GOLDEN GATE ENVIRONMENTAL, INC.

Phase I & II Site Assessments
Soil & Groundwater Sampling
Site Remediation
UST Removal & Oversight
Waste Management

April 14, 2008
GGE Project #2006

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502 - 6577

Subject: **Preliminary Site Characterization**
757 Santa Clara Avenue, Alameda, California
ACEH Case # RO0002957

Dear Mr. Plunkett:

Golden Gate Environmental, Inc. (GGE) is pleased to submit the enclosed Preliminary Site Characterization Report, which discusses the activities and findings of the preliminary soil and groundwater investigation performed on March 5, 2008 at the site located at 757 Santa Clara Avenue in Alameda, California. GGE uploaded an electronic copy of the Site Map, Boring Logs, Analytical Data and Report to the State Water Resources Control Board's GeoTracker Database System.

Should you have any questions, please contact us at your convenience. In my absence from the office, I may be reached by cellular service at (415) 686-8846.

Respectfully Submitted,

Brent A. Wheeler
Golden Gate Environmental, Inc.

Enclosures (1)

Cc: Mr. Fred Selk, 44 Basinside Way, Alameda, CA 94502

PRELIMINARY SITE CHARACTERIZATION REPORT

757 Santa Clara Avenue
Alameda, California 94501
ACEH # RO0002957

Prepared For:

Alvin L. Selk & Aracely Selk Trust
c/o Mr. Frederick Selk
44 Basinside Way
Alameda, CA 94502

Prepared By:

Golden Gate Environmental, Inc.
3730 Mission Street
San Francisco, CA 94110

GGE Project No. 2006
April 14, 2008

PROFESSIONAL GEOLOGIST
EUGENIO DIAZ
No. 7696
STATE OF CALIFORNIA

Eugenio Diaz, P.G.
Project Geologist

Brent A. Wheeler
Project Manager

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INTRODUCTION

Purpose

On behalf of the Alvin L. Selk & Aracely Selk Trust, Golden Gate Environmental, Inc. (GGE) is pleased to submit this report, which discusses the activities and findings of the preliminary soil and groundwater investigation activities, conducted in March 2008 at the Selk Apartments located at 757 Santa Clara Avenue in Alameda, California (the Site). The report was prepared in response to a letter issued by the Alameda County Environmental Health (ACEH; Site #RO0002957), which requested a preliminary assessment to determine the extent of hydrocarbons in soil and groundwater in the direct vicinity of the former underground storage tank (UST) system.

The purpose of this report is to present the activities and findings of the subsurface investigation performed at the Site, and based on evaluation and interpretation of the data obtained, provide conclusions and recommendations for additionally required investigation or Site closure review. The investigation activities were conducted in general accordance with our *Draft Work Plan Preliminary Site Characterization* dated December 7, 2007, which was approved by the ACEH in a letter dated February 13, 2008. The general scope of work proposed in the work plan included drilling four percussion subsurface soil borings and collecting representative soil and grab groundwater samples for laboratory analysis. The investigation activities were performed in general accordance with the State Water Resources Control Board's Leaking Underground Fuel Tank (LUFT) manual and the TRI-Regional Board Staff Recommendation for Preliminary Evaluation and Investigation of Underground Tank Sites. A Copy of the ACEH February 13, 2008 letter is presented in Appendix A.

Scope of Work

The general scope of work conducted at the site included the following:

- Pre-field work activities and permitting
- Percussion soil boring activities
- Soil and grab groundwater sampling activities
- Sample handling and transportation
- Backfilling activities
- Sample analysis
- Temporary wellhead elevation survey
- Waste Management
- Subsurface utility & sensitive receptor survey
- Data interpretation, report preparation and submittal.

Site Location and Description

The Site is located at the north side of Santa Clara Avenue, approximately 350 feet west of Eighth Street and approximately 270 feet east of Page Street, in the City and County of Alameda. The Site lies approximately 0.8 mile south and up gradient from the Oakland Inner Harbor. The location of the Site is shown in Figure 1, *Site Location Map*.

According to Figure 1, the elevation of the Site is estimated to be approximately 18 feet above Mean Sea Level. The Site consists of a rectangular multi-unit apartment building with a front landscaped area and an additional parking area in the rear. The Site occupies approximately 5,617 square feet (0.13 acre) in lot area and has been owned by Alvin L. Selk & Aracely Selk since September 1980 (Alameda County Assessor Parcel 73-420-10). The Site and abutting properties are zoned as General Residential District (R-5; City of Alameda Planning & Zoning).

The Site is relatively flat lying with the topographic relief generally directed towards the north-northwest (Figure 1), in the general direction of the Oakland Inner Harbor. A multi-story, apartment building, approximately 2,610 square feet in area, is situated on the majority of the Site, with one small storage garage located at the southwest corner of the building and and a covered driveway on the east side of the building providing access for tenant vehicular parking in the rear. The surface area leading to the rear garage and rear parking area are completely paved with concrete. The rear parking area dips sharply to the north before the garage entrance. The front entryway of the building is paved throughout with concrete, with small landscaped areas on each side of the garage driveway ramps (Figure 2). The City right of way sidewalk borders the south property line.

One 1,500-gallon underground heating oil storage tank (UST) was located beneath the sidewalk in front of the southwest corner of the Site and removed by GGTR in October 2007. Figure 2, *Site Map*, shows Site features and the approximate location of the former UST.

Site Geology and Hydrogeology

According to a Geologic Map of the San Francisco-San Jose Quadrangle (California Department of Conservation, 1990), the Site lies on dune sand and artificial fill and underlain by up to 500 feet of Quaternary alluvial deposits (unconsolidated and dissected stream and basin deposits) and possibly marine sandstone, shale, cherts, and conglomerates of the Mesozoic Franciscan Complex (thickness not established). Soil beneath the Site was described during the tank removal activities as sandy clay / clayey sand. The geologic map also indicates that the Site is situated approximately 5 miles southwest and 16 miles northeast of the Hayward and San Andreas Fault Zones, respectively.

The Site is in the East Bay Plain groundwater basin according to the San Francisco Bay Basin Water Quality Control Plan prepared by the CRWQCB – Region 2, 1995. Groundwater in this basin is designated beneficial for municipal and domestic water supply and industrial process, service water, and agricultural water supply.

