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December 6, 2005

Project: 2841

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

Subject: Site Located at 5565 Tesla Road, Livermore, California

Dear Mr. Wickham:

SOMA's report entitled "Additional Site Investigation to Evaluate the Extent of Groundwater Contamination" for the subject site has been uploaded to the State's GeoTracker database 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





ENVIRONMENTAL ENGINEERING, INC 6620 Owens Drive, Suite A • Pleasanton, CA 94588-3334 TEL (925)734-6400 • FAX(925)734-6401

## ADDITIONAL SITE INVESTIGATION TO EVALUATE THE EXTENT OF GROUNDWATER CONTAMINATION

# Wente Winery Located at 5565 Tesla Road, Livermore, California

December 6, 2005

Project 2842

Prepared for

Mr. Aris Krimetz 5565 Tesla Road Livermore, California 94550

Prepared by

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

#### CERTIFICATION

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Aris Krimetz, corporate engineer for Wente Winery, which is located at 5565 Tesla Road, Livermore, California. This report details SOMA's investigation to complete site characterization, as proposed in SOMA's *Phase I: Soil and Groundwater Investigation* (July 2005). Alameda County Environmental Health's (ACEH's) staff reviewed the above-referenced report and concurred that an additional investigation was warranted to complete site characterization in their letter regarding *Fuel Leak Case No. RO0002585* (September 2005).

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



#### **SOMA** Environmental Engineering, Inc.

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### 1.0 INTRODUCTION

On behalf of Mr. Aris Krimetz, SOMA Environmental Engineering, Inc. (SOMA) has prepared this report documenting the investigation activities for the property located at 5565 Tesla Road, Livermore, California, hereby referred to as "the Site". Pursuant to Alameda County Environmental Health's (ACEH's) approval of SOMA's recommendation for further investigation to complete site characterization, a cone penetration test (CPT) and ultra violet induced fluorescence (UVIF) study was implemented. As proposed in SOMA's Phase I: Soil and Groundwater Investigation (July 2005) and in accordance with ACEH's approval stated in their letter Fuel Leak Case No. RO0002585 (September 2005), this report details SOMA's investigation to complete site characterization at the Site.

### 1.1 Site Background

The Site is located between South Vasco Road and Mines Road in Livermore, California (Figure 1) and operates as a winery. There are three aboveground fuel storage tanks, with a total capacity of 4,000 gallons, located on the premises.

In 1987, two fuel underground storage tanks (USTs) were removed from the Site. Without available records of the tank removal, there is no information regarding the condition of the tanks when removed or evidence of possible leaking.

In 1990, ACEH issued a notice of violation (NOV) for discharging waste sludge into an open ditch adjacent to a former steam-cleaning bay, which was located at the south end of the steel storage and welding shed. The NOV required sampling of the ditch area and around a stained drum, along with remediation of the contaminated areas. No available records reportedly exist documenting the implementation of the required tasks.

### **1.2 Previous Site Investigation Activities**

In accordance with Comerica Bank guidelines, the Clayton Group (Clayton) performed an ASTM D standard Phase I investigation to identify recognized environmental concerns (RECs). The Phase I study revealed the existence of the former USTs, the former waste discharge area, and a number of agricultural storage areas. Documents indicate agricultural chemicals were previously stored in Building S and in a detached garage. Clayton concluded that the identified areas constituted RECs and recommended sampling of these areas for relevant constituents of concern.

In 2003, Clayton performed a subsurface investigation at the Site to implement the recommendations of the Phase I report. Soil samples were analyzed for pesticides, herbicides, petroleum hydrocarbons, volatile organic compounds (VOCs), and heavy metals. Groundwater samples collected from beneath the former USTs and near the former steam cleaning areas were analyzed for petroleum hydrocarbons, VOCs, pesticides, and herbicides. Clayton concluded that a fuel release in the former UST area impacted the groundwater at concentrations that significantly exceeded Risk Based Screening Levels (RBSLs). In the former steam-cleaning bay, located south/southwest of, and presumably upgradient from the former UST pit, no total petroleum hydrocarbon (TPH) or VOCs were detected in the soil. However, gasoline and motor oil-range petroleum hydrocarbons were detected in the groundwater at concentrations that were slightly above RBSLs.

Clayton recommended an additional site characterization to further characterize the Site. Wente Winery retained SOMA to review Clayton's report and provide an alternate workplan. Upon reviewing Clayton's report, SOMA proposed the installation of three groundwater monitoring wells to evaluate the groundwater contaminant plume and determine the groundwater flow direction. ACEH reviewed SOMA's workplan and requested a revised workplan that would present a vicinity well survey, a regional hydrogeologic study, and an additional proposed site characterization.

Based on the ACEH's request, SOMA prepared a workplan that included a twophased approach for a thorough subsurface site investigation. The first phase of the investigation included 1) sampling on-site and two off-site water supply wells; 2) preparation of a health and safety plan, permit acquisition, and utility clearance; 3) installation and sampling of three piezometers; 4) developing and surveying piezometers; 5) laboratory analysis; and 6) preliminary evaluation of the groundwater flow and chemical contaminant plume. In addition, as part of the phase, SOMA drilled two confirmatory soil borings in close proximity of B-1 (B-9) and B-4 (B-10) and collected soil and groundwater samples to evaluate the current status of the soil and groundwater contamination beneath the Site. The results of the first phase of the investigation are presented in SOMA's *Phase I: Soil and Groundwater Investigation* report dated July 25, 2005.

The second phase of the investigation included 1) site characterization using CPT; 2) groundwater sampling; and 3) laboratory analysis. The results of the second phase of the investigation are presented in the following text.

## 2.0 SCOPE OF WORK

The results of the previous site investigation revealed the presence of fuel hydrocarbons in the soil and groundwater in the area of the former USTs and metals in the groundwater near the former steam-cleaning bay. Because the bulk of field activities conducted in the first phase of the investigation did not completely characterize the extent of contamination in the soil and groundwater, an additional investigation was warranted. The following describes the tasks performed to accomplish the scope of the investigation:

- Task 1:Permit Acquisition, Health and Safety Plan Preparation, and<br/>Subsurface Utility Clearance
- Task 2:Field Activities Hollow Stem Auger (HSA) Calibration, ConePenetration Test (CPT) and Ultra Violet Induced Fluorescence(UVIF) Study, and Groundwater Sampling
- Task 3:Laboratory Analysis
- Task 4: Evaluation of Site Hydrogeology
- Task 5:Summary of Groundwater Analytical Results

# 2.1 Permit Acquisition, Health and Safety Plan Preparation, and Subsurface Utility Clearance

Prior to initiating field activities, SOMA obtained the necessary drilling permit from the Zone 7 Water Agency of Alameda County (permit no. 25172). The permit is attached as Appendix A.

Before conducting the field activities, a site-specific health and safety plan (HASP) was prepared by SOMA. The HASP was designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. The HASP established personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans.

SOMA also contacted Underground Service Alert (USA) to clear the drilling areas of underground utilities. Following USA clearance, SOMA retained a private utility locator to survey the proposed drilling areas and locate any additional subsurface conduits.

### 2.2 Field Activities

In accordance to ACEH's approval of SOMA's recommendation for further investigation to complete site characterization, a Cone Penetration Test (CPT) and Ultra Violet Induced Fluorescence (UVIF) study was implemented. As shown in Figure 2, six CPT boreholes were drilled at the Site. In addition, six groundwater-sampling boreholes were drilled adjacent to the CPT boreholes in order to collect depth-discrete groundwater samples from each water-bearing zone and/or each zone where the UVIF indicated contamination.

On October 26 and 27, 2005, under SOMA's oversight, Gregg Drilling and Testing, Inc. (Gregg) conducted the CPT drilling. Using a 25-ton truck mounted CPT rig, Gregg advanced the CPT boreholes, CPT-1 through CPT-6, to approximately 60 feet below ground surface (bgs). After advancing the boreholes, SOMA's field geologist reviewed the CPT borehole logs and determined the potential water-bearing zones in preparation for collecting depth-discrete groundwater samples.

To verify the CPT produced reliable logs, a continuously sampled hollow stem auger (HSA) borehole was drilled adjacent to one of the CPT boreholes to calibrate the CPT lithology. On October 24, 2005, SOMA oversaw the drilling of HSA calibration borehole HSA/CPT-5 adjacent to CPT borehole CPT-5. The calibration borehole was drilled and continuously sampled to a total depth of 62 feet bgs. By comparing the HSA borehole log with the log of the CPT borehole, SOMA's field geologist was enabled to evaluate the accuracy of the CPT software. The results are discussed in Section 3.0.

The following describes the field procedures for the HSA calibration, CPT and UVIF study, and depth-discrete groundwater sampling.

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#### 2.2.1 HSA Calibration Procedure

Gregg used a Mobile B-53 truck-mounted hollow stem auger rig to drill the calibration borehole. The borehole was continuously core-sampled with an unlined split-spoon sampler to expose the entire borehole stratigraphy. SOMA's field geologist notated the observed soil characteristics encountered and documented them on a geologic log, included as Appendix B. In addition, the volatile hydrocarbon content of the soil cores was characterized. Fragments of the soil core samples were placed into a freezer-grade re-sealable plastic bag and heated to measure the volatile-vapor content using a photo-ionization detector (PID). The PID measurements are presented on the geologic log.

After completing the sample collection, the drilling crew tremie grouted the borehole to surface grade using Type I/II cement grout.

### 2.2.2 CPT and UVIF Procedure

To evaluate the subsurface lithology, stratigraphy and presence of different water-bearing zones a cone penetrometer test was conducted at the Site. CPT is a process whereby soil characteristics are determined when a cone penetrometer is driven into the subsurface. CPT was carried out using an integrated electronic cone system that involved hydraulically pushing a sounding probe into the ground at a constant rate. The soundings were conducted using a 20-ton capacity cone with a tip area of 15 cm<sup>2</sup> and a friction sleeve area of 225 cm<sup>2</sup>.

The cone took measurements of cone bearing  $(q_c)$ , sleeve friction  $(f_s)$  and dynamic pore water pressure  $(u_2)$  at 5-cm intervals during penetration to provide a nearly continuous hydrogeologic log. In addition, the cone also contained a porous filter element located directly behind the cone tip  $(u_2)$ . The filter element is used to obtain dynamic pore pressure as the cone is advanced.

By qualitatively integrating these parameters, CPT provided a rapid means of determining relative soil lithology and hydrogeologic information. The CPT data reduction and interpretation was performed in real time, facilitating on-site decision making by SOMA's field geologist. The hydrogeologic information gathered was used to identify different water-bearing zones, as well as the confining layers beneath the Site.

Concurrent with the CPT study, an ultra violet induced fluorescence study using a UVIF module was conducted by Gregg. The UVIF module used high ultra violet light directed through a sapphire window into the soil and groundwater being penetrated. The ultra violet light caused fluorescence of contaminants contained within the soil and groundwater. The intensity of the fluorescence light was then detected downhole in the UVIF module.

As the UVIF module collected information on the contaminant characteristics, the CPT characterized the sediment types (i.e. clay, silt, silty clay, etc.) in the subsurface. Therefore, at each CPT and UVIF location an integrated vertical profile of contaminant location, relative contaminant concentration, and soil stratigraphy was generated in real time.

When the CPT soundings and UVIF testing were complete, the test holes were grouted using a Gregg support rig. The grouting procedure consisted of pushing a hollow CPT rod with a "knock out" plug to the termination depth of the test hole. Grout was then pumped under pressure as the tremie pipe was pulled from the hole. Disruption or further contamination to the Site was therefore minimized.

## 2.2.3 Depth-Discrete Groundwater Sampling

Groundwater sampling was conducted using a Hydropunch<sup>®</sup> type groundwater sampler. The groundwater sampler had a retrievable stainless steel screen with

a steel drop off tip. This allowed for the sample to be taken at multiple depth intervals within the same CPT sounding location. The groundwater sampler operated by advancing 1<sup>3</sup>/<sub>4</sub>-inch hollow push rods with the filter tip in a closed configuration to the base of the desired sampling interval. Once at the desired sample depth, the push rods were retracted, exposing the encased filter screen and allowing groundwater to infiltrate hydrostatically from the formation into the inlet screen.

