

CAMBRIA

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September 7, 2004

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Alameda County
SEP 09 2004
Environmental Health

Re: **Supplemental Soil and Groundwater Investigation Report**
1137-1167 65th Street
Oakland, California 94608
Case No.: RO0000082

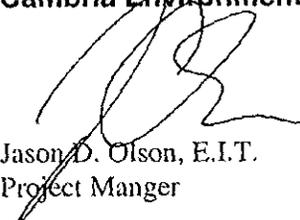


Dear Mr. Chan:

On behalf of Mr. John Nady, Cambria Environmental Technology, Inc. (Cambria) is pleased to submit this *Supplemental Soil and Groundwater Investigation Report* for the above-referenced site. This report summarizes the findings of the second of the three phases of the assessment described in the Alameda County Health Care Services Agency, Environmental Health Division (ACHCSA) approved August 26, 2003 *Investigation Work Plan*, February 24, 2004 *Interim Investigation Report*, and March 17, 2004 *Well Installation Work Plan Addendum*. Additional details for the scope of work for this phase of investigation are described in October 20, 2003 and May 17, 2004 ACHCSA emails.

If you have any questions or comments regarding this report, please contact me at (510) 420-3338.

Sincerely,
Cambria Environmental Technology, Inc.


Jason D. Olson, E.I.T.
Project Manger

Enclosure: September 7, 2004 *Supplemental Soil and Groundwater Investigation Report*

cc: Mr Frederic Schrag, 6701 Shellmound Street, Emeryville, California 94608

Cambria
Environmental
Technology, Inc.

100 Hollis Street
Emeryville, CA 94608
(510) 420-0700
(510) 420-9170

C A M B R I A

SUPPLEMENTAL SOIL AND GROUNDWATER INVESTIGATION REPORT

1137-1167 65th Street
Oakland, California 94608
Case No.: RO0000082

September 7, 2004



Prepared for Submittal to:

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Prepared by:

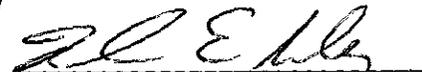
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Alameda County
SEP 07 2004
Department of Health



Jason B. Olson, E.I.T.
Project Manager





Neal Siler, R.G., R.E.A.
Senior Project Geologist

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C A M B R I A SUPPLEMENTAL SOIL AND GROUNDWATER INVESTIGATION REPORT

1137-1167 65th Street
Oakland, California 94608
Case No.: RO0000082

September 7, 2004

1.0 INTRODUCTION



This report summarizes the findings of the second of the three phases of site assessment described in the Alameda County Health Care Services Agency, Environmental Health Division (ACHCSA) approved August 26, 2003 *Investigation Work Plan*, February 24, 2004 *Interim Investigation Report*, and March 17, 2004 *Well Installation Work Plan Addendum*. Additional details for the scope of work for this phase of investigation are described in October 20, 2003 and May 17, 2004 ACHCSA correspondence and emails (Appendix A). The site description and history, field activities summary, geology and hydrogeology, analytical results, preliminary data findings, and conclusions and recommendations are presented below.

1.1. Phased Investigation Background

In a letter dated September 17, 2003, the ACHCSA approved the first and second of the three phases of site assessment proposed in Cambria Environmental Technology, Inc.'s (Cambria's) August 26, 2003 *Investigation Work Plan* (work plan). The first phase of assessment included a soil boring investigation, conduit study, and sensitive receptor survey designed to address site data gaps. The second phase of the investigation included monitoring well installation activities to monitor groundwater concentration trends by obtaining repeatable data. The third phase, which ACHCSA has placed on hold pending the outcome of the first two phases, includes a soil vapor study to evaluate if site compounds of concern pose an indoor air risk to site workers/occupants. Additional details regarding the first phase of the investigation are discussed in the February 24, 2004 *Interim Investigation Report*.

2.0 SITE DESCRIPTION AND HISTORY

2.1. Current Site Description

The site is currently comprised of a group of buildings separated by narrow walkways and occupying the addresses of 1137, 1145, 1147, and 1167 65th Street, Oakland, California (Figure 1). The site topography is at an elevation of approximately 35 feet above mean sea level (ft msl). The site vicinity is of mixed residential, commercial, and light industrial use.

2.2. Local Geology and Hydrogeology

The site is located in the Coast Ranges Geomorphic province of California (Norris and Webb, 1990). The site is situated on alluvial fan deposits of the Temescal Formation, comprised of interfingering lenses of clayey gravel, sandy silt, clay and sand-clay mixtures (Radburch, 1957). The sediments of the San Francisco Bay Estuary, which have been described as unconsolidated silt and clay mixed with abundant organic material and discontinuous beds or lenses of sand and/or gravel (Helley et al., 1979), most likely influence site geology and hydrogeology.

Materials consisting of dark brown to gray sand and gravel and interpreted to be a zone of fill extend from ground surface to a depth of 1 to 3 feet below ground surface (ft bgs). Underlying this upper fill unit are layers of silt and clay interbedded with silty and gravelly sand mixtures to a total depth of 36 ft bgs.

Groundwater has been first encountered at depths ranging from 3.4 to 18 ft bgs and most likely indicates that more than one water-bearing zone is present. Perched and shallow water-bearing zones are generally encountered at depths between 3.5 and 12 ft bgs. In certain areas of the site, these zones appear to be hydraulically connected and have been interpreted to represent one unit, the A-zone. Underlying this zone is a unit interpreted as the B-zone, which is encountered at depths of 16 to 22 ft bgs. Groundwater in the B-zone is under confined conditions. A deeper water-bearing zone, designated the C-zone, has been encountered at depths between 29 and 36 ft bgs. The lower extent of this zone has not yet been defined. Confining conditions are characteristic of the C-zone.

The San Francisco Bay is located less than one-mile to the west of the site. Groundwater flow is inferred to be westward toward the bay.

2.3. Previous Investigation and Remedial Activities

The previous investigation and remedial activities conducted at the site are summarized below. Former UST, product piping, and soil and groundwater sampling locations are shown on Figure 2. Historic soil and groundwater analytical results are summarized in Tables 1 through 4.

2.3.1. 1982 Tank Removal

One gasoline underground storage tank (UST) and associated gas pump was reportedly removed in 1982. Based on depressions in the site asphalt, the gasoline UST was most likely located beneath the former gasoline pump (Figure 2).

2.3.2. 1998 Tank Removal

In 1998, a 750-gallon heating oil UST was removed from beneath the sidewalk in front of 1167 65th Street (Figure 2). Approximately 18 cubic yards of impacted soil was removed from the UST cavity and transported under manifest for disposal. The former UST cavity was subsequently backfilled with clean fill and resurfaced. One confirmation soil sample was collected at a depth of 12 ft bgs and analyzed for total petroleum hydrocarbons as diesel (TPHd) and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The sample contained 14 micrograms per kilogram ($\mu\text{g}/\text{kg}$) TPHd and no detectable concentrations of BTEX constituents. Additional information is present in the December 24, 1998 *UST Removal Report* prepared by Artesian.



2.3.3. 2001 Product Removal

In November 2001, product containing total petroleum hydrocarbon (TPH) compounds with BTEX and volatile organic compounds (VOCs) including 1,2-dichloroethane (1,2-DCA) were removed from six USTs located at the site. The removed product was transported under chain of custody for disposal as hazardous waste.

2.3.4. 2002 Tank Removal and Abandonments

In February 2002, five of the six USTs emptied in November 2001 were excavated and removed, and one UST was filled with cement slurry and abandoned in place. NorCal Geophysical Consultants (NorCal) conducted a limited geophysical survey to identify the location of the buried USTs. Analysis of soil and groundwater samples collected from the tank areas indicated elevated concentrations of TPH compounds including gasoline (TPHg), naphtha (TPHnap), Stoddard solvent (TPHss), and TPHd; BTEX; and VOCs. Soil removed from the former UST areas was transported under manifest for disposal. Additional information is present in the May 17, 2002 *UST Removal Report* prepared by SCI consultants.

2.3.5. 2002 Soil Boring and Geophysical Survey

In November 2002, Cambria advanced eleven soil borings (SB-1 through SB-11) to further define the extent of petroleum hydrocarbons and VOCs in soil and groundwater beneath the site (Figure 2). During the boring activities, Cambria installed temporary wells in each boring to assess groundwater elevation and to facilitate collection of groundwater samples. The eleven borings were located near the former USTs and associated piping, and upgradient, crossgradient and downgradient of the former UST/piping areas. ForeSite of Pleasant Hill, California conducted a brief geophysical survey to screen proposed boring locations prior to drilling. ForeSite was unable to locate piping emanating from the

locations of USTs 1, 2, 3, & 4. Analysis of soil and groundwater samples detected TPH (predominantly derived from Stoddard solvent or mineral spirits) and VOCs. Separate phase hydrocarbon (i.e., free product) globules were observed in groundwater at the location of SB-4 (the former gasoline UST/pump location). The groundwater flow direction at the site could not be fully assessed from the collected data. Additional information is provided in Cambria's February 13, 2004 *Soil and Groundwater Investigation Report*.

2.3.6. July 2003 Geophysical Survey



On July 7, 2003, NorCal conducted a limited site geophysical survey to locate the former product piping. NorCal detected product piping connecting the former exterior and interior USTs, and additional piping north of the exterior UST location, presumably for supply of the former dry cleaning machines (Figure 2). NorCal traced the extents of the pipe previously discovered by ForeSite back to a water box located in the sidewalk and to the bathroom. This pipe is likely a water supply line. NorCal conducted additional searches around the former product piping and have located the full extent of the former product piping.

2.3.7. January 2004 Soil Boring Investigation (Phase 1 of 3)

In January 2004, Cambria conducted the first of three proposed phases of investigation at the site. Cambria advanced nineteen soil borings to further define the extent of petroleum hydrocarbons and VOCs in soil and groundwater beneath the site. Soil samples were collected at the intervals specified in the August 26, 2003 work plan. Cambria collected nine A-zone, one B-zone, and four C-zone groundwater samples. To prevent cross contamination of deeper groundwater samples, a dual-walled direct-push rig was used to obtain multiple discrete-depth groundwater samples. Soil and groundwater samples were analyzed for hydrocarbons and VOCs in accordance with the August 26, 2003 work plan. Analytical laboratory results detected VOCs in C-zone groundwater in the southeastern portion of the site, and petroleum hydrocarbons in shallow soil and groundwater in significant portions of the site. Additional information is provided in Cambria's February 24, 2004 *Interim Investigation Data Report*.

2.3.8. January 2004 Sensitive Receptor Survey Study

In January 2004, Cambria conducted a sensitive receptor survey for beneficial use wells (e.g., municipal supply, domestic, irrigation, etc.) and surface water bodies within ½-mile of the site as described in the August 26, 2003 work plan. While several environmental monitoring wells were located during the survey, Cambria did not locate any surface water bodies or beneficial use wells

within ½-mile of the site. Cambria understands that site groundwater is in the East Bay plain beneath and adjacent to Emeryville, where groundwater is not considered a current or potential drinking water resource.

NO

2.3.9. January 2004 Conduit Study

In January 2004, Cambria conducted a conduit study to evaluate if preferential migration pathways exist near the site and merit additional investigation. Underground utilities are shown on Figure 2. No preferential migration pathways were located adjacent to the site in Peabody Lane. Based on site concentrations in grab groundwater samples near 65th Street, it is unlikely that preferential migration is occurring via the underground utilities located in 65th Street.



3.0 FIELD ACTIVITIES SUMMARY

3.1. Field Activities Overview

In May 2004, Cambria collected soil and groundwater samples from 13 soil borings at the site. These soil borings were then converted to the monitoring wells listed below. A complete description of field activities is included in Appendix B.

- MW-1A through MW-4A, and MW-6A and MW-7A;
- MW-1B, MW-4B, MW-5B, and MW-6B; and
- MW-1C, MW-4C, and MW-6C.

3.1.1. Scope of Work Deviations

During field activities, two well installations deviated from the approved scope of work:

- Installing of the B-zone groundwater monitoring well MW-5B at the location for proposed monitoring well MW-5A. Since groundwater was not observed in the A-zone at this location, the monitoring well in this area was installed into the B-zone, where water was observed.
- Installation of additional monitoring well MW-4B, due to the detection of a B-zone at this location. Please note that this field change was approved by ACHSCA in a May 17, 2004 email (Appendix A).

This work followed the procedures set forth in the scope of work for well installations.

3.2. Groundwater Monitoring Well Installations

3.2.1. Soil Boring and Sampling Activities

From May 7 through May 18, 2004, Cambria advanced twelve soil borings using a hollow stem auger rig and one boring using a hand auger (MW-7A). Activities were performed in accordance with the approved scope of work or as described above. Cambria collected soil samples during the installation of the deepest monitoring well in each cluster (MW-1C, MW-3A, MW-5B, and MW-6C) at approximate five foot intervals to a maximum depth of 20 ft bgs. Soil boring logs are included in Appendix C.



3.2.2. Well Construction Activities

Between May 7 and May 18, 2004, Cambria converted the soil borings into groundwater monitoring wells screened in water-bearing Zones A, B, and C. The wells were installed in accordance with the approved scope of work or as described above. Well completion details are included in Appendix C.

3.2.3. Well Development Activities

On May 24, 2004, Precision Sampling, Inc., of Richmond, California, developed wells MW-1A/B/C, MW-2A, MW-3A, MW-4A/B/C, MW-5B, MW-6A/B/C, and MW-7A by surging and purging multiple well casing volumes of groundwater until the turbidity was significantly reduced (see Appendix D for the well development data). Well development protocol is included in Cambria's *Standard Field Procedures for Monitoring Well Installation* in Appendix E.

3.2.4. Well Surveying Activities

On June 2, 2004, Virgil Chavez Land Surveying of Vallejo, California surveyed the latitude, longitude, and elevation of the well casings and well boxes to mean sea level. The survey was performed relative to a "well monument on Powell St. under the westbound lanes of I580." This benchmark's elevation is at 13.88 ft, NAVD88. The survey report is presented in Appendix F.

3.3. Initial Groundwater Monitoring Activities

On June 3, 2004, Cambria gauged and collected groundwater samples from monitoring wells MW-1A/B/C, MW-2A, MW-3A, MW-4A/B/C, MW-5B, MW-6A/B/C, and MW-7A. Field data sheets are included in Appendix D.

3.4. Decontamination Activities

Drilling and sampling equipment was steam cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment was washed between samples with an EPA-approved detergent. The equipment was then rinsed in two reservoirs in series.

3.5. Investigation Derived Waste Handling Procedures

The investigation-derived waste (IDW) was containerized in 55-gallon drums during the investigation and stored onsite pending waste profiling and transportation to a licensed off-site disposal facility.

3.6. Site Restoration

The wells were finished with flush mounted, traffic rated well boxes. Damaged pavement immediately surrounding the well installation areas was patched with similar material.

4.0 GEOLOGY AND HYDROGEOLOGY

4.1. Geology and Stratigraphy

Subsurface materials encountered during soil boring advancement for this investigation consisted of clayey silts with thin interbeds of silty and clayey sands (Appendix C). The upper zone of sandy, gravelly fill did not appear to be readily encountered on the site proper. The two locations where sands were encountered just below the surface were at areas that had been previously disturbed. At MW-2A, located in the former gasoline UST excavation, sand fill was encountered to a depth of 11.5 ft bgs.

At MW-4A/B/C, located in the southern sidewalk alongside 65th Street and near the location of the former heating oil UST, sand fill was encountered to a depth of 5 ft bgs. The only onsite location where sands were encountered near surface and extended to depth was MW-3A (Appendix C).

The A and C-zones are interpreted to be fairly continuous across the Site. The B-zone appears to be composed of a number of discontinuous lenses that are not laterally extensive (Figures 3 and 4).

4.2. Groundwater Conditions

4.2.1. Groundwater Elevation and Flow

The units encountered during soil boring advancement were observed to be dry to wet with increasing moisture with depth. Water was first encountered at depths ranging from 3.5 to 15.5 feet bgs in the

borings advanced for this investigation (Appendix C). Groundwater conditions across the site were variable, ranging from unconfined to confining conditions. During soil boring advancement, water levels fell in some wells (MW-1B, MW-1C, MW-4B) and rose in other wells (MW-1A, MW-2A, MW-4C, MW-6A, MW-6B, MW-7A) (Appendix C).

Based on depth to water measurements collected during the June 3, 2004 monitoring event, groundwater in the A-zone flowed towards the southwest (Figure 5) with a gradient of 0.034 feet per foot (ft/ft), groundwater in the B-zone flowed towards the southeast (Figure 6) with a gradient of 0.031 ft/ft, and groundwater in the C-zone flowed towards the west-southwest (Figure 7) with a gradient of 0.021 ft/ft.



5.0 ANALYTICAL RESULTS

5.1. Introduction

Select soil and groundwater samples were analyzed for TPHss, TPHg, TPHd, TPHmo, BTEX and halogenated volatile organic compounds (HVOCs). TPHss, TPHg, TPHd and TPHmo were quantified using modified United States Environmental Protection Agency (EPA) Method 8015C, BTEX were analyzed using EPA Method 8021 and HVOCs were identified using EPA Method 8010.

Soil and groundwater samples were analyzed by McCampbell Analytical, Inc. of Pacheco, California (McCampbell). This laboratory is certified by the California Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP) for the specific analytical methods performed.

A summary of the soil and groundwater analytical data are presented in Tables 1 through 4. In addition, concentrations of selected target analytes in groundwater are presented on Figures 5 through 7. Analytical laboratory reports are included in Appendix G.

5.2. Soil Samples

5.2.1. Petroleum Hydrocarbons

TPHss: Six of the 14 soil samples collected contained detectable concentrations of TPHss. Detectable concentrations of TPHss ranged from 11 milligrams per kilogram (mg/kg) (MW-6C@5.5) to 390 mg/kg (MW-5B@15) (Table 1). TPHss was detected in soil samples collected from depths of 5.5 to 16 feet below ground surface (bgs).

TPHg: TPHg was detected in 7 of the 14 samples collected and ranged in concentration from 11 mg/kg (MW-3A@15) to 410 mg/kg (MW-5B@15). TPHg was detected in only one sample with a depth shallower than 9.5 feet and was not detected in samples deeper than 16 feet bgs.

TPHd: TPHd was detected in the same seven samples in which TPHg was detected (Table 1). Detectable concentrations of TPHd ranged from 16 mg/kg (MW-6C@16) to 810 mg/kg (MW-6C@5.5). TPHd was detected in samples collected from between 5.5 and 16 feet bgs.

TPHmo: TPHmo was detected in only two samples. It was detected at 9.2 mg/kg in MW-3A@15 and at 1,800 mg/kg in MW-6C@5.5.



5.2.2. Volatile Organic Compounds

Aromatic Compounds: Only two samples contained detectable concentrations of total xylenes. Total xylenes were detected at 5.3 µg/kg in MW-1C@14.5 and at 1,400 µg/kg in MW-5B@15. Benzene, toluene and ethylbenzene were not detected in any of the soil samples analyzed (Table 2).

Halogenated Compounds: HVOCs were not detected in any of the soil samples collected (Table 2).

5.2.3. Extent of Chemicals detected in Soil

In this section, the extent of chemicals detected in soil are discussed. Soil samples were collected down to a maximum depth of 21 ft bgs; however, groundwater was detected at a minimum depth of 2.45 ft bgs, therefore, the majority of the soil samples were collected under saturated conditions and groundwater concentrations are more representative of site conditions than these soil samples.

TPHss: Historically, the highest concentrations of TPHss were detected from beneath UST 5 (11,000 mg/kg) and UST 6 (17,000 mg/kg). TPHss was detected at a maximum concentration (390 mg/kg) during this investigative phase at MW-5B@15. The saturated soil samples collected indicates that TPHss is ubiquitous in the shallow aquifer zone.

TPHg: As with TPHss, the highest historical concentrations of TPHg are associated with samples collected from beneath UST 5 (17,000 mg/kg) and UST6 (26,000 mg/kg). In addition, it is detected throughout the shallow water-bearing zone at the site.

TPHd: The distribution of TPHd in soil is more restricted than TPHss or TPHg. While the highest concentrations historically detected are associated with UST 5 (1,800 mg/kg) and UST 6 (1,500 mg/kg), the only other locations where TPH was detected during this investigative phase are MW-3A and MW-6C / SB-18A/C.

TPHmo: TPHmo is more restricted in distribution than the other petroleum hydrocarbon species. The only location where TPHmo was detected during this investigative phase at an appreciable concentration was at MW-6C@5.5 (1,800 mg/kg).

VOCs: Total xylenes have been detected at various locations at the site at concentrations in excess of the ESLs. Historically, PCE has only been detected at various isolated locations across the site: SB-10 at a concentration of 56 µg/kg (3 feet bgs); SB-23 at a concentration of 13 µg/kg (3 feet bgs); and at MW-4B at a concentration of 44 µg/kg (3.5 feet bgs). None of the PCE concentrations detected were above the ESLs.



5.3. Groundwater Samples

5.3.1. Petroleum Hydrocarbons

TPHss: Detectable concentrations of TPHss ranged from 340 micrograms per liter (µg/L) (MW-6C) to 12,000 µg/L (MW-3A) (Table 3). Only one of the detectable concentrations of TPHss was below the environmental screening level (ESL) (RWQCB-SFBR, 2003) for groundwater not being a current or potential source of drinking water. None of the concentrations detected were below the ESL for groundwater that is a current or potential source of drinking water.

TPHg: Detectable concentrations of TPHg ranged from 160 µg/L to 4,800 µg/L, with the low concentration detected in MW-6C and the high concentration detected in MW-3A. None of the detectable concentrations were below the ESL for groundwater that is a current or potential drinking water source. The concentration detected in MW-6C was below the ESL for groundwater that is not a current or potential drinking water source.

TPHd: The lowest concentration of TPHd detected was 240 µg/L (MW-6C). The highest concentration of TPHd detected was 90,000 µg/L (MW-3A). None of the detectable concentrations were below the ESL for groundwater that is a current or potential drinking water source. The concentration detected in MW-6C was below the ESL for groundwater that is not a current or potential drinking water source.

TPHmo: Detectable concentrations of TPHmo ranged from 260 µg/L (MW-1A) to 6,000 µg/L (MW-3A). None of the detectable concentrations were below the ESL for groundwater that is a current or potential drinking water source. The concentrations detected in wells MW-1A, MW-4A and MW-6A were below the ESL for groundwater that is not a current or potential drinking water source.

5.3.2. Volatile Organic Compounds

Aromatic Hydrocarbons: Aromatic hydrocarbons were detected in 6 of the 13 wells (Table 4). Toluene, ethylbenzene and/or total xylenes were detected in these wells. The concentrations of the compounds detected were below their ESLs for groundwater considered or not considered a current or potential source of drinking water. Benzene was not detected in any of the wells.

Halogenated Compounds: The HVOCs chloroethane, tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,2-dichlorobenzene (1,2-DCB), 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA) and vinyl chloride (VC) were detected in at least one of the wells (Table 4).

These HVOCs PCE, TCE, cis-1,2-DCE, 1,1-DCA, 1,2-DCA and VC were detected at concentrations above their ESLs for groundwater that is considered a current or potential source of drinking water. None of the HVOCs detected were at concentrations at or in excess of their ESLs for groundwater that is not considered a current or potential drinking water source.

The HVOCs detected at concentrations above their ESLs were from only three wells (MW-1A, MW-1B and MW-6A). VC was the only compound detected above its ESL in MW-6A. The other compounds listed above were from wells MW-1A or MW-1B.

5.3.3. Extent of Chemicals detected in Groundwater

TPHss: TPHss has been detected across the entire site A-zone. The historical high concentration was detected in the vicinity of SB-8 (100,000 µg/L). The eastern boundary of the plume is defined by SB-12A and the northern boundary of the plume is characterized by MW-4A. However, the plume boundaries are not defined to the south and west where TPHss has been detected at a concentration of SB-15A (2,500 µg/L) and SB-20A (610 µg/L), respectively.

The only location where TPHss was detected in the B- and C-zones was at MW-6B/C and SB-18B/C. The concentrations detected in the B-zone were approximately one order of magnitude higher than those detected in the C-zone (Table 3).

TPHg: The only A-zone boundary defined for TPHg is at MW-4A to the north. TPHg was detected in the shallow water-bearing zone at SB-12A to the east, SB15A to the south and SB-20A to the west (Table 3).

As with TPHss, the only location where TPHg was detected in the B- and C-zones was in the vicinity of SB-6B/C and SB-18B/C (Table 3).

TPHd: The highest concentration of any chemical detected in the A-zone was for TPHd at MW-3A (90,000 $\mu\text{g/L}$) (Table 3). The lateral extent of TPHd in the A-zone has not been defined in any direction across the site being detected in MW-2A to the east, MW-1A to the south, MW-4A to the north and SB-20A to the west (Table 3).

In the B-zone, the only location where TPHd was detected was MW-6B (2,300 $\mu\text{g/L}$). However, in the C-zone, it was detected in the vicinity of MW-6C and also at SB-22C (Table 3).

TPHmo: The western boundary of TPHmo in the A-zone is defined by SB-20A, whereas, the other three compass directions have not been defined with TPHmo being detected in this zone across the site (Table 3).

TPHmo was not detected in the B-zone. It has only been detected at one location in the C-zone: SB-9 at a concentration of 300 $\mu\text{g/L}$ (Table 3).

VOCs: PCE has only been associated with one location in each of the A- and C-zones. It was detected at a concentration of 55 $\mu\text{g/L}$ at MW-1A and at a maximum concentration of 630 $\mu\text{g/L}$ at MW-18B/C. PCE was not detected in the B-zone (Table 3).



6.0 CONCLUSIONS

Based on the above information, Cambria makes the following conclusions:

- Groundwater flow is generally towards San Francisco Bay. However, groundwater flow differs in each of the zones: flowing to the southwest in the A-zone; to the southeast in the B-zone; and to the west in the C-zone. Future monitoring events will be used to evaluate the significance of these results.
- Chemicals detected in soil samples consisted of TPHss, TPHg, TPHd, TPHmo and xylenes. Benzene, ethylbenzene, toluene and HVOCs were not detected in the soil samples.
- TPHss and TPHg were detected throughout the A-zone, with the highest historical concentrations associated with the former USTs 5 and 6.
- Xylenes have been detected at various locations at the site at concentrations in excess of ESLs. PCE has been detected at only a few locations, and the concentrations detected have not been above ESLs.
- The soil samples appear to have been collected within saturated materials and, as such, are not entirely indicative of soil conditions. Chemical concentrations within saturated soils are more representative of groundwater conditions than soil conditions.
- TPHss, TPHg, TPHd and TPHmo were detected at concentrations at or in excess of their ESLs where groundwater is considered a current or potential drinking water source.
- The TPHss, TPHg, TPHd and TPHmo are distributed similarly throughout the A-zone, being detected across the entire site. TPHss, TPHg and TPHd are associated with only one location in the B and C-zones (the immediate vicinity of MW-6). TPHmo was not detected in the B-zone, and was only detected at one location in the C-zone (SB-9).
- PCE has a historical association with both the A and C-zones, being detected at MW-1A and MW-18B/C. PCE has not been detected in the B-zone.
- Due to the high groundwater table and that the majority of soil samples were collected below the groundwater table, groundwater, not soil, impacts are the primary concern at the site.
- HVOCs at the site are generally below the indoor air inhalation ESLs, and do not appear to represent a threat to building occupants given the site's commercial/industrial zoning.

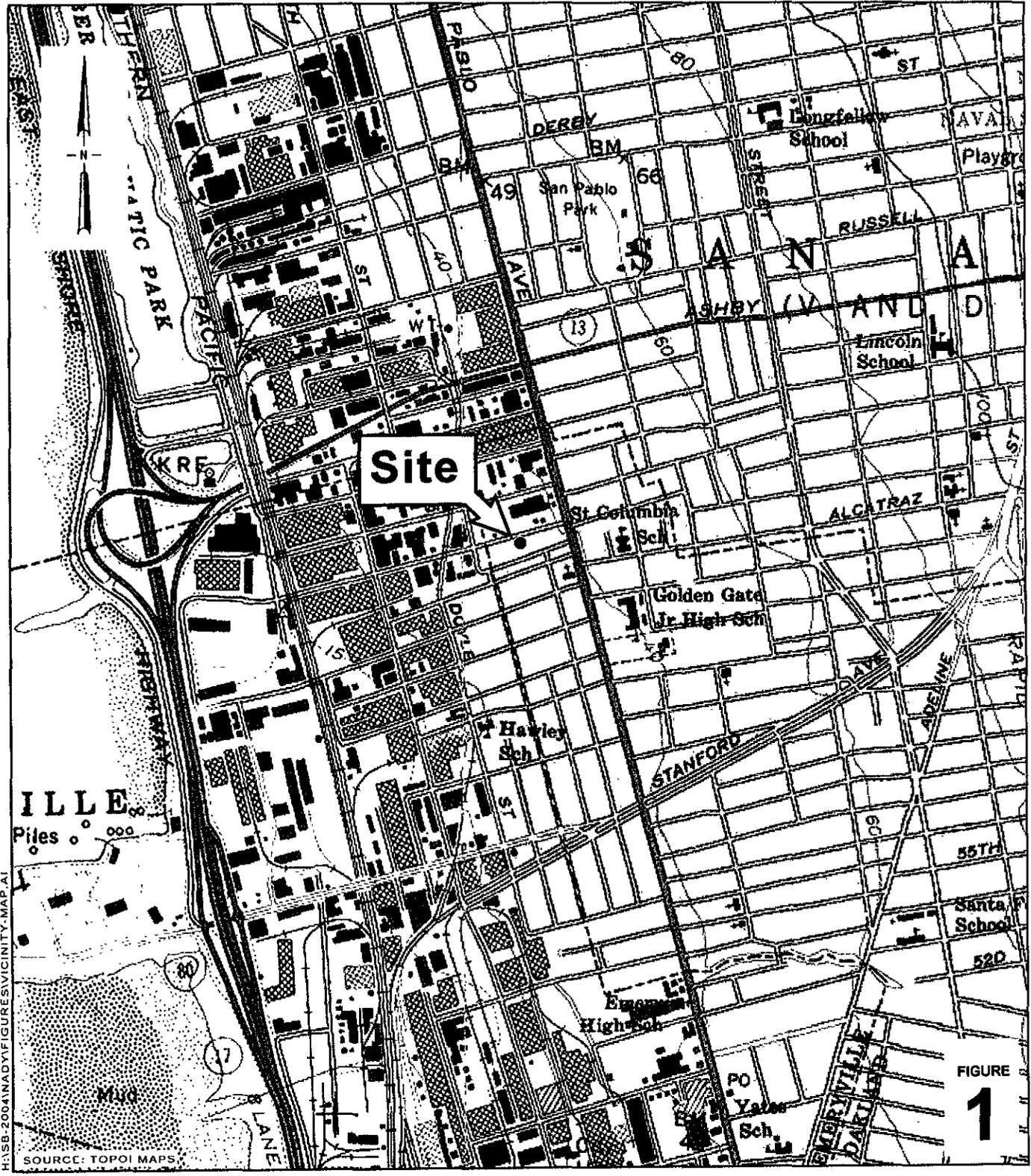
7.0 RECOMMENDATIONS

Based on the conclusions listed above, Cambria offers the following recommendations:

- The monitoring wells installed should be integrated into a regularly scheduled groundwater monitoring program. During each event, depth to groundwater and free-phase hydrocarbon thickness should be measured, and groundwater quality samples collected. The samples should be analyzed for TPHss, TPHg, TPHd, TPHmo and HVOCs. The monitoring program should be evaluated after the completion of the first year.
- Meet with ACHCSA to discuss the need for additional investigations and/or remedial actions at the site. Based on the current investigation, Cambria recommends conducting a feasibility study and preparing a corrective action plan (FS/CAP) for the site.