The regional groundwater flow direction in the vicinity of the Site is estimated to be toward the north-northwest, in the general direction of the Oakland Inner Harbor and decreasing

topographic relief. The nearest surface water body is the Robert Crown Memorial State Beach Inlet of the San Francisco Bay, located approximately 0.4 mile southwest of the Site (Figure 1).

Site Subsurface Geology and Hydrogeology

Shallow subsurface soil texture described by GGE field personnel during the March 2008 soil boring and sampling activities, was predominantly a silty sand, dark yellowish brown to dark brown, moist to wet, very fine to fine-grained sand, to the total explored sample depth of 10.5 feet below grade (fbg) (See Boring Logs, Appendix B). No hydrocarbon odor was detected in any of the soil borings. The depth to groundwater at the site as measured during drilling activities on March 5, 2008, was between approximately 7.3 and 8.5 fbg (non-static). The static groundwater level measured during temporary wellhead elevation survey activities on March 7, 2008, was between 6.98 and 7.77 fbg. The associated groundwater flow direction is estimated toward the southeast (S30E) under a hydraulic gradient of 0.02 ft/ft (Figure 3). As shown in Figure 1, there is a small elliptical-shaped topographic depression area (@ 750' x 450') situated approximately 500 feet southwest of the Site and centrally located at the intersection of Page & Taylor Streets; its elevation is approximately 15 feet below MSL. This surface depression may be influencing Site groundwater flow toward the southeast.

Environmental Background

On October 16, 2007, Golden Gate Tank Removal, Inc. (GGTR) removed one 1,500-gallon heating oil UST from under the sidewalk in front of the Site (Figure 2). A confirmation soil sample collected from the center of the excavation at 11 feet below grade (fbg) and a four point composite soil sample collected from the excavation overburden stockpile contained concentrations of total petroleum hydrocarbons as diesel (TPH-D) at 170 milligrams per kilograms (mg/kg) and 160 mg/kg, respectively. However, the laboratory indicated that these results were an atypical diesel pattern and that the compound detected was in the carbon range C10-C34; TPH as heating oil generally lies within this range. The compounds benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) were not detected in the confirmation soil sample or the composite soil sample. Groundwater was not encountered during the UST removal and sampling activities. Figure 2 depicts the approximate confirmation soil sample location. Table 1 attached, summarizes the UST removal soil sample results.

During removal and sampling activities, GGTR cut the associated subsurface product piping (situated approximately 1 fbg) at a location approximately 16 feet north of the UST excavation (south foundation of building). GGTR subsequently drained the piping of residual product and removed the 16-foot section from the Site (Figure 2). The subsurface product piping remaining in place and extending further north toward the boiler room was drained of any residual product and capped. No fuel dispenser was located onsite. With the approval of Mr. Robert Westin of the ACEH, GGTR backfilled the excavation with the UST excavation overburden soil (3-9 fbg) and clean imported Class II baserock (0.5-3 fbg), and the overlying sidewalk was replaced with concrete according to City of Alameda Department of Public

Works (CADPW) requirements. UST removal and sampling activities were conducted under the direct supervision of Mr. Robert Westin of the ACEH. Additional details including sample analytical results are included in the document entitled *Tank Closure Report. GGTR, November 6, 2007.*

Based on a review of the confirmation soil sample and composite soil sample analytical results, the ACEH requested a work plan to assess the extent of the hydrocarbon-impacted soil in the vicinity of the former UST. The ACEH also requested to assess whether hydrocarbons have impacted the groundwater beneath the Site.

On November 26, 2007, Mr. Fred Selk contracted GGE to prepare the requested work plan and implement the proposed work plan activities, upon approval by the ACEH. On December 7, 2007, GGE submitted its *Draft Work Plan Preliminary Site Characterization* to the ACEH Cleanup Oversight Program's FTP site, which was subsequently approved in a letter dated February 13, 2008. The findings and results of the Preliminary Site Characterization activities are presented in the following sections.

INVESTIGATION ACTIVITIES

Sequence

The following is the sequence of the Preliminary Site Assessment investigation activities performed at the Site in March 2008:

- Notified all representative parties of scheduled field activities
- Obtained a Drilling Permit from the Alameda County Public Works Agency (ACPWA)-Water Resources Division, and a Right-of-Way Permit and an Encroachment Permit from the CADPW Engineering Division for work conducted in the public right of way
- Prepared a Traffic Control Plan for pedestrian and/or vehicle diversion during work activities conducted in the public right-of-way
- Prepared a Site-specific Health & Safety Plan
- Outlined the proposed work area and boring locations in white surface paint and notified Underground Service Alert (USA) for subsurface utility clearance
- Conducted soil boring and sampling activities
- Submitted selected soil samples and grab groundwater samples to a State-certified environmental laboratory for analysis

- Performed temporary wellhead elevation survey activities to establish Site-specific groundwater elevation and gradient data

- Profiled, transported, and disposed of all generated soil and liquid wastes to a State-licensed disposal/recycling facility

- Performed a subsurface utility and sensitive receptor survey in the vicinity of the Site

- Interpreted all field and analytical data and prepared a report summarizing the activities, findings, and conclusions of the investigation

- Uploaded all analytical data to State Geo Tracker Database System.

Pre-Field Activities

Prior to commencing all fieldwork, GGE scheduled John Carver Civil Engineering (JCCE) of Oakland, California for the proposed percussion drilling activities at the Site. Subsequently, GGE obtained drilling Permit No. WR2008-0071 from the ACPWA-Water Resources Division, and Right-of-Way Permit No. EX08-0009 and Encroachment Permit No. EN08-0010 from the CADPW. GGE also prepared a Community Site Health and Safety Plan (HASP) and a traffic Control Plan for all field activities performed at the Site. GGE then notified all property representatives and regulatory personnel of all scheduled fieldwork dates. GGE marked the general work area and proposed boring locations in white surface paint and notified USA at least 72 hours prior to commencement of drilling activities, so that any subsurface utilities extending through the work area are located. Copies of the drilling and encroachment permits are included in Appendix A.

Proposed boring locations were chosen in areas free of conflict with overhead utility lines and marked subsurface utilities, and in areas accessible for a limited access, trailer-mounted GeoProbe® drill rig. Actual boring locations were determined by on-site field personnel during drilling activities, and are shown in Figure 2.