A small diameter bailer (approximately 1-inch) was lowered through the push rods into the screen section for sample collection. The samples were decanted into 40-milliliter (mL) VOA vials, pre-preserved with hydrochloric acid, and 500mL and 1-Liter containers. The samples were then immediately stored in a cooler with ice, pending delivery to a California state-certified analytical laboratory.

Upon completing the sample collection, the push rods and sampler, with the exception of the PVC screen and steel drop off tip, were retrieved to the ground surface, decontaminated and prepared for the next sampling event.

### 2.3 Laboratory Analysis

Groundwater samples were submitted to Curtis & Tompkins, Ltd., Analytical Laboratories (CT). Groundwater samples collected from CPT-1, -2, -4, and -6 were analyzed for total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as motor oil, BTEX, 1,2-dichloroethane, and ethylene dibromide. Groundwater samples collected from CPT-3 and -5 were analyzed for TPH as gasoline, TPH as diesel, TPH as motor oil, volatile organic (full list), and metals. The groundwater analytical results are discussed in Section 4.0.

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## 3.0 EVALUATION OF SITE HYDROGEOLOGY

The results of the recent CPT study were used to construct two geologic crosssections. Figure 3 shows the locations of geologic cross-section lines A–A' and B–B'. Figures 4 and 5 presents geologic cross-sections A–A' and B–B'. As shown in geologic cross sections A–A' and B–B', an unconsolidated sequence of permeable and relatively impermeable sediments underlie the site investigation area. The permeable sediments consist of three water-bearing zones, designated as the Upper, Intermediate, and Lower water-bearing zones (WBZs).

HSA-calibration of the CPT log (CPT-5) indicates that the CPT accurately detected vertical intervals of potential water-bearing zones and the upper and lower boundaries of the intervening confining zones. SOMA noted that the CPT interpreted silty clay with some sand as "clayey silt", and sand and gravel as "silty sand/sand", and silty clay as "silt". The CPT appears to skew the actual texture toward the fine-grained end of the textural range. Given the inherent limitations of soil-behavior based lithologic characterization, the observed textural discrepancies are considered acceptable.

As shown on the HSA calibration and CPT borehole logs, included as Appendix B and C, respectively, the water-bearing zones consist mostly of silty sand/sand and a sand/gravel mixture. The intervening confining zones consist mostly of silty clay, clayey silt and silt.

Based on the geologic cross-section A–A', the Upper WBZ appears to be continuous and consists mostly of silty sand/sand and a sand, gravel mixture. As shown in the cross-section, the Upper WBZ extends from approximately 10 to 30 feet bgs. The Intermediate WBZ appears to be discontinuous and consists mostly of silty sand/sand and sandy silt. This water-bearing zone extends from approximately 28 to 43 feet bgs. The Lower WBZ appears to be continuous and

consists mostly of silty sand/sand and gravelly sand. This water-bearing zone extends from approximately 52 to 70 feet bgs. Please note that geologic cross-sections A–A' is oriented north to south.

Based on geologic cross section B–B', the Upper, Intermediate, and Lower water-bearing zones appear to be continuous and consist of silty sand/sand and sand. As shown in the cross-section, the Upper WBZ extends from approximately 18 to 22 feet bgs, the Intermediate WBZ extends from approximately 31 to 41 feet bgs, and the Lower WBZ extends from approximately 47 to 60 feet bgs. Please note that geologic cross-sections B–B' is oriented west to east.

## 4.0 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

This section describes the groundwater analytical results of the groundwater samples collected from the Upper, Intermediate, and Lower water-bearing zones. Groundwater samples collected from CPT-1, -2, -4, and -6 were analyzed for TPH as gasoline, TPH as diesel, TPH as motor oil, BTEX, 1,2-dichloroethane, and ethylene dibromide. Groundwater samples collected from CPT-3 and -5 were analyzed for TPH as gasoline, TPH as diesel, TPH as diesel, TPH as motor oil, volatile organic (full list), and metals. The laboratory analytical report is included as Appendix D.

## 4.1 Upper Water-Bearing Zone

As shown in Table 1, TPH as gasoline was detected at 79  $\mu$ g/L in CPT-1 (sampling interval 17 to 22 feet bgs), at 56  $\mu$ g/L in CPT-2 (sampling interval 13 to 18 feet bgs), at 260  $\mu$ g/L in CPT-4 (sampling interval 15 to 20 feet bgs), and at 56  $\mu$ g/L in CPT-6 (sampling interval 15 to 20 feet bgs). Benzene was detected at 2.4  $\mu$ g/L in CPT-1 (sampling interval 17 to 22 feet bgs). Toluene was detected at 1.6  $\mu$ g/L in CPT-1 (sampling interval 17 to 22 feet bgs) and at 0.8  $\mu$ g/L in CPT-4

(sampling interval 15 to 20 feet bgs). Ethylbenzene was detected at 5.7  $\mu$ g/L in CPT-1 (sampling interval 17 to 22 feet bgs), 2.3  $\mu$ g/L in CPT-2 (sampling interval 13 to 18 feet bgs), and at 19  $\mu$ g/L in CPT-4 (sampling interval 15 to 20 feet bgs). Total xylenes were detected at 26  $\mu$ g/L in CPT-1 (sampling interval 17 to 22 feet bgs), 12.7  $\mu$ g/L in CPT-2 (sampling interval 13 to 18 feet bgs), and at 64  $\mu$ g/L in CPT-4 (sampling interval 15 to 20 feet bgs). TPH as diesel and TPH as motor oil were not detected at or above the reporting laboratory limit in any of the groundwater samples submitted. Lead was not detected at or above the reporting laboratory limit in the groundwater samples submitted from CPT-3 (sampling interval 11 to 16 feet bgs) and CPT-5 (sampling interval 19 to 24 feet bgs).

## 4.2 Intermediate Water-Bearing Zone

As shown in Table 1, TPH as gasoline was not detected at or above the reporting laboratory limit in any of the groundwater samples submitted. Benzene was detected at 0.5  $\mu$ g/L in CPT-1 (sampling interval 35 to 40 feet bgs). Toluene was detected at 0.8 µg/L in CPT-1 (sampling interval 35 to 40 feet bgs). Ethylbenzene was detected at 1.3  $\mu$ g/L in CPT-1 (sampling interval 35 to 40 feet bgs) and at 1.7 µg/L in CPT-4 (sampling interval 30 to 35 feet bgs). Total xylenes were detected at 3.5 µg/L in CPT-1 (sampling interval 35 to 40 feet bgs), 0.6 µg/L in CPT-2 (sampling interval 27 to 32 feet bgs), and at 7.5 µg/L in CPT-4 (sampling interval 30 to 35 feet bgs). TPH as diesel was detected at 56 µg/L in CPT-2 (sampling interval 27 to 32 feet bgs) and at 74 µg/L in CPT-6 (sampling interval 31 to 36 feet bgs). TPH as motor oil was not detected at or above the reporting laboratory limit in any of the groundwater samples submitted. In addition, lead was not detected at or above the reporting laboratory limit in the groundwater sample submitted from CPT-3 (sampling interval 39 to 44 feet bgs). Please note an Intermediate WBZ was not encountered in CPT-5.

## 4.3 Lower Water-Bearing Zone

As shown in Table 1, TPH as gasoline, benzene, toluene, and ethylbenzene were not detected at or above the reporting laboratory limit in any of the groundwater samples submitted. Total xylenes were detected at 0.5  $\mu$ g/L in CPT-2 (sampling interval 69 to 74 feet bgs) and at 1.1  $\mu$ g/L in CPT-4 (sampling interval 52 to 57 feet bgs). TPH as diesel was detected at 71  $\mu$ g/L in CPT-2 (sampling interval 69 to 74 feet bgs) and at 59  $\mu$ g/L in CPT-5 (sampling interval 56 to 61 feet bgs). TPH as motor oil was not detected at or above the reporting laboratory limit in any of the groundwater samples submitted. In addition, lead was not detected at or above the reporting laboratory limit in the groundwater sample submitted from CPT-3 (sampling interval 58 to 63 feet bgs) and CPT-5 (sampling interval 56 to 61 feet bgs).

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

In light of the current and previous data gathered at the Site, with regard to the following are our conclusions and recommendations.

The results of the current site investigation, using CPT, revealed the presence of three water-bearing zones beneath the Site, which are separated by two confining layers. The three water-bearing zones from the top to the bottom are referred to as "Upper", "Intermediate", and "Lower" water-bearing zones.

The results of the UVIF study did not indicate the presence of polyaromatic hydrocarbons in any of the targeted water-bearing zones.

The results of the groundwater sampling and analysis indicated that the extent of the groundwater contamination has been fully characterized. A negligible amount of petroleum hydrocarbons were only detected in the Upper WBZ. By comparing the site related chemical concentration data with that of Tier I screening values set forth by the California Regional Water Quality Control Board, San Francisco Bay Region, it appears that the current concentration of petroleum hydrocarbons in groundwater are below the Tier I screening values for drinking water purposes. Therefore, the site related chemical concentrations do not pose an unreasonable human health risk to current and future site workers or residents within the Site's vicinity.

As such, based on the California Regional Water Quality Control Board's Interim Guidance Document, dated December 8, 1995, the Site fits into a "Low-Risk" Petroleum Release Site Category for the following reasons:

- The source of petroleum hydrocarbons has been completely removed. As the results of the groundwater monitoring reports indicate, no free petroleum hydrocarbons exist beneath the Site.
- 2. Petroleum hydrocarbons and fuel additives have not significantly impacted the beneficial use of the groundwater.
- 3. Based on the results of our evaluation, under the current conditions, the Site does not pose a significant health risk to the on-site workers or off-site residents via inhalation of vapors in indoor air.

Based on the Alameda County Environmental Health Services' directive, SOMA will conduct four groundwater monitoring events by sampling the existing groundwater monitoring wells. The results of the groundwater monitoring events will reveal that if the existing groundwater chemical plume is a shrinking or an expanding plume. If at the end of the fourth groundwater monitoring event, it appears that the groundwater chemical plume is a shrinking plume, then SOMA will recommend for the adoption of a "no further action" status for the Site.

## TABLES

#### **TABLE 1. Groundwater Analytical Results**

#### 5565 Tesla Road, Livermore, California

Sample Location	Sampling Interval (feet bgs)	Sampling Date	TPH as gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TPH as diesel (μg/L)	TPH as motor oil (μg/L)	Arsenic (µg/L)	Barium (µg/L)	Lead (µg/L)	Mercury (µg/L)		
CPT-1	17 - 22	10/27/2005	79	2.4	1.6	5.7	26	<50	<300	NS	NS	NS	NS		
CPT-1	35 - 40	10/27/2005	<50	0.5	0.8	1.3	3.5	<50	<300	NS	NS	NS	NS		
CPT-1	49 - 54	10/27/2005	<50	<0.5	<0.5	<0.5	<0.5	<50	<300	NS	NS	NS	NS		
CPT-2	13 - 18	10/27/2005	56	<0.5	<0.5	2.3	12.7	<50	<300	NS	NS	NS	NS		
CPT-2	27 - 32	10/27/2005	<50	<0.5	<0.5	<0.5	0.6	56 <sup>Y</sup>	<300	NS	NS	NS	NS		
CPT-2	69 - 74	10/27/2005	<50	<0.5	<0.5	<0.5	0.5	71 <sup>Y</sup>	<300	NS	NS NS		NS NS		NS
CPT-3	11 - 16	10/26/2005	<50	<0.5	<0.5	<0.5	<0.5	<50	<300	<5.0	210	<3.0	0.27		
CPT-3	39 - 44	10/26/2005	<50	<0.5	<0.5	<0.5	<0.5	<50	<300	<5.0	160	<3.0	0.25		
CPT-3	58 - 63	10/26/2005	<50	<0.5	<0.5	<0.5	<0.5	<50	<300	<5.0	55	<3.0	<0.20		
CPT-4	15 - 20	10/27/2005	260	<0.5	0.8	19	64	<50	<300	NS	NS	NS	NS		
CPT-4	30 - 35	10/27/2005	<50	<0.5	<0.5	1.7	7.5	<50	<300	NS	NS	NS	NS		
CPT-4	52 - 57	10/27/2005	<50	<0.5	<0.5	<0.5	1.1	<50	<300	NS	NS NS		NS		
CPT-5	19 - 24	10/26/2005	<50	<1.0	<1.0	<1.0	<1.0	<50	<300	43	11	<3.0	0.61		
CPT-5	56 - 61	10/26/2005	<50	<0.5	<0.5	<0.5	<0.5	59 <sup>Y</sup>	<300	<5.0	210	<3.0	<0.20		
CPT-6	15 - 20	10/27/2005	56	<0.5	<0.5	<0.5	<0.5	<50	<300	NS	NS	NS	NS		
CPT-6	31 - 36	10/27/2005	<50	<0.5	<0.5	<0.5	<0.5	74	<300	NS	NS	NS	NS		
CPT-6	51 - 56	10/27/2005	<50	<0.5	<0.5	<0.5	<0.5	<50	<300	NS	NS	NS	NS		
Drinking water standards as set forth by the RWQCB 100			1	40	30	20	100	100	36	1000	3	0.012			

Notes:

bgs= below ground surface

μg/L= micrograms per Liter

<= Results not detected at or above the reporting laboratory reporting limit indicated

Y= Sample exhibits chromatographic pattern which does not resemble standard

NS= Not Sampled

## FIGURES



approximate scale in feet

Figure 1: Site vicinity map.





