals Analytical Report			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3010A
Project#:	2841	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	131350
Units:	ug/L	Prepared:	11/06/07
Diln Fac:	1.000	Analyzed:	11/06/07

Type: BS Lab ID: QC413858

Analyte	Spiked	Result	%REC	Limits
Cadmium	50.00	52.81	106	80-120
Chromium	200.0	202.6	101	80-120
Lead	100.0	97.71	98	80-120
Nickel	500.0	503.7	101	80-120
Zinc	500.0	513.2	103	80-120

Type: BSD Lab ID: QC413859

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	51.51	103	80-120	2	20
Chromium	200.0	196.7	98	80-120	3	20
Lead	100.0	97.44	97	80-120	0	20
Nickel	500.0	490.4	98	80-120	3	20
Zinc	500.0	501.6	100	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report			
Lab #:	198895	Location:	5565 Tesla Rd, Livermore
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3010A
Project#:	2841	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	131350
MSS Lab ID:	198926-001	Sampled:	11/01/07
Matrix:	Water	Received:	11/02/07
Units:	ug/L	Prepared:	11/06/07
Diln Fac:	1.000	Analyzed:	11/06/07

Type: MS Lab ID: QC413860

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	<0.3555	50.00	51.64	103	80-120
Chromium	1.463	200.0	196.3	97	80-120
Lead	<1.150	100.0	93.80	94	76-120
Nickel	21.00	500.0	492.3	94	80-120
Zinc	139.5	500.0	630.1	98	80-123

Type: MSD Lab ID: QC413861

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	51.44	103	80-120	0	20
Chromium	200.0	195.9	97	80-120	0	20
Lead	100.0	92.63	93	76-120	1	20
Nickel	500.0	492.1	94	80-120	0	20
Zinc	500.0	642.5	101	80-123	2	20

RPD= Relative Percent Difference