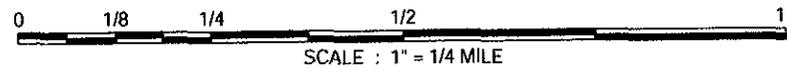


FIGURES



H:\SB-2004\NAD\Y\FIGURES\VICINITY-MAP.A1

SOURCE: TOPOI MAPS



Vicinity Map

1137 - 1167 65th Street
Oakland, California

C A M B R I A

EXPLANATION	
MW-1A	Monitoring well location
SB-12	Soil boring location
○	Cambria soil boring/temporary well location
■	SCI soil sample location
1	Former tank location and tank nomenclature
- - - - -	Product piping
○	Product piping stub-ups
- · - · - · -	Electrical line
- - - - -	Storm drain
- · - · - · -	Sanitary sewer line
- - - - -	Water line
- · - · - · -	Gas line
- - - - -	Communications line
D' - - - - - D'	Cross section transect lines

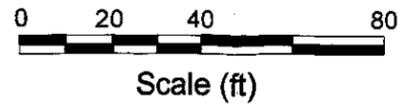
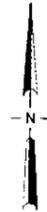
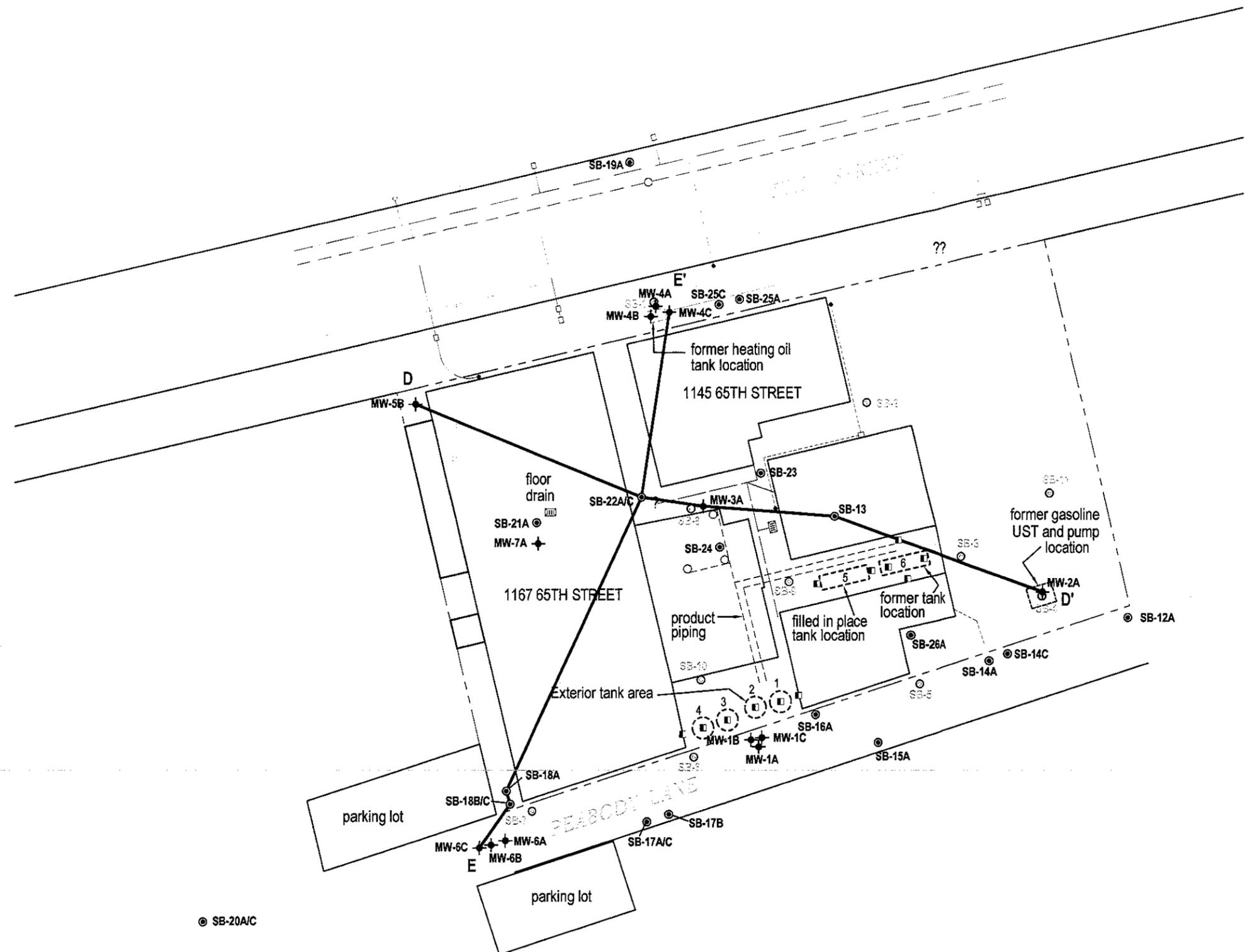
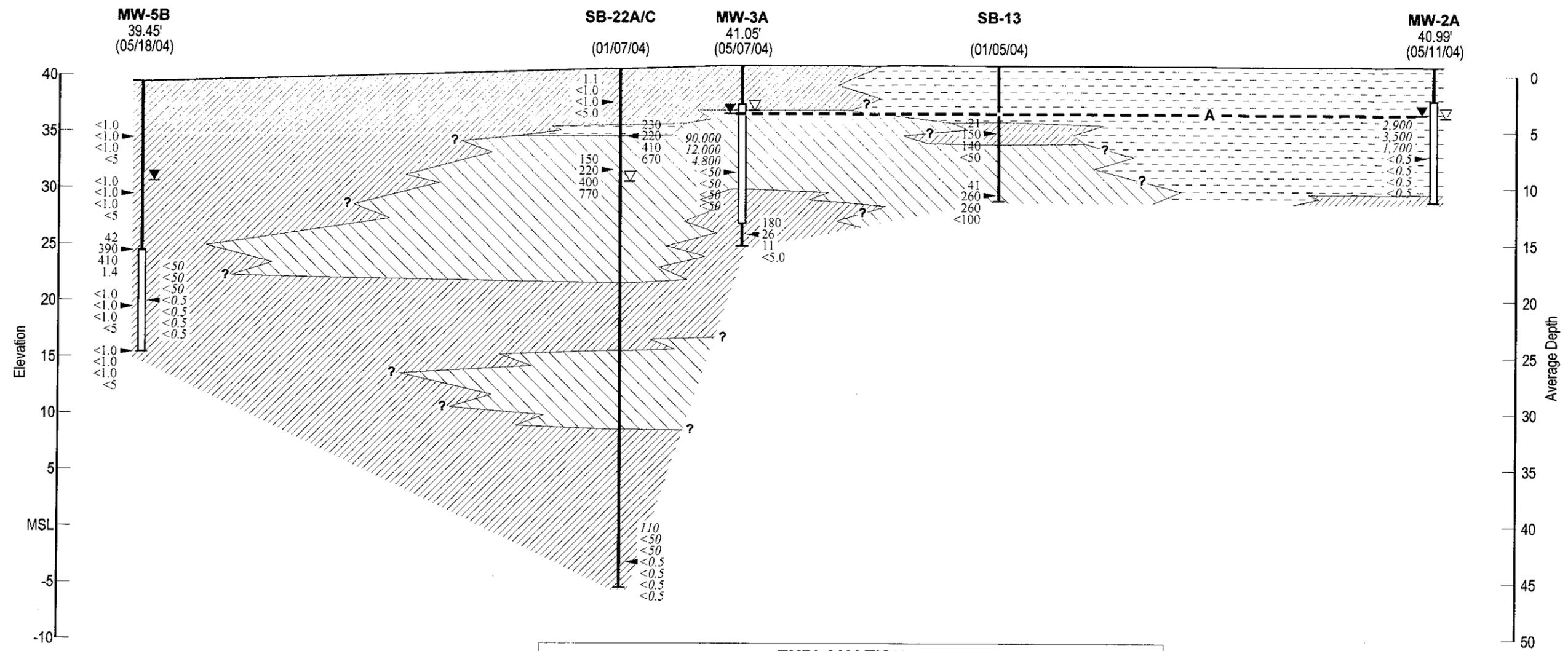


FIGURE
2

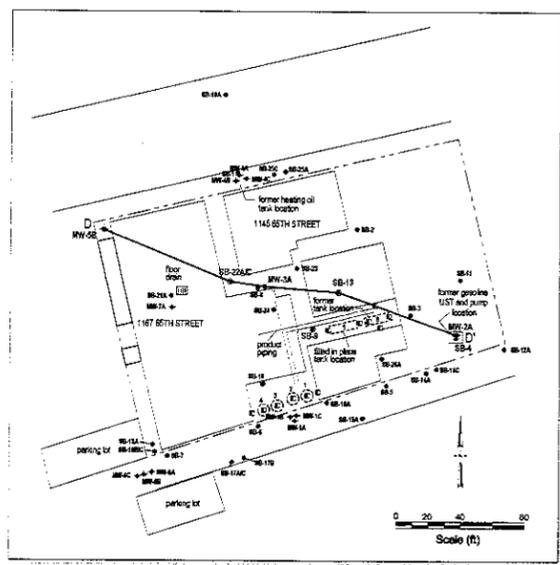
D Northwest Southeast D'



Geologic Cross Section D-D'



1137 - 1167 65th Street
Oakland, California



EXPLANATION

- = Low Permeability Soils
Clay, Silty Clay, Clayey Silt, Silt, Sandy Clay
- = Moderate Permeability Soils
Silty Sand, Clayey Sand, Sandy Silt
- = High Permeability Soils
Sand, Gravelly Sand
- = Fill (Tank Pit)
- = Approximate soil sample location
- = Approximate groundwater sample location
- TPHd
TPHss
TPHg
PCE
TCE
cis-1,2-DCE
Vinyl Chloride

Well ID — Well Designation
Elev. — Top of Casing Elevation (date)
(date) — Drilling Date

- Groundwater Monitoring Well
- Well Screen Interval
- Bottom of boring
- A - - - Groundwater Table
- Initial Groundwater level
- Depth of Groundwater - 06/03/2004

Concentrations in Soil, in parts per million
Concentrations in groundwater, in parts per billion

Note: Groundwater sampled from wells on 06/03/04 and from soil borings on date drilled.

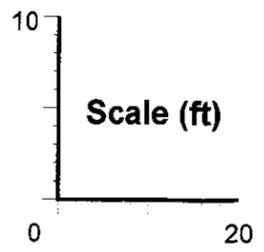
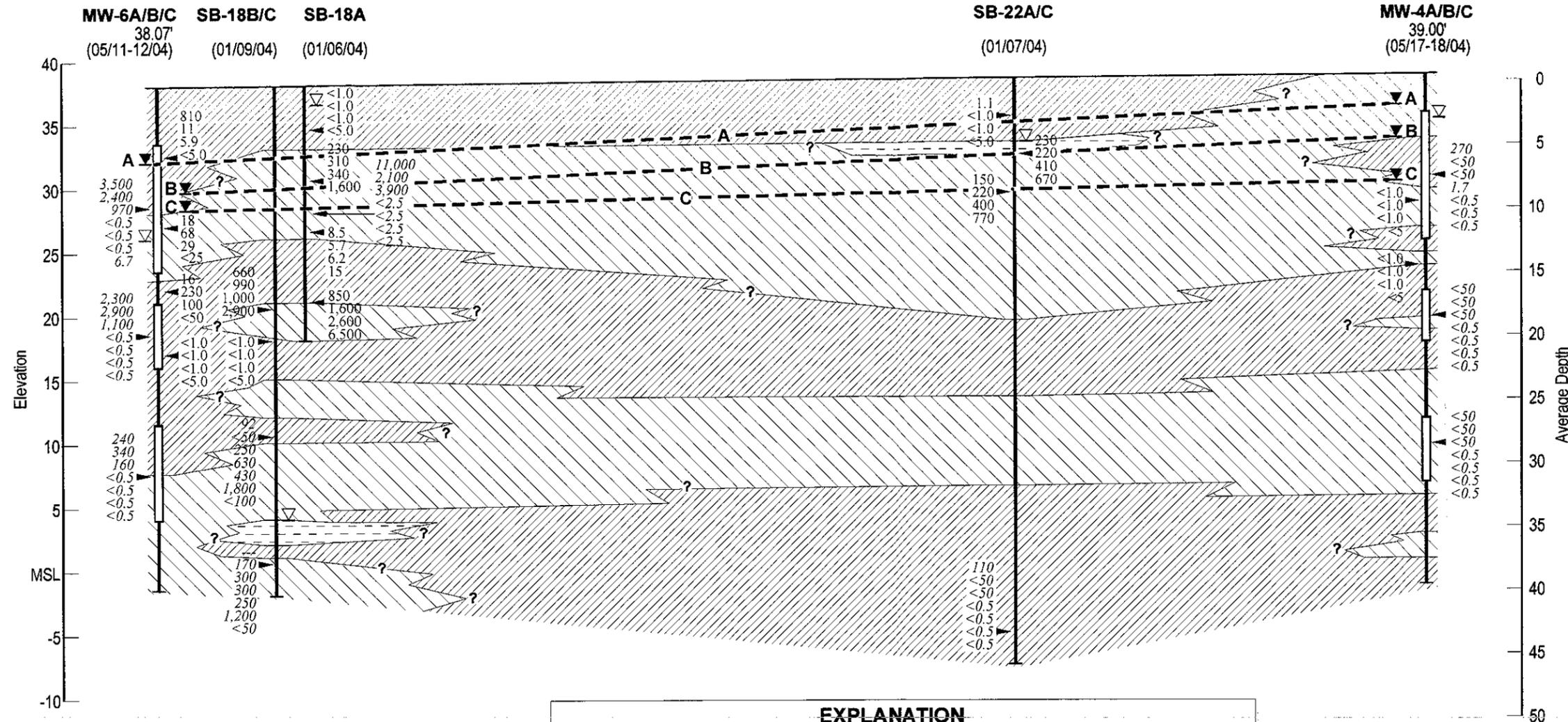


FIGURE
3

E Southwest Northeast E

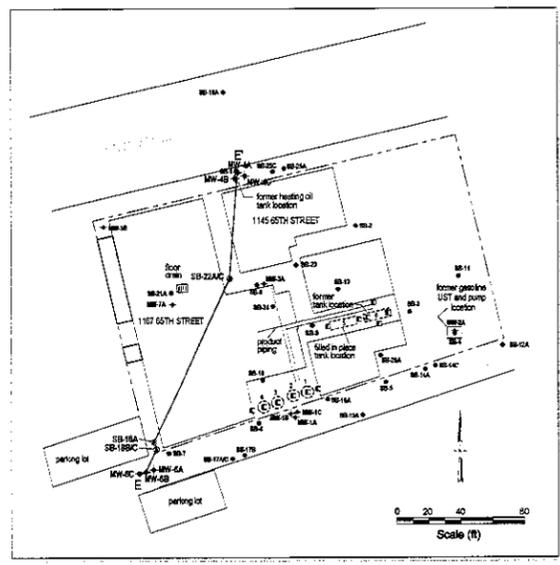


Geologic Cross Section E-E



C A M B R I A

HHNAD\FIGURES\SECT E-E.DWG



EXPLANATION

	= Low Permeability Soils Clay, Silty Clay, Clayey Silt, Silt, Sandy Clay	Well ID — Well Designation
	= Moderate Permeability Soils Silty Sand, Clayey Sand, Sandy Silt	Elev. — Top of Casing Elevation (date) — Drilling Date
	= High Permeability Soils Sand, Gravelly Sand	
	= Fill (Tank Pit)	— Groundwater Monitoring Well
	◀ Approximate soil sample location	— Well Screen Interval
	◀ Approximate groundwater sample location	— Bottom of boring
		--- Potentiometric Surfaces 06/03/04
		▽ Initial Groundwater level
		▼ Depth of Groundwater - 06/03/2004

TPHd Concentrations in Soil, in parts per million
 TPHss
 TPHg
 PCE
 TCE
 cis-1,2-DCE
 Vinyl Chloride

Note: Groundwater sampled from wells on 06/03/04 and from soil borings on date drilled.

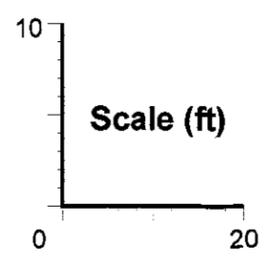
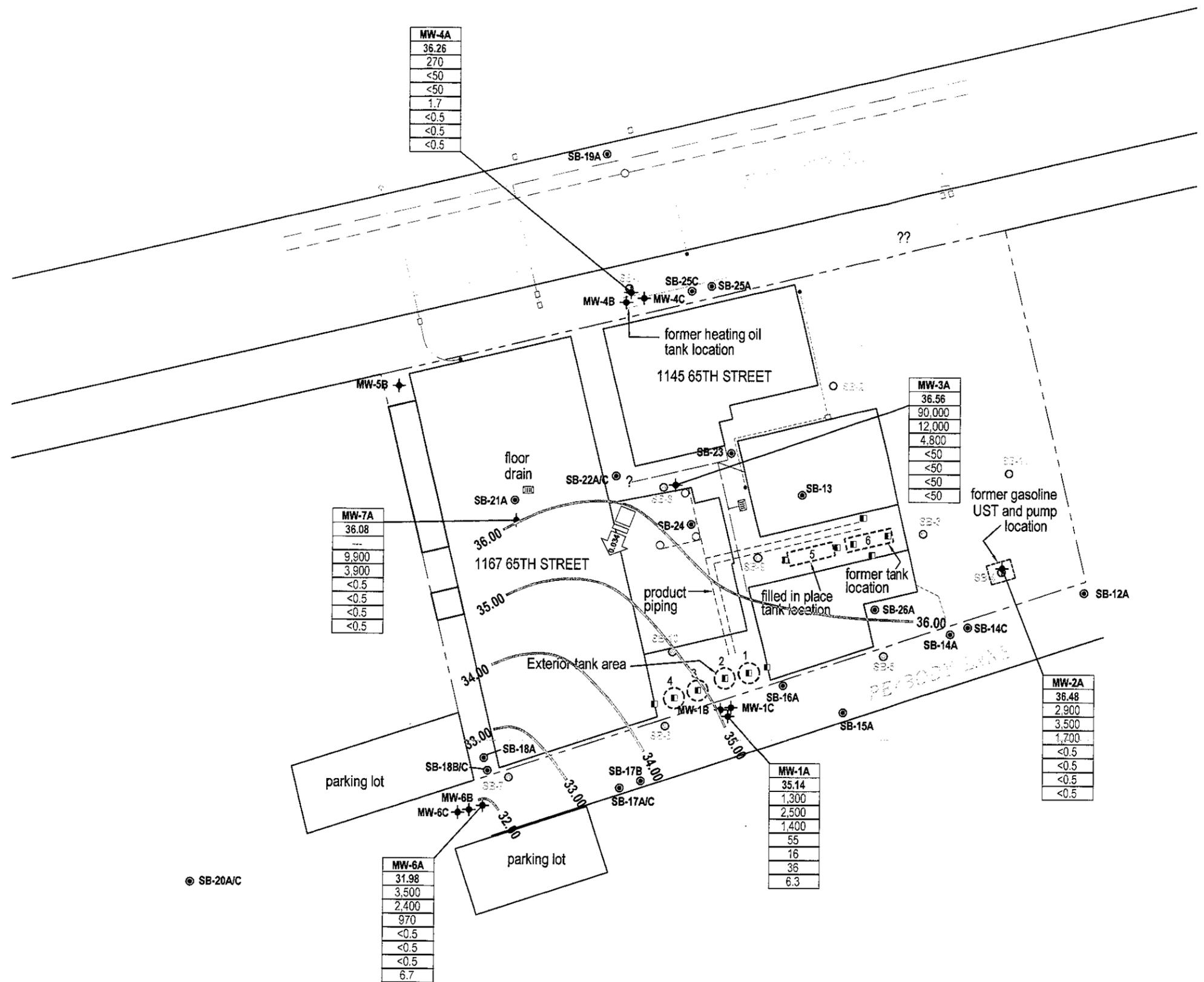


FIGURE
4

1137 - 1167 65th Street
Oakland, California



MW-4A
36.26
270
<50
<50
1.7
<0.5
<0.5
<0.5

MW-3A
36.56
90,000
12,000
4,800
<50
<50
<50

MW-7A
36.08

9,900
3,900
<0.5
<0.5
<0.5

MW-2A
36.48
2,900
3,500
1,700
<0.5
<0.5
<0.5
<0.5

MW-1A
35.14
1,300
2,500
1,400
55
16
36
6.3

MW-6A
31.98
3,500
2,400
970
<0.5
<0.5
<0.5
6.7

EXPLANATION

- MW-1A + Monitoring well location
- SB-12 ● Soil boring location
- Cambria soil boring/temporary well location
- SCI soil sample location
- 1 ○ Former tank location and tank nomenclature
- - - Product piping
- Product piping stub-ups
- - - Electrical line
- - - Storm drain
- - - Sanitary sewer line
- - - Water line
- - - Gas line
- - - Communications line
- 35.00 — Groundwater elevation contour line in feet above mean sea level (MSL)
- ← 0.034 □ Groundwater flow direction and gradient

Well ID	Monitoring Well Designation
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	Concentrations in groundwater in parts per billion
TPHss	
TPHg	
PCE	
TCE	
cis-1,2-DCE	
Vinyl Chloride	

**Groundwater Flow and
Chemical Concentrations - A Zone**
 June 3, 2004

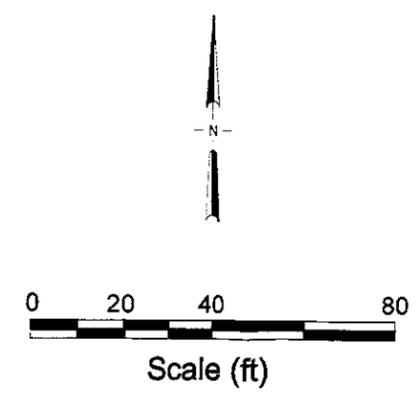
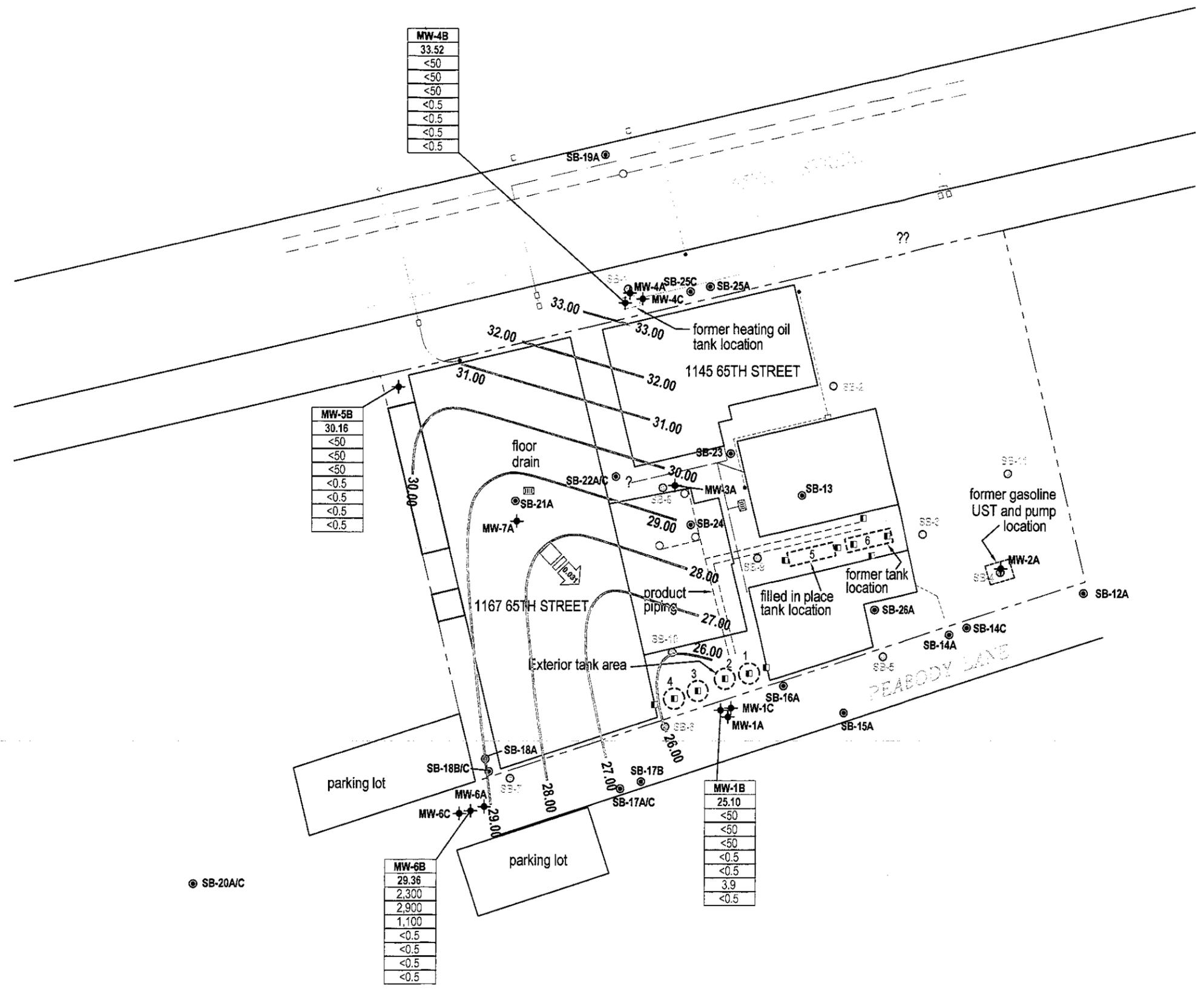


FIGURE
5



MW-4B
33.52
<50
<50
<50
<0.5
<0.5
<0.5

MW-5B
30.16
<50
<50
<50
<0.5
<0.5
<0.5

MW-1B
25.10
<50
<50
<50
<0.5
<0.5
3.9
<0.5

MW-6B
29.36
2,300
2,900
1,100
<0.5
<0.5
<0.5
<0.5

EXPLANATION

- MW-1A + Monitoring well location
- SB-12 ● Soil boring location
- Cambria soil boring/temporary well location
- SCI soil sample location
- 1 ○ Former tank location and tank nomenclature
- - - Product piping
- Product piping stub-ups
- - - Electrical line
- - - Storm drain
- - - Sanitary sewer line
- - - Water line
- - - Gas line
- - - Communications line
- 35.00 — Groundwater elevation contour line in feet above mean sea level (MSL)
- ← 0.031 □ Groundwater flow direction and gradient

Well ID	Monitoring Well Designation
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	
TPHss	
TPHg	
PCE	Concentrations in groundwater in parts per billion
TCE	
cis-1,2-DCE	
Vinyl Chloride	

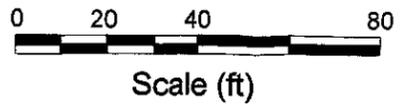
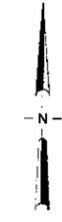
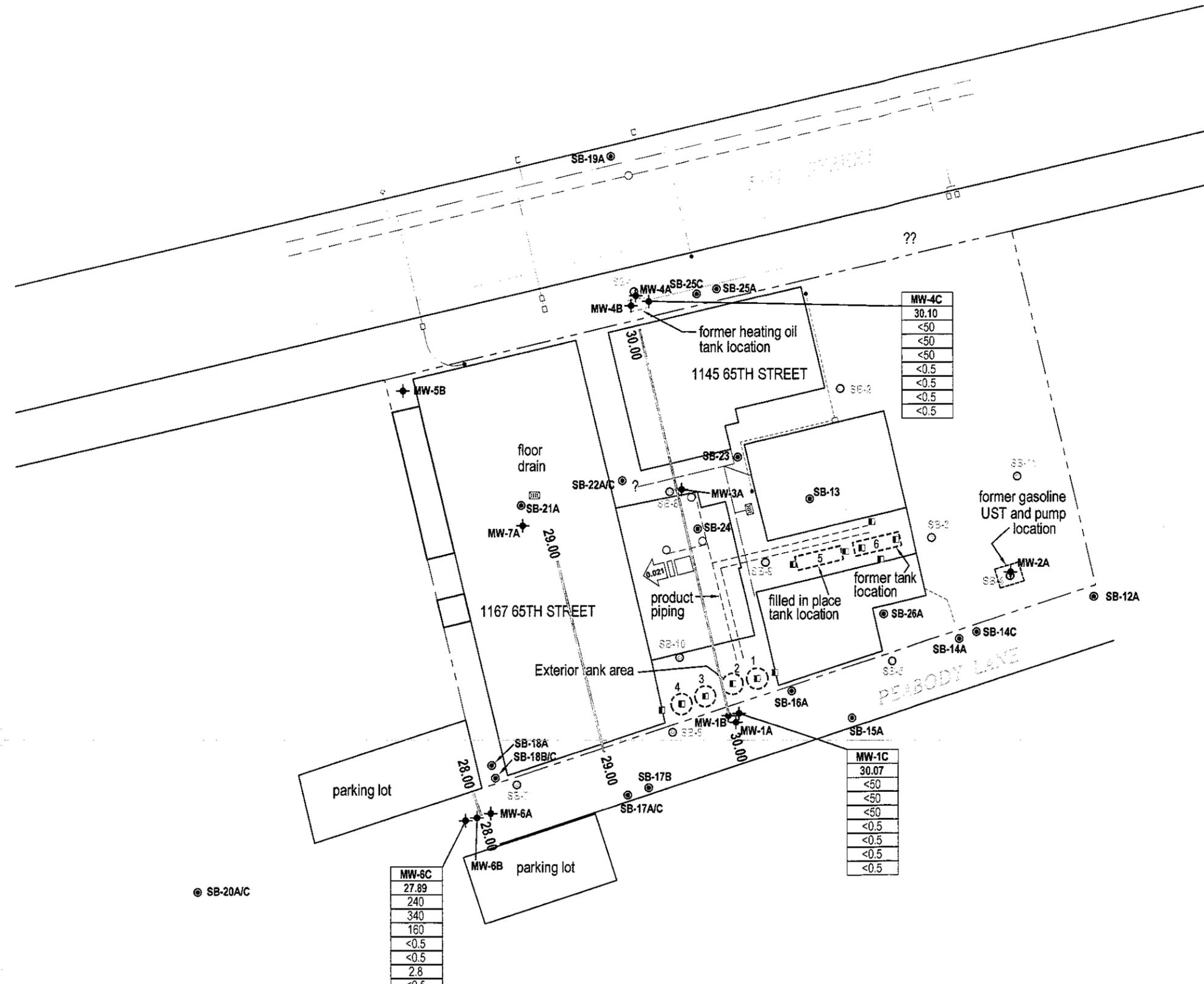


FIGURE
6



EXPLANATION

- MW-1A ◆ Monitoring well location
- SB-12 ● Soil boring location
- Cambria soil boring/temporary well location
- SCI soil sample location
- 1 ○ Former tank location and tank nomenclature
- - - Product piping
- Product piping stub-ups
- - - Electrical line
- - - Storm drain
- - - Sanitary sewer line
- - - Water line
- - - Gas line
- - - Communications line
- 30.00 — Groundwater elevation contour line in feet above mean sea level (MSL)
- ← 0.021 □ Groundwater flow direction and gradient

Well ID	Monitoring Well Designation
ELEV.	Groundwater elevation in feet above mean sea level (MSL)
TPHd	
TPHss	
TPHg	
PCE	
TCE	
cis-1,2-DCE	
Vinyl Chloride	Concentrations in groundwater in parts per billion

Groundwater Flow and Chemical Concentrations - C Zone
 June 3, 2004



1137 - 1167 65th Street
 Oakland, California

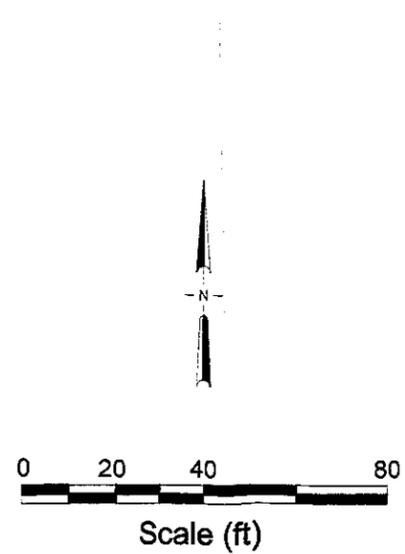


FIGURE
7

TABLES

CAMBRIA

Table 1. Soil Analytical Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHmo	TPHd	TPHss	TPHg
			←----- mg/kg -----→			
Residential ESL, non-drinking water			500	500	100	100
Commercial ESL, non-drinking water			1,000	500	400	400
<i>Current Cambria Samples</i>						
MW-1C@6.5	5/10/2004	6.5	<5.0	<1.0	<1.0	<1.0
MW-1C@9.5	5/10/2004	9.5	<5.0	60	340	160
MW-1C@14.5	5/10/2004	14.5	<5.0	9.5	--	6.0
MW-1C@20	5/10/2004	20	<5.0	<1.0	<1.0	<1.0
MW-3A@15	5/7/2004	15	9.2	180	26	11
MW-5B@5	5/18/2004	5.5	<5.0	<1.0	<1.0	<1.0
MW-5B@10	5/18/2004	10	<5.0	<1.0	<1.0	<1.0
MW-5B@15	5/18/2004	15	<5.0	42	390	410
MW-5B@20	5/18/2004	20	<5.0	<1.0	<1.0	<1.0
MW-5B@24	5/18/2004	24	<5.0	<1.0	<1.0	<1.0
MW-6C@5.5	5/11/2004	5.5	1,800	810	11	5.9
MW-6C@11	5/11/2004	11	<5.0	18	68	29
MW-6C@16	5/11/2004	16	<5.0	16	230	100
MW-6C@21	5/11/2004	21	<5.0	<1.0	<1.0	<1.0
<i>Previous Cambria Samples</i>						
SB-11-7.5	11/25/2002	7.5	<5.0	<1.0	<1.0	<1.0
SB-13@6.0	1/5/2004	6.0	<5.0	21	150	140
SB-13@11.5	1/5/2004	11.5	<5.0	41	260	260
SB-14@7.5	1/9/2004	7.5	<5.0	64	100	210
SB-14@11.5	1/9/2004	11.5	<5.0	<1.0	<1.0	<1.0
SB-15@7.5	1/12/2004	7.5	9.3	190	820	1,500
SB-15@11.5	1/12/2004	11.5	<5.0	<1.0	<1.0	<1.0
SB-16@7.5	1/12/2004	7.5	<5.0	59	49	90
SB-16@11.5	1/12/2004	11.5	<5.0	<1.0	<1.0	<1.0

CAMBRIA

Table 1. Soil Analytical Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	mg/kg			
			TPHmo	TPHd	TPHss	TPHg
Residential ESL, non-drinking water			500	500	100	100
Commercial ESL, non-drinking water			1,000	500	400	400
SB-17@3.5	1/8/2004	3.5	210	110	<1.0	<1.0
SB-17@7.5	1/8/2004	7.5	<5.0	<1.0	<1.0	<1.0
SB-17@11.5	1/8/2004	11.5	<5.0	<1.0	<1.0	<1.0
SB-17@17.5	1/8/2004	17.5	<5.0	<1.0	<1.0	<1.0
SB-17@20	1/8/2004	20.0	5.5	1.4	<1.0	<1.0
SB-18@3.5	1/6/2004	3.5	<5.0	<1.0	<1.0	<1.0
SB-18@7.5	1/6/2004	7.5	<5.0	230	310	340
SB-18@11.5	1/6/2004	11.5	<5.0	8.5	5.7	6.2
SB-18@17	1/6/2004	17.0	<100	850	1,600	2,600
SB-18@17.5	1/9/2004	17.5	<5.0	660	990	1,000
SB-18@20	1/9/2004	20.0	<5.0	<1.0	<1.0	<1.0
SB-21@3	1/20/2004	3.0	<5.0	<1.0	<1.0	<1.0
SB-21@6	1/20/2004	6.0	<25	220	590	590
SB-21@9	1/20/2004	9.0	<25	270	450	470
SB-22@3.0	1/7/2004	3.0	<5.0	1.1	<1.0	<1.0
SB-22@6.0	1/7/2004	6.0	11	230	220	410
SB-22@9.0	1/7/2004	9.0	6.7	150	220	400
SB-23@3	1/6/2004	3.0	<5.0	<1.0	<1.0	<1.0
SB-23@6	1/6/2004	6.0	<5.0	<1.0	<1.0	<1.0
SB-23@9	1/6/2004	9.0	<5.0	<1.0	<1.0	<1.0
SB-24@3	1/5/2004	3.0	<250	1,300	1,000	980
SB-24@6	1/5/2004	6.0	8.9	220	420	430
SB-24@9	1/5/2004	9.0	<5.0	54	43	43
SB-26@7.5	1/7/2004	7.5	6.8	150	220	240
SB-26@11.5	1/7/2004	11.5	<5.0	67	98	180

CAMBRIA

Table 1. Soil Analytical Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHmo	TPHd	TPHss	TPHg
			←————— mg/kg —————→			
Residential ESL, non-drinking water			500	500	100	100
Commercial ESL, non-drinking water			1,000	500	400	400

Previous Cambria Samples

SB-1-3.5	11/25/2002	3.5	860	170	1.7	2.6a,b
SB-1-7.5	11/25/2002	7.5	140	32	<1.0	<1.0
SB-2-3.5	11/25/2002	3.5	<5.0	<1.0	<1.0	<1.0
SB-2-11.5	11/25/2002	11.5	<5.0	<1.0	<1.0	<1.0
SB-3-7.5	11/25/2002	7.5	<5.0	20	180	190a
SB-3-11.5	11/25/2002	11.5	<5.0	<1.0	<1.0	<1.0
SB-4-3.5	11/25/2002	3.5	<5.0	<1.0	<1.0	<1.0
SB-4-7.5	11/25/2002	7.5	15	2.1	<1.0	<1.0
SB-4-11.5	11/25/2002	11.5	5.9	4.8	3.6	4.0
SB-5-7.5	11/25/2002	7.5	5	190	1,300	1,200a
SB-5-11.5	11/25/2002	11.5	<5.0	<1.0	<1.0	<1.0
SB-7-3.5	11/25/2002	3.5	16	250	750	810a
SB-7-7.5	11/25/2002	7.5	13	79	350	380a
SB-7-17.5	11/25/2002	17.5	18	470	830	890a
SB-8-3	11/25/2002	3.0	<500	2,500	3,600	3,500a
SB-8-6	11/25/2002	6.0	<500	2,900	6,600	6,400a
SB-8-9	11/25/2002	9.0	6.3	58	380	380a
SB-9-6	11/25/2002	6.0	<5.0	2.8	9.4	9.5a
SB-9-9	11/25/2002	9.0	<5.0	<1.0	<1.0	<1.0
SB-10-3	11/25/2002	3.0	<5.0	<1.0	<1.0	<1.0
SB-10-6	11/25/2002	6.0	<5.0	70	140	140a
SB-10-9	11/25/2002	9.0	<5.0	96	140	180a
SB-10-12	11/25/2002	12.0	<5.0	<1.0	<1.0	<1.0

Previous SCI Samples

Tank 1 Bottom	2/25/2002	--	---	69	74	110
Tank 2 Bottom	2/25/2002	--	---	34	280	440
Tank 3 Bottom	2/25/2002	--	---	220	940	1,500
Tank 4 Bottom	2/25/2002	--	---	12	1,000	1,600
E End @ 6'	2/26/2002	6.0	---	220	1,400	2,200
W End @ 6'	2/26/2002	6.0	---	390	1,800	2,900
Pipe #1	2/26/2002	--	---	68	<0.99	<0.99

CAMBRIA

Table 1. Soil Analytical Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHmo	TPHd	TPHss	TPHg
			←----- mg/kg -----→			
Residential ESL, non-drinking water			500	500	100	100
Commercial ESL, non-drinking water			1,000	500	400	400
Pipe #2	2/26/2002	--	---	6.8	<0.95	<0.95
Tank 5 E End	2/13/2002	--	---	1,000	11,000	17,000
Tank 5 W End	2/13/2002	--	---	1,800	8,400	13,000
Tank 6 N Wall	3/7/2002	2.0	---	53	<0.98	<0.98
Tank 6 S Wall	3/7/2002	5.0	---	260	270	310
Tank 6 E End	2/13/2002	--	---	670	300	470
Tank 6 W End	2/13/2002	--	---	1,500	17,000	26,000

Abbreviations and Methods:

Bold values represent concentrations above the commercial ESL.

mg/kg = Milligrams per kilogram, equivalent to parts per million (ppm)

-- = Not available, not analyzed, or does not apply

ND = Not detected above laboratory reporting limit; see laboratory report for individual reporting limits

TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015C with silica gel cleanup

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015C with silica gel cleanup

TPHss = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8021B/8015Cm

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8021B/8015Cm

TPHnap = Total petroleum hydrocarbons as naphtha by EPA Method 8015m/8020

Lead by EPA Method 6010C

a = Laboratory note: TPH pattern that does not appear to be derived from gasoline (Stoddard solvent/mineral spirit?)

b = Laboratory note: heavier gasoline range compounds are significant (aged gasoline?)