0 25 50

Figure 2: Location of Groundwater Monitoring Wells, HSA Calibration Borehole, and CPT Boreholes.





0 25 50

Figure 3: Location of Geologic Cross Sections A-A' and B-B'.







Figure 4: Geologic Cross Section A-A'.

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**A'** 



Figure 5: Geologic Cross Section B-B'.

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## **APPENDIX A**

**Drilling Permit** 



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551

PHONE (925) 454-5000

November 5, 2005

Mr. John Lohman SOMA Environmental 6620 Owens Drive, Suite A Pleasanton, CA 94588

Dear Mr. Lohman:

Enclosed is drilling permit 25186 for a contamination investigation at 5565 Tesla Road in Livermore for Wente Bros. Winery. Also enclosed are current drilling permit applications for your files.

Please note that permit conditions A-2 and G requires that a report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, permit number and any analysis of the soil and water samples. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact me at extension 5056 or Matt Katen at extension 5071.

Sincerely,

- Maprian Hong

Wyman Hong UWater Resources Specialist

Enc.

## **APPENDIX B**

HSA Log

	GEOLOGIC LOG OF BOREHOLE: Calibration Borehole (CPT-5)						PAGE 1 OF 3						
	PROJECT: 2842 DATE DRILLED: Octobe							r 24, 2005					
	SITE LOCATION: 5565 Tesla Road, Livermore CASING ELEVATION: N						A						
	DRILLER: Gregg Drilling & Testing DEPTH TO GW: NA												
	D	RILLING	METHO	D: Hollow Stem Auger	T.O.C. TO SCREEN: NA								
	B	DRING D	IAMETE	R: Approximately 6"	SCREEN LENGTH: NA								
	LC	)GGED E	3Y: E Jei	nnings	APPROVED BY: M Sepeh	r Pł	ו. D	., F	P.E.				
PID ppm	DEPTH	HL BOIL CLASS GEOLOGIC DESCRIPTION						GW LEVEL	BLOWCOUNTS	WELL DIAGRAM			
	-			Hand auger borehole to 5 feet below ground surface (	bgs)	Hand alloer to 5							
1.5	5—		SM/ML	SILTY SAND/SANDY SILT: brown; damp - moist; mo medium estimated permeability.	edium dense; alluvial sand;				Д				
2	-		CL	SILTY CLAY WITH SOME SAND: brown slight mottle soft - firm; slightly plastic; small percentage of fine sar permeability. (8.5 feet) Brown slight mottled red/orange brown; (wit	ed dark gray brown; damp - moist; nd (20%); medium estimated h depth).				8 13 15 5 7				
1.5	10—		CL	SILTY CLAY: light gray brown slight mottled dark gra plastic - very plastic; medium estimated permeability.	y brown; moist; firm; moderately				9 3 7				
1.5	-	-	CL	SILTY CLAY WITH SOME SAND: light gray brown s brown; moist - very moist; soft - firm; very plastic; sma medium estimated permeability.	light mottled black and red/orange all percentage of fine sand (20%);				9 10 5 9				
1.5	- 15— -		CL	SILTY CLAY: gray brown slight mottled red/orange b moderately plastic - very plastic; low estimated perme	rown; moist; stiff - very stiff; ability.				12 6 12 15 7 13 15				
	-	-		(15.5 feet) Gray brown mottled black, light gray, and re firm; increase in percentage of sand; (with depth).	ed/orange brown; very moist; soft-			$\checkmark$	9 9 10 <u>12</u>				
	20		SW/GW	SAND, GRAVEL MIXTURE: brown; wet - saturated; li coarse gravel particles 2 in. maximum size; high estir	oose - medium dense; angular, nated permeability.			-	4 12 16 16 24 20				
2	-								16 29 50 15 27				
	25-COMMENTS:												

	GEOLOGIC LOG OF BOREHOLE: Calibration Borehole (CPT-5)						PAGE 2 OF 3						
	Р	ROJECT:	2842		DATE DRILLED: October	24	, 20	)05					
	SITE LOCATION: 5565 Tesla Road, Livermore CASING ELEVATION: NA												
	D	RILLER: (	Gregg Di	rilling & Testing	DEPTH TO GW: NA								
	D	RILLING	METHO	D: Hollow Stem Auger	T.O.C. TO SCREEN: NA								
	B	ORING D	IAMETE	R: Approximately 6"	SCREEN LENGTH: NA								
	LC	OGGED E	BY: E Jer	nnings	APPROVED BY: M Sepeh	r P	h. [	D., F	P.E.				
PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIF	PTION	SPLIT SPOON		GW LEVEL	BLOWCOUNTS	WELL DIAGRAM			
1.5			CL	(25 - 38 feet) No Recovery (NR). SILTY CLAY: brown slight mottled black; moist; stiff - very plastic; low estimated permeability. (40 feet) Brown slight mottled red/orange brown and g plastic; (with depth).	• very stiff; moderately plastic - gray brown; soft - firm; very	No Recovery SPI	8		а   25 40 50 10 25 41 44 50 20 40 50 19 50 50 рериссеи том				

ENVIRONMENTAL ENGINEERING, INC.	GEOLOGIC LOG OF Calibration Boreho	BOREHOLE: ble (CPT-5)	PAGE 3 OF 3						
PROJECT: 2842		DATE DRILLED: October 24, 2005							
SITE LOCATION: 556	65 Tesla Road, Livermore	CASING ELEVATION: NA							
DRILLER: Gregg Drill	ing & Testing	DEPTH TO GW: NA							
DRILLING METHOD:	Hollow Stem Auger	T.O.C. TO SCREEN: NA							
BORING DIAMETER	Approximately 6"	SCREEN LENGTH: NA							

LOGGED BY: E Jennings

#### APPROVED BY: M Sepehr Ph. D., P.E.

PID ppm	рертн	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	CORE SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	-	-	CL	SILTY CLAY WITH SOME SAND: brown slight mottled gray brown; moist - very moist soft - firm; moderately plastic; small percentage of fine sand (20%); medium estimated permeability.				14 41 50	
1.5	-	-		(55 feet) Brown mottled red/orange brown: (with depth)				Not recorded	
	55 —							29	
	-	-	CL	SILTY CLAY INTERBEDDED WITH SAND AND GRAVEL: brown mottled red/orange brown; very moist - wet; rounded and subangular sand grains, fine - medium; hard,				50 50	
1.5	-	-		angular gravel particles 1 ½ in. maximum size; nign estimated permeability.				Not recorded	
	60—		sw/gw	SAND, GRAVEL MIXTURE: brown; wet - saturated; loose - medium dense; angular, coarse gravel particles 2 <sup>1</sup> / <sub>2</sub> in. maximum size; high estimated permeability.				50 50 50	
	-								
	- 65—								
	-								
	-								
	-								
	70—								
	-								
	-								
	75—								
	COMMENTS: Total Depth 62' bgs								

## **APPENDIX C**

**CPT Logs** 
























# APPENDIX D

Laboratory Analytical Report



#### ANALYTICAL REPORT

Prepared for:

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

Date: 17-NOV-05 Lab Job Number: 182815 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 Mahager
Reviewed by:	

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NELAP # 01107CA



#### CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 182815 SOMA Environmental Engineering Inc. 5565 Tesla Rd. 10/28/05 10/27/05

This hardcopy data package contains sample and QC results for seventeen water samples, requested for the above referenced project on 10/28/05. The samples were received on ice and intact.

#### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

#### TPH-Extractables by GC (EPA 8015B):

Low surrogate recoveries were observed for hexacosane in CPT-1(35-40) (lab # 182815-002) and CPT-5(19-24) (lab # 182815-013); these low surrogate recoveries were confirmed by re-extraction and re-analysis. No other analytical problems were encountered.

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

1,2,3-trichlorobenzene was detected above the RL in the method blank for batch 107433; this analyte was not detected in samples at or above the RL. CPT-5(19-24) (lab # 182815-013) was diluted due to an insufficient volume of sample. The VOA vials were submitted over halfway full of sediment. No other analytical problems were encountered.

#### Metals (EPA 6010B and EPA 7470A):

No analytical problems were encountered.

#

СНА	IN OF CUSTODY	Pageof
Curtis & Tompkins, Ltd.		Analyses
Analytical Laboratory Since 1878 2323 Fifth Street Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax	C&T LOGIN # $182815$	romide
	Sampler: John Loniman	
	Report To: Joyce Bobek	
roject Name: 5565 Tesla Rd, Livermore	Company : SOMA Environmental	
urnaround Time: Standard	Telephone: 925-734-6400	
	Fax: 925-734-6401	d, T
	Matrix Preservative	
Lab No. Sample ID Depth Sampling [	Date Time 이 프 프 프 프 프 프 프 프 프 프 프 프 프 프 프 프 프 프	TPHg, 1,2-dich Metals
CPT-1 17-22 10/27/05	2:55 X 5VOAS-ILAMONX XX	XXX
2 CPT-1 35-40 10127105		
- CPT-2 13-18 10/27/05	1.45 X	
5 CPT-2 27-32 16127105		
6 CPT-2 69-74 10/27/05		
4 CPT-3 39-44 10/26/05	3.55 X X X X	
9 CPJ-3 58-63 10/26/05	4.c5 X X X X	XXX
D CPT-4 15-20 10127105	TZIO X SVOAS-IL X XX	
11 CP - 4 50 - 55 10/27/05		
13 CPT-5 19-24 10/26/05	12:00 X STOP, IL, SOUML POLY X XX	
4 CPT-5 56-61 10/26/05	12:40 X X X	
9 CPT-6 15-20 10/27/05	IOITE X SVORS-IL X XX	
CPT-6 51-56 10127105		
****		
Silica gel cleanup method	D RELINQUISHED BY	RECEIVED BY:
Filter MetalSamples	DATE/TIME	DATE/TIME
095-HCL/12-None/Soc Poly-Nov	Q DATE/TIME	DATE/TIME
<i>r</i>	REC'D intactie	micEFR





		Total Vola	tile Hydrocarh	oons	
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering In	Location: nc. Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8015B	
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Analyzed:	107205 10/27/05 10/30/05	
Field ID: Type:	CPT-1(17-22) SAMPLE		Lab ID: Sampled:	182815-001 10/27/05	
Gasoline	Analyte C7-C12	<b>Resul</b> 79	E	<b>RL</b> 50	
Trifluoro Bromofluo	Surrogate toluene (FID) probenzene (FID)	%REC Limit   94 62-14   117 78-13	<b>ts</b> 41 34		
Field ID: Type:	CPT-1(35-40) SAMPLE		Lab ID: Sampled:	182815-002 10/27/05	
Gasoline	Analyte C7-C12	Resul! ND		<b>RL</b> 50	
Trifluoro Bromofluo	<b>Surrogate</b> toluene (FID) robenzene (FID)	%REC Limit   94 62-14   127 78-11	<b>ts</b> 41 34		
_, ,,					
Field ID: Type:	CPT-1(54-49) SAMPLE		Lab ID: Sampled:	182815-003 10/27/05	
Gasoline	Analyte C7-C12	Resul: ND	<u></u>	<b>RL</b> 50	
Trifluoro Bromofluo	Surrogate toluene (FID) robenzene (FID)	%REC Limit   92 62-14   121 78-13	<b>Es</b> 41 34		
Field ID: Type:	CPT-2(13-18) SAMPLE		Lab ID: Sampled:	182815-004 10/27/05	
Gasoline	Analyte C7-C12	<b>Result</b> 56	Ę	<b>RL</b> 50	
				· · · · · · · · · · · · · · · · · · ·	
Trifluoro	Surrogate	<u>%REC Limit</u>	<b>58</b> 11		