Drilling and Soil Sampling Activities

On March 5, 2008, GGE contracted JCCE (State Contractors C-57 License #407379) to perform the additional soil boring and sampling activities at the Site. GGE initially conducted a safety tailgate meeting with all pertinent Site personnel to discuss all information provided in the project Health and Safety Plan. GGE inspected the percussion drill tubes for cleanliness to avoid cross contamination between differing sites.

Prior to drilling, GGE directed JCCE to hand auger the proposed soil borings (B1 through B4) up to approximately 5 fbg to clear for any unmarked utilities. JCCE drilled B1 through B4 up to approximately 10.5 fbg using 2-inch diameter, dual cased, percussion drill tubing [Direct Push Technology (DPT)]. Figure 2 depicts each soil boring location. Continuous soil samples were collected in each boring at 2-feet intervals, between 4 and 10 fbg, by hydraulically driving a 1-inch-diameter, butyrate plastic tube-lined, split spoon sampler into relatively undisturbed soil.

At the bottom section of each sample interval, GGE monitored and recorded the organic vapor concentrations of each soil sample using a Mini Rae® Photoionization Detector and classified and logged all soil samples and hand auger soil cuttings using the Unified Soil Classification System and Munsell Rock Color Chart. Soil boring logs of B1 through B4 are presented in Appendix B.

Immediately following soil sample collection, GGE chose a representative portion of the sample tube (0.5-foot-long) from each sample interval, sealed the ends of each sample tube with Teflon® tape and plastic caps, appropriately labeled each tube and transferred the samples to a cooler chilled to approximately 4º Centigrade. The core sampler was decontaminated between each sample interval using an Alconox® solution and double rinsed with clean, potable water. Equipment wash and rinse water was subsequently transferred to a 55-gallon D.O.T.-approved steel drum and temporarily stored onsite. All samples were submitted under chain of custody command to Accutest Laboratories of Santa Clara, California (State ELAP #2346).

Soil Sample Analysis

Analytical soil samples collected from each soil boring were analyzed for the following compounds using approved Environmental Protection Agency (EPA) methods:

- TPH as Heating Oil TPH-HO, includes Diesel (TPH-D) and Motor Oil (TPH-MO) by EPA Method 3445A/8015B(M)
- BTEX by EPA Method 5030B/8260B
- MTBE by EPA Method 5030B/8260B

Accutest performed all sample extraction and analysis in conformance with the maximum 14-day hold time for the volatile analyses.

The attached Table 2 includes a summary the laboratory analytical results of the soil samples collected from B1 through B4. A copy of the laboratory analytical report, QA/QC report, and chain of custody record is included in Appendix C.

Grab Groundwater Sampling Activities

Immediately following soil sampling activities from soil borings B1 through B4, JCCE temporarily placed 0.75-inch-diameter, factory-sealed, screened piezometer casing to the approximate total depth of each borehole. JCCE monitored and recorded the depth to groundwater in each borehole relative to grade surface using an electronic water level indicator. GGE collected a grab groundwater sample from B1 through B4 using a peristaltic pump with dedicated polyethylene tubing. GGE carefully drained the groundwater sample from the effluent end of the peristaltic pump tubing directly into laboratory-cleaned amber 1-liter bottles and 40-milliliter volatile organic analysis (VOA) vials. GGE sealed each sample container with a threaded cap and inverted the VOA vials to insure no headspaces or

entrapped air bubbles were present. GGE appropriately labeled each sample container and immediately placed the samples in a cooler chilled to approximately 4º Centigrade.

Following grab groundwater sampling, GGE secured all temporary piezometers by covering and sealing with hydrated bentonite at grade surface to inhibit any potential surface water infiltration. All non-disposable groundwater sampling equipment was decontaminated using a non-phosphate Alconox® solution and double rinsed using clean, potable water. Equipment wash and rinse water was transferred to a 55-gallon D.O.T. approved storage drum. The drum was sealed with a steel lid, appropriately labeled as non-hazardous waste and temporarily store on site pending final disposal to a licensed facility.

Grab Groundwater Sample Analysis

All grab groundwater samples were analyzed for the following compounds using approved EPA methods.

- TPH-HO (includes TPH-D and TPH-MO) by EPA Method 3445A/8015B(M)
- BTEX by EPA Methods 5030B/8260B
- MTBE by EPA Methods 5030/8020

The grab groundwater sample collected in B4 was additionally analyzed for Total Dissolved Solids (TDS) by EPA Method 160.1 to assess groundwater quality at the Site. Accutest performed all groundwater extraction and analysis procedures in conformance with the maximum 14 day hold time for the volatile analyses.

The attached Table 3 presents a summary the laboratory analytical results of the grab groundwater samples collected from B1 through B4. A copy of the laboratory analytical report, QA/QC report, and chain of custody record is included in Appendix C.

Temporary Wellhead Survey & Backfilling Activities

On March 7, 2008, GGE returned to the Site and monitored and recorded the depth to groundwater in each temporary piezometer (B1-B4) using an electronic water level indicator. GGE then surveyed the wellhead and grade elevations of each temporary piezometer casing using an electronic level and measuring rod. All wellhead elevations were measured relative to an arbitrary datum with an assumed site elevation of 18 feet (not Mean Sea level). Wellhead elevations were measured from the top (north side) of each temporary piezometer casing, with an accuracy of 0.01 foot. Top of casing elevations were used to calculate the groundwater elevation in each temporary piezometer, which, in turn, were used to determine the groundwater flow direction and hydraulic gradient beneath the Site. Figure 3 depicts the *Groundwater Potentiometric Map* showing the approximate groundwater flow direction and gradient across the monitored area for this event. Table 3 includes the groundwater level monitoring and groundwater elevation data calculated in each temporary piezometer during this monitoring/survey event. A copy of the survey data sheet and associated fluid-level monitoring data sheet is included in Appendix D.

As inspected by the ACPWA, GGE subsequently extracted the temporary piezometer casing and backfilled each open borehole with neat Portland cement to approximately 0.5 foot below grade surface. To restore original Site conditions, GGE backfilled the balance of each borehole with surface concrete, as inspected and approved by the CADPW.