Residential ESL = Table B - Environmental Screening Levels Shallow Soil <3 meters (Groundwater is not a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

Commercial ESL = Table B - Environmental Screening Levels Shallow Soil <3 meters (Groundwater is not a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

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Table 2. Soil Analytical Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)										
			Benzene	Toluene	Ethylbenzene	Xylenes	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	1,2-Dichloropropane	Methylene Chloride
Residential, non-drinking water ESL			180	9,300	4,700	1,500	88	1,600	260	6.7	52	520
Commercial, non-drinking water ESL			380	9,300	13,000	1,500	250	3,600	730	19	150	1,500

Current Cambria Samples

MW-1C@6.5	5/10/2004	6.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1C@9.5	5/10/2004	9.5	<0.20	<0.20	<0.20	<0.20	<20	<20	<20	<20	<20	<20
MW-1C@14.5	5/10/2004	14.5	<5.0	<5.0	<5.0	5.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-1C@20	5/10/2004	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-3A@15	5/7/2004	15.0	<5.0	<5.0	<5.0	<5.0	<100	<100	<100	<100	<100	<100
MW-5B@5	5/18/2004	5.5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-5B@10	5/18/2004	10.0	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-5B@15	5/18/2004	15.0	<100	<100	<100	1,400	<20	<20	<20	<20	<20	<20
MW-5B@20	5/18/2004	20.0	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-5B@24	5/18/2004	24.0	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6C@5.5	5/11/2004	5.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6C@11	5/11/2004	11.0	<25	<25	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6C@16	5/11/2004	16.0	<50	<50	<50	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-6C@21	5/11/2004	21.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Previous Cambria Samples

SB-13@6	1/5/2004	6.0	<50	<50	<50	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-13@11.5	1/5/2004	11.5	<100	<100	<100	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-14@7.5	1/9/2004	7.5	640	390	1,800	5,000	<400	<400	<400	<400	<400	<400
SB-14@11.5	1/9/2004	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-15@7.5	1/12/2004	7.5	<1,000	<1,000	<1,000	2,400	<400	<400	<400	<400	<400	<400
SB-15@11.5	1/12/2004	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

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Table 2. Soil Analytical Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	Benzene	Toulene	Ethylbenzene	Xylenes	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	1,2-Dichloropropane	Methylene Chloride
			← μg/kg →									
Residential, non-drinking water ESL			180	9,300	4,700	1,500	88	1,600	260	6.7	52	520
Commercial, non-drinking water ESL			380	9,300	13,000	1,500	250	3,600	730	19	150	1,500
SB-16@7.5	1/12/2004	7.5	<50	<50	69	110	<100	<100	<100	<100	<100	<100
SB-16@11.5	1/12/2004	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-17@3.5	1/8/2004	3.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-17@7.5	1/8/2004	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	8.3	<5.0	<5.0	<5.0	<5.0
SB-17@11.5	1/8/2004	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	180	<5.0	8.3	7.4	<5.0
SB-17@17.5	1/8/2004	17.5	<5.0	<5.0	<5.0	<5.0	<10	170	<10	<10	<10	<10
SB-17@20	1/8/2004	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-18@3.5	1/6/2004	3.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-18@7.5	1/6/2004	7.5	<200	<200	310	1,600	<400	<400	<400	<400	<400	<400
SB-18@11.5	1/6/2004	11.5	<5.0	<5.0	<5.0	15	<50	<50	<50	<50	<50	<50
SB-18@17	1/6/2004	17.0	<200	<200	1,100	6,500	<400	<400	<400	<400	<400	<400
SB-18@17.5	1/9/2004	18.5	<250	<250	570	2,900	<400	<400	<400	<400	<400	<400
SB-18@20	1/9/2004	20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-21@3	1/20/2004	3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-21@6	1/20/2004	6.0	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-21@9	1/20/2004	9.0	<200	<200	230	<200	<200	<200	<200	<200	<200	<200
SB-22@3.0	1/7/2004	3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-22@6.0	1/7/2004	6.0	<200	<200	<200	670	<400	<400	<400	<400	<400	<400
SB-22@9.0	1/7/2004	9.0	<200	<200	<200	770	<100	<100	<100	<100	<100	<100
SB-23@3	1/6/2004	3.0	<5.0	<5.0	<5.0	<5.0	13	<5.0	<5.0	<5.0	<5.0	<5.0
SB-23@6	1/6/2004	6.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-23@9	1/6/2004	9.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-24@3	1/5/2004	3.0	<500	<500	<500	<500	<400	<400	<400	<400	<400	<400

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Table 2. Soil Analytical Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)										
			Benzene	Toluene	Ethylbenzene	Xylenes	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	1,2-Dichloropropane	Methylene Chloride
Residential, non-drinking water ESL			180	9,300	4,700	1,500	88	1,600	260	6.7	52	520
Commercial, non-drinking water ESL			380	9,300	13,000	1,500	250	3,600	730	19	150	1,500
SB-24@6	1/5/2004	6.0	<200	<200	240	<200	<400	<400	<400	<400	<400	<400
SB-24@9	1/5/2004	9.0	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
SB-26@7.5	1/7/2004	7.5	<200	<200	<200	<200	<100	<100	<100	<100	<100	<100
SB-26@11.5	1/7/2004	11.5	<200	<200	<200	330	<50	<50	<50	<50	<50	<50
<i>Previous Cambria Samples</i>												
SB-1-3.5	11/25/2002	3.5	<5.0	37	16	120	44	<5.0	<5.0	<5.0	<5.0	<5.0
SB-1-7.5	11/25/2002	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-2-3.5	11/25/2002	3.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-2-11.5	11/25/2002	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-3-7.5	11/25/2002	7.5	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-3-11.5	11/25/2002	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-4-3.5	11/25/2002	3.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-4-7.5	11/25/2002	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-4-11.5	11/25/2002	11.5	<5.0	<5.0	7.4	11	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-5-7.5	11/25/2002	7.5	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
SB-5-11.5	11/25/2002	11.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-7-3.5	11/25/2002	3.5	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-7-7.5	11/25/2002	7.5	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-7-17.5	11/25/2002	17.5	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-8-3	11/25/2002	3.0	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
SB-8-6	11/25/2002	6.0	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
SB-8-9	11/25/2002	9.0	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SB-9-6	11/25/2002	6.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SB-9-9	11/25/2002	9.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
SB-10-3	11/25/2002	3.0	<5.0	<5.0	<5.0	<5.0	56	<5.0	<5.0	<5.0	<5.0	<5.0
SB-10-6	11/25/2002	6.0	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
SB-10-9	11/25/2002	9.0	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500

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Table 2. Soil Analytical Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)										
			Benzene	Toluene	Ethylbenzene	Xylenes	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	1,2-Dichloropropane	Methylene Chloride
Residential, non-drinking water ESL			180	9,300	4,700	1,500	88	1,600	260	6.7	52	520
Commercial, non-drinking water ESL			380	9,300	13,000	1,500	250	3,600	730	19	150	1,500
SB-10-12	11/25/2002	12.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	18	<5.0	<5.0
SB-11-7.5	11/25/2002	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
<i>Previous SCI Samples</i>												
Tank 1 Bottom	2/25/2002	--	<130	<130	<130	<130	<130	<130	<130	<130	<130	<130
Tank 2 Bottom	2/25/2002	--	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Tank 3 Bottom	2/25/2002	--	<250	<250	<250	<250	310	<250	<250	<250	<250	<250
Tank 4 Bottom	2/25/2002	--	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
E End @ 6'	2/25/2002	6.0	<250	<250	<250	950	<250	<250	<250	<250	<250	<250
W End @ 6'	2/25/2002	6.0	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Pipe #1	2/25/2002	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pipe #2	2/25/2002	--	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
Tank 5 E End	3/7/2002	--	<2,000	<2,000	8,600	<2,000	<2,000	<2,000	<2,000	<2,000	<2,000	<2,000
Tank 5 W End	3/7/2002	--	<1,700	<1,700	5,900	<1,700	<1,700	<1,700	<1,700	<1,700	<1,700	<1,700
Tank 6 N Wall	3/7/2002	2.0	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Tank 6 S Wall	3/7/2002	5.0	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Tank 6 E End	3/7/2002	--	<420	<420	<420	<420	<420	<420	<420	<420	<420	<420
Tank 6 W End	3/7/2002	--	<3,100	<3,100	<3,100	<3,100	<3,100	<3,100	<3,100	<3,100	<3,100	<3,100

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Table 2. Soil Analytical Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)										
			Benzene	Toluene	Ethylbenzene	Xylenes	Tetrachloroethene	cis-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	1,2-Dichloropropane	Methylene Chloride
Residential, non-drinking water ESL			180	9,300	4,700	1,500	88	1,600	260	6.7	52	520
Commercial, non-drinking water ESL			380	9,300	13,000	1,500	250	3,600	730	19	150	1,500

Abbreviations and Methods:

Bold values represent concentrations above the commercial ESL.

µg/kg = Micrograms per kilogram, equivalent to parts per billion (ppb)

Volatile organic compounds by EPA Method 8260B

< n = Chemical not present at a concentration in excess of detection limit shown

ND = None detected above laboratory reporting limit, see laboratory report for individual reporting limits.

Residential ESL = Table B - Environmental Screening Levels Shallow Soils <3 meters (Groundwater is not a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

Commercial ESL = Table B - Environmental Screening Levels Shallow Soils <3 meters (Groundwater is not a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

(160,000) = No RBSL published for component. The value presented is from EPA's Preliminary Remediation Goals (PRG), 2000.

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Table 3. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Boring ID TOC (ft*)	Date Sampled	Groundwater Elevation (ft)/ Screen Interval (ft bgs)	Depth to Water (ft)	TPHs µg/L				Notes
				TPHmo ←	TPHd	TPHss	TPHg →	
ESL - Potential Drinking Water Source				100	100	100	100	
ESL - Not a Potential Drinking Water Source				640	640	500	500	
MW-1A 39.64	6/3/2004	35.14	4.50	260	1,300	2,500	1,400	
MW-1B 39.5	6/3/2004	25.10	14.40	<250	<50	<50	<50	
MW-1C 39.49	6/3/2004	30.07	9.42	<250	<50	<50	<50	
MW-2A 40.72	6/3/2004	36.48	4.24	<250	2,900	3,500	1,700	
MW-3A 40.88	6/3/2004	36.56	4.32	6,000	90,000	12,000	4,800	
MW-4A 38.71	6/3/2004	36.26	2.45	440	270	<50	<50	
MW-4B 38.54	6/3/2004	33.52	5.02	<250	<50	<50	<50	
MW-4C 38.50	6/3/2004	30.10	8.40	<250	<50	<50	<50	
MW-5B 38.98	6/3/2004	30.16	8.82	<250	<50	<50	<50	
MW-6A 37.98	6/3/2004	31.98	6.00	340	3,500	2,400	970	

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Table 3. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Boring ID TOC (ft*)	Date Sampled	Groundwater Elevation (ft)/ Screen Interval (ft bgs)	Depth to Water (ft)	TPHs µg/L				Notes
				TPHmo ←	TPHd	TPHss	TPHg →	
ESL - Potential Drinking Water Source				100	100	100	100	
ESL - Not a Potential Drinking Water Source				640	640	500	500	
MW-6B 37.66	6/3/2004	29.36	8.30	<250	2,300	2,900	1,100	
MW-6C 37.59	6/3/2004	27.89	9.70	<250	240	340	160	
MW-7A 40.58	6/3/2004	36.08	4.50	--	--	9,900	3,900	
<i>Current Cambria Samples</i>								
SB-12A	1/13/2004	8 to 13	4.5	300	130	<50	230	h,c,e,d,f
SB-14A	1/9/2004	2 to 7	4.0	<250	<50	<50	<50	c
SB-14C	1/9/2004	30.5 to 35.5	NW	---	---	---	---	
SB-15A	1/12/2004	8 to 13	4.0	290	2,400	2,500	2,700	a,c,d
SB-16A	1/12/2004	8 to 13	4.0	9,800	23,000	1,500	1,700	a,b,c,d,e,i
SB-17A	1/13/2004	8 to 13	NW	---	---	---	---	
SB-17B	1/8/2004	17 to 22	16.5	<250	95	<50	120	c,d,f,g
SB-17C	1/13/2004	29 to 34	NW	---	---	---	---	
SB-18A	1/6/2004	7 to 12	1.5	<2,500	11,000	2,100	3,900	d,b
SB-18B**	1/9/2004	26 to 31	25.0	<250	92	<50	250	g,h
SB-18C	1/9/2004	35 to 40	34.0	---	---	170	300	c,g,h
SB-19A	1/13/2004	14 to 19	NW	---	---	---	---	
SB-20A	1/13/2004	8 to 13	8.0	<250	1,400	610	680	b,d,j
SB-20C	1/13/2004	29 to 34	31.0	<250	<50	<50	<50	c

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Table 3. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Boring ID <i>TOC</i> <i>(ft*)</i>	Date Sampled	Groundwater Elevation (ft)/ <i>Screen Interval</i> <i>(ft bgs)</i>	Depth to Water (ft)	TPHs <i>µg/L</i>				Notes
				TPHmo ←	TPHd	TPHss	TPHg →	
ESL - Potential Drinking Water Source				100	100	100	100	
ESL - Not a Potential Drinking Water Source				640	640	500	500	
SB-21A	1/20/2004	4.5 to 9.5	8.5	<25,000	110,000	5,600	6,100	a,b,i,k
SB-22A	1/7/2004	5 to 10	NW	---	---	---	---	
SB-22C	1/7/2004	41 to 46*	--	<250	110	<50	<50	c,f
SB-25A	1/8/2004	5 to 10	5.0	<250	64	<50	<50	c,f,g
SB-25C	1/8/2004	29 to 34	29.0	<250	<50	<50	<50	c
SB-26A	1/7/2004	8 to 13	4.0	1,000	5,300	2,600	3,000	c,d,e
<i>Previous Cambria Samples</i>								
SB-1	11/25/2002	35.39	3.45	---	---	---	---	
(38.84)	11/26/2002	35.44	3.40	7,500	2,000	<50	58	
SB-2	11/25/2002	11.61	29.50	---	---	---	---	
(41.11)	11/26/2002	29.46	11.65	<250	<50	<50	<50	
SB-4	11/25/2002	34.02	6.90	---	---	---	---	
(40.92)	11/26/2002	34.82	6.10	---	---	---	---	SPH
SB-6	11/25/2002	28.24	11.25	---	---	---	---	
(39.49)	11/26/2002	32.19	7.30	620	23,000	7,800	8,700a,b,c	
SB-7	11/25/2002	28.20	10.30	---	---	---	---	
(38.50)	11/26/2002	30.10	8.40	<25,000	120,000	5,800	6,100a,b,c	
SB-8	11/25/2002	36.30	4.70	---	---	---	---	
(41.00)	11/26/2002	36.55	4.65	<250,000	1,200,000	100,000	110,000a,b,c	
SB-9	11/25/2002	16.02	25.00	---	---	---	---	

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Table 3. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Boring ID TOC (ft*)	Date Sampled	Groundwater Elevation (ft)/ Screen Interval (ft bgs)	Depth to Water (ft)	TPHmo ←	TPHd μg/L	TPHss →	TPHg	Notes
ESL - Potential Drinking Water Source				100	100	100	100	
ESL - Not a Potential Drinking Water Source				640	640	500	500	
(41.02)	11/26/2002	17.07	23.95	300	50	<50	<50c	
SB-10	11/25/2002	29.27	11.60	---	---	---	---	
(40.87)	11/26/2002	31.12	9.75	<250	350	200	260a,c	
SB-11	11/25/2002	12.15	29.30	---	---	---	---	
(41.45)	11/26/2002	19.55	21.90	<250	<50	<50	<50	
<i>Previous SCI Samples</i>								
Interior	2/20/2002	---	---	---	94,000	13,000	21,000	
Exterior	2/25/2002	---	---	---	82,000	42,000	66,000	

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Table 3. Groundwater Analytical and Elevation Data: Petroleum Hydrocarbons - 1137-1167 65th Street, Oakland, California

Boring ID	Date	Groundwater	Depth	TPHmo	TPHd	TPHss	TPHg	Notes
TOC	Sampled	Elevation (ft)/	to Water	←————— μg/L —————→				
(ft*)		Screen Interval	(ft)					
			(ft bgs)					
ESL - Potential Drinking Water Source				100	100	100	100	
ESL - Not a Potential Drinking Water Source				640	640	500	500	

Abbreviations:

Bold values represent concentrations above the non-drinking water ESL.

TOC Elev. (ft) = Top of casing elevation in feet above mean sea level

μg/L = micrograms per liter = parts per billion = ppb

TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method 8015C with silica gel cleanup

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015C with silica gel cleanup

TPHss = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8021B/8015Cm

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8021B/8015Cm

TPHnap = Total petroleum hydrocarbons as naphtha by EPA Method 8015m/8020

ND = None detected above laboratory reporting limit, see laboratory report for individual reporting limits.

--- = Not available, not analyzed, or does not apply.

< n = Chemical not present at a concentration in excess of detection limit shown.

SPH = Separate phase hydrocarbons detected in well; no groundwater collected.

Notes:

* = Grab groundwater sample was collected without protection against cross contamination between groundwater zones; sample may not be discrete

** = Sample SB-18B collected in the C-zone

a = Laboratory note: TPH pattern that does not appear to be derived from gasoline (Stoddard solvent/mineral spirit?)

b = Laboratory note: lighter than water immiscible sheen/product is present

c = Laboratory note: liquid sample that contains greater than ~2 vol. % sediment

d = Laboratory note: gasoline range compounds are significant

e = Laboratory note: oil range compounds are significant

f = Laboratory note: diesel range compounds are significant; no recognizable pattern

g = Laboratory note: one to a few isolated non-target peaks present

h = Laboratory note: unmodified or weakly modified gasoline is significant

i = Laboratory note: sample diluted due to high organic content

j = Laboratory note: strongly aged gasoline or diesel range compounds are significant

k = Laboratory note: stoddard solvent/mineral spirit

ESL - Potential Drinking Water Source = Table A - Environmental Screening Levels (Groundwater is a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

ESL - Not A Potential Drinking Water Source = Table B - Environmental Screening Levels (Groundwater is not a Current or Potential Source of Drinking) established by the RWQCB-SFBR, Interim Final July 2003.

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Table 4. Groundwater Analytical and Elevation Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Boring ID (TOC) (ft*)	Date Sampled	Screen Interval / Groundwater Elevation (ft)	Depth to Water (ft)														Notes
				Benzene	Toluene	Ethylbenzene	Xylenes	Chloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	
ESL - Potential Drinking Water Source				μg/L													
ESL - Not a Potential Drinking Water Source				1.0	40	30	13	12	1.0	5.0	360	10	6.0	5.0	0.5	0.5	
MW-1A 39.64	6/3/2004	35.14	4.50	<0.5	<0.5	2.0	11	<2.5	<2.5	55	16	<2.5	36	<2.5	<2.5	6.3	
MW-1B 39.50	6/3/2004	25.10	14.40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.9	8.1	7.9	<0.5	
MW-1C 39.49	6/3/2004	30.07	9.42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-2A 40.72	6/3/2004	36.48	4.24	<0.5	3.5	4.9	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-3A 40.88	6/3/2004	36.56	4.32	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-4A 38.71	6/3/2004	36.26	2.45	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-4B 38.54	6/3/2004	33.52	5.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-4C 38.50	6/3/2004	30.10	8.40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-5B 38.98	6/3/2004	30.16	8.82	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

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Table 4. Groundwater Analytical and Elevation Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Boring ID (TOC) (ft*)	Date Sampled	Screen Interval / Groundwater Elevation (ft)	Depth to Water (ft)	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes
				µg/L													
ESL - Potential Drinking Water Source				1.0	40	30	13	12	1.0	5.0	5.0	10	6.0	5.0	0.5	0.5	
ESL - Not a Potential Drinking Water Source				46	130	290	13	12	190	120	360	14	590	47	200	4.0	
MW-6A 37.98	6/3/2004	31.98	6.00	<0.5	<0.5	<0.5	2.1	4.7	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	6.7	
MW-6B 37.66	6/3/2004	29.36	8.30	<0.5	<0.5	<0.5	1.4	0.65	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-6C 37.59	6/3/2004	27.89	9.70	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	0.61	<0.5	<0.5	
MW-7A 40.58	6/3/2004	36.08	4.50	<5.0	<5.0	<5.0	6.6	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	<0.5	
<i>Previous Cambria Samples</i>																	
SB-1 (38.84)	11/25/2002	35.39	3.45	---	---	---	---	---	---	---	---	---	---	---	---	---	
	11/26/2002	35.44	3.40	1.7	3.2	0.55	3.6	---	---	1.2	<0.5	<0.5	---	---	---	<0.5	a,b,c
SB-2 (41.11)	11/25/2002	11.61	29.50	---	---	---	---	---	---	---	---	---	---	---	---	---	
	11/26/2002	29.46	11.65	<0.5	<0.5	<0.5	<0.5	---	---	<0.5	<0.5	<0.5	---	---	---	<0.5	
SB-4 (40.92)	11/25/2002	34.02	6.90	---	---	---	---	---	---	---	---	---	---	---	---	---	
	11/26/2002	34.82	6.10	---	---	---	---	---	---	---	---	---	---	---	---	---	SPH
SB-6 (39.49)	11/25/2002	28.24	11.25	---	---	---	---	---	---	---	---	---	---	---	---	---	
	11/26/2002	32.19	7.30	2.1	1.2	<0.5	0.55	3.8	<0.5	<0.5	---	1.2	---	---	---	0.90	d,e,f,g
SB-7 (38.50)	11/25/2002	28.20	10.30	---	---	---	---	---	---	---	---	---	---	---	---	---	
	11/26/2002	30.10	8.40	<0.5	0.74	<0.5	3	16	16	<0.5	<0.5	<0.5	---	---	---	1.3	i,j,k,l,m

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Table 4. Groundwater Analytical and Elevation Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Boring ID (TOC) (ft*)	Date Sampled	Screen Interval / Groundwater Elevation (ft)	Depth to Water (ft)	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	Vinyl Chloride	Notes
				μg/L													
ESL - Potential Drinking Water Source				1.0	40	30	13	12	10	5.0	5.0	10	6.0	5.0	0.5	0.5	
ESL - Not a Potential Drinking Water Source				46	130	290	13	12	190	120	360	14	590	47	200	4.0	
SB-8 (41.00)	11/25/2002 11/26/2002	36.30 36.55	4.70 4.65	---	---	---	---	---	---	---	---	---	---	---	---	---	o
SB-9 (41.02)	11/25/2002 11/26/2002	16.02 17.07	25.00 23.95	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-10 (40.87)	11/25/2002 11/26/2002	29.27 31.12	11.60 9.75	---	---	---	---	---	---	---	---	---	---	---	---	---	p,q
SB-11 (41.45)	11/25/2002 11/26/2002	12.15 19.55	29.30 21.90	---	---	---	---	---	---	---	---	---	---	---	---	---	t
SB-12A	1/13/2004	8 to 13	4.5	<0.5	2.0	<0.5	<0.5	---	---	---	---	<0.5	---	---	---	<0.5	
SB-14A	1/9/2004	2 to 7	4.0	0.58	<0.5	<0.5	<0.5	---	---	---	---	<0.5	---	---	---	<0.5	
SB-14C	1/9/2004	30.5 to 35.5	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-15A	1/12/2004	8 to 13	4.0	<0.5	<0.5	<0.5	17	---	---	---	---	<0.5	---	---	---	<0.5	
SB-16A	1/12/2004	8 to 13	4.0	0.65	0.51	1.3	7.7	---	---	---	---	<2.5	---	---	---	<2.5	
SB-17A	1/13/2004	8 to 13	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-17B	1/8/2004	17 to 22	16.5	<0.5	<0.5	<0.5	<0.5	---	---	---	---	<50	---	---	---	<50	
SB-17C	1/13/2004	29 to 34	NW	---	---	---	---	---	---	---	---	---	---	---	---	---	
SB-18A	1/6/2004	7 to 12	1.5	<5.0	<5.0	<5.0	11	---	---	---	---	<2.5	---	---	---	<2.5	
SB-18B**	1/9/2004	26 to 31	25.0	0.54	<0.5	<0.5	0.64	---	---	---	---	630	430	1,800	---	<100	
SB-18C	1/9/2004	35 to 40	34.0	0.82	<0.5	<0.5	1.3	---	---	---	---	300	250	1,200	---	<50	

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Table 4. Groundwater Analytical and Elevation Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Boring ID (TOC) (ft*)	Date Sampled	Screen Interval / Groundwater Elevation (ft)	Depth to Water (ft)													Notes	
				Benzene	Toulene	Ethylbenzene	Xylenes	Chloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane		Vinyl Chloride
				← μg/L →													
ESL - Potential Drinking Water Source				1.0	40	30	13	12	1.0	5.0	5.0	10	6.0	5.0	0.5	0.5	
ESL - Not a Potential Drinking Water Source				46	130	290	13	12	190	120	360	14	590	47	200	4.0	
SB-19A	1/13/2004	14 to 19	NW	---	---	---	---										
SB-20A	1/13/2004	8 to 13	8.0	<0.5	<0.5	<0.5	3.3		<0.5	<0.5		<0.5				<0.5	
SB-20C	1/13/2004	29 to 34	31.0	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5				<0.5	
SB-21A	1/20/2004	4.5 to 9.5	8.5	<5.0	<5.0	<5.0	<5.0		<50	<50		<50				<50	
SB-22A	1/7/2004	5 to 10	NW														
SB-22C	1/7/2004	41 to 46*	--	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5				<0.5	
SB-25A	1/8/2004	5 to 10	5.0	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5				<0.5	
SB-25C	1/8/2004	29 to 34	29.0	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5				<0.5	
SB-26A	1/7/2004	8 to 13	4.0	6.2	<5.0	<5.0	13		<5.0	<5.0		<5.0				<5.0	
Trip Blank	11/26/2002	---	---	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5				<0.5	
<i>Previous SCI Samples</i>																	
Interior	2/20/2002	---	---	47	<5.0	9.4	114		<5.0	<5.0		<5.0				<5.0	
Exterior	2/20/2002	---	---	<7.1	<7.1	<7.1	24		83	<7.1		9.6				<7.1	

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Table 4. Groundwater Analytical and Elevation Data: Volatile Organic Compounds - 1137-1167 65th Street, Oakland, California

Boring ID (TOC)	Date Sampled	Screen Interval / Groundwater Elevation (ft)	Depth to Water (ft)	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,2-Dichlorobenzene	cis-1,2-Dichloroethene	1,1-Dichloroethene	1,2-Dichloroethane	Vinyl Chloride	Notes	
(ft*)		(ft)	(ft)	← μg/L →														
ESL - Potential Drinking Water Source				1.0	40	30	13	12	1.0	5.0	10	6.0	5.0	0.5	0.5			
ESL - Not a Potential Drinking Water Source				46	130	290	13	12	190	120	360	14	590	47	200	4.0		

Abbreviations:

TOC Elev. (ft) = Top of casing elevation in feet above mean sea level
 μg/L = micrograms per liter = parts per billion = ppb
 Volatile organic compounds by EPA Method 8260B
 --- = Not available, not analyzed, or does not apply
 < n = Chemical not present at a concentration in excess of detection limit shown
 * = Grab groundwater sample was collected without protection against cross contamination between groundwater zones; may not be discrete.
 ** = Sample 18B collected in the C-zone
 Bold values represent concentrations above the non-drinking water ESL.

Notes:

a = Carbon Disulfide: 0.64 ug/L
 a = 2-Hexanone: 0.58 ug/L
 b = Methyl tertiary-butyl ether (MTBE): 5.1 ug/L
 d = tert-Butylbenzene: 4.6 ug/L
 e = Chloroethane: 3.8 ug/L
 f = 1,1-Dichloroethene: 1.4 ug/L
 g = trans-1,2-Dichloroethene: 2.6 ug/L
 i = tert-Butylbenzene: 7.3 ug/L
 j = Chloroethane: 16 ug/L
 k = 1,1-Dichloroethene: 1.7 ug/L
 l = trans-1,2-Dichloroethene: 0.9 ug/L
 m = 1,1,2,2-Tetrachloroethane: 1.0 ug/L
 o = 1,2-Dichlorobenzene: 20 ug/L
 p = 1,1-Dichloroethene: 19 ug/L
 q = trans-1,2-Dichloroethene: 3.9 ug/L
 t = Methyl tertiary-butyl ether (MTBE): 5.1 ug/L

ESL - Potential Drinking Water Source = Table A - Environmental Screening Levels (Groundwater is a Current or Potential Source Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

ESL - Not A Potential Drinking Water Source = Table B - Environmental Screening Levels (Groundwater is not a Current or Potential Source of Drinking Water) established by the RWQCB-SFBR, Interim Final July 2003.

APPENDIX A

Agency Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

September 17, 2003

Mr. John Nady
6701 Shellmound St.
Emeryville, CA 94608

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Dear Mr. Nady:

Subject: Fuel Leak Case RO0000082, 1137-1167 65th St., Oakland, CA 94608

Alameda County Environmental Health, Local Oversight Program (LOP), staff has reviewed the August 26, 2003 Cambria Environmental Technology, Inc. (Cambria) *Investigation Work Plan* and met with your consultant, Cambria on September 11, 2003. The referenced work plan provides an interpretation of previous geologic data and proposes a comprehensive approach to determine the lateral and vertical extent of soil and groundwater contamination at this site. Based upon our discussion with your consultant, our office approves the investigation work plan with the following technical comments and conditions.

TECHNICAL COMMENTS

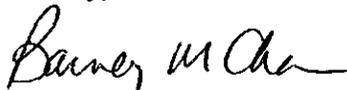
- Our office concurs with the proposal to perform a sensitive receptor survey and an underground utilities survey.
- Our office concurs in performing a soil and groundwater investigation to fill in data gaps. The proposed locations of soil borings and monitoring wells are acceptable. Additional step out borings may be warranted depending on the investigation results. However, specific changes and amendments to the work plan shall include the following:
 1. The borings identified in the Cambria work plan as SB-14, SB-16, SB-18, SB-20, SB-23 and SB-25 shall be advanced to the C zone. These deep borings shall be completed first and, based on their results, will dictate whether other planned borings will also be advanced to the C zone. Soil and groundwater, if encountered, should be collected for chemical analysis from each discrete horizon and water-bearing zone, as appropriate.
 2. Based upon the results of these initial borings, the final, multi-level monitoring plan shall be modified, as appropriate. Our office will be informed for concurrence prior to well installations, the locations and configurations of which will be proposed at a later date. Final configurations of well clusters, i.e., the zones across which the individual screens will be constructed, will be based on the outcome of this current phase of the investigation.
 3. Drilling will be performed in such a manner to prevent the potential for cross contamination while advancing borings through water bearing units.

September 17, 2003
Mr. John Nady
Fuel Leak Case RO0000082
1137-1167 65th St., Oakland, CA 94608
Page 2

- The proposed soil gas probe installation and sampling plan is not approved at this time. Additional research into the appropriate clean-up levels for the contaminants of concern should be done to verify the need for such sampling. Once the data from this investigation is received we will meet with the RWQCB to discuss whether the site-specific conditions warrant this type of evaluation.
- Our office concurs with the cost control recommendation to analyze soil samples from only the deepest well of any well cluster. We also concur that free product, if encountered, should be sampled and analyzed for identification.
- Soil samples are proposed for collection for physical property analyses. In accordance with the DTSC/LARWQCB January 23, 2003 *Active Soil Gas Investigations Advisory*, samples should be collected from a minimum of 3 locations in non-impacted areas and at depths corresponding to detected VOCs and for each soil type within this depth.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,



Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos, S. Seery

Mr. Bob Clark-Riddell, Cambria Environmental, 5900 Hollis St., Suite A, Emeryville, 94608

Wpap1137 65th

Olson, Jason

From: Chan, Barney, Env. Health [BChan@co.alameda.ca.us]
Sent: Monday, October 20, 2003 4:07 PM
To: 'jolson@cambria-env.com'
Subject: RE: Case No. RO0000082 - 1137-1167 65th St, Oakland - Analytical Concurrence

Jason:

After speaking with you, the modifications in the analysis rationale and methodology is approved by our office. As you noted there is no compromise in detection limits going from EPA 8260 to 8020 and although you do not plan to analyze all soil samples, soil samples will be collected approximately every 5 feet and screened with a PID and those samples detecting significant readings (>100ppm ?) will be analyzed.

Please let me know if this is not consistent with your understanding.

Barney Chan
ACEH
510-567-6765

-----Original Message-----

From: Jason Olson [mailto:jolson@cambria-env.com]
Sent: Friday, October 17, 2003 1:09 PM
To: 'Barney Chan (ACHCSA) (E-mail)'
Cc: Bob Clark-Riddell (E-mail)
Subject: Case No. RO0000082 - 1137-1167 65th St, Oakland - Analytical Concurrence

Barney,

I'm preparing the Cost Pre-Approval for the UST Fund and trying to trim some costs while still achieving our data quality objectives. I have reviewed the VOCs detected at the site above the RWQCB ESLs, and determined that we can analyze for all the site COCs with an 8010 analysis rather than an 8260, which costs twice as much. Also, since we're sampling several groundwater zones, there really isn't any need to analyze soil below 15 feet in most areas of the site (exceptions are data gaps near boring SB-7 and the Exterior Tank Area).

Thus, I propose the following:

1. Change all 8260 analyses to 8010.
2. Collect and analyze soil samples at the discrete depths proposed in Table 5 of the workplan (this only affects the borings you have requested to get deeper groundwater samples at).
3. Analyze soil in the proposed monitoring well clusters MW-1 and MW-6 to a maximum depth of 20 ft bgs, and 15 ft bgs in all other well clusters (maximum sample analysis depth for the wells is unclear in the workplan).

This will give us the data we're looking for, and trim around \$20,000 off the analytical bill, making it much more cost effective (and palatable to the UST Fund).

Please respond as soon as possible. I'm hoping to get this Cost Pre-Approval out today to get the ball rolling. If you have any questions, please call me.

Thanks,

Jason D. Olson, EIT
Project Manager

Cambria Environmental Technology, Inc.
(510) 420-3338 (direct)
(510) 420-0700 (general office)
(510) 420-9170 (fax)

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

March 26, 2004

Mr. John Nady
Nady Systems
6701 Shellmound St.
Emeryville, CA 94608

Dear Mr. Nady:

Subject: Fuel Leak Case RO0000082, 1137-1167 65th Ave., Oakland, CA 94608

Alameda County Environmental Health staff has received and reviewed the March 17, 2004 *Well Installation Work Plan Addendum* from Cambria Environmental. The work plan responds to prior County comments and proposes the installation of two additional shallow screened wells, MW-7A and MW-8A to further investigate the area near and down-gradient of boring SB-8. These wells are approved as are the six wells previously proposed and described in Cambria August 26, 2003 *Investigation Workplan*.

The soil gas probe sampling and soil matrix sampling portion of the investigation workplan shall be temporarily placed on-hold until groundwater sampling data is evaluated.

You may contact me at (510) 567-6765 if you any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: ~~B.~~ Chan, D. Drogos

✓ Mr. Bob Clark-Riddell, Cambria Environmental, 5900 Hollis St., Suite A, Emeryville,
CA 94608

Wellwpaddn11371167 65thAve

Olson, Jason

From: Olson, Jason [jolson@cambria-env.com]
Sent: Tuesday, April 27, 2004 1:15 PM
To: 'Chan, Barney, Env. Health'
Cc: Bob Clark-Riddell (E-mail); Frederic D. Schrag (E-mail)
Subject: RE: Nady site, 1137-1167 65th St., Oakland, RO82

Barney,

As we discussed today, there is sufficient overhead clearance to install a well in the area of former boring SB-8 (the breezeway). As you recall, when we thought there was insufficient overhead clearance to install a well at this location, we proposed installing two wells located on either side of the boring (MW-3A to the east and MW-7A to the west). The installation of one well at SB-8 now eliminates the need for two wells in the breezeway.

Based on our conversation today, Cambria will change our scope of work as follows:

1. Install well MW-3A at the location of former boring SB-8.
2. Eliminate the well location designated MW-7A in our Workplan Addendum
3. Re-designate well MW-8A as MW-7A

We currently have the drilling in this area scheduled for Friday, May 7, 2004. Please issue your concurrence via email. If you have any questions, please call me.

Sincerely,

Jason D. Olson, EIT
Project Manager

Cambria Environmental Technology, Inc.
(510) 420-3338 (direct)
(510) 420-0700 (general office)
(510) 420-9170 (fax)

On Wednesday, March 10, 2004 3:33 PM, Chan, Barney, Env. Health [SMTP:barney.chan@acgov.org] wrote:

Jason: I reviewed your Interim Investigation report. I've got a couple of questions/comments

- * Is there possible source near SB-21 and the floor drain? GW concentrations were high. Would it be possible to add a well near SB-21 or near the STEP boring just sw of SB-21?
- * Is it possible/reasonable to have a mw near the inner tanks 5&6 since we know there is high residual soil contamination left in place.
- * Could the location of proposed well MW3 be moved west, near SB-8 which exhibited very high soil and gw concentrations?