Total Volatile Hydrocarbons							
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8015B			
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Analyzed:	107205 10/27/05 10/30/05			
Field ID: Type:	CPT-2(27-32) SAMPLE		Lab ID: Sampled:	182815-005 10/27/05			
Gasoline	Analyte C7-C12	Result ND		RL 50			
Trifluoro Bromofluo	Surrogate toluene (FID) robenzene (FID)	%REC Limits   93 62-141   126 78-134					
Field ID: Type:	CPT-2(69-74) SAMPLE		Lab ID: Sampled:	182815-006 10/27/05			
Gasoline	Analyte C7-C12	Result ND		RL 50			
Trifluoro Bromofluo	Surrogate toluene (FID) robenzene (FID)	%REC Limits   95 62-141   122 78-134					
Field ID: Type:	CPT-3(11-16) SAMPLE		Lab ID: Sampled:	182815-007 10/26/05			
Gasoline	Analyte C7-C12	Result ND		<b>RL</b> 50			
Trifluoro Bromofluo	Surrogate toluene (FID) robenzene (FID)	%REC Limits   93 62-141   120 78-134					
Field ID: Type:	CPT-3(39-44) SAMPLE		Lab ID: Sampled:	182815-008 10/26/05			
Gasoline	Analyte C7-C12	Result ND		RL 50			
Trifluoro Bromofluo	Surrogate toluene (FID) robenzene (FID)	%REC Limits   95 62-141   125 78-134					



		Total	Volatil	e Hydrocarbons	
Lab #: 1 Client: S Project#: S	82815 OMA Environmental TANDARD	Engineer	ing Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8015B
Matrix: Units: Diln Fac:	Water ug/L 1.000			Batch#: Received: Analyzed:	107205 10/27/05 10/30/05
Field ID: Type:	CPT-3(58-63) SAMPLE			Lab ID: Sampled:	182815-009 10/26/05
Gasoline C7	Analyte -C12	ND	Result	<b>RL</b> 50	
<b>S</b> Trifluoroto Bromofluoro	<mark>urrogate</mark> luene (FID) benzene (FID)	%REC 93 120	Limits 62-141 78-134		
	and and a second se				
Field ID: Type:	CPT-4(15-20) SAMPLE			Lab ID: Sampled:	182815-010 10/27/05
Gasoline C7	Analyte -C12		Result 260	<b>RL</b> 50	
<b>S</b> Trifluoroto Bromofluoro	urrogate luene (FID) benzene (FID)	% <b>REC</b> 100 128	Limits 62-141 78-134		
Field ID: Type:	CPT-4(30-35) SAMPLE			Lab ID: Sampled:	182815-011 10/27/05
Gasoline C7	Analyte -Cl2	ND	Result	<b>RL</b> 50	
S Trifluoroto Bromofluoro	<b>urrogate</b> luene (FID) benzene (FID)	% <b>REC</b> 91 118	<b>Limits</b> 62-141 78-134		
Field ID: Type:	CPT-4(52-57) SAMPLE			Lab ID: Sampled:	182815-012 10/27/05
Gasoline C7	Analyte -C12	ND	Result	<b>RL</b> 50	
S	urrogate	%REC	Limits		
Trifluoroto Bromofluoro	luene (FID) benzene (FID)	92 121	62-141 78-134		



		Total Volati	le Hydrocarbons	3
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8015B
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Analyzed:	10/205 10/27/05 10/30/05
Field ID:	CPT-5(19-24)		Lab ID:	182815-013
Type:	SAMPLE	Regult	Sampled:	10/26/05
Gasoline (	C7-C12	ND	50	
Trifluoro Bromofluo:	<b>Surrogate</b> toluene (FID) robenzene (FID)	%REC Limits   92 62-141   127 78-134		
Field ID: Type:	CPT-5(56-61) SAMPLE		Lab ID: Sampled:	182815-014 10/26/05
Gasoline (	Analyte C7-C12	Result ND	RL 50	
Trifluoro Bromofluo:	<b>Surrogate</b> coluene (FID) robenzene (FID)	%REC Limits   89 62-141   121 78-134		
Field ID: Type:	CPT-6(15-20) SAMPLE		Lab ID: Sampled:	182815-015 10/27/05
Gasoline (	Analyte C7-C12	Result 56	RL 50	
Trifluoro Bromofluo:	<b>Surrogate</b> coluene (FID) robenzene (FID)	%REC Limits   96 62-141   123 78-134		
Field ID: Type:	CPT-6(31-36) SAMPLE		Lab ID: Sampled:	182815-016 10/27/05
Gasoline (	Analyte 27-C12	Result ND	<b>RL</b> 50	
Trifluorot Bromofluor	<b>Surrogate</b> coluene (FID) cobenzene (FID)	%REC Limits   95 62-141   133 78-134		



		Total Volatil	e Hydrocarbons	
Lab #:	182815		Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD	5 5	Analysis:	EPA 8015B
Matrix:	Water		Batch#:	107205
Units:	ug/L		Received:	10/27/05
Diln Fac:	1.000		Analyzed:	10/30/05

Field ID: Type:	CPT-6(51-56) SAMPLE			Lab ID: Sampled:	182815-01 10/27/05	7
2	malyte		Result		RL	
Gasoline C7-	C12	1	1D		50	
Su	irrogate	%REC	Limits			
Trifluorotol Bromofluorok	uene (FID) enzene (FID)	92 121	62-141 78-134			
Type:	BLANK			Lab ID:	OC314870	

rype.	BLANK	54	ab 1D.	QC314070
Analy	/te	Result	RL	
Gasoline C7-C12		ND	50	
Surrog	jate %Ri	EC Limits		
Trifluorotoluene	e (FID) 90	62-141		
Bromofluorobenze	ene (FID) 111	78-134		

Sample Name	:	182815-001,107205	,tvh only		Sample #: b1.9		Page 1 of 1
FileName	:	G: (GCUS (DAIA (SUSG	004.Iaw		Date : 10/30/05 00:32 AM	06.07	λм
	÷		Trad Thims		Low Deint , 7 46 mW	Uliah	Deint 122 70 mV
Start Time	:	0.00 min	End lime :	25.00 min	LOW POINT : 7.46 mV	нıgn	POINT : 132.70 mV
Scale Factor	::	1.0	Plot Offset:	7 mV	Plot Scale: 125.2 mV		

Response [mV]













#### Batch QC Report

		Total Volatil	e Hydroca	rbons		
Lab #:	182815		Location:		5565 Tesla Rd	
Client:	SOMA Environmental	Engineering Inc.	Prep:		EPA 5030B	
Project#:	STANDARD		Analysis:		EPA 8015B	
Type:	LCS		Diln Fac:		1.000	
Lab ID:	QC314872		Batch#:		107205	
Matrix:	Water		Analyzed:		10/30/05	
Units:	ug/L					
	Analyte	Spiked		Result	%REC	Limits
Gasoline	C7-C12	2,000		1,749	87	80-120

Surrogate	%REC	Limits	 	
Trifluorotoluene (FID)	107	62-141		,
Bromofluorobenzene (FID)	118	78-134		



Batch QC Report

Total Volatile Hydrocarbons							
Lab #:	182815		Location:	5565 Tesla Rd.			
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B			
Project#:	STANDARD		Analysis:	EPA 8015B			
Field ID:	CPT-2(13-18)		Batch#:	107205			
MSS Lab II	182815-004		Sampled:	10/27/05			
Matrix:	Water		Received:	10/27/05			
Units:	ug/L		Analyzed:	10/30/05			
Diln Fac:	1.000						

Type:	MS			Lab	ID:	QC314924			
	Analyte	MSS R	esult		Spiked	Result	%REC	Lir	aits
Gasoline	C7-C12		56.24		2,000	1,878	91	80-	-120
	Surrogate	%REC	Limits						
Trifluoro	toluene (FID)	118	62-141						
Bromofluo	robenzene (FID)	127	78-134						1
Type:	MSD			Lab	ID:	QC314925			
	Analyte		Spiked		Rest	ult %RE(	2 Limits	RPD	Lim
Gasoline	C7-C12		2,000		1,90	00 92	80-120	1	20
	Surrogate	%REC	Limits						
Trifluoro	toluene (FID)	117	62-141						
Bromofluo	robenzene (FID)	131	78-134						



		Total Extract	able Hydrocarbo	ns
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc	Location: Prep: Analysis:	5565 Tesla Rd. EPA 3520C EPA 8015B
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Přepared:	107306 10/27/05 11/01/05
Field ID: Type: Lab ID:	CPT-1(17-22) SAMPLE 182815-001		Sampled: Analyzed: Cleanup Method:	10/27/05 11/07/05 EPA 3630C
Diesel C10	Analyte )-C24	Result ND	<b>RL</b> 50	
Motor Oil	C24-C36	ND	300	
Hexacosane	Surrogate	70 60-135		
Field ID: Type: Lab ID:	CPT-1(35-40) SAMPLE 182815-002		Sampled: Analyzed: Cleanup Method:	10/27/05 11/07/05 EPA 3630C
Diegel (1)	Analyte	Result	RL	
Motor Oil	<u>C24-C36</u>	ND	300	
Hexacosane	Surrogate	%REC Limits 53 * 60-135		
Hexacosane	Surrogate	<b>%REC Limits</b> 53 * 60-135		
Hexacosane Field ID: Type: Lab ID:	Surrogate CPT-1(54-49) SAMPLE 182815-003	<b>%REC Limits</b> 53 * 60-135	Sampled: Analyzed: Cleanup Method:	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte	%REC Limits 53 * 60-135 Result	Sampled: Analyzed: Cleanup Method: RL	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36	%REC Limits 53 * 60-135 Result ND ND	Sampled: Analyzed: Cleanup Method: <b>RL</b> 50 300	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil Hexacosane	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36 Surrogate	%REC Limits   53 * 60-135   ND ND   %REC Limits   %REC Limits   69 60-135	Sampled: Analyzed: Cleanup Method: <b>RL</b> 50 300	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil Hexacosane	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36 Surrogate	%REC Limits   53 * 60-135   ND ND   %REC Limits   69 60-135	Sampled: Analyzed: Cleanup Method: <b>RL</b> 50 300	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil Hexacosane Field ID: Type: Lab ID:	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36 Surrogate CPT-2(13-18) SAMPLE 182815-004	%REC Limits   53 * 60-135   Result ND   ND ND   *REC Limits   69 60-135	Sampled: Analyzed: Cleanup Method: RL 50 300 Sampled: Analyzed: Cleanup Method:	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil Hexacosane Field ID: Type: Lab ID: Diesel C10	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36 Surrogate CPT-2(13-18) SAMPLE 182815-004 Analyte 0-C24	%REC Limits   53 * 60-135   Result ND   ND ND   %REC Limits   69 60-135   %REC Limits   69 60-135	Sampled: Analyzed: Cleanup Method: RL 50 300 Sampled: Analyzed: Cleanup Method: RL 50	10/27/05 11/04/05 EPA 3630C
Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil Hexacosane Field ID: Type: Lab ID: Diesel C10 Motor Oil	Surrogate CPT-1(54-49) SAMPLE 182815-003 Analyte 0-C24 C24-C36 Surrogate CPT-2(13-18) SAMPLE 182815-004 Analyte 0-C24 C24-C36	%REC Limits   53 * 60-135   Result ND   ND ND   %REC Limits   69 60-135   %REC Limits   69 60-135	Sampled: Analyzed: Cleanup Method: RL 50 300 Sampled: Analyzed: Cleanup Method: RL 50 300	10/27/05 11/04/05 EPA 3630C 10/27/05 11/04/05 EPA 3630C

\*= Value outside of QC limits; see narrative Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 1 of 5