Subsurface Utility Survey

On March 18, 2008, GGE visited the Site and measured the approximate locations and directional orientation of the underground utility corridors previously marked by USA. As authorized by the City of Alameda, GGE also removed three sanitary sewer manhole covers situated adjacent to the northern bicycle lane of Santa Clara Avenue, between 8th and Page Streets, and subsequently measured the invert depths (flow line) and fluid flow directions of the sewer main. The location of the sewer main, its service laterals associated with the subject building and the adjacent property to the east (759 Santa Clara Avenue), as well as other utility corridor locations, are shown in Figure 4, *Subsurface Utility Map*. GGE visited the City of Alameda Public Works Department (Alameda Point) and acquired a copy of the sewer map to confirm pipe dimensions, invert depths, and utility corridor flow directions and gradient. Figure 5, *Cross Section A-A'*, presents a cross section (location referenced in Figure 4) through B2, B3, the former UST excavation, and pertinent subsurface utility corridors, showing soil lithology, sample depth intervals, and laboratory analytical results of soil and grab groundwater samples collected in these borings. A copy of the City sanitary sewer map is included in Appendix C.

Sensitive Receptor Survey

Included with this report are the results of a sensitive receptor survey performed between May and June 2006 at 748 Lincoln Avenue (ACEH; Site #RO0002880), located approximately 650 feet north-northeast of the Site. Because of the relatively close proximity of the two properties (< 1,000 feet), the survey results should be considered valid for the subject property, as was suggested by Mr. Fred Selk in a telephone conversation with the ACEH in early March 2008. The purpose of such a survey is to determine whether any municipal, irrigation, and/or domestic water-producing wells exist within a 2,000-feet radius of the site and whether they may potentially act as receptors for offsite migration of the hydrocarbon-affected groundwater. The survey is also utilized to locate any surface water bodies and any areas of sensitive land usage in the vicinity of the site. The following was provided in the report *Sensitive Receptor Survey for Site Closure Review – Monterey Apartments, 748 Lincoln Avenue, Alameda, GGTR July 14, 2006*, however the results were revised accordingly with the location of the subject property.

On April 24, 2006, GGTR submitted a Well Completion Report Release Agreement to the Department of Water Resources (DWR), Central District and the Alameda County Public Works Agency (ACPWA), Water Resources Section for all municipal, irrigation and domestic water supply wells installed within a 2,000-foot radius of the subject property. On May 11, 2006, the **ACPWA** submitted all Well Completion Reports within an approximate 0.5- to 1-mile radius of the subject property. Thirteen (13) irrigation wells, one (1) industrial well, four (4) groundwater extraction/vapor wells, and approximately seventy-five (75) groundwater monitoring wells were located as result of the ACPWA radius search. However,

only three irrigation wells and one industrial well potentially exist within the 2,000-feet radius survey area. Groundwater monitor wells were located within the 2,000-feet radius survey area, but were not requested as part of this search.

On June 20, 2006 GGTR visited the DWR Central District Office in Sacramento, California to acquire Well Completion Reports on the DWR database within an approximate 1-mile radius of the subject property. DWR staff was unavailable at the time to conduct a database record search. One (1) domestic water supply well, Three (3) irrigation wells, One (1) cathodic protection well, five (5) vapor extraction wells, and approximately eighteen (18) groundwater monitoring wells were located as result of the DWR 1-mile radius search. Again, groundwater monitor wells were not requested as part of this search.

GGTR also accessed the State Water Resources Control Board's GeoTracker Database to determine the status of Leaking Underground Fuel Tank sites with historical groundwater/vapor extraction wells. Only one site (Bay Area Service Station) outside the 2,000-feet search radius area and located at 1127 Lincoln Avenue (@ Bay Street), historically maintained four (4) vapor extraction wells. The site, showing on both the ACPWA & DWR file search, was closed in November 2001.

Sensitive Receptor Well Survey Results

The results of the receptor well survey for the subject property are presented in the table below. Wells shown in bold type are located within the 2,000-feet radius survey area. Figure 6, *Sensitive Receptor Survey Map*, shows the approximate location of each subject well, as described by its respective Well Record / Report number. Additional details and locational information for each subject well (shown in bold type) are presented in the attached spreadsheet provided by the ACPWA. A copy of each available DWR Well Driller Report for Well Record Nos. 613, 4071, 106486, 106524, and 140358 is attached. Well Driller Reports for the remaining Well Records tabulated below were not available from either the ACPWA or DWR.

Well Record/ Report No.	Distance from Site (Feet)	Well Diameter (Inches)	Total Well Depth (Feet)	Well Construction Material	Screened Interval (Feet)	Well Usage (D,I,M,In,Ex)	Well Installation Date
613	2250 (SE)	10	60	PVC Plastic	40-60	I	02/90
4062	**1700 (NW)**	**6**	**25**	**?**	**?**	**I**	**06/77**
4065	3300 (SE)	4	70	?	?	I	07/77
4066	2500 (SE)	?	68	?	?	I	05/77
4067	2800 (SE)	4	80	?	?	I	08/77
4069	3200 (SE)	?	28	?	?	I	07/77
4070	3500 (SE)	5	60	?	?	I	10/88
4071	2950 (SE)	5	60	PVC Plastic	40-60	I	10/88
4072	**1650 (SSE)**	**36**	**?**	**?**	**?**	**I**	**01/58**
4073	**1500 (SSE)**	**6**	**70**	?	?	**I**	**10/87**
4074	**1200 (SW)**	**8**	**88**	?	?	**In**	**10/77**
4075	3250 (SE)	4	70	?	?	I	07/77
4076	3250 (SE)	4	70	?	?	I	07/77
106486	3350 (W)	2	30	PVC Plastic	23-30	D	05/77
106524	4650 (WNW)	4	35	PVC Plastic	?	I	08/77
140358	3800 (W)	NA	120	NA	NA	C	06/76

Notes: D = Domestic Supply
I = Irrigation/Landscaping
M = Municipal
In = Industrial
Ex = Extraction/Vapor
C = Cathodic Protection
NA = Not Applicable

Based on results of the receptor well survey, only three irrigation wells and one industrial well reportedly exist within the 2000-feet survey radius of the subject property. Three irrigation wells (Well Record Nos. 4062, 4072 & 4073) reportedly exist within approximately 1,700 feet of the site; one is located approximately 1,700- feet northwest and in the estimated lateral gradient direction of the site, and two are located approximately 1,650 and 1,500 feet south-southeast, respectively, from the site and in the estimated down gradient direction. One industrial well (Well Record No. 4074), exists approximately 1,200 feet southwest and cross-gradient of the site. The approximate location of each associated well is shown in Figure 6, and referenced by its specific Well Report Number.