Sincerely,

Barney M. Chan
Hazardous Materials Specialist
Alameda County Environmental Health
510-567-6765

<< File: ATT00002.html >>

Olson, Jason

From: Chan, Barney, Env. Health [barney.chan@acgov.org]
Sent: Monday, May 17, 2004 1:33 PM
To: 'jolson@cambria-env.com'
Subject: RE: 1137-1167 65th Street, Oakland - Request to install additional wells

Jason:

Based upon your field observations when installing the wells in the proposed location of MW-4, our office approves of the installation of a B-zone well in addition to the previously approved A and C zone wells.

Barney Chan
ACEH, Hazardous Materials Specialist
510-567-6765

-----Original Message-----

From: Olson, Jason [mailto:jolson@cambria-env.com]
Sent: Monday, May 17, 2004 11:31 AM
To: 'Barney Chan (ACHCSA) (E-mail)'
Cc: Frederic D. Schrag (E-mail)
Subject: 1137-1167 65th Street, Oakland - Request to install additional well

Barney,

As we discussed today, Cambria will install a "B-zone" well at the location of MW-4. During well installation activities for the "C-zone" well MW-4C, our field geologist observed a saturated zone within the same interval as the "B-zone" (17-21 ft bgs). This additional well will give us 3 wells in the "B-zone" and will allow us to triangulate the groundwater flow. The "B-zone" well at this location will be designated MW-4B.

As we are currently drilling at the site, please issue your concurrence as soon as possible.

Thank you,

Jason D. Olson, EIT
Project Manager

Cambria Environmental Technology, Inc.
(510) 420-3338 (direct)
(510) 420-0700 (general office)
(510) 420-9170 (fax)

APPENDIX B

Field Activities Description

FIELD ACTIVITIES DESCRIPTION

Monitoring Well Installations and Sampling Activities

Personnel Present: Cambria's Senior Staff Geologist Matthew Meyers performed the well installation activities and Staff Scientist Sanjiv Gill performed the well sampling activities, which were overseen by Cambria's Senior Geologist Ron Scheele, a California Registered Geologist.

Number of Wells: Thirteen monitoring wells (MW-1A,B,C; MW-2A; MW-3A; MW-4A,B,C; MW-5B; MW-6A,B,C; and MW-7A) were installed on- and offsite.

Well Locations: Monitoring wells MW-1A,B,C were installed in the vicinity of previous boring SB-6 and near the exterior tank area. Monitoring well MW-2A was installed in the vicinity of previous boring SB-4 and near the former gasoline UST and pump location. Monitoring well MW-3A was installed in the vicinity of previous boring SB-8. Monitoring wells MW-4A,B,C were installed in the vicinity of previous boring SB-1 and near the former heating oil tank location. Monitoring well MW-5B was installed in the vicinity of previous boring SB-4 and near the former gasoline UST and pump location. Monitoring well MW-5B was installed in the northwest corner of the property. Monitoring wells MW-6A,B,C were installed in Peabody Lane near the southwest property corner. Monitoring well MW-7A was installed in the vicinity of previous boring SB-21 (Figure 2).

Permits: Alameda County Public Works Agency issued drilling permits for the installation of the thirteen wells. The permits are included in Appendix F.

Contractor: Precision Drilling Corporation of Richmond, California performed the well installation and development activities.

Well Install Date: Drilling activities began on May 7, and were completed on May 18, 2004.

Well Installation Method: The borings for wells MW-1A,B,C; MW-3A; MW-4A,B,C; MW-5B; and MW-6A,B,C were drilled with 8-inch diameter hollow stem augers to total depth. A 2-inch diameter screened well casing was then installed in the borehole.

The boring for well MW-2A was drilled with 10-inch diameter hollow stem augers to total depth. A 4-inch diameter screened well casing was then installed in the borehole.

The boring for well MW-7A was drilled with a hand auger to total depth. A 1-inch diameter, screened, and pre-packed well casing was then installed.

- Soil Sampling Method:** Soil samples were collected continuously using a Macrocore™ sampler.
- Total Depths Drilled:** Borings MW-1A, MW-2A, MW-3A, MW-4A, MW-6A, and MW-7A were advanced to 14.5, 12.0, 16.0, 16.0, 14.5 and 10.0 ft bgs, respectively. Borings MW-1B, MW-4B, MW-5B, and MW-6B were advanced to 20.0, 24.0, 24.0, and 24.5 ft bgs, respectively. Borings MW-1C, MW-4C, and MW-6C were advanced to 40.0, 40.0, and 39.5 ft bgs, respectively.
- Groundwater Depth:** Saturated soil was encountered from 3.5 to 15.5 ft bgs.
- Well Development:** On May 24, 2004, Precision Drilling Corporation developed the wells by surging and purging between 6 to 30 gallons of groundwater.
- Groundwater Sampling:** On June 3, 2004, Cambria gauged and collected groundwater samples from the monitoring wells. The groundwater samples were collected using a disposable bailer following the removal of between 2 and 13 gallons of groundwater with a disposable bailer. Samples were transported under chain-of-custody procedures to McCampbell Analytical of Pacheco, California for analysis. Groundwater samples were analyzed for TPHg, TPHd, TPH as stoddard solvent (TPHss), and TPH as motor oil (TPHmo) by modified EPA Method 8015C; BTEX and MTBE by EPA Method 8021B; and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B.
- Soil Sampling:** Cambria collected soil samples from the soil borings. Samples were transported under chain-of-custody procedures to McCampbell Analytical of Pacheco, California for analysis. Select samples were analyzed for TPHg, TPHd, TPHss, and TPHmo by modified EPA Method 8015C; BTEX and MTBE by EPA Method 8021B; and HVOCs by EPA Method 8260B.
- Soil Types Encountered:** Soils encountered during drilling consisted of interbedded layers of silty clays, clayey silts, sandy silts, and silty sands to the total depth drilled. The boring logs are included in Appendix C.
- Well Survey Information:** On June 2, 2004, Virgil Chavez Land Surveying of Vallejo, California surveyed the well location and elevation. The well survey information is included in Appendix F.

APPENDIX C

Boring Logs



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-1A
JOB/SITE NAME	65th Street	DRILLING STARTED	10-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	10-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (19 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	39.95
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	39.64 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	4.5 to 14.5 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	7.0 ft (10-May-04) ▽
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	4.5 ft (03-Jun-04) ▽
REMARKS	Located in Peabody Lane.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0.3			ASPHALT: 2 inches thick.	0.3	<p>Portland Type I/II Cement Bentonite Seal Monterey Sand #2/12</p>
					5	ML		Clayey SILT (ML): black; stiff; moist; 30% clay, 50% silt, 10% very fine to fine grained sand, 10% angular to subround gravel to 10mm; low plasticity; low estimated permeability. @ 4': becomes blue gray.	5.0	
								No soil samples observed below 5 ft. See boring log for MW-1C for lithology.	14.5	<p>2"-diameter, 0.010" Slotted Schedule 40 PVC</p> <p>Bottom of Boring @ 14.5 ft</p>

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ_DEFAULT.GDT 7/25/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

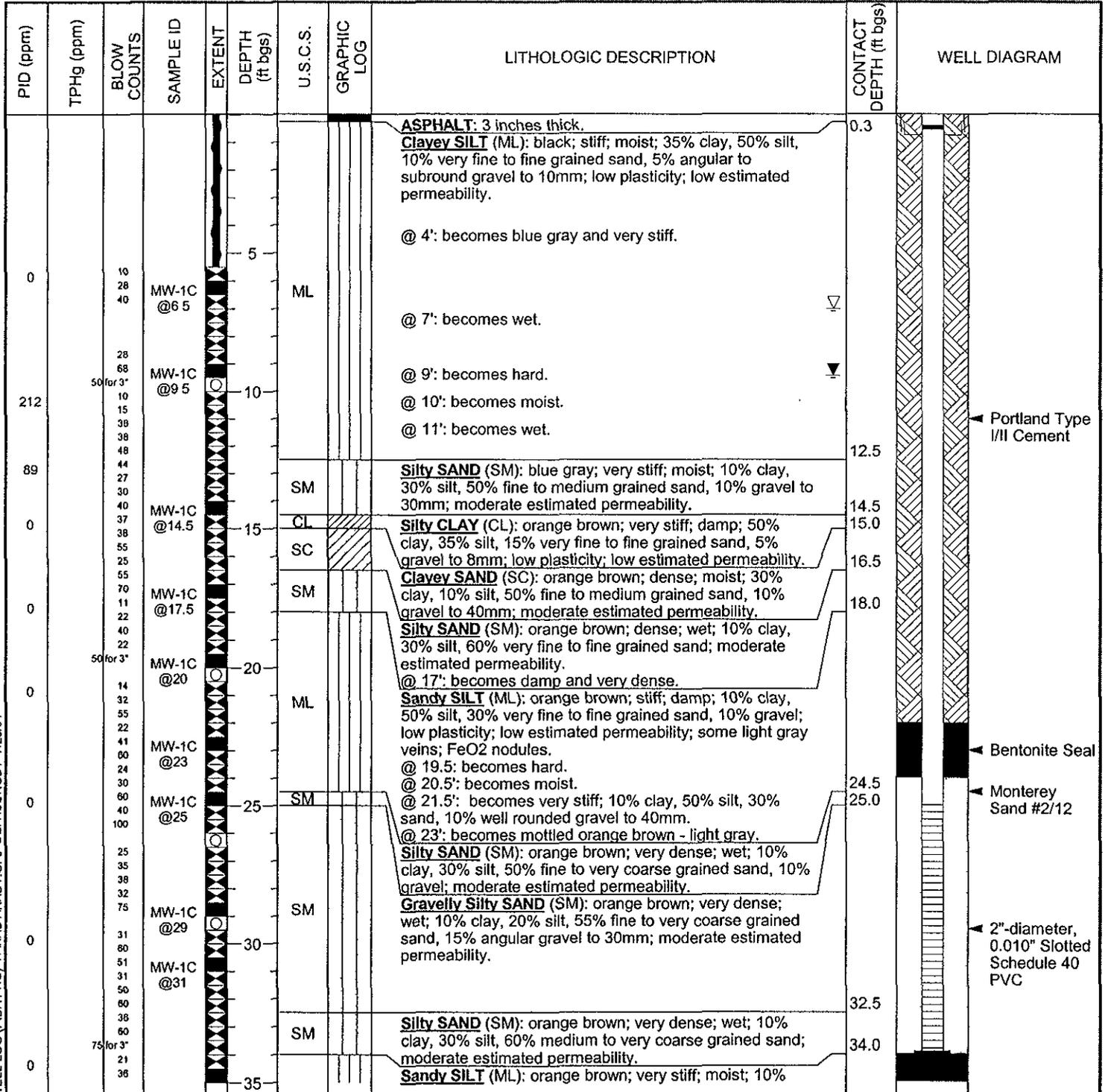
CLIENT NAME	John Nady	BORING/WELL NAME	MW-1B
JOB/SITE NAME	65th Street	DRILLING STARTED	12-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	12-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (19 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	39.88
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	39.50 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	16.5 to 20 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	7.0 ft (12-May-04)
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	14.4 ft (03-Jun-04)
REMARKS	Located in Peabody Lane.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0.3			ASPHALT: 3 inches thick. Clayey SILT (ML): black; stiff; moist; 30% clay, 50% silt, 10% very fine to fine grained sand, 10% angular to subround gravel to 10mm; low plasticity; low estimated permeability. @ 4": becomes blue gray.	0.3	<p>Portland Type I/II Cement</p> <p>Bentonite Seal</p> <p>Monterey Sand #2/12</p> <p>2"-diameter, 0.010" Slotted Schedule 40 Boring of Boring @ 20 ft</p>
					5.0	ML		No soil samples observed below 5 ft. See boring log for MW-1C for lithology.	5.0	
					10					
					15					
					20					

WELL LOG (PID/TPHG) H:\NADYNADY GPJ DEFAULT GDT 7/23/04



CLIENT NAME	John Nady	BORING/WELL NAME	MW-1C
JOB/SITE NAME	65th Street	DRILLING STARTED	10-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	10-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (25 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	39.91
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	39.49 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	25 to 34 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	7.0 ft (10-May-04)
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	9.4 ft (03-Jun-04)
REMARKS	Located in Peabody Lane.		





Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-1C
JOB/SITE NAME	65th Street	DRILLING STARTED	10-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	10-May-04

Continued from Previous Page

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
0	100 for 6"	62 14 18 23 27 28 35	MW-1C @35			ML		clay, 60% silt, 30% very fine to medium grained sand; low plasticity; low estimated permeability. @ 35': becomes hard.	37.0	<p>Bentonite Plug</p> <p>Bottom of Boring @ 40 ft</p>
			MW-1C @38			SM		Gravelly Silty SAND (SM) : light gray; medium dense; wet; 10% clay, 25% silt, 50% very fine to very coarse grained sand, 15% well rounded gravel to 30mm; moderate estimated permeability.		
			MW-1C @39.5		40			@ 39': as above with angular gravel to 10mm.	40.0	

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-2A
JOB/SITE NAME	65th Street	DRILLING STARTED	11-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	11-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (20 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	40.99
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	40.72 ft
BORING DIAMETER	10 inches	SCREENED INTERVAL	3 to 12 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	4.5 ft (11-May-04)
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	4.2 ft (03-Jun-04)
REMARKS	Located in parking lot. Former UST cavity well.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
0		3 2 4			0.2			ASPHALT: 2 inches thick. SAND (SW): light brown; medium dense; moist; 100% fine grained sand; high estimated permeability.	0.2	<ul style="list-style-type: none"> Portland Type I/II Cement Bentonite Seal Monterey Sand #3 4"-diam., 0.020" Slotted Schedule 40 PVC
					5	SW		@ 4.5': becomes green gray and wet. @ 5': as above with some clayey silt chunks.		
0		5 5 25			11.5	CL		Silty CLAY (CL): light brown; very stiff; damp; 60% clay, 40% silt; low plasticity; low estimated permeability.	11.5	
					12.0				12.0	Bottom of Boring @ 12 ft

WELL LOG (PID/TPHG) H:\NADYNADY GPJ DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-3A
JOB/SITE NAME	65th Street	DRILLING STARTED	07-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	07-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (30 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	41.05
DRILLING METHOD	Hollow-stem auger/Direct Push	TOP OF CASING ELEVATION	40.88 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	3.5 to 14 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	4.0 ft (07-May-04)
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	4.3 ft (03-Jun-04)
REMARKS	Located in breezeway area.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
118					0.3	CL		CONCRETE: 3 inches thick. Silty CLAY (CL): medium brown; soft; moist; 60% clay, 30% silt, 10% very fine grained sand; medium plasticity; low estimated permeability. @ 3': becomes light brown.	0.3	
			MW-3A @5.5		5	SC		Clayey SAND (SC): green gray; soft; wet; 30% clay, 10% silt, 60% fine to medium grained sand; moderate estimated permeability. @ 5': becomes dark gray; 20% clay, 80% fine to very coarse grained sand; high estimated permeability.	4.0	
584					10	CL		@ 10': becomes green gray.	11.0	
230			MW-3A @10.5			CL		Silty CLAY (CL): light brown; very stiff; damp; 60% clay, 40% silt; low plasticity; low estimated permeability.	14.0	
86					15	CL		Sandy Silty CLAY (CL): orange brown; very stiff; damp; 40% clay, 30% silt, 20% medium grained sand, 10% well rounded gravel to 40mm; low plasticity; low estimated permeability.	16.0	
11			MW-3A @15							

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-4A
JOB/SITE NAME	65th Street	DRILLING STARTED	17-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	18-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (18 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	38.89
DRILLING METHOD	Hollow-stem auger/Direct Push	TOP OF CASING ELEVATION	38.71 ft
BORING DIAMETER	8 Inches	SCREENED INTERVAL	3 to 13 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	NA
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	2.5 ft (03-Jun-04)
REMARKS	Located in sidewalk on 65th Street		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0.3			CONCRETE: 4 inches thick. Gravelly SAND (SP): dark gray; dense; moist; 75% fine to coarse grained sand, 25% gravel to 30mm; high estimated permeability. @ 3': difficulty hand augering.	0.3	
					5	SP				
0					8.0	SM		Silty SAND and Gravelly Sandy SILT (SM-ML): orange brown/olive gray; medium dense; moist; moderate estimated permeability; mottled materials.	8.0	
0					13.0	ML		Clayey SILT (ML): light gray; very stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	13.0	
					14.0	SM		Silty SAND (SM): light brown; dense; moist; 40% silt, 60% fine grained sand; moderate estimated permeability.	14.0	
					15.0	ML		Clayey SILT (ML): olive gray; very stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	15.0	
					16.0				16.0	

WELL LOG (PID/TPHG) H:WADYNADY.GPJ DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-4B
JOB/SITE NAME	65th Street	DRILLING STARTED	18-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	18-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (22 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	38.96
DRILLING METHOD	Hollow-stem auger/Direct Push	TOP OF CASING ELEVATION	38.54 ft
BORING DIAMETER	8 Inches	SCREENED INTERVAL	17 to 21 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	3.5 ft (18-May-04) ▼
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	5.0 ft (03-Jun-04) ▼
REMARKS	Located in sidewalk along 65th Street.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0.3	SW	Concrete	CONCRETE: 3 inches thick.	0.3	
					1.0	SM		Gravelly SAND (SW): medium gray; dense; damp; 10% silt, 60% fine grained sand, 30% angular gravel to 20mm; high estimated permeability.	1.0	
					5.0			Silty SAND (SM): medium gray; medium dense; moist; 40% silt, 50% fine grained sand, 10% gravel; moderate estimated permeability.	5.0	
					5 to 16			No soil samples observed 5 to 16 ft bgs. See boring log for MW-4C for lithology.		
					16.0	ML		Sandy SILT (ML): light gray; stiff; moist; 10% clay, 50% silt, 30% fine grained sand, 10% gravel to 20mm; low plasticity; moderate estimated permeability.	16.0	Portland Type I/II Cement
					19.0	ML		Clayey SILT (ML): light brown; very stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	19.0	Bentonite Seal
					20.0	SM		Silty SAND (SM): light brown; medium dense; wet; 40% silt, 60% fine grained sand; moderate estimated permeability.	20.0	Slough from Caving
					21.0	ML		Clayey SILT (ML): light brown; very stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	21.0	Monterey Sand #2/12
					24.0			@ 22': becomes damp.	24.0	2"-diameter, 0.010" Slotted Schedule 40 PVC
										Bentonite Plug
										Bottom of Boring @ 24 ft

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ_DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-4C
JOB/SITE NAME	65th Street	DRILLING STARTED	17-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	17-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (19 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	39.00
DRILLING METHOD	Hollow-stem auger/Direct Push	TOP OF CASING ELEVATION	38.50 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	27 to 32 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	12.0 ft (17-May-04) ▼
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	8.4 ft (03-Jun-04) ▼
REMARKS	Located in sidewalk along 65th Street.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
						SW		CONCRETE: 3 inches thick.	0.3	<p>Portland Type I/II Cement</p> <p>Bentonite Seal</p> <p>Monterey Sand #2/12</p> <p>2"-diameter, 0.010" Slotted Schedule 40 PVC</p>
						SM		Gravelly SAND (SW): medium gray; dense; damp; 10% silt, 60% fine grained sand, 30% angular gravel to 20mm; low plasticity; high estimated permeability.	1.0	
						ML		Silty SAND (SM): medium gray; medium dense; moist; 40% silt, 50% fine grained sand, 10% gravel.	5.0	
0			MW-4C @5		5	ML		Clayey SILT (ML): orange brown; stiff; moist; 20% clay, 70% silt, 10% very fine grained sand; low plasticity; low estimated permeability.	9.0	
0						ML		Sandy SILT (ML): orange brown; very stiff; moist to wet; 10% clay, 60% silt, 30% fine to medium grained sand; low estimated permeability.	11.0	
			MW-4C @10		10	ML		Sandy SILT (ML): orange brown; very stiff; wet; 5% clay, 50% silt, 40% fine to very coarse grained sand, 5% gravel to 8mm; low plasticity; moderate estimated permeability.	12.0	
						ML		Clayey SILT (ML): orange brown; stiff; moist; 20% clay, 70% silt, 10% fine grained sand; low plasticity; low estimated permeability.	14.0	
0			MW-4C @15		15	ML		Silty SAND (SM): light gray/orange brown; dense; moist; 40% silt, 60% fine grained sand; moderate estimated permeability.	15.0	
0						ML		Clayey SILT (ML): light gray/orange brown; stiff; moist; 30% clay, 70% silt; medium plasticity; low estimated permeability.	17.5	
			MW-4C @20		20	ML		Clayey SILT (ML): orange brown; stiff; moist; 20% clay, 50% silt, 20% fine to coarse grained sand, 10% angular gravel to 20mm; low plasticity; low estimated permeability.	19.0	
						ML		Sandy SILT (ML): light gray; medium stiff; wet; 60% silt, 40% fine grained sand; moderate estimated permeability.	20.0	
						ML		Clayey SILT (ML): light gray/orange brown; very stiff; damp; 30% clay, 70% silt; low plasticity; low estimated permeability.	23.0	
0			MW-4C @25		25	ML		Sandy SILT (ML): orange brown; soft; moist; 70% silt, 30% fine grained sand; low plasticity; moderate estimated permeability.	29.0	
0						SM		Silty SAND (SM): medium brown; medium dense; wet; 30% silt, 50% sand, 20% gravel; moderate estimated permeability.	33.0	
			MW-4C @30		30	ML		Sandy SILT (ML): orange brown; stiff; moist; 10% clay, 60% silt, 30% medium grained sand; low plasticity; low estimated permeability.	35.0	

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ DEFAULT.GDT 7/23/04

Continued Next Page



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 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME John Nady BORING/WELL NAME MW-4C
 JOB/SITE NAME 65th Street DRILLING STARTED 17-May-04
 LOCATION 1137-1167 65th Street, Oakland, California DRILLING COMPLETED 17-May-04

Continued from Previous Page

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
0			MW-4C @35	0		ML		Clayey SILT (ML): orange brown; very stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	36.0	<p>← Bentonite Plug</p>
				0		ML		Sandy SILT (ML): brown; medium stiff; moist; 60% silt, 40% fine grained sand; low plasticity; medium estimated permeability.	38.0	
0			MW-4C @40	40		ML		Clayey SILT (ML): orange brown; very stiff; damp; 20% clay, 70% silt, 10% very fine grained sand; low plasticity; low estimated permeability.	40.0	
										Bottom of Boring @ 40 ft

WELL LOG (PID/TPHG) H:\NADYNADY GPJ DEFAULT.GDT 7/23/04



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 5900 Hollis Street, Suite A
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 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-5B
JOB/SITE NAME	65th Street	DRILLING STARTED	18-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	18-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (19 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	39.45
DRILLING METHOD	Hollow stem auger/Direct Push	TOP OF CASING ELEVATION	38.98 ft
BORING DIAMETER	8 Inches	SCREENED INTERVAL	15 to 24 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	NA
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	8.8 ft (03-Jun-04)
REMARKS	Located in northwest corner of property.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
								CONCRETE: 6 inches thick.	0.5	<p>Portland Type I/II Cement</p> <p>Bentonite Seal</p> <p>Monterey Sand #2/12</p> <p>2"-diameter, 0.010" Slotted Schedule 40 PVC</p> <p>Bottom of Boring @ 24 ft</p>
			MW-5B @5		5	ML		Clayey SILT (ML): dark brown; very stiff; damp; 30% clay, 50% silt, 10% sand, 10% gravel to 15mm; low plasticity; low estimated permeability.		
0						ML		Clayey SILT (ML): dark brown; very stiff; damp; 20% clay, 80% silt; low plasticity; low estimated permeability.	5.0	
						ML		SILT (ML): olive gray; very stiff; dry; 10% clay, 90% silt; low plasticity; low estimated permeability.	6.5	
0			MW-5B @10		10	ML		Sandy SILT (ML): orange brown; very stiff; damp; 10% clay, 60% silt, 30% fine to coarse grained sand; low plasticity; low estimated permeability.	10.0	
						ML		Sandy SILT (ML): orange brown; very stiff; damp; 10% clay, 60% silt, 30% fine to coarse grained sand; low plasticity; low estimated permeability.		
282			MW-5B @15		15	ML		Sandy SILT (ML): green gray; very stiff; damp; 10% clay, 60% silt, 20% fine to very coarse grained sand, 10% angular gravel to 20mm; low plasticity; low estimated permeability.	15.0	
						ML		Clayey SILT (ML): medium brown; stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	17.5	
0			MW-5B @20		20	ML		@ 20': becomes medium stiff.	22.0	
						ML		Sandy SILT (ML): medium brown; stiff; moist; 10% clay, 70% silt, 20% fine to very coarse grained sand; low plasticity; low estimated permeability.		
0			MW-5B @24		24	ML		@ 23': becomes very stiff and damp.	24.0	

WELL LOG (PID/TPHG) H:\NADY\NADY.GPJ DEFAULT GDT 7/23/04



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 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-6A
JOB/SITE NAME	65th Street	DRILLING STARTED	11-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	11-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (19 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	38.29
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	37.98 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	4.5 to 14.5 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	12.0 ft (11-May-04) ▼
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	6.0 ft (03-Jun-04) ▼
REMARKS	Located in Peabody Lane.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
						ML		ASPHALT: 2 inches thick. Gravelly Sandy SILT (ML): dark brown; stiff; moist; 10% clay, 50% silt, 25% fine to medium grained sand, 15% gravel to 30mm; low plasticity; moderate estimated permeability. Sandy SILT (ML): green gray; medium stiff; moist; 10% clay, 60% silt, 30% sand; low plasticity; moderate estimated permeability. @ 3': becomes 10% clay, 50% silt, 30% fine to very coarse grained sand, 10% gravel to 30mm. @ 4': becomes 10% clay, 50% silt, 40% sand. No soil samples observed 5 to 14.5 ft bgs. See boring log for MW-6C for lithology.	0.2	<p>Portland Type I/II Cement Bentonite Seal Monterey Sand #2/12 2"-diameter, 0.010" Slotted Schedule 40 PVC</p>
					5	ML		@ 12': auger cuttings were wet.	14.5	
										Bottom of Boring @ 14.5 ft

WELL LOG (PID/TPHG) H:HNADYNADY.GPJ DEFAULT GDT 7/23/04



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 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-6B
JOB/SITE NAME	65th Street	DRILLING STARTED	12-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	12-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (20 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	38.16
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	37.66 ft
BORING DIAMETER	8 inches	SCREENED INTERVAL	17 to 22 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	15.5 ft (12-May-04) ▼
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	8.3 ft (03-Jun-04) ▼
REMARKS	Located in Peabody Lane.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
					0.2			ASPHALT: 2.5 inches thick.	0.2	
					2.0	ML		Gravelly Clayey SILT (ML): dark brown; stiff; moist; 30% clay, 55% silt, 5% fine to medium grained sand, 10% gravel to 30mm; low plasticity; low estimated permeability.	2.0	
					5.0	ML		Sandy SILT (ML): green gray; medium stiff; moist; 10% clay, 60% silt, 30% sand; low plasticity; moderate estimated permeability. @ 3': becomes 10% clay, 50% silt, 30% fine to very coarse grained sand, 10% gravel to 30mm. @ 4': becomes 10% clay, 50% silt, 40% sand. No soil samples collected 5 to 14 ft bgs. See boring log for MW-6C for lithology.	5.0	
					10			@ 10': Auger cuttings become wet.		
					14.0				14.0	Portland Type I/II Cement
33		11			15.5	ML		Clayey SILT (ML): light brown; stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability; some blue gray staining.	15.5	Bentonite Seal
3160		13			18.0	SM		Silty SAND (SM): medium green gray; medium dense; wet; 10% clay, 30% silt, 60% fine to medium grained sand; moderate estimated permeability.	18.0	Monterey Sand #2/12
16		20			20	ML		Sandy SILT (ML): orange brown; very stiff; moist; 60% silt, 40% fine grained sand; moderate plasticity; moderate estimated permeability. @ 19': No recovery.	20	2"-diameter, 0.010" Slotted Schedule 40 PVC
		17			22.0	ML		Gravelly Sandy SILT (ML): orange brown; stiff; moist; 50% silt, 25% very fine to medium grained sand, 25% gravel to 20mm; low plasticity; moderate estimated permeability; mottled.	22.0	
21		8			24.5	ML		Clayey SILT (ML): orange brown; stiff; moist; 30% clay, 70% silt; low plasticity; low estimated permeability.	24.5	Bentonite Plug
		16								Bottom of Boring @ 24.5 ft

WELL LOG (PID/TPHG) HANADYNADY.GPJ DEFAULT.GDT 7/23/04



Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-6C
JOB/SITE NAME	65th Street	DRILLING STARTED	11-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	11-May-04

Continued from Previous Page

P/D (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft. bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft. bgs)	WELL DIAGRAM
0		18 22 30 22 38 28 16 28 50	MW-6C @36.5 MW-6C @37.5	XXXX				@ 35': becomes very stiff; damp; 10% clay, 70% silt, 20% very fine grained sand, low estimated permeability.	37.0	<p>← Bentonite Plug</p>
0			MW-6C @39.5	XXXX		ML		Gravelly SILT (ML): light brown; very stiff; wet; 10% clay, 60% silt, 10% sand, 20% gravel to 30mm; low plasticity; moderate estimated permeability.	39.5	
										Bottom of Boring @ 39.5 ft

WELL LOG (P/D/TPHG) H:\NADYNADY.GPJ_DEFAULT.GDT 7/23/04



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 Emeryville, California 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	John Nady	BORING/WELL NAME	MW-7A
JOB/SITE NAME	65th Street	DRILLING STARTED	07-May-04
LOCATION	1137-1167 65th Street, Oakland, California	DRILLING COMPLETED	07-May-04
PROJECT NUMBER	522-1000	WELL DEVELOPMENT DATE (YIELD)	24-May-04 (6 gallons)
DRILLER	Precision	GROUND SURFACE ELEVATION	40.74
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	40.58 ft
BORING DIAMETER	6 inches to 6 ft, 4 inches to 10 ft	SCREENED INTERVAL	5 to 8 ft bgs
LOGGED BY	M. Meyers	DEPTH TO WATER (First Encountered)	6.0 ft (07-May-04) ▽
REVIEWED BY	N. Siler, RG #7004	DEPTH TO WATER (Static)	4.5 ft (03-Jun-04) ▽
REMARKS	Located inside Berkeley Architectural Salvage building.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
0						ML		CONCRETE: 4 inches thick. Clayey SILT (ML): dark brown; stiff; damp; 30% clay, 60% silt, 10% fine grained sand; low plasticity; low estimated permeability. @ 3': becomes soft; 30% clay; 50% silt, 10% fine grained sand, 10% well rounded gravel to 20mm.	0.3	<p>Portland Type I/II Cement Bentonite Seal Monterey Sand #2/12 1"-diam., 0.010" Slotted Schedule 40 PVC Bottom of Boring @ 10 ft</p>
27					5	CH		Silty CLAY (CH): green gray; soft; moist; 60% clay, 40% silt; high plasticity; low estimated permeability. @ 6': becomes olive gray.	5.0	
555						ML		Clayey SILT (ML): olive gray; stiff; moist; 40% clay, 60% silt; low plasticity; low estimated permeability; strong odor.	7.0	
691						ML			8.0	
594						SP		Gravelly Sandy SILT (ML): olive gray; stiff; wet; 50% silt, 30% fine to coarse grained sand, 20% gravel to 40mm; low plasticity; moderate estimated permeability. Gravelly SAND (SP): olive gray; medium dense; wet; 20% silt, 50% medium to very coarse grained sand, 30% gravel to 40mm; high estimated permeability.	9.0	
726					10				10.0	

WELL LOG (PID/TPHG) H:\NADYNADY.GPJ DEFAULT.GDT 7/23/04

APPENDIX D

Field Data Sheets

DAILY FIELD REPORT

Project Name: NADY	Cambria Mgr: JDO	Field Person: MM
Project Number: 522-1000	Date: 5-12-04	Site Address:
General Tasks: OBSERVE DRILLING OF MW-6B; OBSERVE WELL INSTALLATION		1167 65 TH STREET OAKLAND, CA

Time	Activity/Comments	Code	Hours
10:30 AM (ARRIVE)	PRECISION SAMPLING DRILLING W/ HOLLOW STEM AUGERS (8" ϕ) GW @ 12' A.T.O. \rightarrow DRILLER - " THIS WELL HAS A LOT MORE H ₂ O THAN THE OTHER WELLS "		
	SAMPLES - COLLECTED IN STEEL LINES (2"), 140 165/30" DROP <ul style="list-style-type: none"> • MODIFIED CALIFORNIA SAMPLER \rightarrow 2.5" O.D. • CONTINUOUS SAMPLES \rightarrow IDENTIFY H₂O-BEARING ZONES 15'-25' • 21.5'-23.0' \rightarrow MOIST; WET ON OUTSIDE - SAMPLES LOOK SLIGHTLY DAMP, CLAYEY TO SANDY SILT (22'), V. STIFF (LOW PERMEABILITY) 		
11:10	<p>BCR = "STUDDARD" SOLVENT</p> <p>BOTTOM OF HOLE @ 24'6"; "PLUG" 24 1/2' - 22'</p> <ul style="list-style-type: none"> • SCREEN (PAR-SLOTTED), 2" I.D. \rightarrow 17' - 22' • 0.010 - SLOT SIZE (FINER = FINER GRAINED SOIL) • 2/12 \rightarrow MONTEREY SAND • SAND \rightarrow 22' ; BENZONITE ~ 14' - 16' • GROUT/CEMENT \rightarrow 0' - 14' <p>• PID = DETECT VOCs IN VAPOR PHASE \hookrightarrow REQUIRED</p> <p>• TYPE I - II CEMENT</p>		

WELL DEVELOPMENT FORM DATE: 5-24-04

PRECISION SAMPLING INC WELL #: MW-7A

DEPTH / DIAMETER: 12' 1"

PROJECT NO. INITIAL DTW: 8'

SITE LOCATION: 1137 65th St Oakland FINAL DTW:

NAME: Fernando Ambroz CALCULATED WELL VOLUME:

DEVELOPMENT METHOD: TOTAL WATER REMOVED 6

Well Dia. (OD-INCH):	3/4	1	2	4	4.5	6	8			
Gallons / Linear FT:	(0.02)	(0.04)	(0.17)	(0.66)	(0.83)	(1.5)	(2.8)			
TIME	Cum. Vol. Rmvd. (G)	pH	COND (mS/cm)	TURB	DO (mg/L)	TEMP (Deg C)	SAL (%)	Appearance / Comments		
1200	0	7.26	1.06	882	9.80	19.5	.06	Light Brown		
1210	2	7.28	1.10	020	9.82	19.2	.07	Very light Brown		
1216	4	7.30	1.12	480	9.80	19.0	.06	"		
1220	6	7.28	1.14	320	9.79	18.9	.06	Clear		
1220										
1220										

Post-it* Fax Note 7671

Date: 5/25/04 # of pages: 13

To: Matt Womers

From: Raquel Carbon

Co./Dept: Camberia

Company: Precision Sampling

Phone: 510-420-3314

Phone #: 510-237-4575

Fax #: 510-420-9170

Fax #: 510-237-4574

Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-1A	5:15		4.50	14.07				
MW-1B	5:10		14.40	19.53				
MW-1C	5:05		9.42	34.40				
MW-2A	5:55		4.24	10.82				4"
MW-3A	5:50		4.32	13.40				
MW-4A	5:35		2.45	12.40				
MW-4B	5:40		5.02	20.61				
MW-4C	5:45		8.40	31.85				
MW-5B	5:00		8.82	22.75				
MW-6A	5:30		6.00	14.25				
MW-6B	5:25		8.30	21.80				
MW-6C	5:20		9.70	33.70				
MW-7A	2:15		4.50	9.85				1"

Project Name: NadyProject Number/Task: 522-1000/027Technician: J. HillDate: 6-3-04