200000000000000000000000000000000000000				
		Total Extracts	able Hydrocarbo	ns
Lab #: Client:	182815 SOMA Environmental	Engineering Inc.	Location: Prep:	5565 Tesla Rd. EPA 3520C
Project#: Matrix: Units:	STANDARD Water ug/L		Analysis: Batch#: Received:	EPA 8015B 107306 10/27/05
Diln Fac:	1.000		Prepared:	11/01/05
Field ID:	CPT-2(27-32)		Sampled:	10/27/05
Type: Lab ID:	SAMPLE 182815-005		Analyzed: Cleanup Method:	11/04/05 EPA 3630C
Diesel C10	Analyte 0-C24	Result 56 Y	<b>RL</b> 50	
Motor Oil	C24-C36	ND		
Hexacosane	Surrogate	%REC Limits   81 60-135		
			_ , ,	
Field ID: Type: Lab ID:	CPT-2(69-74) SAMPLE 182815-006		Sampled: Analyzed: Cleanup Method:	10/27/05 11/04/05 EPA 3630C
	Analyte	Result	RL	
Diesel C10 Motor Oil	)-C24 C24-C36	71 Y ND	50 300	
Hexacosane	Surrogate	%REC Limits   84 60-135		
Field ID: Type:	CPT-3(11-16) SAMPLE		Sampled: Analyzed:	10/26/05 11/04/05
Lab lD:	182815-007	Dani (	Cleanup Method:	EPA 3630C
Diesel C10 Motor Oil	C24 C24-C36	ND ND	50 	
Hexacosane	Surrogate	*REC Limits 91 60-135		
	<u> </u>			
Field ID: Type:	CPT-3(39-44) SAMPLE		Sampled: Analyzed:	10/26/05 11/04/05
Lab ID:	182815-008		Cleanup Method:	EPA 3630C
Diesel C10 Motor Oil	Analyte )-C24 C24-C36	ND ND	<b>RL</b> 50 300	
	Surrogate	%REC Limits		

\*= Value outside of QC limits; see narrative Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 2 of 5







		Total Extract	table Hydrocarbo	ns
Lab #: Client:	182815 SOMA Environmental	Engineering Inc	Location: . Prep:	5565 Tesla Rd. EPA 3520C
Matrix:	Water ug/L		Batch#: Received:	107306 10/27/05
Diln Fac:	1.000		Prepared:	11/01/05
Tiala ID.			Compled	10/06/05
Type: Lab ID:	SAMPLE 182815-009		Analyzed: Cleanup Method:	10/26/05 11/04/05 EPA 3630C
Diecel (1)	Analyte	Result	<b>RL</b>	
Motor Oil	C24-C36	ND	300	
Hexacosan	Surrogate	*REC Limits 80 _ 60-135		
		· · · · · · · · · · · · · · · · · · ·		
Field ID:	CPT-4(15-20)		Sampled:	10/27/05
Lab ID:	182815-010		Cleanup Method:	EPA 3630C
Diesel Cl	Analyte 0-C24	Result ND	<b>RL</b> 50	
Motor Oil	C24-C36	ND	300	
Hexacosan	Surrogate e	%REC Limits   76 60-135	, ,	
Field ID: Tvpe:	CPT-4(30-35) SAMPLE		Sampled: Analvzed:	10/27/05 11/04/05
Lab ID:	182815-011		Cleanup Method:	EPA 3630C
Diesel C1	Analyte 0-C24	Result ND	<b>RL</b> 50	
Motor Uil	C24-C36		300	
Hexacosan	Surrogate e	65 60-135		
Field ID: Type:	CPT-4(52-57) SAMPLE		Sampled: Analvzed:	10/27/05 11/04/05
Lab ID:	182815-012		Cleanup Method:	EPA 3630C
Diesel Cl	Analyte 0-C24	Result ND	<b>RL</b> 50	
Motor Oil	C24-C36	ND	300	
	Surrogate	*REC Limits		

\*= Value outside of QC limits; see narrative Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 3 of 5

29.0



		Total Extracta	ble Hydrocarbo	ns
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 3520C EPA 8015B
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Prepared:	107306 10/27/05 11/01/05
			~ ] ]	
Field ID: Type: Lab ID:	CPT-5(19-24) SAMPLE 182815-013		Sampled: Analyzed: Cleanup Method:	10/26/05 11/07/05 EPA 3630C
Diesel Clo Motor Oil	Analyte 0-C24 C24-C36	Result ND ND	<b>RL</b> 50 300	
Hexacosan	<b>Surrogate</b> e	*REC Limits 50 * 60-135		
Field ID:	CPT-5(56-61)		Sampled:	10/26/05
Type: Lab ID: 	SAMPLE 182815-014		Analyzed: Cleanup Method:	11/05/05 EPA 3630C
Diesel Clo Motor Oil	Analyte 0-C24 C24-C36	Result 59 Y ND	<b>RL</b> 50 300	
Hexacosane	Surrogate e	%REC Limits   83 60-135		
Field ID: Type: Lab ID:	CPT-6(15-20) SAMPLE 182815-015		Sampled: Analyzed: Cleanup Method:	10/27/05 11/05/05 EPA 3630C
Diesel Clo Motor Oil	Analyte 0-C24 C24-C36	Result ND ND	<b>RL</b> 50 300	
Hexacosane	Surrogate e	%REC Limits   82 60-135		
Field ID: Type: Lab ID:	CPT-6(31-36) SAMPLE 182815-016		Sampled: Analyzed: Cleanup Method:	10/27/05 11/05/05 EPA 3630C
Diesel Cl( Motor Oil	Analyte J-C24 C24-C36	Result 74 ND	<b>RL</b> 50 300	

\*= Value outside of QC limits; see narrative Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 4 of 5











Total Extractable Hydrocarbons							
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 3520C EPA 8015B			
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Received: Prepared:	107306 10/27/05 11/01/05			
Field ID: Type: Lab ID:	CPT-6(51-56) SAMPLE 182815-017		Sampled: Analyzed: Cleanup Method:	10/27/05 11/05/05 EPA 3630C			
Diesel C10 Motor Oil	<b>Analyte</b> 0-C24 C24-C36	Result ND ND	<b>RL</b> 50 300				
Hexaçosane	Surrogate e	<b>%REC Limits</b> 76 60-135					
Type: Lab ID:	BLANK QC315281		Analyzed: Cleanup Method:	11/03/05 EPA 3630C			
Diesel Clo Motor Oil	Analyte 0-C24 C24-C36	Result ND ND	RL 50 300				
Hexacosan	Surrogate	85 60-135					

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Batch	OC	Report
Ducon	$\sim \sim$	TCPOLC

		Total Extract	able Hydrocarbo	ns		
Lab #:	182815		Location:	5565 Tesla R	d.	
Client:	SOMA Environmental	Engineering Inc	. Prep:	EPA 3520C		
Project#:	STANDARD		Analysis:	EPA 8015B		
Matrix:	Water		Batch#:	107306		
Units:	ug/L		Prepared:	11/01/05		
Diln Fac:	1.000		Analyzed:	11/03/05		
Type: Lab ID:	BS QC315282		Cleanup Method:	EPA 3630C		
	Analyte	Spiked	Result	. %REC	Limits	
Diesel Clo	)-C24	2,500	2,395	96	53-138	
	Surrogate	%REC Limits				
Hexacosan	2	104 60-135				
L						
Type:	BSD		Cleanup Method:	EPA 3630C		
Lab ID:	QC315283					
	Analyte	Spiked	Result	%REC	Limits	RPD Lim
Diesel Cl	)-C24	2,500	2,436	97	53-138	2 36
	Surrogate	%REC Limits				
Hexacosane	÷	105 60-135				



		BTXE & (	xygenates		
Lab #: 1 Client: 5 Project#: 5	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Ro EPA 5030B EPA 8260B	L
Matrix: Units: Diln Fac:	Water ug/L 1.000		Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-1(17-22) SAMPLE 182815-001		Batch#: Analyzed:	107433 11/04/05	
1,2-Dichlon Benzene Toluene 1,2-Dibromo Ethylbenzen m,p-Xylenes o-Xylene	Analyte roethane Dethane Se	Result ND 2.4 1.6 ND 5.7 19 7.0		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibromofluo 1,2-Dichlor Toluene-d8 Bromofluoro	bromethane roethane-d4 obenzene	105 80-121 109 80-125 95 80-120 105 80-124			
Field ID: Type: Lab ID:	CPT-1(35-40) SAMPLE 182815-002		Batch#: Analyzed:	107433 11/04/05	
1,2-Dichlon Benzene Toluene 1,2-Dibromo Ethylbenzen m,p-Xylenes o-Xylene	Analyte roethane Dethane ne S	Result   ND   0.5   0.8   ND   1.3   2.8   0.7		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibromofluc 1,2-Dichlor Toluene-d8 Bromofluoro	Surrogate promethane roethane-d4 pbenzene	%REC Limits   105 80-121   111 80-125   99 80-120   109 80-124			



		BT	(E & C	)xygenates		
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineerin	g Inc.	Location: Prep: Analysis:	5565 Tesla EPA 5030B EPA 8260B	Rd.
Matrix: Units: Diln Fac:	Water ug/L 1.000			Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-1(54-49) SAMPLE 182815-003			Batch#: Analyzed:	107433 11/04/05	
	Analyte	Re	sult		RL	
1,2-Dichlo Benzene Toluene 1,2-Dibrom Ethylbenze m,p-Xylene o-Xylene	proethane noethane ene es	ND ND ND ND ND ND ND			0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
	Surrogate	*PR0 1	imite			
Dibromoflu 1,2-Dichlo Toluene-de Bromofluor	uoromethane proethane-d4 3 robenzene	106 8 112 8 97 8 103 8	0-121 0-125 0-120 <u>0-124</u>			
					105400	
rieid ID: Type: Lab ID:	CPT-2(13-18) SAMPLE 182815-004			BatCn#: Analyzed:	11/04/05	
	Analyte	Re	sult		RL	
1,2-Dichl Benzene Toluene 1,2-Dibror	noethane	ND ND ND ND	ר כ כ		0.5 0.5 0.5 0.5 0.5	
m,p-Xylene	enc es 		12 0.7		0.5	
	Surrogate	%REC L	imits			
Dibromoflu 1,2-Dichlo Toluene-da	uoromethane proethane-d4 8	109 8 109 8 99 8	0-121 0-125 0-120			
Bromofluo:	robenzene	104 8	0-124			



		BTXE &	Oxygenates		
Lab #: 18 Client: SO Project#: ST	2815 MA Environmental	Engineering Inc	Location: . Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8260B	
Matrix: Units: Diln Fac:	Water ug/L 1.000		Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-2(27-32) SAMPLE 182815-005		Batch#: Analyzed:	107433 11/04/05	
A 1,2-Dichloro Benzene	nalyte Dethane	ND ND		0.5 0.5	
Toluene 1,2-Dibromoe Ethylbenzene m,p-Xylenes o-Xylene	thane	ND ND ND 0.6 ND		0.5 0.5 0.5 0.5 0.5 0.5	
Sv	rrogate	REG Limits			
Dibromofluor 1,2-Dichloro Toluene-d8 Bromofluorob	omethane bethane-d4 benzene	105 80-121 106 80-125 97 80-120 109 80-124	****		
Field ID: Type: Lab ID:	CPT-2(69-74) SAMPLE 182815-006		Batch#: Analyzed:	107297 11/01/05	
	nalyte	Result		RL	
1,2-Dichlord Benzene Toluene 1,2-Dibromoe Ethylbenzene m,p-Xylenes o-Xylene	ethane thane	ND ND ND ND 0.5 ND		0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Su	irrogate	*REC Limits			
Dibromofluor   1,2-Dichlorc   Toluene-d8   Bromofluorob	romethane bethane-d4 benzene	94 80-121 89 80-125 96 80-120 98 80-124			



		BTXE & (	Oxygenates		
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:	5565 Tesla R EPA 5030B EPA 8260B	d.
Matrix: Units: Diln Fac:	Water ug/L 1.000		Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-4(15-20) SAMPLE 182815-010		Batch#: Analyzed:	107331 11/02/05	
1,2-Dichle	Analyte oroethane	ND		0.5	
Benzene Toluene 1,2-Dibron Ethylbenz m,p-Xylene o-Xylene	moethane ene es	ND 0.8 ND 19 48 16		0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibuomofil	Surrogate	%REC Limits			
1,2-Dichle Toluene-d Bromofluo	oroethane-d4 8 robenzene	105 80-121   108 80-125   99 80-120   98 80-124			
Field ID: Type: Lab ID:	CPT-4(30-35) SAMPLE 182815-011		Batch#: Analyzed:	107297 11/01/05	
1.0.0/-1-1	Analyte	Result		RL	
1,2-Dichl Benzene Toluene 1,2-Dibroi Ethylbenz m,p-Xylen o-Xylene	oroethane moethane ene es	ND ND ND 1.7 6.2 1.3		0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibronefi	Surrogate	%REC Limits			
1,2-Dichl	uorometnane oroethane-d4	95 80-121   92 80-125			
Toluene-d Bromofluo	8 robenzene	97 80-120 101 80-124			