One Cathodic Protection Well is located approximately 3,800 feet west and lateral-gradient of the subject site. Although the deepest of the vicinity wells, the well is sealed with concrete to 95 fbg and does not appear to be a potential receptor based on its usage and distant location cross-gradient of the site. Cathodic protection wells are typically installed to protect metallic objects (i.e., buried petroleum, natural gas, and water pipelines) in contact with the ground or subsurface environment from electrolytic corrosion.

Sensitive Surface Water and Land Usage

As mentioned above, the nearest surface water body is the Robert Crown Memorial State Beach Inlet of the San Francisco Bay, located approximately 0.4 mile south-southwest and lateral gradient of the Site. The Alameda-Oakland Estuary is also located approximately 0.75 mile north-northeast of the site, also located lateral gradient to the Site. Both surface water

bodies are ultimately contiguous and lie respectively at and outside the 2,000-feet radius survey area. According to Figure 1, and the July 13, 2006 Site Vicinity Reconnaissance, no apparent drainage creeks or springs are located within the 2,000-feet radius survey vicinity of the Site. As mentioned above and shown in Figures 1 & 6, there is a small elliptical-shaped topographic depression area (@ 750' x 450') situated approximately 500 feet southwest of the Site and centrally located at the intersection of Page & Taylor Streets; its elevation is approximately 15 feet below MSL. This surface depression may be influencing Site groundwater flow toward the southeast. During the recent Site field activities, GGE confirmed the presence of the depression area along Page & Taylor Streets.

Also, during a recent Site vicinity reconnaissance, GGE confirmed the locations of one children's day care center, a public library, and two elementary schools, which currently exist within the 2,000-feet radius, survey area of the site. The table below provides information for each facility.

Facility Name	Description	Address (Alameda, CA)	Distance from Site (Feet)
Rising Star Children's Montessori	Day Care Center	770 Santa Clara Ave.	145 (Southeast)
Public Library	Public Library	788 Santa Clara Ave.	300 (Southeast)
Washington Elementary	Elementary School	825 Taylor Ave. (@ Eighth St.)	550 (East-Southeast)
St. Barnabas School	Elementary School	1400 6th St.	1,600 (West-Southwest)

Each educational facility, except for the St. Barnabas School is generally located in the estimated down gradient direction of the Site. The Rising Star Children's Montessori and Public Library facility are located 145 and 300 feet, respectively, southeast of the site, along the south side of Santa Clara Avenue. Washington Elementary School is located approximately 550 feet east-southeast of the Site and bordered by Santa Clara Avenue & Taylor Street to the north and south, and 8th & 9th Streets to the west and east (Figure 6). GGE accessed the satellite view of Google Maps to confirm the locations of such potential receptor surface waters and land usage establishments.

Waste Management

The equipment wash and rinse water generated during the March 2008 activities (@ 20 gallons) was transferred to a 55-gallon D.O.T.-approved steel drum, appropriately labeled, sealed, and temporarily stored on site in a secure area pending final disposal at a State-licensed recycling facility**.** On April 4, 2008, Clearwater Environmental Management, Inc. transported the drum containing the wash/rinse water generated during the preliminary site characterization as *Non- Hazardous Waste Liquid* under Non- Hazardous Waste Manifest No. 6951, to the Alviso Independent Oil facility in Alviso, California. A copy of the liquid waste manifest is presented in Appendix C.

GeoTracker/ACEH FTP Upload

All soil/groundwater samples analytical data collected during the preliminary Site characterization activities were uploaded in Electronic Deliverable Format to the State Water

Resources Control Board's GeoTracker Database System. Also, geologic boring logs, a scaled Site Map, and report prepared during this investigation were uploaded in PDF format to the State GeoTracker Database. GGE also uploaded a copy of the report to the ACEH's FTP Site. Copies of the GeoTracker confirmation Forms are included in Appendix C.

Findings of Investigation

The following is a summary of the findings of the preliminary Site characterization activities:

General Site Conditions

- On March 5, 2008, GGE percussion-drilled four (4) subsurface investigative soil borings, B1 through B4, to approximately 10.5 fbg to evaluate the extent of hydrocarbon-effected soil and groundwater along the north, south, east, and west sides of the former 1,500-gallon heating oil UST, removed from the Site in October 2007. Soil samples were collected continuously in each boring between 4 and 10 fbg. GGE collected grab groundwater samples from B1 through B4. Each borehole was subsequently backfilled with neat Portland cement and surface concrete, pursuant to ACPWA and CADPW requirements and final inspection.

- The property is currently occupied by a multi-family residential building. The property consists of a rectangular Site occupying 5,617 square feet (0.13 acre) in lot area. The elevation of the site is approximately 18 feet above Mean Sea Level (Figure 1).

- The Site is underlain by dune sand and artificial fill and by up to 500 feet of Quaternary alluvial deposits (unconsolidated and dissected stream and basin deposits) and possibly marine sandstone, shale, cherts, and conglomerates of the Mesozoic Franciscan Complex (thickness not established).

- Subsurface soil encountered beneath the Site during the preliminary Site characterization activities was predominantly silty sand, dark yellowish brown to dark brown, moist to wet, very fine to fine-grained, moderately graded sand. No staining or odor was observed in soil from any of the borings. Only a slight organic vapor concentration (4.8 ppm) was measured in the soil sampled in B4 at 7 fbg.

- The regional groundwater flow direction in the vicinity of the site is estimated to be toward the north-northeast, in the general direction of the Oakland Inner Harbor and decreasing topographic relief.

- The static groundwater level measured during temporary wellhead elevation survey activities (B1-B4) on March 7, 2008, was between 6.98 (B3) and 7.77 (B4) fbg. The groundwater hydraulic gradient across the Site was approximately 0.02 ft/ft directed 30° east of south (S30°E, Figure 3).

- Depth to groundwater at the Site may be influenced by changes in Tidal depths along both the Alameda/Oakland Estuary and San Francisco Bay. According to Tide Tables for Alameda, California (www.freetidetables.com), the tidal change during both the October 16, 2007 UST removal and March 5, 2008 soil boring activities ranged between 0.3 feet (maximum low tide during morning UST removal) and 6.5 feet (maximum high tide during morning and early afternoon soil boring activities) above MSL. Such tidal depths appear somewhat consistent with the depths to groundwater during both Site events, as may be evidenced by the dry soil encountered at 11 fbg during the UST removal activities.