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-1A</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>4.50</i>	Total Well Depth: <i>14.07</i>	Water Column Height: <i>9.57</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.53</i>	3 Casing Volumes: <i>4.59</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>4</i>
Start Purge Time: <i>10:00</i>	Stop Purge Time: <i>10:14</i>	Total Time: <i>14mins</i>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>10:05</i>	<i>1.5</i>	<i>18.7</i>	<i>7.13</i>	<i>1510</i>	
<i>10:10</i>	<i>3</i>	<i>18.6</i>	<i>7.08</i>	<i>1690</i>	
<i>10:15</i>	<i>4</i>	<i>18.6</i>	<i>7.05</i>	<i>1582</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-1A</i>	<i>6-3-04</i>	<i>10:20</i>	<i>400a 1Amb</i>	<i>ML</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-1B</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>14.40</i>	Total Well Depth: <i>19.53</i>	Water Column Height: <i>5.13</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>0.82</i>	3 Casing Volumes: <i>2.46</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>2</i>
Start Purge Time: <i>9:30</i>	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>9:35</i>	<i>1</i>	<i>18.8</i>	<i>7.04</i>	<i>620</i>	
<i>9:40</i>	<i>1.5</i>	<i>18.7</i>	<i>7.01</i>	<i>1013</i>	
<i>9:45</i>	<i>2</i>	<i>18.8</i>	<i>6.99</i>	<i>970</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-1B</i>	<i>6-3-04</i>	<i>9:50</i>	<i>4vda 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-1C</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <input type="checkbox"/> pvc
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>9.42</i>	Total Well Depth: <i>34.40</i>	Water Column Height: <i>24.98</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>3.99</i>	3 Casing Volumes: <i>11.99</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>12</i>
Start Purge Time: <i>8:45</i>	Stop Purge Time: <i>9:14</i>	Total Time: <i>29mins</i>

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>8:55</i>	<i>4</i>	<i>18.8</i>	<i>7.03</i>	<i>703</i>	
<i>9:05</i>	<i>8</i>	<i>18.6</i>	<i>6.97</i>	<i>820</i>	
<i>9:15</i>	<i>12</i>	<i>18.7</i>	<i>6.99</i>	<i>857</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-1C</i>	<i>6-3-04</i>	<i>9:20</i>	<i>400a 1Amb</i>	<i>MeI</i>		

WELL SAMPLING FORM

Project Name: <u>Nady</u>	Cambria Mgr: <u>JO</u>	Well ID: <u>MW-2A</u>
Project Number: <u>522-1000</u>	Date: <u>6-3-04</u>	Well Yield:
Site Address: <u>1137-1167 65th St. Oakland, CA</u>	Sampling Method: <u>disposable bailer</u>	Well Diameter: <u>4" pvc</u>
		Technician(s): <u>SG</u>
Initial Depth to Water: <u>4.24</u>	Total Well Depth: <u>10.82</u>	Water Column Height: <u>6.58</u>
Volume/ft: <u>0.65</u>	1 Casing Volume: <u>4.27</u>	3 Casing Volumes: <u>12.83</u>
Purging Device: <u>4" PVC bailer</u>	Did Well Dewater?: <u>NO</u>	Total Gallons Purged: <u>13</u>
Start Purge Time: <u>3:05</u>	Stop Purge Time: <u>3:19</u>	Total Time: <u>14mins</u>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<u>3:10</u>	<u>5</u>	<u>19.1</u>	<u>7.00</u>	<u>1295</u>	
<u>3:15</u>	<u>10</u>	<u>19.1</u>	<u>6.95</u>	<u>1439</u>	
<u>3:20</u>	<u>13</u>	<u>19.1</u>	<u>6.97</u>	<u>1604</u>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<u>MW-2A</u>	<u>6-3-04</u>	<u>3:25</u>	<u>4voa 1Amb</u>	<u>MC1</u>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-3A</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>4.32</i>	Total Well Depth: <i>13.40</i>	Water Column Height: <i>9.08</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.45</i>	3 Casing Volumes: <i>4.35</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>4</i>
Start Purge Time: <i>2:40</i>	Stop Purge Time: <i>2:54</i>	Total Time: <i>14 mins</i>

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>2:45</i>	<i>1.5</i>	<i>19.2</i>	<i>7.01</i>	<i>610</i>	
<i>2:50</i>	<i>3</i>	<i>19.1</i>	<i>7.04</i>	<i>631</i>	
<i>2:55</i>	<i>4</i>	<i>19.0</i>	<i>7.07</i>	<i>650</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-3A</i>	<i>6-3-04</i>	<i>3:00</i>	<i>400a 1Amb</i>	<i>nc1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-4A</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
Initial Depth to Water: <i>2.45</i>	Total Well Depth: <i>12.40</i>	Technician(s): <i>SG</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.59</i>	Water Column Height: <i>9.95</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>NO</i>	3 Casing Volumes: <i>4.77</i>
Start Purge Time: <i>1:50</i>	Stop Purge Time: <i>2:04</i>	Total Gallons Purged: <i>5</i>
		Total Time: <i>14mins</i>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>1:55</i>	<i>1.5</i>	<i>19.0</i>	<i>7.00</i>	<i>1391</i>	
<i>2:00</i>	<i>3</i>	<i>18.9</i>	<i>6.99</i>	<i>1105</i>	
<i>2:05</i>	<i>5</i>	<i>19.1</i>	<i>6.98</i>	<i>1239</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-4A</i>	<i>6-3-04</i>	<i>2:10</i>	<i>400a 1Amb</i>	<i>ML</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-4B</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>5.02</i>	Total Well Depth: <i>20.61</i>	Water Column Height: <i>15.59</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>2.49</i>	3 Casing Volumes: <i>7.48</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>7</i>
Start Purge Time: <i>1:25</i>	Stop Purge Time: <i>1:39</i>	Total Time: <i>14mins</i>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>1:30</i>	<i>2.5</i>	<i>19.1</i>	<i>7.05</i>	<i>830</i>	
<i>1:35</i>	<i>5</i>	<i>19.3</i>	<i>7.01</i>	<i>651</i>	
<i>1:40</i>	<i>7</i>	<i>19.3</i>	<i>7.02</i>	<i>693</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-4B</i>	<i>6-3-04</i>	<i>1:45</i>	<i>400a 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-4C</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>8.40</i>	Total Well Depth: <i>31.85</i>	Water Column Height: <i>23.45</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>3.75</i>	3 Casing Volumes: <i>11.25</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>NO</i>	Total Gallons Purged: <i>11</i>
Start Purge Time: <i>12:45</i>	Stop Purge Time: <i>1:14</i>	Total Time: <i>29 mins</i>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>12:55</i>	<i>4</i>	<i>19.1</i>	<i>7.02</i>	<i>1325</i>	
<i>1:05</i>	<i>8</i>	<i>18.9</i>	<i>6.95</i>	<i>1068</i>	
<i>1:15</i>	<i>11</i>	<i>19.0</i>	<i>6.99</i>	<i>921</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-4C</i>	<i>6-3-04</i>	<i>1:20</i>	<i>4vda 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-5B</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2 pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>8.82</i>	Total Well Depth: <i>22.75</i>	Water Column Height: <i>13.93</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>2.22</i>	3 Casing Volumes: <i>6.66</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>NO</i>	Total Gallons Purged: <i>6</i>
Start Purge Time: <i>10:35</i>	Stop Purge Time: <i>10:49</i>	Total Time: <i>14 min</i>

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>10:40</i>	<i>2</i>	<i>18.5</i>	<i>7.02</i>	<i>7.12</i>	
<i>10:45</i>	<i>4</i>	<i>18.7</i>	<i>6.99</i>	<i>7.10</i>	
<i>10:50</i>	<i>6</i>	<i>18.8</i>	<i>6.98</i>	<i>7.09</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-5B</i>	<i>6-3-04</i>	<i>10:55</i>	<i>4vda 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-6A</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>6.00</i>	Total Well Depth: <i>14.25</i>	Water Column Height: <i>8.25</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>1.32</i>	3 Casing Volumes: <i>3.96</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>4</i>
Start Purge Time: <i>8:10</i>	Stop Purge Time: <i>8:24</i>	Total Time: <i>14 mins</i>

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>8:15</i>	<i>1.5</i>	<i>18.9</i>	<i>7.07</i>	<i>870</i>	
<i>8:20</i>	<i>3</i>	<i>18.7</i>	<i>7.05</i>	<i>635</i>	
<i>8:25</i>	<i>4</i>	<i>18.8</i>	<i>7.02</i>	<i>792</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-6A</i>	<i>6-3-04</i>	<i>8:30</i>	<i>4vva 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-6B</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>8.30</i>	Total Well Depth: <i>21.80</i>	Water Column Height: <i>13.5</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>2.16</i>	3 Casing Volumes: <i>6.48</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>6</i>
Start Purge Time: <i>7:40</i>	Stop Purge Time: <i>7:54</i>	Total Time: 7:25 <i>14 mins</i>

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>7:45</i>	<i>2</i>	<i>18.5</i>	<i>7.15</i>	<i>1041</i>	
<i>7:50</i>	<i>4</i>	<i>18.5</i>	<i>7.19</i>	<i>728</i>	
<i>7:55</i>	<i>6</i>	<i>18.5</i>	<i>7.19</i>	<i>850</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-6B</i>	<i>6-3-04</i>	<i>8:00</i>	<i>400ml 1Amb</i>	<i>MeI</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-6C</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>2" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>9.70</i>	Total Well Depth: <i>33.70</i>	Water Column Height: <i>24.00</i>
Volume/ft: <i>0.16</i>	1 Casing Volume: <i>3.84</i>	3 Casing Volumes: <i>11.52</i>
Purging Device: <i>disposable bailer</i>	Did Well Dewater?: <i>no</i>	Total Gallons Purged: <i>11</i>
Start Purge Time: <i>7:00</i>	Stop Purge Time: <i>7:29</i>	Total Time: <i>29 mins</i>

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam.</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>7:10</i>	<i>4</i>	<i>18.7</i>	<i>7.03</i>	<i>690</i>	
<i>7:20</i>	<i>8</i>	<i>18.5</i>	<i>7.12</i>	<i>410</i>	
<i>7:30</i>	<i>11</i>	<i>18.8</i>	<i>7.08</i>	<i>451</i>	

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-6C</i>	<i>6-3-04</i>	<i>7:35</i>	<i>400a 1Amb</i>	<i>MC1</i>		

WELL SAMPLING FORM

Project Name: <i>Nady</i>	Cambria Mgr: <i>JO</i>	Well ID: <i>MW-7A</i>
Project Number: <i>522-1000</i>	Date: <i>6-3-04</i>	Well Yield:
Site Address: <i>1137-1167 65th St. Oakland, CA</i>	Sampling Method: <i>disposable bailer</i>	Well Diameter: <i>1" pvc</i>
		Technician(s): <i>SG</i>
Initial Depth to Water: <i>450</i>	Total Well Depth: <i>985</i>	Water Column Height: <i>5.35</i>
Volume/ft: <i>0.0055</i>	1 Casing Volume: <i>0.0029</i>	3 Casing Volumes: <i>.088</i>
Purging Device:	Did Well Dewater?: <i>yes</i>	Total Gallons Purged:
Start Purge Time: <i>2:20</i>	Stop Purge Time:	Total Time:

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. (°C)	pH	Cond. (uS)	Comments
<i>2:21</i>		<i>dewatered</i>			

Fe = mg/L ORP = mV DO = mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>MW-7A</i>	<i>6-3-04</i>	<i>2:35</i>	<i>400a</i> <i>400b</i>	<i>MeI</i>		

McCAMPBELL ANALYTICAL INC
 110 2ND AVENUE SOUTH, #D7
 PACHECO, CA 94553-5560

FILE COPY

CHAIN OF CUSTODY RECORD

JRN AROUND TIME:

RUSH 24 HOUR 48 HOUR 5 DAY

Telephone: (925) 798-1620

Fax: (925) 798-1620

EDF Required? Yes No

Report To: Matt Meyers Bill To: Cambria
 Company: Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, Ca 94608 E-mail: mmeyers@cambria-env.com
 Tele: (510) 420-3314 Fax: (510) 420-9170
 Project #: 522-1000-027 Project Name: John Nady
 Project Location: 1167 65th Street, Oakland
 Sampler Signature:

										Analysis Request			Other	Comments
										BTEX & TPH as Gas & Standard Solvent (602/8020 + 8015) MTBE	TPH as Diesel & Motor Oil (8015)	HVOCs (8010)		

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				
MW-1A		6-30-04	10:20	5	VOL Amb	X					X	X		X	X	X		
MW-1B			9:50															
MW-1C			9:20															
MW-2A			3:25															
MW-3A			3:00															
MW-4A			2:10															
MW-4B			1:45															
MW-4C			1:20															
MW-5B			10:55															
MW-6A			8:30															
MW-6B			8:00															
MW-6C			7:35	X	X	X				X	X		X	X	X			
MW-7A		X	2:35	4	VOL	X				X	X		X	X				

Relinquished By: *[Signature]* Date: 6-30-04 Time: 4:00 Received By: secure location

Relinquished By: Date: Time: Received By:

Relinquished By: Date: Time: Received By:

Remarks:
 Lowest possible detection limits.
 Please email results.

APPENDIX E

Standard Field Procedures

STANDARD FIELD PROCEDURES FOR MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

DRILLING AND SAMPLING

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Geologist (RG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Prior to drilling, the first 8 ft of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 40 C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I,II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

APPENDIX F

Well Permits and Well Survey Report

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94644-1395
PHONE: (510) 670-6033 James Yee
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRE A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT: 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER: W04-0467
WELL NUMBER: _____
APN: _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

CLIENT
Name: Freddie Schvay
Address: 6301 Shattuck St Phone: 510-652-2411
City: Emeryville Zip: 94608

APPLICANT
Name: Cambria Environmental Technology, Inc.
Attn: Matt Meyers Fax: 510-420-9170
Address: 5700 Hollis St, Suite A Phone: 510-420-1314
City: Emeryville Zip: 94608

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation	
Culverts Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD(S):

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME: Precision Drilling
DRILLER'S LICENSE NO.: 636387

WELL PROJECS

Drill Hole Diameter	<u>8</u> in.	Maximum Depth	<u>12</u> ft
Casing Diameter	<u>8</u> in.	Owner's Well Number	<u>MW-1A</u>
Surface Seal Depth	<u>5</u> ft		

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Expt	_____ ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE: 4/30/04
ESTIMATED COMPLETION DATE: 5/31/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE: _____ DATE: 4/22/04

PLEASE PRINT NAME: Matt Meyers Rev. 3-04-02
of Cambria Environmental Technology, Inc.

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

D. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Recess bore hole by tremie with cement grout or cement grout/mud mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED: _____ DATE: 4-28-04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yee
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER W04-0468
WELL NUMBER _____
APN _____

CLIENT
Name Freddie Schrag
Address 6701 Shattuck St Phone 510-452-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Attn: Matt Meyers Fax 510-420-9170
Address 5700 Hollis St, Suite A Phone 510-470-2314
City Emeryville Zip 94608

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

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

DRILLING METHOD:
Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Precision Drilling
DRILLER'S LICENSE NO. 636387

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum Depth 22 ft
Casing Diameter 7 in. Owner's Well Number MW-1B
Surface Seal Depth 16 ft

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

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. J-04-02
of Cambria Environmental Technology, Inc.

- PERMIT CONDITIONS
Circled Permit Requirements Apply
- A. GENERAL**
 1. A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.
 - B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
 - C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum casing seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
 - D. GEOTECHNICAL**
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cullings.
 - E. CATHODIC**
Fill hole anode zone with concrete placed by tremie.
 - F. WELL DESTRUCTION**
Send a map of work site. A separate permit is required for wells deeper than 45 feet.
 - G. SPECIAL CONDITIONS** — MW-1

NOTE: One application must be submitted for each well or well designation. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 4/28-04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
309 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6033 James Yoo
FAX (510)782-1939

APPLICANTS PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER W04-0469
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name Freddie Schvay
Address 6701 Shattuck St Phone 510-652-2411
City Emeryville Zip 94608

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name Cambria Environmental Technology, Inc.
Address 5500 Wallis St, Suite A Phone 510-420-2314
City Emeryville Zip 94608

D. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Maintaining	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETRICS

1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE:

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

D. GEOTECHNICAL

Backfill bore hole by trowel with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

E. CATHODIC

Fill hole anodic zone with concrete placed by trowel.

DRILLER'S NAME Precision Drilling
DRILLER'S LICENSE NO. 636387

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

WELL PROJECTS

Drill Hole Diameter	<u>8</u> in.	Maximum Depth	<u>40</u> ft.
Casing Diameter	<u>2</u> in.	Owner's Well Number	<u>MW-1C</u>
Surface Seal Depth	<u>28</u> ft.		

G. SPECIAL CONDITIONS

MW#1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Depth	_____ ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/19/04

APPROVED _____ DATE 4/22/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

FLASH POINT NAME Matt Meyers of Cambria Environmental Technology, Inc.
Rev. 3-04-03

Handwritten signature and date 4/22/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1295

PHONE (510) 670-4633 James Yoo

FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

FOR OFFICE USE

PERMIT NUMBER W04-0470
WELL NUMBER _____
APN _____

CLIENT
Name Fredric Schrag
Address 1201 Shattuck St Phone 510-452-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Attn: Matt Meyers Phone 510-420-9170
Address 5700 Hollis St, Suite A Phone 510-420-2314
City Emeryville Zip 94608

TYPE OF PROJECT		
Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation
Cathodic Protection	<input type="checkbox"/>	General
Water Supply	<input type="checkbox"/>	Contamination
Monitoring	<input checked="" type="checkbox"/>	Well Destruction

PROPOSED WATER SUPPLY WELL USE		
New Domestic	<input type="checkbox"/>	Replacement Domestic
Municipal	<input type="checkbox"/>	Irrigation
Industrial	<input type="checkbox"/>	Other _____

DRILLING METHOD:		
Mud Rotary	<input type="checkbox"/>	Air Rotary <input type="checkbox"/>
Cable	<input type="checkbox"/>	Other <input type="checkbox"/>
		Auger <input checked="" type="checkbox"/>

DRILLER'S NAME: Precision Drilling
DRILLER'S LICENSE NO. 636387

WELL PROJECTS
Drill Hole Diameter 10 in. Maximum Depth 15 ft.
Casing Diameter 4 in. Owner's Well Number MW-2A
Surface Seal Depth 5 ft.

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

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/18/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-58.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME: Matt Meyers Rev. 3-04-02
of Cambria Environmental Technology, Inc.

PERMIT CONDITIONS

Circled Permit Requirements Apply

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permanent original Department of Water Resources Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
 1. Minimum annular seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.
- E. CATHODIC**
Fill hole annular zone with concrete placed by tremie.
- F. WELL DESTRUCTION**
Send a map of work site. A separate permit is required for wells deeper than 45 feet.
- G. SPECIAL CONDITIONS** MW#1
NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 9/28/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 679-6633 Janet Yee
FAX (510) 782-1937

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

FOR OFFICE USE

PERMIT NUMBER W04-0471
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name: Freddie Schwarz
Address: 6701 Shellmound St Phone: 510-652-2411
City: Emeryville Zip: 94608

APPLICANT
Name: Cambria Environmental Technology, Inc.
Attn: Matt Meyers Phone: 510-420-9170
Address: 5500 Hollis St, Suite A Phone: 510-420-3314
City: Emeryville Zip: 94608

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other

DRILLING METHOD:

Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Precision Drilling

DRILLER'S LICENSE NO. 636387

WELL PROJECTS

Drill Hole Diameter 8 in. Maximum
Casing Diameter 8 in. Depth 15 ft.
Surface Seal Depth 5 ft. Owner's Well Number MW-3A

GEOTECHNICAL PROJECTS

Number of Borings _____ Maximum
Hole Diameter _____ ft. Depth _____ ft.

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. 3-04-02

of Cambria Environmental Technology, Inc.

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

D. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PERZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Reamfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-thirds feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS - MW#7

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____

DATE 4/28/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA 94544-1395
PHONE (510) 670-6633 James Yee
FAX (510)782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER W04-0472
WELL NUMBER _____
APN _____

CLIENT
Name Endre Schrag
Address 6701 Shellmound St Phone 510-652-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Address 5500 Hollis St, Suite A Phone 510-470-1314
City Emeryville Zip 94608

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation
Corrosion Protection	<input type="checkbox"/>	General
Water Supply	<input type="checkbox"/>	Contamination
Monitoring	<input checked="" type="checkbox"/>	Well Destruction

PROPOSED WATER SUPPLY WELL USE:

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD(S)

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Precision Drilling
DRILLER'S LICENSE NO. 636387

WELL PROJECTIONS

Drill Hole Diameter	<u>8</u> in.	Maximum	
Casing Diameter	<u>8</u> in.	Depth	<u>15</u> ft.
Surface Seal Depth	<u>5</u> ft.	Owner's Well Number	<u>MW-4A</u>

GEOTECHNICAL PROJECTS

Number of Borings		Maximum	
Hole Diameter		Depth	

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/18/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. 3-04-02
of Cambria Environmental Technology, Inc.

- PERMIT CONDITIONS
Circled Permit Requirements Apply
- GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.
 - D. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
 - C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
 - D. GEOTECHNICAL**

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.
 - E. CATHODIC**

Fill hole anode zone with concrete placed by tremie.
 - F. WELL DESTRUCTION**

Send a map of work site. A separate permit is required for wells deeper than 45 feet.
 - G. SPECIAL CONDITIONS** MW# 1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature] DATE 4-28-04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1395

PHONE (510) 670-4633 James Yee

FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DEFINITION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1147 65th Street
in Oakland, Ca

PERMIT NUMBER W04-0473
WELL NUMBER _____
APN _____

CLIENT
Name Freddie Schrag
Address 6701 Shattuck St Phone 510-452-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Address 5700 Hollis St, Suite A Phone 510-472-9170
City Emeryville Zip 94608

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation
Cathodic Protection	<input type="checkbox"/>	General
Water Supply	<input type="checkbox"/>	Continuation
Monitoring	<input checked="" type="checkbox"/>	Well Destruction

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD(S)

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME: Precision Drilling

DRILLER'S LICENSE NO. 636387

WELL PROJECTS

Well Hole Diameter	<u>8</u> in.	Maximum Depth	<u>40</u> ft.
Casing Diameter	<u>3</u> in.	Owner's Well Number	<u>MW-4C</u>
Surface Seal Depth	<u>28</u> ft.		

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Depth	_____ ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. 3-04-02

of Cambria Environmental Technology, Inc.

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Reinfill bore hole by trowel with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by trowel.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature] DATE 4/28/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE: (510) 670-4631 Jaimin Yoo
FAX: (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DEFINITION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT: 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER: W04-0474
WELL NUMBER: _____
APN: _____

CLIENT
Name: Freddie Schray
Address: 6701 Shattuck St Phone: 510-452-2411
City: Emeryville Zip: 94608

APPLICANT
Name: Cambria Environmental Technology, Inc.
Attn: Matt Meyers Fax: 510-420-9170
Address: 5900 Hollis St, Suite A Phone: 510-420-1314
City: Emeryville Zip: 94608

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation
Cathodic Protection	<input type="checkbox"/>	General
Water Supply	<input type="checkbox"/>	Contamination
Monitoring	<input checked="" type="checkbox"/>	Well Destruction

PROPOSED WATER SUPPLY WELL USE

Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME: Precision Drilling

DRILLER'S LICENSE NO.: 636387

WELL PROJECTS

Drill Hole Diameter	<u>8</u> in.	Maximum Depth	<u>15</u> ft.
Casing Diameter	<u>2</u> in.	Owner's Well Number	<u>MW-SA</u>
Surface Seal Depth	<u>5</u> ft.		

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum Depth	_____ ft.
Hole Diameter	_____ in.		

ESTIMATED STARTING DATE: 4/30/04
ESTIMATED COMPLETION DATE: 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-08.

APPLICANT'S SIGNATURE: _____ DATE: 4/22/04

PLEASE PRINT NAME: Matt Meyers REV. 3-04-02
of Cambria Environmental Technology, Inc.

PERMIT CONDITIONS

Cited Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE

[Handwritten signature]
4/22/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-4633 James Yoo
FAX (510) 782-1939

APPLICANTS PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1137-1147 65th Street
in Oakland, Ca

FOR OFFICE USE

PERMIT NUMBER W04-0475
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT
Name Fredric Schwan
Address 6701 Shattuck St Phone 510-652-2411
City Fremont Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Address 5900 Hollis St, Suite A Phone 510-420-3314
City Fremont Zip 94608

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE:

New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other _____

DRILLING METHOD:

Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Precision Drilling

DRILLER'S LICENSE NO. 636387

WELL PROJECTS

Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 12 ft
Surface Seal Depth 5 ft. Owner's Well Number MW-6A

GEOTECHNICAL PROJECTS

Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/27/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. 3-04-02
of Cambria Environmental Technology, Inc.

- GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permanent original Department of Water Resources-Well Completion Report.
 3. Permit is void if project not begun within 90 days of approved date.

D. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and fillings. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS - MW#1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 4/28/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 678-6433 James Yoo
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
CONSTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

FOR OFFICE USE

PERMIT NUMBER 104-0476
WELL NUMBER _____
APN _____

CLIENT
Name Freddie Schrag
Address 1701 Shattuck St Phone 510-652-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Attn: Matt Meyers Fax 510-420-9140
Address 5700 Hollis St, Suite A Phone 510-420-3314
City Emeryville Zip 94608

TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation
Cathodic Protection	<input type="checkbox"/>	General
Water Supply	<input type="checkbox"/>	Contamination
Monitoring	<input checked="" type="checkbox"/>	Well Destruction

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD(S)

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Precision Drilling

DRILLER'S LICENSE NO. 636387

WELL PROJECTS

Drill Hole Diameter	<u>8</u> in.	Maximum	
Casing Diameter	<u>2</u> in.	Depth	<u>22</u> ft
Surface Seal Depth	<u>116</u> ft	Owner's Well Number	<u>MSW-16B</u>

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. 3-04-02
of Cambria Environmental Technology, Inc.

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole by tremie with cement grout or cement grout and mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole shade zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS - MWH 1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature] DATE 4-28-04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 870-6633 Janet Yee
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT: 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER: W04-0477
WELL NUMBER: _____
APN: _____

CLIENT
Name: Fredric Schwa
Address: 6701 Shellmound St. Phone: 510-652-2411
City: Emeryville Zip: 94608

APPLICANT
Name: Cambria Environmental Technology, Inc.
Attn: Matt Meyers Fax: 510-420-9170
Address: 500 Hollis St, Suite A Phone: 510-920-2314
City: Emeryville Zip: 94608

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

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

DRILLING METHOD(S)
Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME: Precision Drilling

DRILLER'S LICENSE NO.: 036387

WELL PROJECTS
Drill Hole Diameter: 8 in. Maximum Depth: 40 ft.
Casing Diameter: 2 in. Owner's Well Number: MW-6C
Surface Seal Depth: 20 ft.

GEOTECHNICAL PROJECTS
Number of Footings: _____ Maximum Depth: _____ ft.
Hole Diameter: _____ in.

ESTIMATED STARTING DATE: 4/30/04
ESTIMATED COMPLETION DATE: 5/8/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE: _____ DATE: 4/22/04

PLEASE PRINT NAME: Matt Meyers of Cambria Environmental Technology, Inc.
Rev. 3-04-02

PERMIT CONDITIONS

Circled Permit Requirements Apply

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
Backfill bore hole by trowel with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.
- E. CATHODIC**
Fill hole anodic zone with concrete placed by trowel.
- F. WELL DESTRUCTION**
Send a map of work site. A separate permit is required for wells deeper than 45 feet.
- G. SPECIAL CONDITIONS** - MW# 7

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED: _____ DATE: 4/22/04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6433 James Yee
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1167 65th Street
in Oakland, Ca

PERMIT NUMBER WD4-0478
WELL NUMBER _____
APN _____

CLIENT
Name Freddie Schwan
Address 601 Spalding St Phone 510-462-2411
City Emeryville Zip 94608

APPLICANT
Name Cambria Environmental Technology, Inc.
Attn: Matt Meyers Phone 510-420-9170
Address 5500 Hallis St, Suite A Phone 510-420-2314
City Emeryville Zip 94608

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

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

DRILLING METHOD(S):
Mud Rotary Air Rotary Auger
Cable Other

DRILLER'S NAME Precision Drilling
DRILLER'S LICENSE NO. 636387

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum Depth 15 ft.
Casing Diameter 4 in. Owner's Well Number MW-7A
Surface Seal Depth 10 ft.

GEOTECHNICAL PROJECTS
Number of Readings _____ Maximum Depth _____ ft.
Hole Diameter _____ in.

ESTIMATED STARTING DATE 4/30/04
ESTIMATED COMPLETION DATE 5/18/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. J-04-02
of Cambria Environmental Technology, Inc.

APPLICANT'S SIGNATURE _____ DATE 4/22/04

PLEASE PRINT NAME Matt Meyers Rev. J-04-02
of Cambria Environmental Technology, Inc.

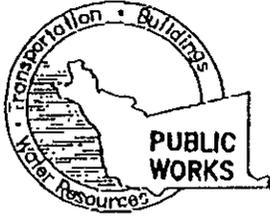
PERMIT CONDITIONS

Circled Permit Requirements Apply

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.
- D. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- P. GEOTECHNICAL**
Backfill bore hole by trowel with cement grout or cement grout and material. Upper two-three feet replaced in kind or with compacted cuttings.
- E. CATHODIC**
Fill hole anode zone with concrete placed by trowel.
- F. WELL DESTRUCTION**
Send a map of work site. A separate permit is required for wells deeper than 45 feet.
- G. SPECIAL CONDITIONS** FRWA 7

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 4/28-04



**ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD, CA. 94544-1395
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939**

PERMIT NO. W04-0467-0478

**WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
MW#1-GENERAL CONDITIONS; MONITORING WELL**

1. Prior to installation of any monitoring wells into any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
2. The minimum surface seal thickness two inches of cement grout placed by tremic.
3. All monitoring wells shall have a minimum surface cement seal depth of five (5) feet or the maximum depth practicable or twenty (20) feet.
4. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
5. Permittee, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on- or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.
7. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Permit is valid from April 30 to May 8, 2004. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
8. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including: permit number and site map.
9. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939

www.acfcwed.org

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 1137-1167 65th St
Oakland

PERMIT NUMBER W04-0574
WELL NUMBER _____
APN _____

CLIENT John Nady
Name John Nady Phone 510-420-3338
Address 1167 65th St
City Oakland Zip 94608

APPLICANT Jason Olsen
Name Jason Olsen Fax 510-420-9170
Address 5700 Hill St, S.F.C. Phone 510-420-3338
City Emeryville, CA Zip 94608

TYPE OF PROJECT

- | | |
|--|---|
| <input type="checkbox"/> Well Construction | <input type="checkbox"/> Geotechnical Investigation |
| <input type="checkbox"/> Cathodic Protection | <input type="checkbox"/> General |
| <input type="checkbox"/> Water Supply | <input type="checkbox"/> Contamination |
| <input checked="" type="checkbox"/> Monitoring | <input type="checkbox"/> Well Destruction |

PROPOSED WATER SUPPLY WELL USE

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> New Domestic | <input type="checkbox"/> Replacement Domestic |
| <input type="checkbox"/> Municipal | <input type="checkbox"/> Irrigation |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Other _____ |

DRILLING METHOD:

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> Mud Rotary | <input type="checkbox"/> Air Rotary | <input checked="" type="checkbox"/> Auger |
| <input type="checkbox"/> Cable | <input type="checkbox"/> Other | |

DRILLER'S NAME Precision Sampling

DRILLER'S LICENSE NO. C57-636387

WELL PROJECTS

Drill Hole Diameter 8 in. Maximum Depth 22 ft
Casing Diameter 2 in. Owner's Well Number MW-4B
Surface Seal Depth 16 ft.

GEOTECHNICAL/CONTAMINATION PROJECTS

Number of Borings _____ Maximum Hole Diameter _____ in. Depth _____ ft.

STARTING DATE 5/18/04

COMPLETION DATE 5/18/04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 5/17/04

PLEASE PRINT NAME JASON OLSEN Rev. 5-11-04

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL/CONTAMINATION

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole inside zone with concrete placed by tremie.

F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

MWH 1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature] DATE 5-17-04

Job Site 1167 65TH ST Parcel# 016 -1505-011-03 Appl# X0401968

Descr install 6 wells on Peabody Lane all monitoring wells Permit Issued 05/05/04

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
 Util Fund #:

Owner JOHN NADY Applc# Phone# Lic# --License Classes--

Contractor Arch/Engr PRECISION SAMPLING INC X (\$10) 237-4575 636387
 CHMOND, CA 94804

\$291.84 TOTAL FEES PAID AT ISSUANCE
 \$51.00 Applic \$205.00 Permit
 \$.00 Process \$23.04 Rec Mgmt
 \$.00 Gen Plan \$.00 Invstg
 \$.00 Other \$12.80 Tech Enh

ITE

OF OAKLAND

CITY OF OAKLAND
 Community & Economic Development Agency
 250 Frank H. Ogawa Pl, Oakland CA, 94612
 Phone: (510)238-3587 FAX: (510)238-2263

PAYMENT RECEIPT

Application#: X0401968 Payment#: 001
 APPLICATION FEE \$51.00
 EXCAVATION PERMIT \$285.00
 RECORDS MANAGEMENT FEE (\$23.04
 TECHNOLOGY ENHANCEMENT FE \$12.00
 Subtotal: \$291.04

Sales Tax: \$.00
 ***** TOTAL PAID: \$291.04

Check Payment: \$291.04

Payor: CAMBRIA ENVIRON CK3022 CK 3023
 Date: 05/05/04 Time: 15:10:59

By: ANL Register R03 Receipt# 007982

 ORIGINAL RECEIPT REQUIRED FOR REFUND



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

ON PEABODY LANE

PERMIT NUMBER X0401968		SITE ADDRESS/LOCATION 1167 65th Street, Oakland	
APPROX. START DATE 5/7/04	APPROX. END DATE 5/21/04	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) 1-888-881-4367	
CONTRACTOR'S LICENSE # AND CLASS C57 636387		CITY BUSINESS TAX # 559 628	

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 150067

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or apartments thereon, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two separate occasions during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # WCB 371072339 013 Company Name Liberty Mutual Fire Insurance Company

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee: Matt Meyers Date: 5/5/04
 Signature of Agent for Contractor: Cory Bean Date: 5/3/04
 Signature of Owner: _____ Date: _____

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-5AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ISSUED BY	DATE ISSUED		

Job Site 1167 65TH ST Parcel# 016 -1505-011-03 Appl# X0401967

Descr install 2 wells on 65th street Permit Issued 05/05/04

all monitoring wells

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
 Util Fund #:

Owner JOHN NADY
 Contractor
 Arch/Engr PRECISION SAMPLING INC X (510) 237-4575 636387
 Agent MATT MEYERS
 RICHMOND, CA 94804

Apprent Phone# Lic# License Classes--

\$291.84 TOTAL FEES PAID AT ISSUANCE
 \$51.00 Applic \$205.00 Permit
 \$.00 Process \$23.04 Rec Mgmt
 \$.00 Gen Plan \$.00 Invstg
 \$.00 Other \$12.80 Tech Enh

ITE

CITY OF OAKLAND
 Community & Economic Development Agency
 250 Frank H. Ogawa Pl, Oakland CA, 94612
 Phone: (510)238-3507 FAX: (510)238-2263

CITY OF OAKLAND

PAYMENT RECEIPT

Application#: X0401967 Payment#: 001
 APPLICATION FEE \$51.00
 EXCAVATION PERMIT \$205.00
 RECORDS MANAGEMENT FEE \$23.04
 TECHNOLOGY ENHANCEMENT FE \$12.80
 Subtotal: \$291.84

Sales Tax: \$.00
 ***** TOTAL PAID: \$291.84

Check Payment: \$291.84

for: CAMBRIA ENVIRON #3022
 Date: 05/05/04 Time: 15:09:57
 By: ANL Register R03 Receipt# 007901

 ORIGINAL RECEIPT REQUIRED FOR REFUND



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

ON 65th ST

2921-832
15
5/15/04
1101
David
0537150
6/13/04
238
015
151
151
151

PERMIT NUMBER X0401967		SITE ADDRESS/LOCATION 1167 65 th Street, Oakland	
APPROX. START DATE 5/7/04	APPROX. END DATE 5/21/04	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) 1-888-881-4367	
CONTRACTOR'S LICENSE # AND CLASS C57 636287		CITY BUSINESS TAX # 559 628	

ATTENTION:

- State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 150067
- 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500;

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or apartments thereon, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).