		BTXE	& C	xygenates		
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering	Inc.	Location: Prep: Analysis:	5565 Tesla . EPA 5030B EPA 8260B	Rd.
Matrix: Units: Diln Fac:	Water ug/L 1.000			Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-4(52-57) SAMPLE 182815-012			Batch#: Analyzed:	107297 11/01/05	
1,2-Dichlo Benzene Toluene 1,2-Dibror Ethylbenze m,p-Xylene o-Xylene	Analyte proethane noethane ene es	Resu ND ND ND ND ND ND	1.1		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibromoflu 1,2-Dichlo Toluene-da Bromofluo	Surrogate foromethane proethane-d4 } robenzene	%REC Lim   98 80 -   99 80 -   99 80 -   99 80 -   106 80 -	121 125 120 124			
Field ID: Type: Lab ID:	CPT-6(15-20) SAMPLE 182815-015			Batch#: Analyzed:	107297 11/01/05	
1,2-Dichlo Benzene Toluene 1,2-Dibron Ethylbenzo m,p-Xyleno o-Xylene	Analyte proethane noethane ene es	Resu ND ND ND ND ND ND ND ND	1t		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Dibromofl 1,2-Dichlo Toluene-d Bromofluo	Surrogate uoromethane proethane-d4 3 robenzene	%REC Lim   99 80 -   98 80 -   100 80 -   100 80 -   100 80 -	121 121 125 120 124			



		B:	rxe & C	)xygenates		
Lab #: 18281 Client: SOMA Project#: STAND	5 Environmental ARD	Engineeri	ng Inc.	Location: Prep: Analysis:	5565 Tesla EPA 5030B EPA 8260B	.Rd.
Matrix: Units: Diln Fac:	Water ug/L 1.000			Sampled: Received:	10/27/05 10/27/05	
Field ID: Type: Lab ID:	CPT-6(31-36) SAMPLE 182815-016			Batch#: Analyzed:	107297 11/01/05	
Anal 1,2-Dichloroeth Benzene Toluene 1,2-Dibromoetha Ethylbenzene m,p-Xylenes o-Xylene	yte ane ne	R ND ND ND ND ND ND	<u>esult</u>		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Surro Dibromofluorome 1,2-Dichloroeth Toluene-d8 Bromofluorobenz	<b>gate</b> thane ane-d4 ene	%REC 100 102 103 108	Limits 80-121 80-125 80-120 80-124			
Field ID: Type: Lab ID:	CPT-6(51-56) SAMPLE 182815-017			Batch#: Analyzed:	107297 11/01/05	
Anal 1,2-Dichloroeth Benzene Toluene 1,2-Dibromoetha Ethylbenzene m,p-Xylenes o-Xylene	yte ane ne	R ND ND ND ND ND ND	esul t		RL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	
Surro Dibromofluorome 1,2-Dichloroeth Toluene-d8 Bromofluorobenz	<b>gate</b> thane ane-d4 ene	%REC 105 102 96 104	Limits 80-121 80-125 80-120 80-124			



	BTXE &	Oxygenates		
Lab #: Client: Project#:	182815 SOMA Environmental Engineering In STANDARD	Location: c. Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8260B	
Matrix: Units: Diln Fac:	Water ug/L 1.000	Sampled: Received:	10/27/05 10/27/05	

Type: BLANK Lab ID: QC315246	Batch#: Analyzed:	107297 11/01/05
Analvte	Result	RL
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Dibromofluoromothano	106 90-121	
1 2 Dighloroothane d4	104 90-125	
Toluono de	104 90-120	
Dromofluorobongono		

Type: Lab ID:	BLANK QC315379			Batch#: Analyzed:	107331 11/02/	'05	
	Analyte		Result		RL		
1,2-Dichlor	oethane	N	D		0.5		
Benzene		N	D		0.5		
Toluene		N	D		0.5		
1,2-Dibromo	ethane	N	D		0.5		
Ethylbenzen	e	N	D		0.5		
m,p-Xylenes		N	D		0.5		
o-Xylene		N	D		0.5		
S	urrogate	%REC	Limits				
Dibromofluo:	romethane	104	80-121				
1,2-Dichlor	oethane-d4	109	80-125				
Toluene-d8		101	80-120				
Bromofluoro	benzene	106	80-124				



	BTXE & O	xygenates	
Lab #: Client: Project#:	182815 SOMA Environmental Engineering Inc. STANDARD	Location: Prep: Analysis:	5565 Tesla Rd. EPA 5030B EPA 8260B
Matrix: Units: Diln Fac:	Water ug/L 1.000	Sampled: Received:	10/27/05 10/27/05

Type: Lab ID:	BLANK QC315801			Batch#: Analyzed:	107433 11/04/05	
	Analyte		Result		RL	
1,2-Dichlor	oethane	N	ID		0.5	
Benzene		N	D		0.5	
Toluene		N	D		0.5	
1,2-Dibromo	bethane	N	D		0.5	
Ethylbenzer	le	N	D		0.5	
m,p-Xylenes	3	N	ID		0.5	
o-Xylene		N	ID		0.5	
	urrogate	*REC	Limits			
Dibromofluc	promethane	103	80-121			
1,2-Dichlor	coethane-d4	112	80-125			
Toluene-d8		98	80-120			
Bromofluoro	obenzene	108	80-124			



		BTXE & O	xygenates	
Lab #:	182815		Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD		Analysis:	EPA 8260B
Matrix:	Water		Batch#:	107297
Units:	ug/L		Analyzed:	11/01/05
Diln Fac:	1.000			

Type:

BS

Lab ID: QC315244

Analyte	Spiked	Result	%RE(	2 Limits	
1,2-Dichloroethane	25.00	20.62	82	77-120	
Benzene	25.00	20.23	81	80-120	
Toluene	25.00	20.61	82	80-120	
1,2-Dibromoethane	25.00	20.40	82	80-120	
Ethylbenzene	25.00	21.33	85	80-120	
m,p-Xylenes	50.00	42.53	85	80-121	
o-Xylene	25.00	21.97	88	80-120	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121
1,2-Dichloroethane-d4	103	80-125
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-124

Туре:	BSD	Lab ID	: QC31	5245			
	Analyte	Spiked	Result	%RE	2 Limits	RPD	Lim
1,2-Dichlo	roethane	25.00	22.85	91	77-120	10	20
Benzene		25.00	22.64	91	80-120	11	20
Toluene		25.00	23.03	92	80-120	11	20
1,2-Dibrom	oethane	25.00	22.39	90	80-120	9	20
Ethylbenze	ne	25.00	23.54	94	80-120	10	20
m,p-Xylene	S	50.00	46.65	93	80-121	9	20
o-Xylene		25.00	24.19	97	80-120	10	20
· · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
	Surrogate	%REC Limits					

Bromofluorobenzene	98	80-124	
Toluene-d8	102	80-120	
1,2-Dichloroethane-d4	101	80-125	
Dibromofluoromethane	99	80-121	
Surrogate	%REC	Limits	



BTXE & Oxygenates						
Lab #:	182815		Location:	5565 Tesla Rd.		
Client:	SOMA Environmental H	Engineering Inc.	Prep:	EPA 5030B		
Project#:	STANDARD		Analysis:	EPA 8260B		
Matrix:	Water		Batch#:	107331		
Units:	ug/L		Analyzed:	11/02/05		
Diln Fac:	1.000					

Type:

BS

Lab ID: QC315377

Analyte	Spiked	Result	%REC	Limits
1,2-Dichloroethane	25.00	26.07	104	77-120
Benzene	25.00	25.24	101	80-120
Toluene	25.00	26.07	104	80-120
1,2-Dibromoethane	25.00	25.09	100	80-120
Ethylbenzene	25.00	26.90	108	80-120
m,p-Xylenes	50.00	54.44	109	80-121
o-Xylene	25.00	27.38	110	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-121
1,2-Dichloroethane-d4	102	80-125
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-124

Type:	BSD		]	Lab ID:	QC31	5378			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
1,2-Dichl	oroethane		25.00		26.37	105	77-120	1	20
Benzene			25.00		25.22	101	80-120	0	20
Toluene			25.00		25.49	102	80-120	2	20
1,2-Dibro	moethane		25.00		25.22	101	80-120	1	20
Ethylbenz	ene		25.00		26.01	104	80-120	3	20
m,p-Xylen	es		50.00		51.96	104	80-121	5	20
o-Xylene			25.00		26.77	107	80-120	2	20
		· · · · · · · · · · · · · · · · · · ·						fil	
	Surrogate	%RBC	Limits						
Dibromofl	uoromethane	101	80-121						
1 2 5 5 - 5 1	amaathama di	104	00 105						

1,2-Dichloroethane-d4 104 80-125 Toluene-d8 99 80-120 Bromofluorobenzene 95 80-124	Dibromofluoromethane	101	80-121
Toluene-d8 99 80-120   Bromofluorobenzene 95 80-124	1,2-Dichloroethane-d4	104	80-125
Bromofluorobenzene 95 80-124	Toluene-d8	99	80-120
	Bromofluorobenzene	95	80-124



BTXE & Oxygenates						
Lab #:	182815		Location:	5565 Tesla Rd.		
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B		
Project#:	STANDARD		Analysis:	EPA 8260B		
Matrix:	Water		Batch#:	107433		
Units:	ug/L		Analyzed:	11/04/05		
Diln Fac:	1.000					

Туре	:
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BS	
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Lab ID:

QC315799

Analyte	Spiked	Result	%REC	Limita
1,2-Dichloroethane	25.00	26.19	105	77-120
Benzene	25.00	26.81	107	80-120
Toluene	25.00	27.18	109	80-120
1,2-Dibromoethane	25.00	26.07	104	80-120
Ethylbenzene	25.00	29.38	118	80-120
m,p-Xylenes	50.00	58.60	117	80-121
o-Xylene	25.00	29.73	119	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-121
1,2-Dichloroethane-d4	102	80-125
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-124

Type:	BSD			Lab ID:	QC315	5800			
	Analyte		Spiked		Result	%REC	Limits	RPL	Lim
1,2-Dichlo	oroethane		25.00		24.46	98	77-120	7	20
Benzene			25.00		24.63	99	80-120	8	20
Toluene			25.00		25.06	100	80-120	8	20
1,2-Dibrom	noethane		25.00		23.96	96	80-120	8	20
Ethylbenze	ene		25.00		25.17	101	80-120	15	20
m,p-Xylene	es		50.00		52.26	105	80-121	11	20
o-Xylene			25.00		25.88	104	80-120	14	20
									-
	Surrogate	%RBC	Limits						
Dibromoflu	Joromethane	104	80-121						
1,2-Dichlo	oroethane-d4	104	80-125						
Toluene-d8	8	100	80-120						

98

80-124

Bromofluorobenzene



		Purgeable Org	anics by GC/MS	
Lab #:	182815		Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD	· · · · · · · · · · · · · · · · · · ·	Analysis:	EPA 8260B
Field ID:	CPT-3(11-16)		Batch#:	107433
Lab ID:	182815-007		Sampled:	10/26/05
Matrix:	Water		Received:	10/27/05
Units:	ug/L		Analyzed:	11/04/05
Diln Fac:	1.000			

Analyte	Resul	t RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
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



Purgeable Organics by GC/MS							
Lab #:	182815		Location:	5565 Tesla Rd.			
Client:	SOMA Environmental H	Engineering Inc.	Prep:	EPA 5030B			
Project#:	STANDARD		Analysis:	EPA 8260B			
Field ID:	CPT-3(11-16)		Batch#:	107433			
Lab ID:	182815-007		Sampled:	10/26/05			
Matrix:	Water		Received:	10/27/05			
Units:	ug/L		Analyzed:	11/04/05			
Diln Fac:	1.000						

Analyte	Result	Ru
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
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