Soil Analytical Data (Refer To Attached Table 2)

- The soil samples collected in B1, B3, and B4 at 6 and 7 fbg, contained non-detectable concentrations of TPH-D, TPH-MO, BTEX, and MTBE. The soil samples collected in B2 (garage driveway location) at 6 and 7 fbg, contained 86 and 21 mg/kg TPH, respectively, with discrete peaks existing in the motor oil hydrocarbon range (see Lab Data Report & Case Narrative). Such concentrations are insignificant and do not exceed applicable environmental screening levels (ESL).

Grab Groundwater Analytical Data (Refer To Attached Table 3)

- The grab groundwater samples collected in soil borings B1 through B4 contained non-detectable concentrations of TPH-D, TPH-MO, BTEX, and Fuel Oxygenates (including MTBE), except for the samples in B2 and B3, which contained 380 and 730 micrograms per liter (ug/l) TPH as motor oil, respectively (see respective Lab Data Reports & Case Narrative). Such concentrations exceed the applicable ESL (100 ug/l). TPH-MO concentrations in B1 and B4 were not detected, but the laboratory reporting limits were higher than the ESL. Also, the grab groundwater sample collected in B4 contained 700 ug/l discrete peaks in the diesel range (C10-C28), with the more volatile peak(s) reported as a non-target compound (Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-). According to an Accutest chemist, the non target compound is consistent with camphor or similar volatile compound associated with roots, bark, needles, etc. from an evergreen tree. Synonyms for this non target compound are presented in the associated Material Safety Data Sheet (MSDS) included in Appendix C.

- The grab groundwater sample collected in B2 contained 240 mg/l Total Dissolved Solids.

Subsurface Utility Survey

- The locations and approximate depths of the water, gas, and sanitary sewer main and/or service lateral utility corridors are shown on Figures 4 and 5. Because of the shallow invert (flow line) depths of these utilities ($\leq$ 5.8 to 6 fbg) relative to the depth to groundwater measured at the Site during both a seasonally high water table and high tide ($\geq$ 7.5 fbg), it does not appear that these utility corridors act as preferential pathways for offsite migration of impacted groundwater.

Sensitive Receptor Survey

- Based on results of the receptor well survey, only three irrigation wells and one industrial well reportedly exist within the 2000-feet survey radius of the subject property (Figure 6); however, only two of the irrigation wells (Well Nos. 4072 & 4073) are located in the estimated down gradient direction from the Site, at approximately 1,650 and 1,500 feet to the south-southeast, respectively. Because of their distance from the subject property, the relatively low concentrations ($\leq$ 730 ug/l) of heating oil range hydrocarbons measured in groundwater at the Site, and the generally low mobility of heating oil in saturated soil and groundwater, it appears unlikely that such wells will act as potential receptors or vertical conduits for potential contaminant migration from the subject property.

- The nearest surface water bodies are the Robert Crown Memorial State Beach Inlet of the San Francisco Bay and the Alameda-Oakland Estuary, both located lateral gradient and approximately 0.4 mile south-southwest and 0.75 mile north-northeast of the Site, respectively. Both surface water bodies are ultimately contiguous, lie respectively at and outside the 2,000-feet radius survey area, and do not appear to act as a sensitive receptor from offsite migration of any impacted groundwater.

- One children's day care center, a public library, and two elementary schools currently exist within the 2,000-feet radius survey area of the site (Figures 4 & 6). The Rising Star Children's Montessori and Public Library facility are located 145 and 300 feet, respectively, southeast of the Site, along the south side of Santa Clara Avenue. Washington Elementary School is located approximately 550 feet east-southeast of the Site and bordered by Santa Clara Avenue & Taylor Street to the north and south, and 8th & 9th Streets to the west and east. Again, because of the relatively low concentrations of heating oil range hydrocarbons measured in groundwater at the Site, the generally low mobility of heating oil in saturated soil and groundwater, as well as the absence of any preferential migratory pathways (utility corridors), it appears unlikely that such establishments will act as potential receptors for potential contaminant migration from the subject property.

Conclusions / Recommendation

Based on the findings of the March 2008 preliminary Site characterization activities, GGE presents the following conclusions and recommendations.

- The lateral and vertical extent of heating oil range hydrocarbons in shallow soil in the vicinity of the former UST has been adequately assessed. Only insignificant concentrations of TPH-MO below the applicable ESL were detected in shallow soil north of the UST (B2), in the driveway/parking space accessing the building storage garage. Because such low concentrations were detected in soil at depths above the bottom of the former UST (@ 9 fbg), it appears that the TPH source may potentially have been from a leaking underground product line removed during the UST removal activities in October 2007. Another potential source of TPH could be from either insignificant unauthorized release, such as oil from a vehicle engine, or associated with the upper limit(s) of the groundwater contaminant smear zone. The later, however, appears unlikely due to the absence of heating oil range soil hydrocarbons at similar depths in the other soil borings.

- Heating oil range hydrocarbons at concentrations exceeding the applicable ESL has impacted groundwater beneath the Site. The lateral extent of these hydrocarbons in groundwater appears to be adequately assessed to the east and west of the former UST. Although discrete peaks of TPH (diesel-range) were measured in the soil boring (B4) east of the former UST, the more pronounced volatile hydrocarbon peaks were reported as a non targeted compound consistent with camphor or similar volatile compound associated with roots, bark, needles, etc. potentially from an evergreen tree, located approximately 5 feet southeast of B4. The lateral extent of groundwater contamination generally north and south of the former UST has not been assessed at this time.

- Similar contamination in groundwater as result of an unauthorized release from a heating oil UST was investigated at the residential property located at 748 Lincoln Avenue (ACEH; Site #RO0002880), situated approximately 650 feet north-northeast of the Site. Based on results of investigative boring soil and grab groundwater sample analysis and on a subsequent sensitive receptor survey (presented above), the ACEH, in a letter dated January 9, 2006, provided case closure with no further action required at that site. The letter provided a conditional disclosure that residual concentrations up to 9,100 ug/l TPH-D remain in the groundwater at the site.

Based on the findings and conclusions presented above, the existing groundwater impacted at the Site is likely localized within the direct vicinity of the former UST and low enough in residual concentration relative to other similar leaking UST investigation sites in the area. As a result, GGE recommends that any additional investigation at the Site will be at the discretion of the ACEH. Otherwise, the ACEH could initiate Site closure review.