I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).
Policy # WGL B71072339 013 Company Name: Liberty Mutual Fire Insurance Company

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

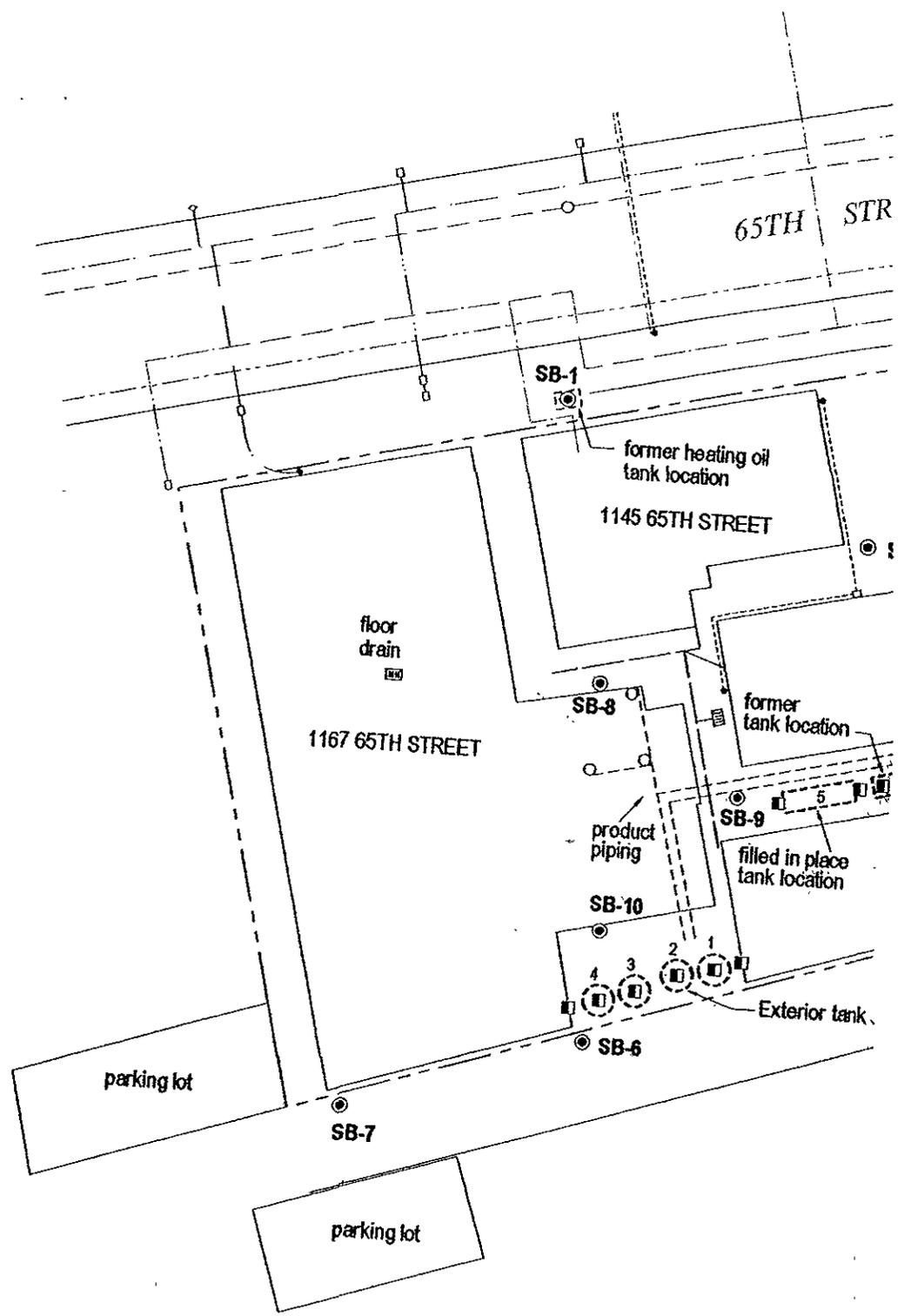
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

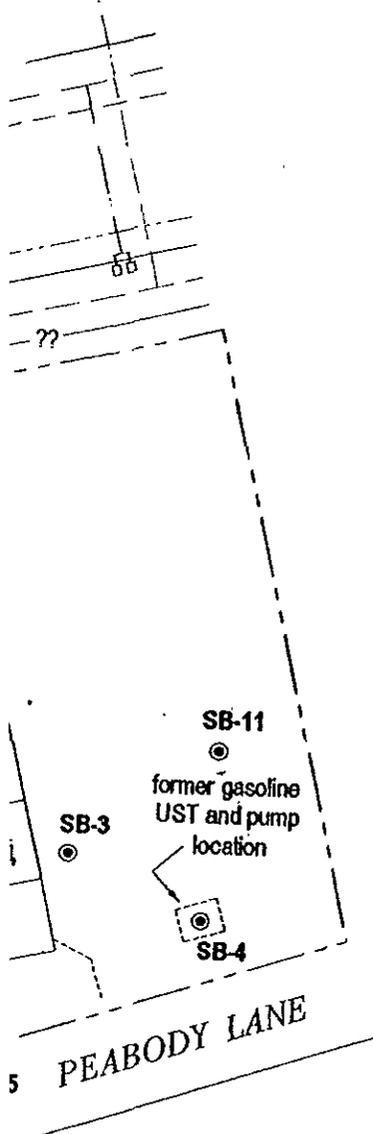
I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Matt Meyers Cambria 5/8/04
Gary Bean Precision Supply 5/13/04

Signature of Permittee: _____ Date: _____
By Agent for Contractor: Owner:

DATE STREET LAST RESURFACED: ISSUED BY: _____	SPECIAL PAVING DETAIL: REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION: (NOV F - JAN I): <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA: (7AM-9AM & 4PM-6PM): <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	DATE ISSUED: _____		





EXPLANATION

SB-1 ●	Cambria soil boring/temporary well location
■	SCI soil sample location
①	Former tank location and tank nomenclature
---	Product piping
○	Product piping stub-ups
- - - - -	Electrical line
---	Storm drain
- - - - -	Sanitary sewer line
---	Water line
---	Gas line
- - - - -	Communications line

sewer laterals were
unable to be located

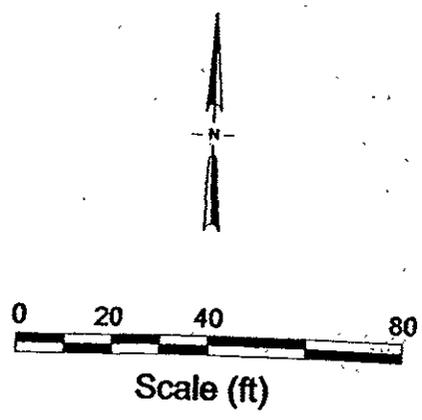
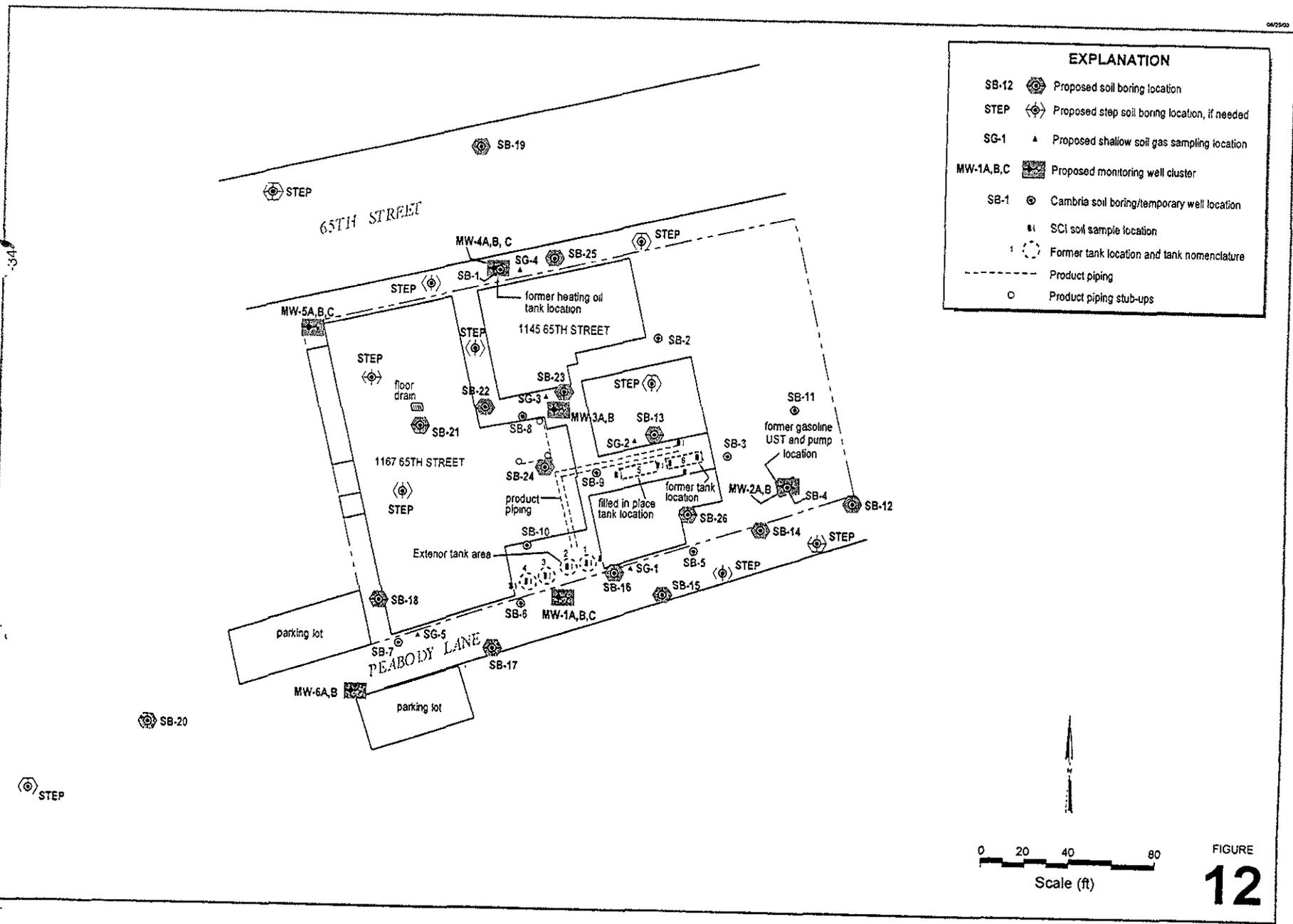


FIGURE
2





EXPLANATION	
SB-12	Proposed soil boring location
STEP	Proposed step soil boring location, if needed
SG-1	Proposed shallow soil gas sampling location
MW-1A,B,C	Proposed monitoring well cluster
SB-1	Cambria soil boring/temporary well location
■	SCI soil sample location
○	Former tank location and tank nomenclature
- - -	Product piping
○	Product piping stub-ups

Proposed Soil Boring Locations



C A M B R I A

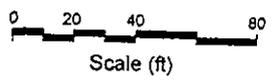


FIGURE 12

Job Site 1137 65TH ST

Parcel# 016 -1505-011-03

Appl# X0301

Descr soil boring on 65th St

Permit Issued 12/31/03

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #

Acctg#:

Util Fund #:

Applicant

Phone#

Lic#

--License Classes--

Owner NADY JOHN TR

Contractor PRECISION SAMPLING, INC

X

(510) 237-4575 636387 C57

Arch/Engr

Agent MATT MEYERS

Public Addr 1400 SOUTH 50TH ST RICHMOND, CA 94804

JOB SITE

\$256.00 TOTAL FEES PAID AT ISSUANCE

\$51.00 Application \$205.00 Permit

\$.00 Process \$.00 Rec Mgmt

\$.00 Gen Plan \$.00 Invstg

\$.00 Other

CITY OF OAKLAND

ADDRESS



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

AGE 2 of 2

ON 65th ST

PERMIT NUMBER X0301216		SITE ADDRESS/LOCATION <i>Street and Alley bordering 1137-1167 65th St., Oakland</i>	
APPROX. START DATE <i>1/5/04</i>	APPROX. END DATE <i>1/20/04</i>	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) <i>1-888-881-4367</i>	
CONTRACTOR'S LICENSE # AND CLASS <i>C57# 636387</i>		CITY BUSINESS TAX # <i>559628</i>	

ATTENTION:
State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: *4165055*

48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.

OWNER/BUILDER
I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the exempt exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):
I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).
I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or apartments thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two occasions more than once during any three-year period. (Sec. 7044 Business and Professions Code).
I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).
I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION
I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).
Policy # *WC2-871-072339-013* Company Name *Liberty Mutual*

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

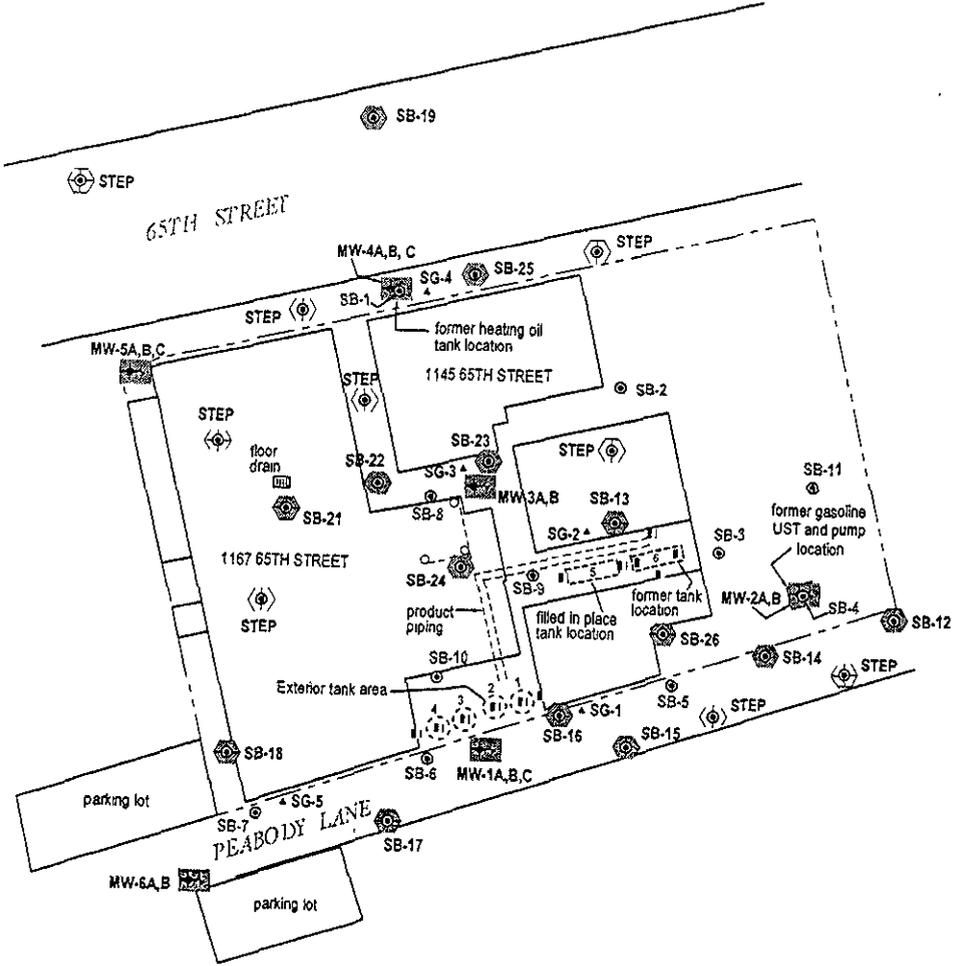
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is issued upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property incurred or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

[Signature] for *Precision Drilling* Date *12/30/03*

TYPE OF PERMITTEE <input checked="" type="checkbox"/> AGENT FOR <input checked="" type="checkbox"/> CONTRACTOR <input type="checkbox"/> OWNER	SPECIAL PAVING DETAILS REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
3 STREET LAST	DATE ISSUED			

EXPLANATION	
SB-12	Proposed soil boring location
STEP	Proposed step soil boring location, if needed
SG-1	Proposed shallow soil gas sampling location
MW-1A,B,C	Proposed monitoring well cluster
SB-1	Cambria soil boring/temporary well location
■	SCI soil sample location
1	Former tank location and tank nomenclature
- - -	Product piping
○	Product piping stub-ups



Proposed Soil Boring Locations



C A M B R I A

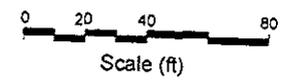


FIGURE 12

A. J. M. CONSULTING ENGINEERS, INC. 01/03



Monday 2 3 p.m.

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

Permit valid for 90 days from date of issuance.

PERMIT NUMBER X 0 3 0 1 2 1 7		SITE ADDRESS/LOCATION 1137 - 1167 ^{25th} Street, Oakland ^{on} Peabody Lane
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS CS7 # 636387		CITY BUSINESS TAX #

ATTENTION:

- 1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____
- 2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.
- 3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee: [Signature] for Precision Sampling, Inc. Date: 12/30/03

Agent for Contractor Owner

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ISSUED BY	DATE ISSUED		

Job Site 1137 65TH ST

Parcel# 016 -1505-011-03

Appl# X0301217

Descr soil boring on Peabody Lane

Permit Issued 12/31/03

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #

Acctg#:

Util Fund #:

Applcmt

Phone#

Lic#

--License Classes--

Owner NADY JOHN TR

Contractor PRECISION SAMPLING INC

Arch/Engr

Agent MATT MEYERS

Applic Addr 1400 SOUTH 50TH ST RICHMOND, CA, 94804

~~\$256.00 TOTAL FEES PAID AT ISSUANCE~~

~~\$51.00 Applic~~ ~~\$205.00 Permit~~

~~\$.00 Process~~ ~~\$.00 Rec Mgmt~~

~~\$.00 Gen Plan~~ ~~\$.00 Invstg~~

~~\$.00 Other~~

JOB SITE

CITY OF OAKLAND

DIST: ADDRESS:

Applic#* ENMI04493 Type: 1

Date Filed: 04/21/04

Disposition:

NUMBER	STREET NAME	SUFFIX*	SUITE	ASSESSOR	PARCEL#
1)	1167	65TH	ST	016	-1505-011-03
2)					
3)					

Prcl Cond: X Cond Aprvl: Viol:

Proj Descr: install 2 wells on 65th street and
6 wells on Peabody Lane
all monitoring wells

Insp Div: ENG-SVCS Dist:

Track:

Lic# Phone# Applicant

Owner: JOHN NADY

Contractor:

Arch/Engr: CAMBRIA ENVIRONMENTAL TECHNO ()420-0700 X

Agent: JASON GERKE

Applicant Addr: 5900 HOLLIS STREET

No Fee:

City/State: EMERYVILLE, CA

Zip: 94608

Wrkrs Comp*

Other Related Applic#s: X0401967 X0401968

F3=Ext F5=Chg F6=Add F7=Fwd F8=Bck F11=Fnd F12=Prv F23=Dsc F24=Com

307 Press ENTER to view page 2 data

JOB SITE

Virgil Chavez Land Surveying

312 Georgia Street, Suite 225
Vallejo, California 94590-5907
(707) 553-2476 • Fax (707) 553-8698

June 9, 2004
Project No.: 2111-48

Matt Meyers
Cambria Environmental
5900 Hollis Street, Suite A
Emeryville, CA 94608

Subject: Monitoring Well Survey
1137-1167 65th St.
Oakland, CA

Dear Matt:

This is to confirm that we have proceeded at your request to survey the new ground water monitoring wells located at the above referenced location. The survey was performed on June 2, 2004. The benchmark for this survey was a well monument on Powell St. under the westbound lanes of I-580. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone II (NAD83). Benchmark Elevation = 13.88 feet (NAVD88).

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
37.8472236	-122.2866863	2135879.67	6045809.48	39.64	TOC MW-1A
				39.95	RIM MW-1A
37.8472300	-122.2866958	2135882.07	6045806.77	39.50	TOC MW-1B
				39.88	RIM MW-1B
37.8472323	-122.2866825	2135882.83	6045810.62	39.49	TOC MW-1C
				39.91	RIM MW-1C
37.8473761	-122.2863455	2135933.32	6045908.93	40.72	TOC MW-2A
				40.99	RIM MW-2A
37.8474515	-122.2867589	2135963.03	6045790.09	40.88	TOC MW-3A
				41.05	RIM MW-3A
37.8476410	-122.2868200	2136032.35	6045773.77	38.71	TOC MW-4A
				38.89	RIM MW-4A
37.8476310	-122.2868258	2136028.76	6045772.04	38.54	TOC MW-4B
				38.96	RIM MW-4B
37.8476355	-122.2868037	2136030.28	6045778.45	38.50	TOC MW-4C
				39.00	RIM MW-4C
37.8475435	-122.2871088	2135998.46	6045689.73	38.98	TOC MW-5A
				39.45	RIM MW-5A
37.8471299	-122.2869907	2135847.24	6045720.94	37.98	TOC MW-6A
				38.29	RIM MW-6A
37.8471254	-122.2870078	2135845.69	6045715.98	37.66	TOC MW-6B
				38.16	RIM MW-6B

Virgil Chavez Land Surveying

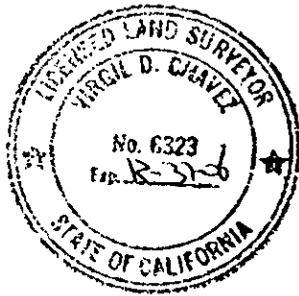
312 Georgia Street, Suite 225
Vallejo, California 94590-5907
(707) 553-2476 • Fax (707) 553-8698

June 9, 2004
Project No.: 2111-48
Page 2

Monitoring Well Survey
1137-1167 65th St.
Oakland, CA

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
37.8471225	-122.2870218	2135844.71	6045711.92	37.59	TOC MW-6C
				38.07	RIM MW-6C
37.8474130	-122.2869572	2135950.12	6045732.59	40.58	TOC MW-7A
				40.74	RIM MW-7A

Sincerely,



Virgil D. Chavez
Virgil D. Chavez, PLS 6323

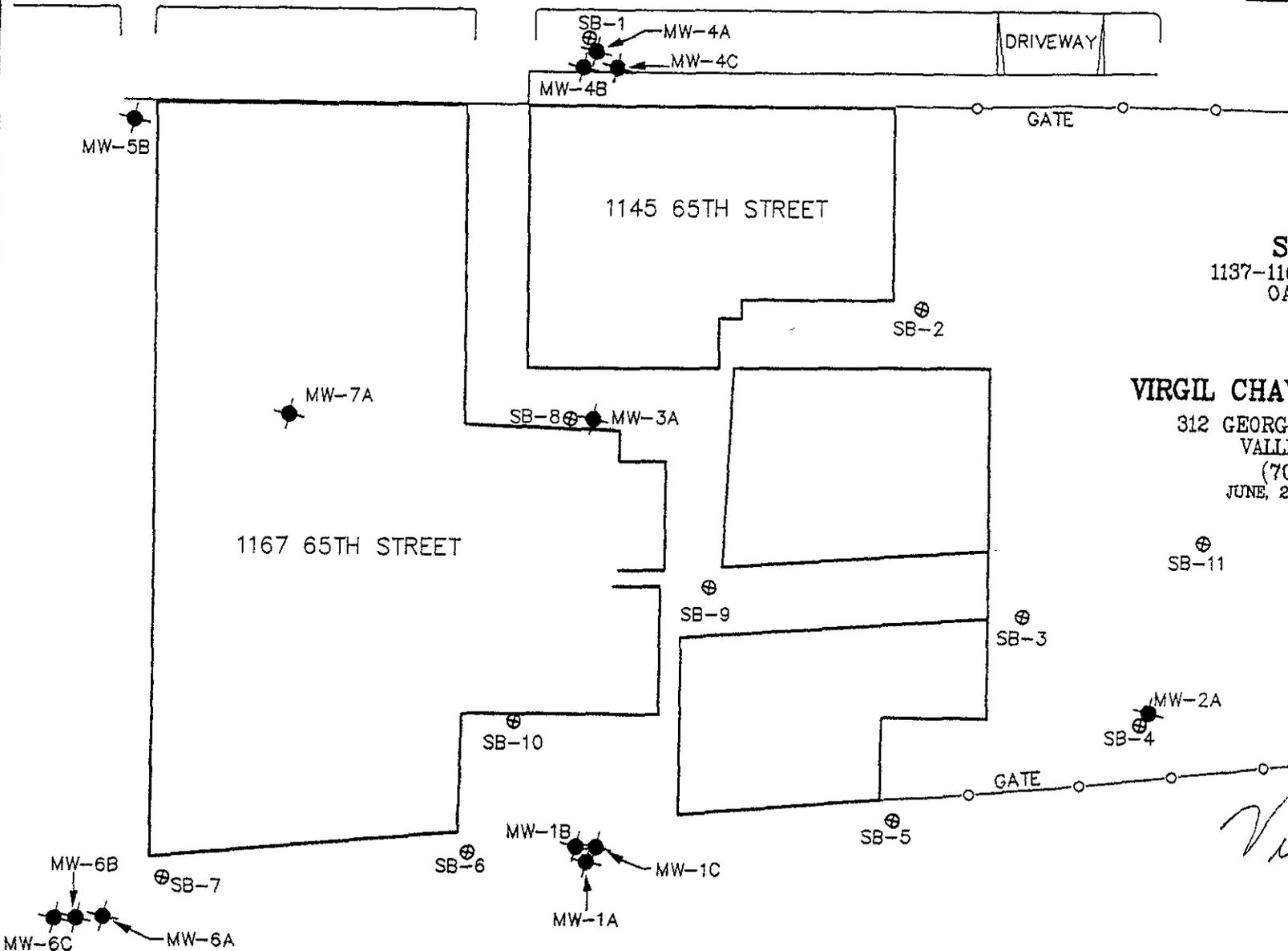
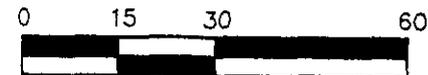
LEGEND

- - MONITORING WELL
- ⊕ - BORING HOLE
- - FENCE

65TH STREET



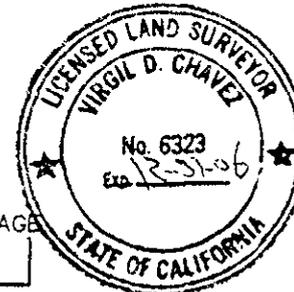
SCALE: 1" = 30'



SITE MAP
1137-1167 65TH STREET
OAKLAND, CA

VIRGIL CHAVEZ LAND SURVEYING

312 GEORGIA STREET, SUITE 225
VALLEJO, CALIFORNIA
(707) 553-2478
JUNE, 2004 SCALE: 1" = 30'



Virgil D. Chavez

APPENDIX G

Laboratory Analytical Reports

		110 2nd Avenue South, #D7, Pacheco, CA 94553-5500 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mna@mccampbell.com	
Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady Client Contact Matt Meyers Client P O	Date Sampled 05/07/04 Date Received 05/10/04 Date Reported 05/14/04 Date Completed 05/14/04	Work Order: 0405130 May 14, 2004

Dear Matt

Enclosed are

- 1) the results of 2 analyzed samples from your #522-1000-28; John Nady project,
- 2) a QC report for the above samples
- 3) a copy of the chain of custody, and
- 4) a bill for analytical services

All analyses were completed satisfactorily and all QC samples were found to be within our control limits

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again

Yours truly,

 Angela Rydelius, Lab Manager

		110 2nd Avenue South, #D7, Pacheco, CA 94553-5500 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mna@mccampbell.com								
Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady Client Contact Matt Meyers Client P O	Date Sampled 05/07/04 Date Received 05/10/04 Date Extracted 05/10/04 Date Analyzed 05/11/04	Work Order: 0405130							
Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE* Extraction Method: SW9510B Analytical Method: SW8021B/9013C.m										
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
003A	MW-3A@15	S	11 g/m	ND	ND	ND	ND	ND	1	97.4

Reporting Limit for DF = 1, ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	NA	1	ug/L
	S	10	0.05	0.005	0.005	0.005	0.005	0.005	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/solid/udge samples in mg/kg, wipe samples in ug/wipe, product/non aqueous liquid samples in mg/L.
 # clustered chromatogram, sample peak coelutes with surrogate peak
 *The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (standard solvent / mineral spirit), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aromatic gas), m) no recognizable pattern

DHS Certification No 1644

Angela Rydelius, Lab Manager

		110 2nd Avenue South, #D7, Pacheco, CA 94553-5500 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mna@mccampbell.com				
Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady Client Contact Matt Meyers Client P O	Date Sampled 05/07/04 Date Received 05/10/04 Date Extracted 05/10/04 Date Analyzed 05/12/04	Work Order: 0405130			
Diesel (C10-C35) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil* Extraction Method: SW9310C Analytical Method: SW8013C						
Lab ID	Client ID	Matrix	TPH(g)	TPH(m)	DF	% SS
0405130-001A	MW-3A@15	S	110.4 g	9.2	1	107

Reporting Limit for DF = 1, ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	10	5.0	mg/Kg

* water samples are reported in ug/L, wipe samples in ug/wipe, soil/solid/udge samples in mg/kg, product/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in ug/L.
 # clustered chromatogram resulting in coeluted surrogate and sample peaks, or, surrogate peak is on elevated baseline, or, surrogate has been diminished by dilution of original extract
 *The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) diesel range compounds are significant, c) aged diesel is significant, d) gasoline range compounds are significant, e) unknown medium boiling point pattern that does not appear to be derived from diesel (uphill), f) one to a few isolated peaks present, g) oil range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) kerosene/crescent range, l) bunker oil, m) fuel oil, n) standard solvent/mineral spirit

DHS Certification No 1644

Angela Rydelius, Lab Manager

		110 2nd Avenue South, #D7, Pacheco, CA 94553-5500 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mna@mccampbell.com		
Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady Client Contact Matt Meyers Client P O	Date Sampled 05/07/04 Date Received 05/10/04 Date Extracted 05/10/04 Date Analyzed 05/11/04	Work Order: 0405130	
Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)* Extraction Method: SW9300 Analytical Method: SW9018				
Lab ID	Client ID	Matrix	DF	Reporting Limit for DF = 1
0405130-003A	MW-3A@15	S	20	W
Compound	Concentration	ug/Kg	ug/L	
Bromodichloromethane	ND<100	5.0	NA	
Bromofom	ND<100	5.0	NA	
Bromomethane	ND<100	5.0	NA	
Carbon Tetrachloride	ND<100	5.0	NA	
Chlorobenzene	ND<100	5.0	NA	
Chloroethene	ND<100	5.0	NA	
1-Chloroethyl vinyl ether	ND<100	5.0	NA	
Chloroform	ND<100	5.0	NA	
Chloromethane	ND<100	5.0	NA	
1,4-Dichlorobenzene	ND<100	5.0	NA	
Dibromochloromethane	ND<100	5.0	NA	
1,2-Dichlorobenzene	ND<100	5.0	NA	
1,3-Dichlorobenzene	ND<100	5.0	NA	
Dichlorodifluoromethane	ND<100	5.0	NA	
1,1-Dichloroethane	ND<100	5.0	NA	
1,2-Dichloroethane	ND<100	5.0	NA	
cis-1,2-Dichloroethene	ND<100	5.0	NA	
trans-1,2-Dichloroethene	ND<100	5.0	NA	
1,2-Dichloropropane	ND<100	5.0	NA	
cis-1,3-Dichloropropene	ND<100	5.0	NA	
trans-1,3-Dichloropropene	ND<100	5.0	NA	
Methylene chloride	ND<100	5.0	NA	
1,1,2,2-Tetrachloroethane	ND<100	5.0	NA	
Tetrachloroethene	ND<100	5.0	NA	
1,1,1-Trichloroethane	ND<100	5.0	NA	
1,1,2-Trichloroethane	ND<100	5.0	NA	
Trichloroethene	ND<100	5.0	NA	
Trichlorofluoromethane	ND<100	5.0	NA	
Vinyl Chloride	ND<100	5.0	NA	
Surrogate Recoveries (%)				
%SS	90.0			
Comments	J			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/solid/udge samples in ug/kg, wipe samples in ug/wipe, product/non aqueous liquid samples in mg/L.
 ND means not detected above the reporting limit, NA means analytic not applicable to this analysis
 # surrogate diluted out of range or surrogate coelutes with another peak
 # lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) sample diluted due to high organic content, k) reporting limit raised due to insufficient sample amount

DHS Certification No 1644

Angela Rydelius, Lab Manager

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S WorkOrder: 0405130

EPA Method	SW8021B/8015Cm	Extraction	SW3500B			BatchID: 11483			Spiked Sample ID: 0405123-021A		
			Sample mg/Kg	Spiked mg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)
TPH(hex)	ND	0.10	66	75.4	74.4	0.973	101	100	0.942	70	130
MTBE	ND	0.10	102	97.6	4.99	113	108	2.21	70	130	
Benzene	ND	0.10	112	107	4.37	109	105	3.63	70	130	
Toluene	ND	0.10	94.1	91.6	2.69	90	88.4	1.81	70	130	
Ethylbenzene	ND	0.10	111	110	0.806	109	107	2.19	70	130	
Xylenes	ND	0.10	100	96	4.08	96.7	96	0.692	70	130	
%SS	96.4	0.10	99.5	90	10.0	94.9	94.2	0.740	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 % Recovery = 100 * (MS Sample) / (Amount Spiked) RPD = 100 * (MS - MSD) / (MS + MSD) / 2
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 TPH(hex) = sum of BTEX areas from the TID
 If clustered chromatogram, sample peak co-elutes with surrogate peak
 NA = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No 1644

TL QA/QC Officer

QC SUMMARY REPORT FOR SW8021B

Matrix: S WorkOrder: 0405130

EPA Method	SW8021B	Extraction	SW5000			BatchID: 11484			Spiked Sample ID: 0405130-003A		
			Sample ug/Kg	Spiked ug/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)
Chlorobenzene	ND<100	50	87.6	91.6	4.46	97.2	95.9	1.37	70	130	
1,1-Dichloroethene	ND<100	50	84.3	86.6	2.69	118	113	4.94	70	130	
Trichloroethene	ND<100	50	71	79	10.7	102	100	1.70	70	130	
%SS	90.0	50	87.4	89.4	2.76	104	104	0	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 % Recovery = 100 * (MS Sample) / (Amount Spiked) RPD = 100 * (MS - MSD) / (MS + MSD) / 2
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 NA = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels

DHS Certification No 1644

TL QA/QC Officer

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0405130

EPA Method	SW8015C	Extraction	SW3550C			BatchID: 11479			Spiked Sample ID: 0405123-001A		
			Sample mg/Kg	Spiked mg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)
TPH(d)	ND	150	105	104	1.40	115	116	1.04	70	130	
%SS	109	30	105	104	1.38	112	113	0.715	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 % Recovery = 100 * (MS Sample) / (Amount Spiked) RPD = 100 * (MS - MSD) / (MS + MSD) / 2
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 NA = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No 1644

TL QA/QC Officer

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

McC Campbell Analytical, Inc.
 110 Second Avenue South, #D7
 Pacheco, CA 94553-5540
 (925) 798-1620

WorkOrder: 0405130 ClientID: CETE

Requested TAT: 5 days
 Date Received: 5/10/04
 Date Printed: 5/10/04

Bill to: Accounts Payable
 Cambria Env. Technology
 5900 Hollis St, Ste A
 Emeryville, CA 94608

Report to: Mark Meyers
 Cambria Env. Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

Sample ID: _____ Matrix: _____ Collection Date: _____ Hold: _____
 (0405130-003) MW-24@15 Sol: 5/7/04 11:00:00 AM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TPH(DMS)														
G-MBTEX S														
MBTEX S														

Prepared by: Melissa Valles
 Comments:
 NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCAMPBELL ANALYTICAL INC		CHAIN OF CUSTODY RECORD																	
110 2 ND AVENUE SOUTH RD PACKWOOD CA 94533 3940		TURN AROUND TIME <input type="checkbox"/> RUSH <input type="checkbox"/> 24 HOUR <input type="checkbox"/> 48 HOUR <input checked="" type="checkbox"/> 5 DAY																	
Telephone (925) 798-1620 Fax (925) 798-1622		EDF Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
Report To: Matt Meyers	Bill To: Cambra	Analysis Request:	Other: Comments:																
Company: Cambra Environmental Technology, Inc.																			
5900 Hollis Street, Suite A																			
Emeryville, Ca 94608		E-mail: mmeyers@cambra-env.com																	
Tele: (510) 420-3314		Fax: (510) 420-9170																	
Project #: 522-1000-28		Project Name: John Nady																	
Project Location: 1137-1167 65 th Street, Oakland																			
Sampler Signature: _____																			
SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX								METHOD PRESERVED						
		Date	Time		Type	Water	Soil	Air	Sludge	Other	Ice	HCl		HNO ₃	Other				
MW-2A055		5/7/04	11:40	1	TYPE	X													
MW-2A015																			
MW-2A015																			
Requisitioned By: _____		Date: 5/7/04	Time: 3:30	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: 5/10/04	Time: 12:55	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: _____	Time: _____	Received By: _____	PRESERVATION: VOL ✓ OAG ✓ METALS ✓ OTHER ✓														