Surrogate	%REC	Limits	
Dibromofluoromethane	112	80-121	
1,2-Dichloroethane-d4	113	80-125	
Toluene-d8	98	80-120	
Bromofluorobenzene	108	80-124	



Purgeable Organics by GC/MS							
Lab #:	182815		Location:	5565 Tesla Rd.			
Client:	SOMA Environmental	Engineering Inc	. Prep:	EPA 5030B			
Project#:	STANDARD		Analysis:	EPA 8260B			
Field ID:	CPT-3(39-44)		Batch#:	107433			
Lab ID:	182815-008		Sampled:	10/26/05			
Matrix:	Water		Received:	10/27/05			
Units:	ug/L		Analyzed:	11/04/05			
Diln Fac:	1.000						

Analyte	Result	RL	
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
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	



		Purgeable	Org	anics by GC/MS	
Lab #:	182815			Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering :	Inc.	Prep:	EPA 5030B
Project#:	STANDARD			Analysis:	EPA 8260B
Field ID:	CPT-3(39-44)			Batch#:	107433
Lab ID:	182815-008			Sampled:	10/26/05
Matrix:	Water			Received:	10/27/05
Units:	ug/L			Analyzed:	11/04/05
Diln Fac:	1.000				

Analyte	Result	RL
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
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

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-121
1,2-Dichloroethane-d4	110	80-125
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-124



Purgeable Organics by GC/MS				
Lab #:	182815	Location:	5565 Tesla Rd.	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	CPT-3 (58-63)	Batch#:	107433	
Lab ID:	182815-009	Sampled:	10/26/05	
Matrix:	Water	Received:	10/27/05	
Units:	ug/L	Analyzed:	11/04/05	
Diln Fac:	1.000			

Analyte	Result	RL	
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
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	



	Purgeable Org	anics by GC	/MS
Lab #:	182815	Location:	5565 Tesla Rd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	CPT-3 (58-63)	Batch#:	107433
Lab ID:	182815-009	Sampled:	10/26/05
Matrix:	Water	Received:	10/27/05
Units:	ug/L	Analyzed:	11/04/05
Diln Fac:	1.000		

Analyte	Result	RL
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
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

Surrogate	%REC	Limits	
Dibromofluoromethane	111	80-121	
1,2-Dichloroethane-d4	110	80-125	
Toluene-d8	102	80-120	
Bromofluorobenzene	108	80-124	



Purgeable Organics by GC/MS			
Lab #:	182815	Location:	5565 Tesla Rd.
Client:	SOMA Environmental Engineering Inc	. Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	CPT-5(19-24)	Batch#:	107432
Lab ID:	182815-013	Sampled:	10/26/05
Matrix:	Water	Received:	10/27/05
Units:	ug/L	Analyzed:	11/04/05
Diln Fac:	2.000		

Analyte	Result	RL
Freon 12	ND	2.0
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Acetone	ND	20
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	1.0
MTBE	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Vinyl Acetate	ND	20
1,1-Dichloroethane	ND	1.0
2-Butanone	ND	20
cis-1,2-Dichloroethene	ND	1.0
2,2-Dichloropropane	ND	1.0
Chloroform	ND	1.0
Bromochloromethane	ND	1.0
1,1,1-Trichloroethane	ND	1.0
1,1-Dichloropropene	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Benzene	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
Dibromomethane	ND	1.0
4-Methyl-2-Pentanone	ND	20
cis-1,3-Dichloropropene	ND	1.0
Toluene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
2-Hexanone	ND	20
1,3-Dichloropropane	ND	1.0
Tetrachloroethene	ND	1.0



	Purgeable Org	anics by GC	/MS
Lab #:	182815	Location:	5565 Tesla Rd.
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	CPT-5(19-24)	Batch#:	107432
Lab ID:	182815-013	Sampled:	10/26/05
Matrix:	Water	Received:	10/27/05
Units:	ug/L	Analyzed:	11/04/05
Diln Fac:	2.000		

Analyte	Result	RL
Dibromochloromethane	ND	1.0
1,2-Dibromoethane	ND	1.0
Chlorobenzene	ND	1.0
1,1,1,2-Tetrachloroethane	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0
Styrene	ND	1.0
Bromoform	ND	2.0
Isopropylbenzene	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,2,3-Trichloropropane	ND	1.0
Propylbenzene	ND	1.0
Bromobenzene	ND	1.0
1,3,5-Trimethylbenzene	ND	1.0
2-Chlorotoluene	ND	1.0
4-Chlorotoluene	ND	1.0
tert-Butylbenzene	ND	1.0
1,2,4-Trimethylbenzene	ND	1.0
sec-Butylbenzene	ND	1.0
para-Isopropyl Toluene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
n-Butylbenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,2-Dibromo-3-Chloropropane	ND	4.0
1,2,4-Trichlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Naphthalene	ND	4.0
1,2,3-Trichlorobenzene	ND	1.0

	000000000000000000000000000000000000000				 
Surrogate	%REC	Limits			
Dibromofluoromethane	102	80-121			
1,2-Dichloroethane-d4	93	80-125			
Toluene-d8	102	80-120			
Bromofluorobenzene	99	80-124		-	



	Purgeable Org	anics by GC	/MS	
Lab #:	182815	Location:	5565 Tesla Rd.	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	CPT-5(56-61)	Batch#:	107433	
Lab ID:	182815-014	Sampled:	10/26/05	
Matrix:	Water	Received:	10/27/05	
Units:	ug/L	Analyzed:	11/04/05	
Diln Fac:	1.000			

Analyte	Result	RL	
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
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	



	Purgeable Or	ganics by GC,	/MS	
Lab #:	182815	Location:	5565 Tesla Rd.	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B	
Project#:	STANDARD	Analysis:	EPA 8260B	
Field ID:	CPT-5(56-61)	Batch#:	107433	
Lab ID:	182815-014	Sampled:	10/26/05	
Matrix:	Water	Received:	10/27/05	
Units:	ug/L	Analyzed:	11/04/05	
Diln Fac:	1.000			

Analyte	Result	RL
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
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

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-121
1,2-Dichloroethane-d4	112	80-125
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-124

		Purgeable	Org	anics by GC/M	8
Lab #:	182815			Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering	Inc.	Prep:	EPA 5030B
Project#:	STANDARD			Analysis:	EPA 8260B
Type:	BLANK			Diln Fac:	1.000
Lab ID:	QC315798			Batch#:	107432
Matrix:	Water			Analyzed:	11/04/05
Units:	ug/L				

Analyte	Result	RL	
Freon 12	ND	1.0	:
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
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	



		Purgeable Org	anics by GC/MS	
Lab #:	182815		Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD		Analysis:	EPA 8260B
Type:	BLANK		Diln Fac:	1.000
Lab ID:	QC315798		Batch#:	107432
Matrix:	Water		Analyzed:	11/04/05
Units:	ug/L			

Analyte	Result	RL
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
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

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-121
1,2-Dichloroethane-d4	99	80-125
Toluene-d8	105	80-120
Bromofluorobenzene	104	80-124

		Purgeable O	rganics by GC/I	NS	
Lab #:	182815		Location:	5565 Tesla Rd.	
Client:	SOMA Environmental	Engineering Inc	. Prep:	EPA 5030B	
Project#:	STANDARD		Analysis:	EPA 8260B	
Type:	BLANK		Diln Fac:	1.000	
Lab ID:	QC315801		Batch#:	107433	
Matrix:	Water		Analyzed:	11/04/05	
Units:	ug/L		······································		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
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



		Purgeable	Orga	nics by GC/	MS
Lab #:	182815			Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering In	nc.	Prep:	EPA 5030B
Project#:	STANDARD			Analysis:	EPA 8260B
Type:	BLANK			Diln Fac:	1.000
Lab ID:	QC315801			Batch#:	107433
Matrix:	Water			Analyzed:	11/04/05
Units:	ug/L				

Analyte	Result	RL
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
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	2.0	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-121
1,2-Dichloroethane-d4	112	80-125
Toluene-d8	98	80-120
Bromofluorobenzene	108	80-124



		Purgeable Org	anics by GC/M	S
Lab #:	182815		Location:	5565 Tesla Rd.
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	STANDARD		Analysis:	EPA 8260B
Matrix:	Water		Batch#:	107432
Units:	ug/L		Analyzed:	11/04/05
Diln Fac:	1.000			

BS Lab ID: QC315796	ype: BS
Analyte Spiked Result %REC Limits	Analyte
Dethene 25.00 22.53 90 74-124	1,1-Dichloroethene
25.00 24.37 97 80-120	Benzene
nene 25.00 24.09 96 79-120	Trichloroethene
25.00 26.15 105 80-120	Toluene
ne 25.00 25.98 104 80-120	Chlorobenzene
25.0026.1510580-120ne25.0025.9810480-120	Toluene Chlorobenzene

Dibromofluoromethane	99	80-121
1,2-Dichloroethane-d4	83	80-125
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-124

T٦r	ne			
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BSD

т.

Lab ID: QC315797

Analyte		Spiked	Result	%REC	Limits	RPI	) Lim
1,1-Dichloroethene		25.00	21.17	85	74-124	6	20
Benzene		25.00	25.71	103	80-120	5	20
Trichloroethene		25.00	26.48	106	79-120	9	20
Toluene		25.00	27.12	108	80-120	4	20
Chlorobenzene		25.00	25.72	103	80-120	1	20
Surrogate	%REC	Limits					
Dibromofluoromethane	99	80-121					
1,2-Dichloroethane-d4	92	80-125					
Toluene-d8	101	80-120					
Bromofluorobenzene	94	80-124					



		Purgeable O	rganics by GC	/ms	
Lab #:	182815		Location:	5565 Tesla Rd.	
Client:	SOMA Environmental	Engineering Inc	. Prep:	EPA 5030B	
Project#:	STANDARD		Analysis:	EPA 8260B	
Matrix:	Water		Batch#:	107433	
Units:	ug/L		Analyzed:	11/04/05	
Diln Fac:	1.000				<u></u>

Type:	BS	Lab ID:	QC315	5799	
	Analyte	Spiked	Result	%RBC	Limits
1,1-Dichl	oroethene	25.00	28.59	114	74-124
Benzene		25.00	26.81	107	80-120
Trichloro	ethene	25.00	27.91	112	79-120
Toluene		25.00	27.18	109	80-120
Chloroben	zene	25.00	28.76	115	80-120
		· · · · · · · · · · · · · · · · · · ·			
	Gunnarata	en la constanta de la constanta			

Surrogate	SREC	<u>. manina C.S</u>	
Dibromofluoromethane	101	80-121	
1,2-Dichloroethane-d4	102	80-125	
Toluene-d8	100	80-120	
Bromofluorobenzene	98	80-124	

Type:	BSD	Li	ab ID:	QC315	5800			
Analy	te	Spiked	Resi	ılt	%REC	Limits	RPD	Lim
1,1-Dichloroethe	ene	25.00	2	25.44	102	74-124	12	20
Benzene		25.00	2	24.63	99	80-120	8	20
Trichloroethene		25.00	2	24.26	97	79-120	14	20
Toluene		25.00	2	25.06	100	80-120	8	20
Chlorobenzene		25.00		25.07	100	80-120	14	20
Surrog	ate %RI	C Limits						
Dibromofluoromet	hane 104	80-121						
1,2-Dichloroetha	ine-d4 104	80-125						
Toluene-d8	100	80-120						
Bromofluorobenze	ene 98	80-124						



	Dissolved Califo	rnia Title 20	5 Metals
Lab #: 182815		Project#:	STANDARD
Client: SOMA En	vironmental Engineering Inc.	Location:	5565 Tesla Rd.
Field ID:	CPT-3(11-16)	Diln Fac:	1.000
Lab ID:	182815-007	Sampled:	10/26/05
Matrix:	Filtrate	Received:	10/27/05
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed		Prep	Ar	alysis
Antimony	ND	60	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Arsenic	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Barium	210	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Beryllium	ND	2.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Cadmium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Chromium	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Cobalt	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Copper	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Lead	ND	3.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Mercury	0.27	0.20	107305	11/01/05	11/01/05	METH	HOD	EPA	7470A
Molybdenum	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Nickel	26	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Selenium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Silver	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Thallium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Vanadium	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B
Zinc	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B