Work Plan & Report Distribution

This document and all subsequent reports that are prepared during the continuing work on this project will be sent to:

Alameda County Health Care Services Agency *(1 Copy, copied to FTP Site)*
Environmental Health Services (1 Electronic Copy via GeoTracker)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577
Attn: Mr. Steven Plunkett

Mr. Fred Selk *(2 Copies, Bound)*
44 Basinside Way
Alameda, California 94502

Limitations

This work plan has been prepared in accordance with generally accepted environmental practices exercised by professional geologists, scientists, and engineers. No warranty, either expressed or implied, is made as to the professional advice presented herein. The proposed activities contained in this work plan are based upon information contained in previous reports of corrective action activities performed at the subject property and based upon site conditions, as they existed at the time of the investigation, and are subject to change.

The professional opinions presented herein are based solely upon visual observations of the subject property and vicinity, and interpretation of available information as described in this report. The scope of services conducted in execution of this investigation may not be appropriate to satisfy the needs of other users and any use or reuse of this document and any of its information presented herein is at sole risk of said user.

References

California Regional Water Quality Control Board, San Francisco Bay Region. Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater; Volume 1, Interim Final – February 2005.

California Regional Water Quality Control Board, San Francisco Bay Region, 1995. Water Quality Control Plan, San Francisco Bay Region.

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California Division of Mines & Geology, 1990. Geologic Map of the San Francisco-San Jose Quadrangle, Wagner, D.L., Bortugno, E.J., and McJunkin, R.D.

Geological Society of America, 1991. Munsell Rock Color Chart.

GGTR. Tank Closure Report, 757 Santa Clara Avenue, Alameda, California. November 6, 2007. Project No. 8938.

GGTR. Report of Preliminary Site Characterization, 748 Lincoln Avenue, Alameda, California. January 25, 2006. Project No. 8657.

GGTR. Sensitive Receptor Survey for Site Closure Review- Monterey Apartments, 748 Lincoln Avenue, Alameda, California. July 14, 2006. Project No. 8657.

TABLE 1

Historical Results of Tank Removal Sample Analysis

757 Santa Clara Avenue, Alameda, CA

Sample ID	Sample Depth (fbg)	Sample Date	TPH-D (ppm)	B (ppm)	T (ppm)	E (ppm)	X (ppm)	MTBE (ppm)	LEAD (ppm)
8938-SP (A-D) (Stockpile)	Not Applicable	10/16/2007	160*	ND<0.25	ND<0.25	ND<0.25	ND<0.5	ND<0.25	12
8938-C-11	11	10/16/2007	170**	ND<0.025	ND<0.025	ND<0.025	ND<0.05	ND<0.025	NA

Notes:

TPH-D = Total Petroleum Hydrocarbons as diesel

BTEX = benzene, toluene, ethylbenzene, total xylenes

MTBE = Methyl tertiary-butyl ether

fbg = Feet below grade

ppm = parts per million

* = Atypical Paterrn (C12-C34)

* * = Atypical Paterrn (C10-C34)

NA = Not Analyzed

ND = Not Detected

TABLE 2

Results of Subsurface Boring Soil Sample Analysis

757 Santa Clara Avenue, Alameda, CA

Boring Location	Sample ID	Sample Date	Sample Depth (fbg)	TPH-D (mg/kg)	TPH-MO (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	EDB / EDC /TBA / DIPE/TAME (mg/kg)
B1	B1-6	3/5/2008	6	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
	B1-7	3/5/2008	7	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
B2	B2-6	3/5/2008	6	ND<5	86 *	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
	B2-7	3/5/2008	7	ND<5	21*	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
B3	B3-6	3/5/2008	6	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
	B3-7	3/5/2008	7	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
B4	B4-6	3/5/2008	6	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
	B4-7	3/5/2008	7	ND<5	ND<20	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND≤0.040
CRWQCB November 2007 ESL				83	410	0.044	2.9	3.3	2.3	0.023	0.00033/0.0045/0.000001/NE/NE

Notes:

TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes
MTBE = Methyl tertiary-butyl ether
EDB = 1.2-Dibromoethane
EDC = 1.2-Dichloroethane
TBA = Tert-Butanol
DIPE = Diisopropyl Ether
TAME = tert-Amyl Methyl Ether
fbg = Feet below grade
mg/kg = Milligrams per kilograms
* = Discrete peaks mixed with Motor Oil
ND = Not Detected
NE = Not Established
CRWQCB November 2007 / ESL: California Regional Water Quality Control Board / Environmental Screening Levels for shallow soils (≤ 10fbg) in Residential Land Use, where groundwater ***IS*** a current or potential source of drinking water.