McCAMPBELL ANALYTICAL INC		CHAIN OF CUSTODY RECORD																	
110 2 ND AVENUE SOUTH RD PACKWOOD CA 94533 3940		TURN AROUND TIME <input type="checkbox"/> RUSH <input type="checkbox"/> 24 HOUR <input type="checkbox"/> 48 HOUR <input checked="" type="checkbox"/> 5 DAY																	
Telephone (925) 798-1620 Fax (925) 798-1622		EDF Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
Report To: Matt Meyers	Bill To: Cambra	Analysis Request:	Other: Comments:																
Company: Cambra Environmental Technology, Inc.																			
5900 Hollis Street, Suite A																			
Emeryville, Ca 94608		E-mail: mmeyers@cambra-env.com																	
Tele: (510) 420-3314		Fax: (510) 420-9170																	
Project #: 522-1000-28		Project Name: John Nady																	
Project Location: 1137-1167 65 th Street, Oakland																			
Sampler Signature: _____																			
SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX								METHOD PRESERVED						
		Date	Time		Type	Water	Soil	Air	Sludge	Other	Ice	HCl		HNO ₃	Other				
MW-2A055		5/7/04	11:40	1	TYPE	X													
MW-2A015																			
MW-2A015																			
Requisitioned By: _____		Date: 5/7/04	Time: 3:30	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: 5/10/04	Time: 12:55	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: _____	Time: _____	Received By: _____	PRESERVATION: VOL ✓ OAG ✓ METALS ✓ OTHER ✓														

McCAMPBELL ANALYTICAL INC		CHAIN OF CUSTODY RECORD																	
110 2 ND AVENUE SOUTH RD PACKWOOD CA 94533 3940		TURN AROUND TIME <input type="checkbox"/> RUSH <input type="checkbox"/> 24 HOUR <input type="checkbox"/> 48 HOUR <input checked="" type="checkbox"/> 5 DAY																	
Telephone (925) 798-1620 Fax (925) 798-1622		EDF Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
Report To: Matt Meyers	Bill To: Cambra	Analysis Request:	Other: Comments:																
Company: Cambra Environmental Technology, Inc.																			
5900 Hollis Street, Suite A																			
Emeryville, Ca 94608		E-mail: mmeyers@cambra-env.com																	
Tele: (510) 420-3314		Fax: (510) 420-9170																	
Project #: 522-1000-28		Project Name: John Nady																	
Project Location: 1137-1167 65 th Street, Oakland																			
Sampler Signature: _____																			
SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX								METHOD PRESERVED						
		Date	Time		Type	Water	Soil	Air	Sludge	Other	Ice	HCl		HNO ₃	Other				
MW-2A055		5/7/04	11:40	1	TYPE	X													
MW-2A015																			
MW-2A015																			
Requisitioned By: _____		Date: 5/7/04	Time: 3:30	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: 5/10/04	Time: 12:55	Received By: _____	Remarks: Lowest possible detection limits. Please email results.														
Requisitioned By: _____		Date: _____	Time: _____	Received By: _____	PRESERVATION: VOL ✓ OAG ✓ METALS ✓ OTHER ✓														

DHS Certification No. 1644

Angela Ryndius, Lab Manager

11224 Avenue South, 2 ND Floor, CA 94533 3940 Web: www.mccampbell.com Email: info@mccampbell.com	
Cambra Env. Technology 5900 Hollis St. Suite A Emeryville, CA 94608	Client Project ID: #522-1000-28, John Nady Client Contact: Matt Meyers Client P.O.
Date Sampled: 05/10/04 Date Received: 05/12/04 Date Reported: 05/19/04 Date Completed: 05/19/04	Work Order: 0483184 May 19, 2004

Dear Matt

Enclosed are

- 1) the results of 4 analyzed samples from your #522-1000-28, John Nady project.
- 2) a QC report for the above samples
- 3) a copy of the chain of custody, and
- 4) a bill for analytical services

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Your truly,

 Angela Ryndius, Lab Manager

WorkOrder: 0405184 ClientID: CETE

Report to: Matt Meyers
Cambria Env Technology
5900 Hollis St, Suite A
Emeryville, CA 94608

TEL (510) 420-0700
FAX (510) 420-9170
Project No: #522-1000-28; John Nady
PC

Bill to: Accounts Payable
Cambria Env. Technology
5900 Hollis St. Ste. A
Emeryville, CA 94608

Requested TAT: 5 days
Date Received: 5/12/04
Date Printed: 5/12/04

Sample ID	Client/SampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0405184-001	MW-1C@9.5	Soil	5/10/04 8:45:00 AM		A	A	A												
0405184-002	MW-1C@9.5	Soil	5/10/04 9:05:00 AM		A	A	A												
0405184-003	MW-1C@14.5	Soil	5/10/04 9:35:00 AM		A	A	A												
0405184-005	MW-1C@20	Soil	5/10/04 10:20:00		A	A	A												

Test Legend:

1	8010B.S	3	G-MBTEX.S	3	TPH(DMO).S	4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense

DHS Certification No 1644

TL QM/QC Officer

EPA Method SW821B
Extraction SW8360
BlankID 11484
Speed Sample ID 0405184-001A

Sample Spiked
MS- % Rec
MSD- % Rec
MS-MSD- % Rec
LCS- % Rec
LCS-D
LCS-LCS-D
Acceptance Criteria (%)
Low High

91.6 91.1 97.2 91.9 0.24 70 130

91.6 101 101 0 107 101 0.211 70 130

None

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

QC SUMMARY REPORT FOR SW8015C

Matrix: S

WorkOrder: 0405184

CETE

0405184

McCAMPBELL ANALYTICAL INC
110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94533 5560
Telephone (925) 798-1620 Fax: (925) 798-1622

Report To: Matt Meyers
Company: Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
E-mail: mmeyers@cambria-env.com
Tele: (510) 420-3314 Fax: (510) 420-9170
Project # 522-1000-28 Project Name: John Nady
Project Location: 1137-1167 65th Street, Oakland

Sampler Signature: [Signature]

CHAIN OF CUSTODY RECORD
TURN AROUND TIME: RUSH 24 HOUR 48 HOUR 5 DAY
EDF Required? Yes No

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX							METHOD PRESERVED	ANALYSIS REQUEST	Other	Comments				
		Date	Time		Type	Water	Soil	Air	Sludge	Other	Leachate					ENOC	ENOC	Other	
MW-1C@9.5		5/10/04	8:45	1	Water	X													
MW-1C@9.5			9:45			X													
MW-1C@14.5			9:35			X													
MW-1C@14.5			10:05																Hold
MW-1C@20			10:10																Hold
MW-1C@20			10:40																
MW-1C@14.5			10:50																
MW-1C@20			11:00																
MW-1C@9.5			11:45																
MW-1C@20			12:25																
MW-1C@9.5			10:50																
MW-1C@9.5			1:20																

Relinquished By: [Signature] Date: 5/10/04 Time: 7:30 Received By: SECURE LUTION

Relinquished By: [Signature] Date: 5/12/04 Time: 9:00 Received By: [Signature]

Relinquished By: [Signature] Date: 5/12/04 Time: 1:27 Received By: [Signature]

Remarks: Lowest possible detection limits. Please email results.

APPROPRIATE CONTAINERS PRESERVED BY LAB

DHS Certification No 1644

TL QM/QC Officer

EPA Method SW821B
Extraction SW8360
BlankID 11484
Speed Sample ID 0405184-001A

Sample Spiked
MS- % Rec
MSD- % Rec
MS-MSD- % Rec
LCS- % Rec
LCS-D
LCS-LCS-D
Acceptance Criteria (%)
Low High

87.6 91.6 4.6 97.7 93.9 1.77 70 130

84.3 86.5 2.69 118 113 4.94 70 130

79 107 102 100 170 130

82.4 69.4 2.5 104 0 70 130

None

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

QC SUMMARY REPORT FOR SW8021B

Matrix: S

WorkOrder: 0405184

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D1 Pacheco, CA 94553 5560
 Telephone 925 798-1620 Fax 925-798-1622
 Website www.mccampbell.com E-mail mna@mccampbell.com

Cambrna Env Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

Client Project ID #522-1000-28, John Nady
 Date Sampled 05/11/04
 Date Received 05/12/04
 Client Contact Matt Meyers
 Date Extracted 05/12/04
 Client P.O.
 Date Analyzed 05/14/04

Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*
 Analytical Method: SW 8021B/8015Cm Work Order: 0405184

Lab ID	0405184 001A	0405184-002A	0405184 005A	Reporting Limit for DF=1	
Client ID	MW 1C@5 S	MW 1C@9 S	MW 1C@20	S	W
Matrix	S	S	S		
DF	1	40	1		

Compound	Concentration			mg/kg	ug/L
TPH(g)	ND	160	ND	1.0	NA
TPH(x)	ND	340	ND	1.0	NA
MTBE	ND	ND<0.0	ND	0.05	NA
Benzene	ND	ND<0.20	ND	0.005	NA
Toluene	ND	ND<0.20	ND	0.005	NA
Ethylbenzene	ND	ND<0.20	ND	0.005	NA
Xylenes	ND	ND<0.20	ND	0.005	NA

Surrogate Recoveries (%)
 NSS 84.9 98.8 89.0

Comments:
 * water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/slug/solid samples in mg/kg, wipe samples in g/wipe, product/oil/non-aqueous liquid samples in mg/L.
 # clustered chromatogram, sample peak coelutes with surrogate peak.
 * The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible chem/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

DHS Certification No 1644

Angela Rydelus, Lab Manager

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D1 Pacheco, CA 94553 5560
 Telephone 925 798-1620 Fax 925-798-1622
 Website www.mccampbell.com E-mail mna@mccampbell.com

Cambrna Env Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

Client Project ID #522-1000-28, John Nady
 Date Sampled 05/11/04
 Date Received 05/12/04
 Client Contact Matt Meyers
 Date Extracted 05/12/04
 Client P.O.
 Date Analyzed 05/14/04-05/15/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*
 Analytical Method: SW 8021B/8015Cm Work Order: 0405185

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% S
001A	MW-6C@5 S	S	5.9 g	ND	ND	ND	ND	ND	1	95.4
002A	MW-6C@11 S	S	29.9 g	ND<0.25	ND<0.025	ND<0.025	ND<0.025	ND<0.025	5	89.9
003A	MW-6C@16 S	S	109.9 g	ND<0.50	ND<0.050	ND<0.050	ND<0.050	ND<0.050	10	84.5
004A	MW-6C@21 S	S	ND	ND	ND	ND	ND	ND	1	81.0

Reporting Limit for DF=1
 ND means not detected or above the reporting limit
 W NA NA NA NA NA NA I ug/L
 S 1.0 0.05 0.005 0.005 0.005 0.005 1 mg/kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/slug/solid samples in mg/kg, wipe samples in g/wipe, product/oil/non-aqueous liquid samples in mg/L.
 # clustered chromatogram, sample peak coelutes with surrogate peak.
 * The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible chem/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D1 Pacheco, CA 94553 5560
 Telephone 925 798-1620 Fax 925-798-1622
 Website www.mccampbell.com E-mail mna@mccampbell.com

Cambrna Env Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

Client Project ID #522-1000-28, John Nady
 Date Sampled 05/11/04
 Date Received 05/12/04
 Client Contact Matt Meyers
 Date Extracted 05/12/04
 Client P.O.
 Date Analyzed 05/14/04-05/15/04

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*
 Analytical Method: SW 8021B/8015Cm Work Order: 0405185

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% S
001A	MW-6C@5 S	S	5.9 g	ND	ND	ND	ND	ND	1	95.4
002A	MW-6C@11 S	S	29.9 g	ND<0.25	ND<0.025	ND<0.025	ND<0.025	ND<0.025	5	89.9
003A	MW-6C@16 S	S	109.9 g	ND<0.50	ND<0.050	ND<0.050	ND<0.050	ND<0.050	10	84.5
004A	MW-6C@21 S	S	ND	ND	ND	ND	ND	ND	1	81.0

Reporting Limit for DF=1
 ND means not detected or above the reporting limit
 W NA NA NA NA NA NA I ug/L
 S 1.0 0.05 0.005 0.005 0.005 0.005 1 mg/kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/slug/solid samples in mg/kg, wipe samples in g/wipe, product/oil/non-aqueous liquid samples in mg/L.
 # clustered chromatogram, sample peak coelutes with surrogate peak.
 * The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible chem/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

DHS Certification No 1644

Angela Rydelus, Lab Manager

McCampbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: info@mccampbell.com				
Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/11/04				
	Client Contact Matt Meyers	Date Received 05/12/04				
	Client P.O.	Date Extracted 05/12/04				
		Date Analyzed 05/14/04-05/15/04				
Direct (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*						
Extraction Method: SW5030C	Matrix: Matrix	Analytical Method: SW5030C	Work Order: 0405185			
Lab ID	Client ID	Matrix	TPH(m)	TPH(mg)	DF	% SS
0405185-001A	MW-6C@5	S	810.2b	1600	100	107
0405185-002A	MW-6C@11	S	18.2	ND	1	97.1
0405185-003A	MW-6C@16	S	16.2	ND	1	99.3
0405185-004A	MW-6C@21	S	ND	ND	1	99.6
Reporting Limit for DF = 1, ND means not detected at or above the reporting limit		W	NA	NA	ug/L	
		S	1.0	5.0	mg/kg	
* water samples are reported in µg/L, wipe samples in µg/wipe, soil/sediment/solid samples in mg/kg, product/other aqueous liquid samples in mg/L, and all DIST/LC / ST/LC / SPLP / TCLP extracts are reported in µg/L.						
* diluted chromatogram resulting in a co-eluted surrogate and sample peaks, or surrogate peak is on elevated baseline, or surrogate has been diminished by dilution of original extract						
* The following descriptions of the TPH1 chromatogram are courtesy in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) diesel range compounds are significant, no recognizable pattern, c) aged diesel? is significant, d) gasoline range compounds are significant, e) unknown, medium boiling peak pattern that does not appear to be derived from diesel (aromatic), f) one to a few isolated peaks present, g) oil range compounds are significant, h) lighter than water immiscible absent/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) kerosene/diesel range, l) bunker oil, m) fuel oil, n) modified solvent/mineral spirit						

DHS Certification No. 1644

Angela Rydehus, Lab Manager

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Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/11/04		
	Client Contact Matt Meyers	Date Received 05/12/04		
	Client P.O.	Date Extracted 05/12/04		
		Date Analyzed 05/13/04-05/14/04		
Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*				
Extraction Method: SW5030	Matrix: Matrix	Analytical Method: SW5030	Work Order: 0405185	
Lab ID	Client ID	Matrix	DF	Reporting Limit for DF = 1
0405185-001A	MW-6C@5	S	1	S
0405185-002A	MW-6C@11	S	1	S
0405185-003A	MW-6C@16	S	1	S
0405185-004A	MW-6C@21	S	1	S
Compound	Concentration			µg/L
Bromodichloromethane	ND	ND	ND	5.0 NA
Bromofluoromethane	ND	ND	ND	5.0 NA
Bromomethane	ND	ND	ND	5.0 NA
Carbon Tetrachloride	ND	ND	ND	5.0 NA
Chlorobenzene	ND	ND	ND	5.0 NA
Chloroethane	ND	ND	ND	5.0 NA
2-Chloroethyl vinyl ether	ND	ND	ND	5.0 NA
Chloroform	ND	ND	ND	5.0 NA
Chloromethane	ND	ND	ND	5.0 NA
1,4-Dichlorobenzene	ND	ND	ND	5.0 NA
Dibromochloromethane	ND	ND	ND	5.0 NA
1,2-Dichlorobenzene	ND	ND	ND	5.0 NA
1,1-Dichloroethane	ND	ND	ND	5.0 NA
Dichlorodifluoromethane	ND	ND	ND	5.0 NA
1,1-Dichloroethane	ND	ND	ND	5.0 NA
1,2-Dichloroethane	ND	ND	ND	5.0 NA
1,1-Dichloroethene	ND	ND	ND	5.0 NA
cis-1,2-Dichloroethene	ND	ND	ND	5.0 NA
trans-1,2-Dichloroethene	ND	ND	ND	5.0 NA
1,2-Dichloropropane	ND	ND	ND	5.0 NA
cis-1,3-Dichloropropene	ND	ND	ND	5.0 NA
trans-1,3-Dichloropropene	ND	ND	ND	5.0 NA
Methylene chloride	ND	ND	ND	5.0 NA
1,1,2,2-Tetrachloroethane	ND	ND	ND	5.0 NA
Tetrachloroethene	ND	ND	ND	5.0 NA
1,1,1-Trichloroethane	ND	ND	ND	5.0 NA
1,1,2-Trichloroethane	ND	ND	ND	5.0 NA
Trichloroethene	ND	ND	ND	5.0 NA
Trichlorofluoromethane	ND	ND	ND	5.0 NA
Vinyl Chloride	ND	ND	ND	5.0 NA
Surrogate Recoveries (%)				
%SS	108	110	110	107
Comments				
* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sediment/solid samples in µg/kg, wipe samples in µg/wipe, product/other aqueous liquid samples in mg/L.				
ND means not detected above the reporting limit, N/A means analyte not applicable to this analysis				
* surrogate diluted out of range or surrogate co-elutes with another peak				
b) lighter than water immiscible absent/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) sample diluted due to high organic content, k) reporting limit raised due to insufficient sample amount				

DHS Certification No. 1644

Angela Rydehus, Lab Manager

McCampbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: info@mccampbell.com	
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QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S		Work Order: 0405185								
EPA Method	SW8021B/8015Cm	Extraction	SW5030B							
		Batch/ID	11528							
		Spiked Sample ID	0405181-001A							
		Sample	mg/kg							
		Spiked	mg/kg							
		MS*	% Rec.							
		MSD*	% Rec.							
		MS MSD	% RPD							
		LCS	% Rec.							
		LCS D	% Rec.							
		LCS D	% RPD							
		Acceptance Criteria (%)	Low High							
TPH(bTEX) ¹	ND	0.60	101	101	0	99.7	101	0.811	70	130
MTBE	ND	0.10	107	100	1.79	105	102	2.92	70	130
Benzene	ND	0.10	101	103	1.17	116	113	2.24	70	130
Toluene	ND	0.10	89.2	89.6	0.510	98.9	95.8	3.19	70	130
Ethylbenzene	ND	0.10	109	110	0.854	128	116	1.91	70	130
Xylenes	ND	0.30	96.7	100	3.39	107	100	6.45	70	130
%SS	109	0.10	101	90.2	11.3	104	112	7.41	70	130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

MS = Matrix Spike, MSD = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCS D = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

% Recovery = 100 * (MS - Sample) / (Amount Spiked) RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is heterogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery

1 TPH(bTEX) = sum of BTEX areas from the FID

* diluted chromatogram, sample peak co-elutes with surrogate peak

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or organic content

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: info@mccampbell.com	
------------------------------------	--	---	--

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S		Work Order: 0405185								
EPA Method	SW8021B/8015Cm	Extraction	SW5030B							
		Batch/ID	11526							
		Spiked Sample ID	0405185-004A							
		Sample	mg/kg							
		Spiked	mg/kg							
		MS*	% Rec.							
		MSD*	% Rec.							
		MS MSD	% RPD							
		LCS	% Rec.							
		LCS D	% Rec.							
		LCS D	% RPD							
		Acceptance Criteria (%)	Low High							
TPH(bTEX) ¹	ND	0.60	100	99.1	0.955	99.1	99.1	0	70	130
MTBE	ND	0.10	104	103	0.696	108	101	7.04	70	130
Benzene	ND	0.10	104	102	1.23	116	112	3.08	70	130
Toluene	ND	0.10	89.8	89.1	0.723	98.2	96.2	2.04	70	130
Ethylbenzene	ND	0.10	110	109	0.401	118	115	2.00	70	130
Xylenes	ND	0.30	100	100	0	107	100	6.45	70	130
%SS	81.0	0.10	95.8	101	5.28	109	88.9	20.3	70	130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

MS = Matrix Spike, MSD = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCS D = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

% Recovery = 100 * (MS - Sample) / (Amount Spiked) RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is heterogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery

1 TPH(bTEX) = sum of BTEX areas from the FID

* diluted chromatogram, sample peak co-elutes with surrogate peak

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or organic content

DHS Certification No. 1644

QA/QC Officer

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0405185 ClientID: CEZE

Report to: Matt Meyers
Cambria Env Technology
5900 Hollis St. Suite A
Emeryville, CA 94608
TEL: (510) 420-0700
FAX: (510) 420-9170
Phone: 8522-1000-58, John Neely
PC:
Requested TAT: 5 days
Date Received: 5/13/04
Date Printed: 5/13/04

Sample ID	Client/Project ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0405185-001	MW-6C23.5	Soil	5/11/04 7:50:00 AM																
0405185-002	MW-6C23.1	Soil	5/11/04 8:05:00 AM																
0405185-003	MW-6C23.15	Soil	5/11/04 8:15:00 AM																
0405185-004	MW-6C23.1	Soil	5/11/04 8:25:00 AM																

Test/Leads	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHENOLS															
CHLORIDES															
PHENOLS															
CHLORIDES															

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McC Campbell Analytical, Inc.
110 2nd Avenue South, #D7
Pacheco, CA 94533-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622
Company: Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
E-mail: mmeyers@cambria-env.com
Tel: (510) 420-3314 Fax: (510) 420-9170
Project # 322-1000-28 Project Name: John Neely
Project Location: 1172-1157 65th Street, Oakland
Sampler Signature: [Signature]

Report to: Matt Meyers Bill To: Cambria

TURN AROUND TIME: Yes No RUSH 24 HOUR 48 HOUR 5 DAY

EDF Required? Yes No

ANALYSIS REQUEST

SAMPLE ID (Field Print Name)	LOCATION	DATE	TIME	MATRIX	METHOD RESERVED	WATER	SOIL	AIR	SLUDGE	OTHER	REMARKS
MW-6C23.5		5/11/04	7:50	Soil							
MW-6C23.1		5/11/04	8:05	Soil							
MW-6C23.15		5/11/04	8:15	Soil							
MW-6C23.1		5/11/04	8:25	Soil							
MW-6C23.15		5/11/04	8:25	Soil							
MW-6C23.5		5/11/04	8:25	Soil							

RECEIVED BY: [Signature] DATE: 5/11/04 5:20
RECEIVED BY: [Signature] DATE: 5/13/04 9:58
RECEIVED BY: [Signature] DATE: 5/13/04 1:33

APPROVED BY: [Signature] DATE: 5/13/04 1:33

QC SUMMARY REPORT FOR SW8015C

Matrix: S WorkOrder: 0405185

EPA Method	SW8015C	Extraction SW3550C		BatchID: 11527							Spiked Sample ID: 0405185-004A	
		Sample mg/Kg	Spiked mg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)	Low	High
7PH46	ND	150	92.1	93.1	101	101	92.7	91.9	92.4	70	130	
%SS	99.6	50	101	101	0	102	101	0.211	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

QC SUMMARY REPORT FOR SW8021B

Matrix: S WorkOrder: 0405185

EPA Method	SW8021B	Extraction SW5030		BatchID: 11484							Spiked Sample ID: 0405130-003A	
		Sample µg/Kg	Spiked µg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)	Low	High
Chlorobenzene	ND<100	50	87.6	91.6	4.46	92.2	95.9	1.37	70	130		
1,1-Dichloroethene	ND<100	50	84.3	86.6	2.69	118	113	4.94	70	130		
Tetrachloroethene	ND<100	50	71	79	10.7	102	100	1.70	70	130		
%SS	50.0	50	87.4	89.4	2.26	104	104	0	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
% Recovery = 100 * (MS Sample) / (Amount Spiked), RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)
MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
NA = not enough sample to perform matrix spike and matrix spike duplicate
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No 1644

QA/QC Officer

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
% Recovery = 100 * (MS Sample) / (Amount Spiked), RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)
MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
NA = not enough sample to perform matrix spike and matrix spike duplicate
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content
Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels

DHS Certification No 1644

QA/QC Officer

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D7, Pacheco, CA 94553 5560
 Telephone: 925 798 1620 Fax: 925 798 1622
 Website: www.mccampbell.com E-mail: info@mccampbell.com

Client Project ID: #522-1000-28, John Nady
 Date Sampled: 05/18/04
 Date Received: 05/20/04
 Date Reported: 05/25/04
 Date Analyzed: 05/21/04

Client Contact: Matt Meyers
 Client P.O.:
 Date Analyzed: 05/14/04-05/15/04

Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*
 Extraction Method: SW 8030B Analytical Method: SW 8021B/8015C/m Work Order: 0405185

Lab ID	0405185 001A	0405185 002A	0405185 003A	0405185 004A	Reporting Limit for DF=1	
Client ID	MW-6C@S 5	MW-6C@11	MW-6C@16	MW-6C@21	S	W
Matrix	S	S	S	S		
DF	1	5	10	1		
Compound	Concentration				mg/kg	ug/L
TPH(g)	59	29	100	ND	1.0	NA
TPH(m)	11	68	230	ND	1.0	NA
MTBE	ND	ND<0.25	ND<0.50	ND	0.05	NA
Benzene	ND	ND<0.015	ND<0.030	ND	0.005	NA
Toluene	ND	ND<0.015	ND<0.030	ND	0.005	NA
Ethylbenzene	ND	ND<0.015	ND<0.030	ND	0.005	NA
Xylenes	ND	ND<0.015	ND<0.030	ND	0.005	NA
Surrogate Recoveries (%)						
NSS	95.4	89.3	84.5	81.0		

Comments: water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/solid/solid samples in mg/kg, wipe samples in ug/wipe, product/water aqueous liquid samples in mg/L.

*The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline?), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline?, e) TPH pattern that does not appear to be derived from gasoline (roadblock solvent / mineral spirits?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible alcohol/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

DHS Certification No 1644

Angela Rydelius, Lab Manager

0405185

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D7, Pacheco, CA 94553 5560
 Telephone: 925 798 1620 Fax: 925 798 1622
 Website: www.mccampbell.com E-mail: info@mccampbell.com

Client Project ID: #522-1000-28, John Nady
 Date Sampled: 05/18/04
 Date Received: 05/20/04
 Date Reported: 05/25/04
 Date Analyzed: 05/21/04

Client Contact: Matt Meyers
 Client P.O.:
 Date Analyzed: 05/14/04-05/15/04

Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*
 Extraction Method: SW 8030B Analytical Method: SW 8021B/8015C/m Work Order: 0405185

Turn Around Time: RUSH 24 HOUR 48 HOUR 5 DAY
 Chain of Custody Record: Analyze Requested Other Comments

EDF Required? Yes No

Sample ID (Field Point Name)	Location	Date	Time	# Containers	Type Containers	Matrix Preserved
MW-6C@S 5		5/18/04	7:00	1	706E	X
MW-6C@11		5/18/04	8:05	1	706E	X
MW-6C@16		5/18/04	8:15	1	706E	X
MW-6C@21		5/18/04	8:55	1	706E	X
MW-6C@S 5		5/18/04	8:40	1	706E	X
MW-6C@11		5/18/04	9:14	1	706E	X
MW-6C@16		5/18/04	9:26	1	706E	X
MW-6C@21		5/18/04	9:36	1	706E	X

Remarks: Lowest possible detection limits. Please email results.

Reported By: Angela Rydelius
 Reviewed By: [Signature]
 Date: 5/25/04
 Time: 1:29

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D7, Pacheco, CA 94553 5560
 Telephone: 925 798 1620 Fax: 925 798 1622
 Website: www.mccampbell.com E-mail: info@mccampbell.com

Client Project ID: #522-1000-28, John Nady
 Date Sampled: 05/18/04
 Date Received: 05/20/04
 Date Reported: 05/25/04
 Date Analyzed: 05/21/04

Client Contact: Matt Meyers
 Client P.O.:
 Date Analyzed: 05/14/04-05/15/04

Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*
 Extraction Method: SW 8030B Analytical Method: SW 8021B/8015C/m Work Order: 0405185

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	SP-LA-11	S	80,ug	ND	ND	ND	0.026	0.14	1	110

WorkOrder: 0405329
 May 25, 2004

- Dear Matt
- Enclosed are
- 1) the results of 1 analyzed sample from your #522-1000-28; John Nady project,
 - 2) a QC report for the above sample
 - 3) a copy of the chain of custody, and
 - 4) a bill for analytical services

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

 Angela Rydelius, Lab Manager

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #D7, Pacheco, CA 94553 5560
 Telephone: 925 798 1620 Fax: 925 798 1622
 Website: www.mccampbell.com E-mail: info@mccampbell.com

Client Project ID: #522-1000-28, John Nady
 Date Sampled: 05/18/04
 Date Received: 05/20/04
 Date Reported: 05/25/04
 Date Analyzed: 05/21/04

Client Contact: Matt Meyers
 Client P.O.:
 Date Analyzed: 05/14/04-05/15/04

Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*
 Extraction Method: SW 8030B Analytical Method: SW 8021B/8015C/m Work Order: 0405185

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	SP-LA-11	S	80,ug	ND	ND	ND	0.026	0.14	1	110

Reporting Limit for DF=1
 ND means not detected at or above the reporting limit

	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	1 mg/kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/solid/solid samples in mg/kg, wipe samples in ug/wipe, product/water aqueous liquid samples in mg/L.

chlorinated chromatogram, sample peak coelutes with surrogate peak.

*The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline?), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline?, e) TPH pattern that does not appear to be derived from gasoline (roadblock solvent / mineral spirits?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible alcohol/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

QC SUMMARY REPORT FOR 6010C

Main S

WorkOrder: 04053319

EPA Method	SW09068	MSD	MSD	MS MSD	ICS	ICSD	ICSID	Acceptance Criteria (%)
Sample	mg/kg	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	Low High
1016	10	123	91.2	21.7	100	100	2.76	80 120
991	210	101	91.8	21.6	100	100	1.09	80 120

MSD = Matrix Spike MSO = Matrix Spike Recovered TCS = Laboratory Control Spike ICSD = Laboratory Control Spike Duplicate PSD = Residue Percent
 Recovery = 100% (MS Sample) (Amount Spiked) / (Amount Recovered) * 100
 Acceptance Criteria for MS (MSD) is between 70% and 130%. MS and/or MSO (duplicate recoveries) may not be near 100% or the PSD may be 0% if the sample is homogeneous and/or contains significant concentrations of analyte relative to the amount spiked. If a PSD spike sample means indicates with slight recovery that a sample contains more than expected, it should be analyzed to a level 2x spike amount for order reason or sample diluted due to high matrix or matrix correction.
 OHS Certification No 1614

SP1 OAC Officer

McCAMPBELL ANALYTICAL INC
 110 2nd AVENUE SOUTH, #07
 PACHECO, CA 94533-5566
 Telephone (925) 798-1620 Fax (925) 798-1622

CHAIN OF CUSTODY RECORD
 TURN AROUND TIME: RUSH 24 HOUR 48 HOUR 5 DAY
 EDF Required? Yes No

Report To: Matt Meyers Bill To: Cambria
 Company: Cambria Environmental Technology, Inc.
 5900 Hollis Street, Suite A
 Emeryville, CA 94608 E-mail: mmeyers@cambria-env.com
 Tele: (510) 420-3314 Fax: (510) 420-9170
 Project #: 522-1000-28 Project Name: John Nady
 Project Location: 1137-1167 65th Street, Oakland
 Sampler Signature: _____

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Container	MATRIX					METHOD		Comments	
		Date	Time			Water	Soil	Sludge	Other	IC	ICSD	ICSD		Other
SP-1A		5/18/04	11:00	1	Tyvek	X	X	X	X	X	X	X	X	
SP-1B			1:45											
SP-1C			5:00											
SP-1D		5/19/04	10am											
SP-1E														
SP-1F														
SP-1G														
SP-1H														

REMARKS: Composite 8 into 1 jar
 if Benzene is >10 ppm, run TLCP.

Requested By: _____ Date: 5/17/04 Time: 12:00 Received By: "SECURE LOCATION"
 Requisitioned By: _____ Date: 5/16/04 Time: 3:10 Received By: _____
 Requisitioned By: _____ Date: 5/20/04 Time: 10:30 Received By: M. J. Hall

CHAIN-OF-CUSTODY RECORD

McC Campbell Analytical, Inc.

110 Second Avenue South, #07
 Pacheco, CA 94533-5566
 (925) 798-1620

WorkOrder: 04053329 ClientID: CETE

Report to: Matt Meyers
 Cambria Env. Technology
 5600 Hollis St, Suite A
 Emeryville, CA 94608

TEL (510) 420-0700
 FAX (510) 420-9170
 Project No. #522-1000-28; John Nady
 PO:

Bill to: Accounts Payable
 Cambria Env. Technology
 5900 Hollis St, Ste A
 Emeryville, CA 94608

Requested TAT: 5 days
 Date Received: 5/20/04
 Date Printed: 5/20/04

Sample ID	Client/SampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
04053329-001	SP-1A-H	Soil	5/18/04		A	A	A												

Test Legend:

1	G-MBTX S	2	PB S	3	TPH(DM) S	4		5	
6		7		8		9		10	
11		12		13		14		15	

Comments:

NOTE: Samples are discarded 80 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McC Campbell Analytical, Inc.
 110 2nd Avenue South, #07, Pacheco, CA 94533-5566
 Telephone: 925-798-1620 Fax: 925-798-1622
 Website: www.mcccampbell.com Email: info@mcccampbell.com

Cambria Env. Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

Client Project ID: #522-1000-28; John Nady
 Client Contact: Matt Meyers
 Client P.O.

Date Sampled: 05/18/04
 Date Received: 05/20/04
 Date Reported: 05/26/04
 Date Completed: 05/26/04

WorkOrder: 04053319
 May 26, 2004

Dear Matt:

Enclosed are

- 1) the results of 5 analyzed samples from your #522-1000-28; John Nady project,
- 2) a QC report for the above samples
- 3) a copy of the chain of custody, and
- 4) a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yogen (up)
 Angela Ryckhus, Lab Manager

McCampbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mta@mccampbell.com			
Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/18/04			
	Client Contact Matt Meyers	Date Received 05/20/04			
	Client P.O.	Date Extracted 05/20/04			
		Date Analyzed 05/21/04			
Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*					
Lab ID 0405331-001A - 0405331-002A 0405331-003A 0405331-004A		Analytical Method: SW801B-9015Cm Work Order: 0405331			
Client ID	MW-5B@5	MW-5B@10	MW-5B@15		
Matrix	S	S	S		
DF	1	1	1		
Reporting Limit for DF = 1	S	W			
Compound	Concentration			mg/kg	ug/L
TPH(g)	ND	ND	410	ND	1.0
TPH(ss)	ND	ND	390	ND	1.0
MTBE	ND	ND	ND<0.0	ND	0.05
Benzene	ND	ND	ND<0.10	ND	0.005
Toluene	ND	ND	ND<0.10	ND	0.005
Ethylbenzene	ND	ND	ND<0.10	ND	0.005
Xylenes	ND	ND	1.4	ND	0.005
Surrogate Recoveries (%)					
%SS	99.7	108	93.5	96.5	
Comments	S				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sediment/solid samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L

clustered chromatogram, sample peak coelutes with surrogate peak

* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline?), c) higher gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline?, e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible show/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern

DHS Certification No 1644

Angela Rydelus, Lab Manager

McCampbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mccampbell.com E-mail: mta@mccampbell.com			
Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/18/04			
	Client Contact Matt Meyers	Date Received 05/20/04			
	Client P.O.	Date Extracted 05/20/04			
		Date Analyzed 05/21/04			
Gasoline Range (C6-C12), Stoddard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX and MTBE*					
Lab ID 0405331-005A		Analytical Method: SW801B-9015Cm Work Order: 0405331			
Client ID	MW-5B@24				
Matrix	S				
DF	1				
Reporting Limit for DF = 1	S	W			
Compound	Concentration			mg/kg	ug/L
TPH(g)	ND			1.0	NA
TPH(ss)	ND			1.0	NA
MTBE	ND			0.05	NA
Benzene	ND			0.005	NA
Toluene	ND			0.005	NA
Ethylbenzene	ND			0.005	NA
Xylenes	ND			0.005	NA
Surrogate Recoveries (%)					
%SS	98.3				
Comments					

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sediment/solid samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L

clustered chromatogram, sample peak coelutes with surrogate peak

* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline?), c) higher gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline?, e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible show/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern

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Angela Rydelus, Lab Manager

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Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled: 05/18/04		
	Client Contact Matt Meyers	Date Received 05/20/04		
	Client P.O.:	Date Extracted 05/20/04		
		Date Analyzed: 05/22/04		
Diesel (C10-23) and Oil (C10+) Range Extractable Hydrocarbons as Diesel and Motor Oil*				
Lab ID 0405331-001A - 0405331-002A 0405331-003A 0405331-004A		Analytical Method: SW8015C Work Order: 0405331		
Client ID	MW-5B@5	MW-5B@10	MW-5B@15	
Matrix	S	S	S	
DF	1	1	1	
Reporting Limit for DF = 1	S	W		
Compound	Concentration			ug/L
TPH(mg)	ND	ND	ND	102
TPH(ss)	ND	ND	ND	102
0405331-001A	MW-5B@5	S	ND	102
0405331-002A	MW-5B@10	S	ND	102
0405331-003A	MW-5B@15	S	42.8b	107
0405331-004A	MW-5B@20	S	ND	102
0405331-005A	MW-5B@24	S	ND	102
Reporting Limit for DF = 1, ND means not detected at or above the reporting limit				
W	NA	NA	NA	ug/L
S	1.0	5.0		mg/kg
* water samples are reported in ug/L, wipe samples in ug/wipe, soil/sediment/solid samples in mg/kg, product/non-aqueous liquid samples in mg/L, and all DISTLC / S11C / SPLP / TCLP extracts are reported in ug/L				
# clustered chromatogram resulting in coeluted surrogate and sample peaks, or, surrogate peak is on elevated baseline, or, surrogate has been diminished by dilution of original extract				
* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) diesel range compounds are significant, no recognizable pattern, c) aged diesel is significant, d) gasoline range compounds are significant, e) unknown medium boiling point pattern that does not appear to be derived from diesel (aphak?), f) one to a few isolated peaks present, g) oil range compounds are significant, h) lighter than water immiscible show/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) kerosene/diesel range, l) bunker oil, m) fuel oil, n) stoddard solvent/mineral spirit.				