	Diss	olved Cal	iforni	a Title	26 Meta	ls				
Lab #: 182815			Pı	coject#:	STA	ANDAF	2D			1
Client: SOMA E	nvironmental Eng	ineering In	c. Lo	ocation:	556	65 Te	esla Rd.			
Field ID:	CPT-3(39-44)		D	iln Fac:	1.(	000				
Lab ID:	182815-008		Sa	ampled:	10,	/26/0	)5			
Matrix:	Filtrate		Re	eceived:	10,	/27/(	)5			
Units:	ug/L									
Analyte	Result	RL	Batch#	Prepared	Analyzed		Prep	Ar	alysis	
Antimony	ND	60	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Arsenic	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Barium	160	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Beryllium	ND	2.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Cadmium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Chromium	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Cobalt	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Copper	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Lead	ND	3.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Mercury	0.25	0.20	107305	11/01/05	11/01/05	METH	IOD	EPA	7470A	
Molybdenum	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Nickel	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Selenium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Silver	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Thallium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Vanadium	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	

20

ND

107257 10/31/05 10/31/05 EPA 3010A

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

Zinc

EPA 6010B



	Dissolved Califo	rnia Title 20	6 Metals
Lab #: 18281	.5	Project#:	STANDARD
Client: SOMA	Environmental Engineering Inc.	Location:	5565 Tesla Rd.
Field ID:	CPT-3(58-63)	Diln Fac:	1.000
Lab ID:	182815-009	Sampled:	10/26/05
Matrix:	Filtrate	Received:	10/27/05
Units:	ug/L		
			-lund Dren Analysis

Analvte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	60	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Arsenic	ND	5.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Barium	55	10	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Bervllium	ND	2.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Chromium	ND	10	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Cobalt	ND	20	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Copper	ND	10	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Lead	ND	3.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Mercurv	ND	0.20	107305	11/01/05	11/01/05	METHOD	EPA 7470A
Molvbdenum	ND	20	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Nickel	ND	20	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Selenium	ND	5.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Silver	ND	5.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Thallium	ND	5.0	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Vanadium	ND	10	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B
Zinc	ND	20	107257	10/31/05	10/31/05	EPA 3010A	EPA 6010B



	Dissolved Califo	rnia Title 2	26 Metals
Lab #: 182815		Project#:	STANDARD
Client: SOMA En	vironmental Engineering Inc.	Location:	5565 Tesla Rd.
Field ID:	CPT-5(19-24)	Diln Fac:	1.000
Lab ID:	182815-013	Sampled:	10/26/05
Matrix:	Filtrate	Received:	10/27/05
Units:	ug/L		

Analyte	Result	RL	Batch#	Prepared	Analyzed		Prep	Ar	alysis	
Antimony	ND	60	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Arsenic	43	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Barium	11	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Beryllium	ND	2.0	107257	10/31/05	10/31/05	ΕPΑ	3010A	EPA	6010B	
Cadmium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Chromium	24	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Cobalt	ND	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Copper	46	10	107257	10/31/05	10/31/05	ΕPΑ	3010A	EPA	6010B	
Lead	ND	3.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Mercury	0.61	0.20	107305	11/01/05	11/01/05	METH	HOD	EPA	7470A	
Molybdenum	59	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Nickel	28	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Selenium	6.4	5.0	107257	10/31/05	10/31/05	ΕPA	3010A	EPA	6010B	
Silver	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Thallium	ND	5.0	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Vanadium	ND	10	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	
Zinc	48	20	107257	10/31/05	10/31/05	EPA	3010A	EPA	6010B	



	Di	ssolved C	aliforn	ia Title	26 Meta	als			
Lab #+ 18281	5		]	Project#:	S	TANDAR	D		<u></u>
Client · SOMA	.5 Environmental F	ngineering	Inc.	Location:	55	565 Te	sla Rd.		
Field ID.	CPT-5 (56-61	)	]	Diln Fac:	1	.000			
Lab ID.	182815-014	- /	:	Sampled:	10	0/26/0	5		
Matrix:	Filtrate		]	Received:	1(	0/27/0	5		
Inits.	ug/L								
011105.									
Analyte	Result	RL	Batch#	Prepared	Analyzed	P	rep	Aı	ialysis
Antimony	ND	60	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Arsenic	ND	5.0	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Barium	210	10	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Beryllium	ND	2.0	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Cadmium	ND	5.0	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Chromium	ND	10	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Cobalt	ND	20	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Copper	ND	10	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Lead	ND	3.0	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Mercury	ND	0.20	107305	11/01/05	11/01/05	METHC	D	EPA	7470A
Molybdenum	ND	20	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Nickel	ND	20	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B
Selenium	ND	5.0	107257	10/31/05	10/31/05	EPA 3	010A	EPA	6010B

107257 10/31/05 10/31/05 EPA 3010A

5.0

5.0

10

20

ND

ND

ND

ND

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

Thallium

Vanadium

Silver

Zinc

EPA 6010B

EPA 6010B

EPA 6010B

EPA 6010B



	Dissolved Califor	nia Title	26 Metals	
Lab #:	182815	Location:	5565 Tesla Rd.	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3010A	
Project#:	STANDARD	Analysis:	EPA 6010B	
Type:	BLANK	Diln Fac:	1.000	
Lab ID:	QC315088	Batch#:	107257	1
Matrix:	Water	Prepared:	10/31/05	
Units:	ug/L	Analyzed:	10/31/05	

Analyte	Result	RL
Antimony	ND	60
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	5.0
Chromium	ND	10
Cobalt	ND	20
Copper	ND	10
Lead	ND	3.0
Molybdenum	ND	20
Nickel	ND	20
Selenium	ND	5.0
Silver	ND	5.0
Thallium	ND	5.0
Vanadium	ND	10
Zinc	ND	20

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



Dissolved California Title 26 Metals						
Lab #:	182815	Location:	5565 Tesla Rd.			
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD			
Project#:	STANDARD	Analysis:	EPA 7470A			
Analyte:	Mercury	Diln Fac:	1.000			
Type:	BLANK	Batch#:	107305			
Lab ID:	QC315274	Prepared:	11/01/05			
Matrix:	Water	Analyzed:	11/01/05			
Units:	ug/L					

Result	RL	
ND	0.20	



	Dissolved Califor	nia Title 2	6 Metals	
Lab #:	182815	Location:	5565 Tesla Rd.	
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3010A	
Project#:	STANDARD	Analysis:	EPA 6010B	
Matrix:	Water	Batch#:	107257	
Units:	ug/L	Prepared:	10/31/05	
Diln Fac:	1.000	Analyzed:	10/31/05	

Type: BS	Lab II	): QC31	5089		
Analyte	Spiked	Result	%REC	Limits	
Antimony	500.0	504.1	101	79-120	
Arsenic	100.0	106.8	107	80-124	
Barium	2,000	1,981	99	80-120	
Beryllium	50.00	52.95	106	80-120	
Cadmium	50.00	54.29	109	80-120	
Chromium	200.0	205.3	103	80-120	
Cobalt	500.0	501.1	100	80-120	
Copper	250.0	241.0	96	80-120	
Liezd	100.0	102.2	102	76-124	
Molybdenum	400.0	425.3	106	80-120	
Nickel	500.0	516.0	103	80-120	
	100 0	110.1	110	70-131	
Selenium	50.00	47.95	96	80-120	
Thollium	100 0	106.0	106	71-129	
Vanadium	500 0	519.5	104	80-120	
Zinc	500.0	538.5	108	80-120	

Type: BSD	Lab ID:	QC315090				
Analvte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	500.0	519.4	104	79-120	3	20
Arsenic	100.0	109.8	110	80-124	3	20
Barium	2,000	2,038	102	80-120	3	20
Bervllium	50.00	54.76	110	80-120	3	20
Cadmium	50.00	55.96	112	80-120	3	20
Chromium	200.0	210.9	105	80-120	3	20
Cobalt	500.0	518.4	104	80-120	3	20
Copper	250.0	249.0	100	80-120	3	20
Lead	100.0	103.8	104	76-124	2	20
Molybdenum	400.0	435.9	109	80-120	2	20
Nickel	500.0	531.9	106	80-120	3	20
Selenjum	100.0	111.3	111	70-131	1	21
Silver	50.00	49.25	99	80-120	3	20
Thallium	100.0	108.5	108	71-129	2	20
Vanadium	500.0	535.6	107	80-120	3	20
Zinc	500.0	554.4	111	80-120	3	20


## Batch QC Report

Dissolved California Title 26 Metals							
Lab #: Client: Project#:	182815 SOMA Environmental Engineering Inc.	Location: Prep: Analysis:	5565 Tesla Rd. EPA 3010A EPA 6010B				
Field ID: MSS Lab I Matrix: Units: Diln Fac:	ZZZZZZZZZ D: 182813-001 Water ug/L 1.000	Batch#: Sampled: Received: Prepared: Analyzed:	107257 10/27/05 10/27/05 10/31/05 10/31/05				

Type :	MS		Lab ID:	QC315091		
Δ.+		MSS Result	Spiked	Result	%REC	Limits
Antimony		< 3.639	500.0	486.4	97	67-126
Ancimony		1 530	100.0	102.7	101	68-141
Dawijum		0 6578	2.000	1,909	95	80-120
Darium		<0.2089	50 00	51.16	102	80-120
Berylllum			50.00	52.01	104	80-120
Cadmium		<0.5500	200.0	198 5	99	80-120
Chromium			500.0	484.7	97	80-120
Cobalt			250.0	232 4	93	78-121
Copper		<0.7122	230.0	97 99	96	61-135
Lead		1.930	100.0	109 3	102	70-120
Molybdenum		1.//8	400.0	405.5	002	77-120
Nickel		<0.9182	500.0	490.9	104	FC 145
Selenium		<1.575	100.0	104.2	104	50-145 70 104
Silver		<1.403	50.00	46.36	93	72-124
Thallium		1.094	100.0	101.7	101	51-138
Vanadium		0.4479	500.0	501.4	100	80-120
Zinc		<1.533	500.0	519.9	104	75-124

Type: MSI		Lab ID:	QC315092			
Analvte	Spiked	Result	%REC	C Limits	RPD	Lim
Antimony	500.0	513.8	103	67-126	5	20
Arsenic	100.0	110.0	108	68-141	7	25
Barium	2,000	2,016	101	80-120	5	20
Bervllium	50.00	) 54.0	6 108	80-120	5	20
Cadmium	50.00	) 55.0	2 110	80-120	6	20
Chromium	200.0	209.7	105	80-120	6	20
Cobalt	500.0	512.2	102	80-120	6	20
Copper	250.0	245.9	98	78-121	6	20
Lead	100.0	104.1	102	61-135	6	23
Molybdenum	400.0	434.2	108	70-120	6	20
Nickel	500.0	525.9	105	77-120	6	20
Selenium	100.0	109.7	110	56-145	5	32
Silver	50.00	) 49.1	4 98	72-124	6	20
Thallium	100.0	107.8	107	51-138	6	31
Vanadium	500.0	530.9	106	80-120	6	20
Zinc	500.0	549.2	110	75-124	5	20



20

80-120 2

Batch QC Report

QC315276

BSD

Dissolved California Title 26 Metals							
Lab #: Client: Project#:	182815 SOMA Environmental STANDARD	Engineering Inc.	Location: Prep: Analysis:		5565 Tesla Rd. METHOD EPA 7470A		
Analyte: Matrix: Units: Diln Fac:	Mercury Water ug/L 1.000		Batch#: Prepared: Analyzed:		107305 11/01/05 11/01/05		
<b>Type</b> BS QC	Lab ID Spik 315275	ed R 5.000	esult 4.570	% <b>REC</b> 91	Limits RPD Lim 80-120		

5.000

4.670

93



Batch QC Report

Dissolved California Title 26 Metals								
Lab #:	182815	Location:	5565 Tesla Rd.					
Client:	SOMA Environmental Engine	ering Inc. Prep:	METHOD					
Project#:	STANDARD	Analysis:	EPA 7470A					
Analyte:	Mercury	Batch#:	107305					
Field ID:	ZZZZZZZZZZ	Sampled:	10/31/05					
MSS Lab II	D: 182865-001	Received:	10/31/05					
Matrix:	Water	Prepared:	11/01/05					
Units:	ug/L	Analyzed:	11/01/05					
Diln Fac:	1.000							

Туре	e Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC315277	0.7790	5.000	5.760	100	77-121		
MSD	QC315278		5.000	5.890	102	77-121	2	20