DHS Certification No 1644

Angela Rydelus, Lab Manager

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Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/18/04		
	Client Contact Matt Meyers	Date Received 05/20/04		
	Client P.O.	Date Extracted 05/20/04		
		Date Analyzed 05/21/04-05/24/04		
Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*				
Lab ID 0405331-001A - 0405331-002A 0405331-003A 0405331-004A		Analytical Method: SW8015B Work Order: 0405331		
Client ID	MW-5B@5	MW-5B@10	MW-5B@15	
Matrix	S	S	S	
DF	1	1	1	
Reporting Limit for DF = 1	S	W		
Compound	Concentration			ug/L
Bromochloromethane	ND	ND	ND	5.0
Bromofluoromethane	ND	ND	ND	5.0
Bromomethane	ND	ND	ND	5.0
Carbon Tetrachloride	ND	ND	ND	5.0
Chlorobenzene	ND	ND	ND	5.0
Chloroethane	ND	ND	ND	5.0
2-Chloroethyl vinyl ether	ND	ND	ND	5.0
Chloroform	ND	ND	ND	5.0
Chloromethane	ND	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	ND	5.0
Dibromochloromethane	ND	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	ND	5.0
Dichlorodifluoromethane	ND	ND	ND	5.0
1,1-Dichloroethane	ND	ND	ND	5.0
1,2-Dichloroethane	ND	ND	ND	5.0
ETH 1,2-Dichloroethane	ND	ND	ND	5.0
trans-1,2-Dichloroethane	ND	ND	ND	5.0
1,1,2-Dichloroethane	ND	ND	ND	5.0
cis-1,2-Dichloroethane	ND	ND	ND	5.0
trans-1,3-Dichloropropane	ND	ND	ND	5.0
Methylene chloride	ND	ND	ND	5.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	5.0
Tetrachloroethene	ND	ND	ND	5.0
1,1,1-Trichloroethane	ND	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	ND	5.0
Trichloroethene	ND	ND	ND	5.0
Trichlorofluoromethane	ND	ND	ND	5.0
Vinyl Chloride	ND	ND	ND	5.0
Surrogate Recoveries (%)				
%SS	115	109	107	107
Comments	J			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sediment/solid samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L

ND means not detected above the reporting limit, N/A means analyte not applicable to this analysis

surrogate diluted out of range or surrogate coelutes with another peak

h) lighter than water immiscible show/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) sample diluted due to high organic content, k) reporting limit raised due to insufficient sample amount

DHS Certification No. 1644

Angela Rydelus, Lab Manager

Cambria Env Technology 5900 Helms St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/18/04
	Client Contact: Matt Meyers	Date Received 05/20/04
	Client P.O.	Date Extracted 05/20/04
		Date Analyzed 05/21/04-05/24/04

Halogenated Volatile Organics by P&T and GC EI-CD (8010 Basic Target List)*

Compound	Concentration	#/Kg	#/L
Bromodichloromethane	ND	5.0	NA
Bromoform	ND	5.0	NA
Bromomethane	ND	5.0	NA
Carbon Tetrachloride	ND	5.0	NA
Chlorobenzene	ND	5.0	NA
Chloroethane	ND	5.0	NA
2-Chloroethyl vinyl ether	ND	5.0	NA
Chloroform	ND	5.0	NA
Chloromethane	ND	5.0	NA
1,1-Dichloroethane	ND	5.0	NA
Dibromochloromethane	ND	5.0	NA
1,1-Dichlorobenzene	ND	5.0	NA
1,2-Dichlorobenzene	ND	5.0	NA
1,3-Dichlorobenzene	ND	5.0	NA
Dichlorodifluoromethane	ND	5.0	NA
1,1,1-Trichloroethane	ND	5.0	NA
1,1,2-Trichloroethane	ND	5.0	NA
1,1,1-Trichloroethene	ND	5.0	NA
trans-1,2-Dichloroethene	ND	5.0	NA
cis-1,2-Dichloroethene	ND	5.0	NA
1,2-Dichloropropane	ND	5.0	NA
cis-1,3-Dichloropropane	ND	5.0	NA
trans-1,3-Dichloropropane	ND	5.0	NA
Methylene chloride	ND	5.0	NA
1,1,2,2-Tetrachloroethane	ND	5.0	NA
Tetrachloroethene	ND	5.0	NA
1,1,1-Trichloroethane	ND	5.0	NA
1,1,2-Trichloroethane	ND	5.0	NA
Trichloroethene	ND	5.0	NA
Trichlorofluoromethane	ND	5.0	NA
Vinyl Chloride	ND	5.0	NA

Surrogate Recoveries (%)
 NSS 108

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/slug/solid samples in µg/kg, wipe samples in µg/wipe, product/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit. N/A means analyzer not applicable to this analysis.

surrogate diluted out of range or surrogate co-elutes with another peak.

*) lighter than water immiscible (shear) product is present, (2) liquid sample that contains greater than 1 vol % sediment, (3) sample diluted due to high organic content, (4) reporting limit raised due to insufficient sample amount.

DHS Certification No. 1644  Angela Rydelius, Lab Manager

QC SUMMARY REPORT FOR SW8021B/8015Cm

EPA Method: SW8021B/8015Cm	Extraction: SW5030B	BatchID: 11613	Spiked Sample ID: 0405321-001A	Sample		MS*		MSD*		MS-MSD*		LCS		LCS-D		LCS-LCSD		Acceptance Criteria (%)	
				mg/Kg	mg/Kg	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD	Low	High						
TPH(BTEX) [†]	ND	0.60	106	112	5.72	97.1	99.3	2.30	70	130									
MTBE	ND	0.10	82.9	90.4	8.69	99.7	93.6	6.32	70	130									
Benzene	ND	0.10	109	111	1.32	108	106	1.73	70	130									
Toluene	ND	0.10	94.5	91.4	3.36	92.1	90.1	2.22	70	130									
Ethylbenzene	ND	0.10	114	112	1.30	107	110	3.10	70	130									
Xylenes	ND	0.30	107	100	6.45	100	100	0	70	130									
%SS	89.0	0.10	107	103	3.81	87.4	103	16.4	70	130									

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCS-D = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery

† TPH(BTEX) = sum of BTEX areas from the FID

calibrated chromatogram; sample peak co-elutes with surrogate peak

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644  QA/QC Officer

QC SUMMARY REPORT FOR SW8021B/8015Cm

EPA Method: SW8021B/8015Cm	Extraction: SW5030B	BatchID: 11625	Spiked Sample ID: 0405333-004A	Sample		MS*		MSD*		MS-MSD*		LCS		LCS-D		LCS-LCSD		Acceptance Criteria (%)	
				mg/Kg	mg/Kg	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD	Low	High						
TPH(BTEX) [†]	ND	0.60	105	105	0	99.8	96.6	3.23	70	130									
MTBE	ND	0.10	87.1	87.9	0.886	93	93.7	0.687	70	130									
Benzene	ND	0.10	108	112	3.22	108	109	0.780	70	130									
Toluene	ND	0.10	92.8	94.9	2.22	92.3	91.7	0.573	70	130									
Ethylbenzene	ND	0.10	113	112	2.41	113	112	1.05	70	130									
Xylenes	ND	0.30	103	107	3.17	103	100	3.28	70	130									
%SS	90.7	0.10	105	111	5.56	97.3	103	5.69	70	130									

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCS-D = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery

† TPH(BTEX) = sum of BTEX areas from the FID

calibrated chromatogram; sample peak co-elutes with surrogate peak

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644  QA/QC Officer

QC SUMMARY REPORT FOR SW8015C

EPA Method: SW8015C	Extraction: SW3550C	BatchID: 11624	Spiked Sample ID: 0405333-004A	Sample		MS*		MSD*		MS-MSD*		LCS		LCS-D		LCS-LCSD		Acceptance Criteria (%)	
				mg/Kg	mg/Kg	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD	Low	High						
TPH(D)	ND	150	97.9	99.1	1.27	91.4	92.1	0	70	130									
%SS	103	30	101	103	1.53	103	105	0	70	130									

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCS-D = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery

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

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644  QA/QC Officer

QC SUMMARY REPORT FOR SW8021B

EPA Method	SW8021B	Sample	EPA Method		SW8020		Method 11126		Speed Sample ID	
			Method	Unit	Method	Unit	Method	Unit	Method	Unit
Chlorobenzene	ND	ND	94	817	6.96	100	111	10.6	70	130
1,1-Dichloroethene	ND	10	101	91.5	9.43	111	11.0	1.68	70	130
Trichloroethene	ND	50	98	81.9	9.80	104	10.3	1.50	70	130
MSX	101	101	101	0.118	103	103	0	70	130	130

All target compounds in the Method Book of this extraction batch were ND but the method BL with the following exceptions:
NOTE

EDF Required? Yes No
RUSH 24 HOUR 48 HOUR 5 DAY

Analysis Request: Other: Comments:

Remarks: Lowest possible detection limits. Please email results.

NEW GOOD CONDITION HEAD SPACE ABSENT DISCHLORINATED IN LAB PRESERVATION YEAR ORO METALS OTHER

DHS Certification No. 1544

TL QAC Officer

McCAMPBELL ANALYTICAL INC
110 2ND AVENUE SOUTH #07
PACHICO, CA 94353-5560
Telephone (925) 798-1620 Fax: (925) 798-1622

Report To: Matt Meyers Bill To: Cambria
Company: Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A Emeryville, Ca 94608
Tel: (510) 420-3314 Fax: (510) 420-9170
Project #: 522-1000-28 Project Name: John Nady
Project Location: 1137-1167 65th Street, Oakland
Sampler Signature: [Signature]

EDF Required? Yes No

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX						METHOD PRESERVED		
		Date	Time			Water	Soil	Air	Sludge	Other	Ice		HCl	ENDS
MW-58@5		5/18/04	4:05	1	7086	X						X	X	
MW-58@10			4:10											
MW-58@15			4:15											
MW-58@20			4:20											
MW-58@24			5:00											

Relinquished By: [Signature] Date: 5/18/04 Time: 8pm Received By: 'SECURE LOCATION'

Relinquished By: [Signature] Date: 5/20/04 Time: 10:10 Received By: [Signature]

Relinquished By: [Signature] Date: 5/20/04 Time: 6:30 Received By: [Signature]

CHAIN-OF-CUSTODY RECORD

McC Campbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94353-5560
(925) 798-1620

WorkOrder: 0405331 ClientID: CETE

Report to: Matt Meyers Cambria Env Technology 5900 Hollis St Suite A Emeryville, CA 94608
TEL (510) 420-0700 FAX (510) 420-9170 ProjectNo #522-1000-28, John Nady PO.

Bill to: Accounts Payable Cambria Env Technology 5900 Hollis St Ste A Emeryville, CA 94608

Requested TAT: 5 days Date Received: 5/20/04 Date Printed: 5/20/04

Sample ID	Client(SampID)	Matrix	Collection Date	Hold	Requested Tests (See Legend Below)															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0405331-001	MW-58@5	Soil	5/18/04 4:05 PM		A	A	A													
0405331-002	MW-58@10	Soil	5/18/04 4:10 PM		A	A	A													
0405331-003	MW-58@15	Soil	5/18/04 4:15 PM		A	A	A													
0405331-004	MW-58@20	Soil	5/18/04 4:50 PM		A	A	A													
0405331-005	MW-58@24	Soil	5/18/04 5:00 PM		A	A	A													

Test Legend

1	5010B_S	2	G-MBTX S	3	TPH(DMO) S	4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCAMPBELL ANALYTICAL INC
110 2ND AVENUE SOUTH #07
PACHICO, CA 94353-5560
Telephone (925) 798-1620 Fax: (925) 798-1622

Report To: Matt Meyers Bill To: Cambria
Company: Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A Emeryville, Ca 94608
Tel: (510) 420-3314 Fax: (510) 420-9170
Project #: 522-1000-28 Project Name: John Nady
Project Location: 1137-1167 65th Street, Oakland
Sampler Signature: [Signature]

EDF Required? Yes No

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX						METHOD PRESERVED		
		Date	Time			Water	Soil	Air	Sludge	Other	Ice		HCl	ENDS
MW-58@5		5/18/04	4:05	1	7086	X						X	X	
MW-58@10			4:10											
MW-58@15			4:15											
MW-58@20			4:20											
MW-58@24			5:00											

Relinquished By: [Signature] Date: 5/18/04 Time: 8pm Received By: 'SECURE LOCATION'

Relinquished By: [Signature] Date: 5/20/04 Time: 10:10 Received By: [Signature]

Relinquished By: [Signature] Date: 5/20/04 Time: 6:30 Received By: [Signature]

Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/17/04
	Client Contact Matt Meyers	Date Received 05/20/04
	Client P O	Date Reported 06/11/04
		Date Completed 06/11/04

WorkOrder: 0406090

June 11, 2004

Dear Matt

Enclosed are

- 1) the results of 2 analyzed samples from your #522-1000-28; John Nady project,
- 2) a QC report for the above samples
- 3) a copy of the chain of custody, and
- 4) a bill for analytical services

All analyses were completed satisfactorily and all QC samples were found to be within our control limits

If you have any questions please contact me - McC Campbell Analytical Laboratories strives for excellence

in quality, service and cost. Thank you for your business and I look forward to working with you again

Yours truly,



Angela Rydelius, Lab Manager

McC Campbell Analytical, Inc.		110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mcccampbell.com E-mail: mna@mcccampbell.com	
Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/17/04	
	Client Contact Matt Meyers	Date Received 05/20/04	
	Client P O	Date Extracted 06/07/04	
		Date Analyzed 06/08/04-06/09/04	
Gasoline Range (C6-C12) Standard Solvent Range (C9-C12) Volatile Hydrocarbons with BTEX & MTBE*			
Extraction Method: SW50508		Analytical Method: SW801D/9913Cm	
Lab ID	0406090-002A	0406090-003A	Work Order: 0406090
Client ID	MW-4C@10	MW-4C@15	Reporting Limit for DF=1
Matrix	S	S	S
DF	I	I	W
Compound		Concentration	
TPH(g)	ND	ND	1.0 NA
TPH(m)	ND	ND	1.0 NA
MTBE	ND	ND	0.05 NA
Benzene	ND	ND	0.005 NA
Toluene	ND	ND	0.005 NA
Ethylbenzene	ND	ND	0.005 NA
Xylenes	ND	ND	0.005 NA
Surrogate Recoveries (%)			
%SS	88.5	89.4	
Comments			
* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sediment/solid samples in mg/kg, wipe samples in µg/wipe, production/non-aqueous liquid samples in mg/L.			
# clustered chromatogram, sample peak coelutes with surrogate peak.			
*The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (standard solvent/mineral spirits), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.			

DHS Certification No 1644



Angela Rydelius, Lab Manager

Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/17/04
	Client Contact Matt Meyers	Date Received 05/20/04
	Client P O	Date Extracted 06/07/04
		Date Analyzed 06/08/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction Method: SW1350C Analytical Method: SW6013C Work Order: 0406090

Lab ID	Client ID	Matrix	TPH(m)	TPH(g)	DF	% SS
0406090-002A	MW-4C@10	S	ND	ND	I	106
0406090-003A	MW-4C@15	S	ND	ND	I	106

Reporting Limit for DF=1, ND means not detected in or above the reporting limit	W	NA	NA	µg/L
	S	1.0	5.0	mg/kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/sediment/solid samples in mg/kg, production/non-aqueous liquid samples in mg/L, and all DBP/LC / STLC / SPLP / TCLP extracts are reported in µg/L.

clustered chromatogram resulting in coeluted surrogate and sample peaks, or, surrogate peak is on elevated baseline, or, surrogate has been diminished by dilution of original extract.

*The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) diesel range compounds are significant, no recognizable pattern, c) aged diesel is significant, d) gasoline range compounds are significant, e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt), f) one to a few isolated peaks present, g) oil range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, k) kerosene/kerosene range, j) bunker oil, m) fuel oil, n) standard solvent/mineral spirit.

DHS Certification No 1644



Angela Rydelius, Lab Manager

Cambria Env Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-28, John Nady	Date Sampled 05/17/04
	Client Contact Matt Meyers	Date Received 05/20/04
	Client P O	Date Extracted 06/07/04
		Date Analyzed 06/11/04

Halogenated Volatile Organics by P&T and GC-ECLD (8010 Basic Target List)*

Extraction Method: SW5000 Analytical Method: SW6013B Work Order: 0406090

Lab ID	0406090-002A	0406090-003A	Reporting Limit for DF=1
Client ID	MW-4C@10	MW-4C@15	S
Matrix	S	S	W
DF	I	I	

Compound	Concentration	µg/Kg	µg/L
Bromochloromethane	ND	ND	5.0 NA
Bromoform	ND	ND	5.0 NA
Bromomethane	ND	ND	5.0 NA
Carbon Tetrachloride	ND	ND	5.0 NA
Chlorobenzene	ND	ND	5.0 NA
Chloroethane	ND	ND	5.0 NA
1,2-Dichloroethyl vinyl ether	ND	ND	5.0 NA
Chloroform	ND	ND	5.0 NA
Chloromethane	ND	ND	5.0 NA
1,4-Dichlorobenzene	ND	ND	5.0 NA
Dibromochloromethane	ND	ND	5.0 NA
1,2-Dichlorobenzene	ND	ND	5.0 NA
1,3-Dichlorobenzene	ND	ND	5.0 NA
Dichlorodifluoromethane	ND	ND	5.0 NA
1,1-Dichloroethane	ND	ND	5.0 NA
1,2-Dichloroethane	ND	ND	5.0 NA
1,1-Dichloroethene	ND	ND	5.0 NA
cis-1,2-Dichloroethene	ND	ND	5.0 NA
trans-1,2-Dichloroethene	ND	ND	5.0 NA
1,2-Dichloroethane	ND	ND	5.0 NA
cis-1,3-Dichloropropene	ND	ND	5.0 NA
trans-1,3-Dichloropropene	ND	ND	5.0 NA
Methylene chloride	ND	ND	5.0 NA
1,1,2,2-Tetrachloroethane	ND	ND	5.0 NA
Tetrachloroethene	ND	ND	5.0 NA
1,1,1-Trichloroethane	ND	ND	5.0 NA
1,1,2-Trichloroethane	ND	ND	5.0 NA
Trichloroethene	ND	ND	5.0 NA
Trichlorofluoromethane	ND	ND	5.0 NA
Vinyl Chloride	ND	ND	5.0 NA

Surrogate Recoveries (%)	
%SS	97.0 114

Comments

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sediment/solid samples in µg/kg, wipe samples in µg/wipe, production/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit, N/A means analyte not applicable to this analysis

surrogate diluted out of range or surrogate coelutes with another peak

h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than -1 vol % sediment, j) sample diluted due to high organic content, k) reporting limit raised due to insufficient sample amount.

DHS Certification No 1644



Angela Rydelius, Lab Manager

QC SUMMARY REPORT FOR SW8021B/8015Cm

QC SUMMARY REPORT FOR SW8015C

Matrix S WorkOrder 0406090

EPA Method	SW8021B/8015Cm	Extraction SW5030B		BatchID 11847			Spiked Sample ID 0406097-002A					
		Sample mg/Kg	Spiked mg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)		
											Low	High
TPH(Direct)	ND	0.60	99.8	98.4	1.46	98	98.1	0.144	70	130		
MTBE	ND	0.10	104	99.6	3.93	107	108	0.440	70	130		
Benzene	ND	0.10	110	104	4.92	119	117	1.55	70	130		
Toluene	ND	0.10	89.5	84	6.40	95.5	93.9	1.38	70	130		
Ethylbenzene	ND	0.10	110	106	3.50	116	114	2.24	70	130		
Xylenes	ND	0.30	99.3	93	0.350	100	100	0	70	130		
%SS	91.3	0.10	103	87	16.8	109	103	5.66	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

Matrix S WorkOrder 0406090

EPA Method	SW8015C	Extraction SW3550C		BatchID 11841			Spiked Sample ID 0406075-001A					
		Sample mg/Kg	Spiked mg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)		
											Low	High
TPH(S)	ND	150	102	97.5	4.29	97.5	99.3	1.84	70	130		
%SS	107	50	114	108	5.40	104	104	0	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCSD = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation
 $\% \text{ Recovery} = 100 \cdot (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$ $\text{RPD} = 100 \cdot (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 TPH(Direct) = sum of BTEX areas from the FID
 * eluted chromatogram, sample peak coincides with surrogate peak
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCSD = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation
 $\% \text{ Recovery} = 100 \cdot (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$ $\text{RPD} = 100 \cdot (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No 1644

VJ QA/QC Officer

DHS Certification No 1644

QA/QC Officer

QC SUMMARY REPORT FOR SW8021B

Matrix S WorkOrder 0406090

EPA Method	SW8021B	Extraction SW5030		BatchID 11851			Spiked Sample ID 0406090-003A					
		Sample µg/Kg	Spiked µg/Kg	MS* % Rec	MSD* % Rec	MS-MSD* % RPD	LCS % Rec	LCSD % Rec	LCS-LCSD % RPD	Acceptance Criteria (%)		
											Low	High
Chlorobenzene	ND	50	86.7	86.3	0.422	96.8	94	2.95	70	130		
1,1-Dichloroethene	ND	50	71.1	73.9	3.86	84.2	80.2	4.82	70	130		
Trichloroethene	ND	50	78.8	83.5	6.07	90.1	84.1	6.89	70	130		
%SS	114	50	109	105	4.20	109	114	4.77	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions
 NONE

MS* = Matrix Spike, MSD* = Matrix Spike Duplicate, LCS = Laboratory Control Sample, LCSD = Laboratory Control Sample Duplicate, RPD = Relative Percent Deviation
 $\% \text{ Recovery} = 100 \cdot (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$ $\text{RPD} = 100 \cdot (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$
 MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content
 Laboratory subtraction schemes such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No 1644

VJ QA/QC Officer

CHAIN-OF-CUSTODY RECORD

McC Campbell Analytical, Inc.
 110 Second Avenue South, #D7
 Picoche, CA 94553-5560
 (925) 798-1620

WorkOrder: 0406090 ClientID: CETE
 Requested TAT: 5 days
 Date Received: 5/20/04
 Date Printed: 5/7/04
 Bill to: Accounts Payable
 Cambria Env Technology
 5900 Hollis St, Ste A
 Emeryville, CA 94608

Sample ID	Client/StampID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0406090-002	MM-40310	Soil	5/17/04 8:40:00 AM		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
0406090-003	MM-40310	Soil	5/17/04 8:50:00 AM		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Test Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8P109-S															
G-METEX-S															
TPH(Direct)-S															

Prepared by: Maria Yanezas

Comments: Sample off hold 5/7/04 (received 5/20) ok to run out of hold time

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-027, John Nady	Date Sampled 06/03/04
	Client Contact Matt Meyers	Date Received 06/04/04
	Client P.O.	Date Extracted 06/09/04-06/11/04
		Date Analyzed 06/09/04-06/11/04

Gasoline (C6-C13), Standard Solvent (C9-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Lab ID	0406080-007A	0406080-010A	0406080-011A	0406080-012A	Reporting Limit for DF=1
Client ID	MW-5B	MW-6A	MW-6B	MW-6C	
Matrix	W	W	W	W	
DF	1	1	1	1	

Compound	Concentration				ug/g	ug/L
TPH(g)	ND	970	1100	160	NA	50
TPH(u)	ND	2400	2900	340	NA	50
MTBE	ND	ND	ND	ND	NA	5.0
Benzene	ND	ND	ND	ND	NA	0.5
Toluene	ND	ND	ND	ND	NA	0.5
Ethylbenzene	ND	ND	ND	ND	NA	0.5
Xylenes	ND	2.1	1.4	1.1	NA	0.5

Surrogate Recoveries (%)						
%SS	86.0	82.8	82.7	90.3		

* water and vapor samples and all TCLP & SPL extracts are reported in ug/L, soil/solid/adsorbent samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L.
 † clustered chromatogram, sample peak coelutes with surrogate peak

* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (standard solvent / mineral spirit), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas) m) no recognizable pattern

DHS Certification No. 1644

Angela Rydelius, Lab Manager

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-027, John Nady	Date Sampled 06/03/04
	Client Contact Matt Meyers	Date Received 06/04/04
	Client P.O.	Date Extracted 06/09/04-06/11/04
		Date Analyzed 06/09/04-06/11/04

Gasoline (C6-C12), Standard Solvent (C9-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Lab ID	0406080-013A	Reporting Limit for DF=1
Client ID	MW-7A	
Matrix	W	
DF	10	

Compound	Concentration		ug/g	ug/L
TPH(g)	3900		NA	50
TPH(u)	9900		NA	50
MTBE	ND<5.0		NA	5.0
Benzene	ND<5.0		NA	0.5
Toluene	ND<5.0		NA	0.5
Ethylbenzene	ND<5.0		NA	0.5
Xylenes	6.6		NA	0.5

Surrogate Recoveries (%)				
%SS	81.6			

* water and vapor samples and all TCLP & SPL extracts are reported in ug/L, soil/solid/adsorbent samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L.
 † clustered chromatogram, sample peak coelutes with surrogate peak

* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant (aged gasoline), c) lighter gasoline range compounds (the most mobile fraction) are significant, d) gasoline range compounds having broad chromatographic peaks are significant, biologically altered gasoline, e) TPH pattern that does not appear to be derived from gasoline (standard solvent / mineral spirit), f) one to a few isolated non-target peaks present, g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) reporting limit raised due to high MTBE content, k) TPH pattern that does not appear to be derived from gasoline (aviation gas) m) no recognizable pattern

DHS Certification No. 1644

Angela Rydelius, Lab Manager

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-027, John Nady	Date Sampled 06/03/04
	Client Contact Matt Meyers	Date Received 06/04/04
	Client P.O.	Date Extracted 06/04/04
		Date Analyzed 06/07/04-06/09/04

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Lab ID	Client ID	Matrix	TPH(g)	TPH(u)	DF	%SS
0406080-001C	MW-1A	W	1300.d,b	260	1	102
0406080-002C	MW-1B	W	ND	ND	1	108
0406080-003C	MW-1C	W	ND	ND	1	102
0406080-004C	MW-2A	W	2900.d	ND	1	105
0406080-005C	MW-3A	W	90,000.n b,g,d,h	6000	20	89.6
0406080-006C	MW-4A	W	270.g,b	440	1	92.7
0406080-007C	MW-4B	W	ND	ND	1	102
0406080-008C	MW-4C	W	ND	ND	1	104
0406080-009C	MW-5B	W	ND	ND	1	101
0406080-010C	MW-6A	W	3500.d,b	340	1	97.6
0406080-011C	MW-6B	W	2300.d,b	ND	1	102
0406080-012C	MW-6C	W	240.d,b	ND	1	97.5

Reporting Limit for DF=1, ND means not detected at or above the reporting limit						
W	50		250			ug/L
S	NA		NA			mg/kg

* water samples are reported in ug/L, wipe samples in ug/wipe, soil/solid/adsorbent samples in mg/kg, product/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPL / TCLP extracts are reported in ug/L.
 † clustered chromatogram resulting in co-eluted surrogate and sample peaks, or: surrogate peak is on elevated baseline, or: surrogate has been diminished by dilution of original extract

* The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant, b) diesel range compounds are significant, no recognizable pattern, c) aged diesel is significant, d) gasoline range compounds are significant, e) unknown medium boiling point pattern that does not appear to be derived from diesel (automotive transmission fluid), f) one to a few isolated peaks present, g) oil range compounds are significant, h) lighter than water immiscible sheen/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) kerene/microsene range, k) bunker oil, m) fuel oil, n) standard solvent/mineral spirit

DHS Certification No. 1644

Angela Rydelius, Lab Manager

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID #522-1000-027, John Nady	Date Sampled 06/03/04
	Client Contact Matt Meyers	Date Received 06/04/04
	Client P.O.	Date Extracted 06/09/04-06/11/04
		Date Analyzed 06/09/04-06/11/04

Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)*

Lab ID	0406080-001B	0406080-002B	0406080-003B	0406080-004B	Reporting Limit for DF=1
Client ID	MW-1A	MW-1B	MW-1C	MW-2A	
Matrix	W	W	W	W	
DF	5	1	1	1	

Compound	Concentration				ug/g	ug/L
Bromochloromethane	ND<2.5	ND	ND	ND	NA	0.5
Bromofom	ND<2.5	ND	ND	ND	NA	0.5
Bromomethane	ND<2.5	ND	ND	ND	NA	0.5
Carbon Tetrachloride	ND<2.5	ND	ND	ND	NA	0.5
Chlorobenzene	ND<2.5	ND	ND	ND	NA	0.5
Chloroethane	ND<2.5	ND	ND	ND	NA	0.5
1,2-Dichloroethyl vinyl ether	ND<2.5	ND	ND	ND	NA	0.5
Chloroform	ND<2.5	8.3	0.57	ND	NA	0.5
Chloromethane	ND<2.5	ND	ND	ND	NA	0.5
Dibromochloromethane	ND<2.5	ND	ND	ND	NA	0.5
1,2-Dichlorobenzene	ND<2.5	ND	ND	ND	NA	0.5
1,3-Dichlorobenzene	ND<2.5	ND	ND	ND	NA	0.6
1,4-Dichlorobenzene	ND<2.5	ND	ND	ND	NA	0.6
Dichlorodifluoromethane	ND<2.5	ND	ND	ND	NA	0.6
1,1-Dichloroethane	ND<2.5	8.1	ND	ND	NA	0.6
1,2-Dichloroethane	ND<2.5	7.9	ND	ND	NA	0.5
1,1-Dichloroethene	ND<2.5	ND	ND	ND	NA	0.6
cis-1,2-Dichloroethene	36	3.9	ND	ND	NA	0.6
trans-1,2-Dichloroethene	ND<2.5	ND	ND	ND	NA	0.6
1,2-Dichloropropane	ND<2.5	ND	ND	ND	NA	0.5
cis-1,3-Dichloropropene	ND<2.5	ND	ND	ND	NA	0.5
trans-1,3-Dichloropropene	ND<2.5	ND	ND	ND	NA	0.5
Methylene chloride	ND<2.5	ND	ND	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND<2.5	ND	ND	ND	NA	0.5
Tetrachloroethene	53	ND	ND	ND	NA	0.5
1,1,1-Trichloroethane	ND<2.5	ND	ND	ND	NA	0.5
1,1,2-Trichloroethane	ND<2.5	ND	ND	ND	NA	0.5
Trichloroethene	16	ND	ND	ND	NA	0.6
Trichlorofluoromethane	ND<2.5	ND	ND	ND	NA	0.6
Vinyl Chloride	6.3	ND	ND	ND	NA	0.6

Surrogate Recoveries (%)				
%SS	91.4	102	92.6	88.1

* water and vapor samples and all TCLP & SPL extracts are reported in ug/L, soil/solid/adsorbent samples in mg/kg, wipe samples in ug/wipe, product/non-aqueous liquid samples in mg/L.
 ND means not detected above the reporting limit, N/A means analyte not applicable to this analysis

* surrogate diluted out of range or surrogate coelutes with another peak.
 † higher than water immiscible sheen/product is present, i) liquid sample that contains greater than ~1 vol % sediment, j) sample diluted due to high organic content, k) reporting limit raised due to insufficient sample amount.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix W WorkOrder: 0406080

EPA Method	SW8021B/8015Cm	Extraction		BatchID: 11843			Spiked Sample ID: 0406080-009A				Acceptance Criteria (%)	
		Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	% RPD	Low	High
		µg/L	µg/L	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD			
TPH(hex)	ND	60	99.3	97	2.55	83.3	84.8	1.57	70	130		
NTRF	ND	10	104	105	1.43	84.8	85.8	1.76	70	130		
Benzene	ND	30	111	107	2.48	86.5	87.3	0.992	70	130		
Toluene	ND	10	103	105	2.44	87.9	88.6	0.788	70	130		
Ethylbenzene	ND	30	110	105	4.52	90.2	90.7	0.533	70	130		
Xylenes	ND	30	96	95	1.03	90.3	90.3	0	70	130		
%SS	86.0	10	107	107	0	93.6	96.3	0.679	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 $\% Recovery = 100 * (MS - Sample) / (Amount Spiked)$ $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$
 *MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 †TPH(hex) = sum of BTEX areas from the FID
 ‡Chromatogram sample peak co-elutes with surrogate peak
 N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No. 1644

QA/QC Officer

QC SUMMARY REPORT FOR SW8015C

Matrix W WorkOrder: 0406080

EPA Method	SW8015C	Extraction		BatchID: 11833			Spiked Sample ID: N/A				Acceptance Criteria (%)	
		Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	% RPD	Low	High
		µg/L	µg/L	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD			
TPH(h)	N/A	7500	N/A	N/A	N/A	N/A	109	108	0.413	70	130	
%SS	N/A	2500	N/A	N/A	N/A	N/A	117	116	0.491	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 $\% Recovery = 100 * (MS - Sample) / (Amount Spiked)$ $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$
 *MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No. 1644

QA/QC Officer

QC SUMMARY REPORT FOR SW8015C

Matrix W WorkOrder: 0406080

EPA Method	SW8015C	Extraction		BatchID: 11844			Spiked Sample ID: N/A				Acceptance Criteria (%)	
		Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	% RPD	Low	High
		µg/L	µg/L	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD			
TPH(h)	N/A	7500	N/A	N/A	N/A	N/A	98.1	106	7.44	70	130	
%SS	N/A	2500	N/A	N/A	N/A	N/A	108	115	6.74	70	130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 $\% Recovery = 100 * (MS - Sample) / (Amount Spiked)$ $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$
 *MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content

DHS Certification No. 1644

QA/QC Officer

QC SUMMARY REPORT FOR SW8021B

Matrix W WorkOrder: 0406080

EPA Method	SW8021B	Extraction		BatchID: 11845			Spiked Sample ID: 0406080-012A				Acceptance Criteria (%)	
		Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	% RPD	Low	High
		µg/L	µg/L	% Rec	% Rec	% RPD	% Rec	% Rec	% RPD			
Chlorobenzene	ND	10	99.8	99.2	0.603	105	105	0	70	130		
1,1-Dichloroethene	ND	10	119	123	2.98	113	113	0	70	130		
Trichloroethene	ND	10	90.2	90.7	0.553	107	106	0.522	70	130		
%SS	95	10	102	92.2	10.1	115	109	5.39	70	130		

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

MS = Matrix Spike MSD = Matrix Spike Duplicate LCS = Laboratory Control Sample LCSD = Laboratory Control Sample Duplicate RPD = Relative Percent Deviation
 $\% Recovery = 100 * (MS - Sample) / (Amount Spiked)$ $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$
 *MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if a) the sample is inhomogeneous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery
 N/A = not enough sample to perform matrix spike and matrix spike duplicate
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels

DHS Certification No. 1644

QA/QC Officer