TABLE 3

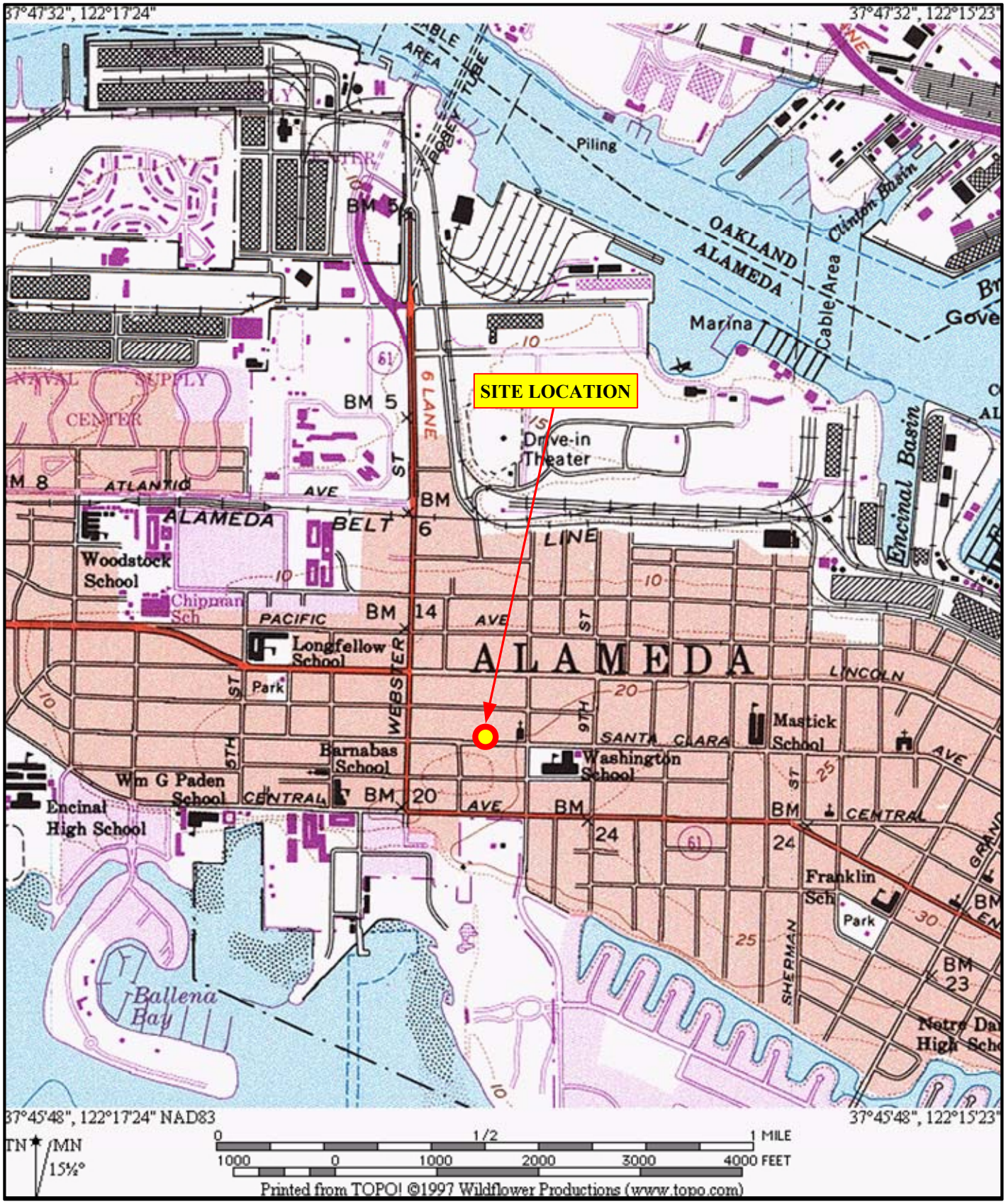
Results of Grab Groundwater Sample Analysis

757 Santa Clara Avenue, Alameda, CA

Boring Location	Sample ID	Sample Date	TOC Elevation (Feet)	Depth to GW (fb TOC)	GW Elevation (Feet)	TPH-D (ug/L)	TPH-MO (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	EDB/EDC/TBA/DIPE/TAME (ug/L)
B1	B1-W	3/5/2008	17.78	7.34	10.44	ND<48	ND<190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND≤10
B2	B2-W	3/5/2008	17.78	7.35	10.43	ND<48	380	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND≤10
B3	B3-W	3/5/2008	17.17	6.98	10.19	ND<48	730	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND≤10
B4	B4-W*	3/5/2008	18.08	7.77	10.31	ND<49 **	ND<200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND≤10
CRWQCB November 2007 ESL						100	100	1	40	30	20	5	0.05/0.5/NE/NE/NE

Notes:

TOC = Top of Casing
GW = Groundwater
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes
MTBE = Methyl tertiary-butyl ether
EDB = 1.2-Dibromoethane
EDC = 1.2-Dichloroethane
TBA = Tert-Butanol
DIPE = Diisopropyl Ether
TAME = tert-Amyl Methyl Ether
fb TOC = Feet below Top of Casing (Assumed Elevation. Not reference to Mean Sea Level)
ug/L = Micrograms pre Liter
* = Sample also analyzed for Total Dissolved Solids (440 mg/L) by EPA Method
** = Sample contains 700 ug/L discrete peaks in the Diesel range (C10 - C28);
Volatile peak contains non target compound (Bicyclo[2.2.1]heptan-2-one, 1,7,7-; trimethyl-)
NE = Not Established
ND = Not Detected
CRWQCB November 2007 / ESL: California Regional Water Quality Control Board / Environmental Screening Levels where groundwater ***IS*** a current or potential source of drinking water.



GOLDEN GATE ENVIRONMENTAL, INC. 3730 Mission Street San Francisco, CA 94110 Ph (415) 970-9088 Fx (415) 970-9089		**SITE LOCATION MAP** 757 Santa Clara Avenue Alameda, California 94501	
GGE Project No. 2006	*Fn: 2006.psa.F1*	*Figure By: baw/3.08*	***Figure 1***

LEGEND

- B1 ⊗ — Soil Boring Location (3/5/08)
- Former Location 1500-gals. Heating Oil UST. Removed 10/16/07
- Approximate UST Excavation
- x — UST Confirmation Soil Sample 8938-C-11 (from 11fbg. on 10/16/07)
- UST — Underground Storage Tank
- fbg — Feet Bellow Grade
- Underground Product Lines. Removed 10/16/07
- Residual Underground Product Lines.
- Underground Gas Meter
- Landscaped Areas
- Light Pole
- PL — Property Line Boundary
- Evergreen Tree

N

Scale in Feet
(1" = 20')

0 20

PL

Parking Garage

Parking Area

Parking Area
Slopping North

759 C Santa Clara Ave.
(Residential)

759 B Santa Clara Ave.
(Residential)

753 Santa Clara Ave.
(Residential)

755 Santa Clara Ave.
(Residential)

757 Santa Clara Ave.
(Multi-Unit Residential)

759 A Santa Clara Ave.
(Residential)

765 Santa Clara Ave.
(Residential)

?

Garage Door

Building Entrance

Parking Entrance 7' High

B1 B2 B3 B4

x

Sidewalk

Driveway

Driveway

Driveway

Parking Lane

Bicycle Lane

Sewer Manhole

Santa Clara Avenue

Bicycle Lane

Parking Lane

Sidewalk

Residential

GOLDEN GATE ENVIRONMENTAL, INC.
3730 Mission Street, San Francisco, CA 94110
Phone: (415) 970-9088 Fax: (415) 970-9089

SITE MAP
757 Santa Clara Avenue
Alameda, California 94501

GGE Project No. 2006	Fn: 2006.psa.F2_Site Map	Figure By: ed.3/08	**Figure 2**

LEGEND

- B1 (10.44) — Soil Boring & Groundwater Elevation (3/7/08)
- 20.00 — Approx. Groundwater Contour Line
- S30E 0.02 ft/ft — Approx. Groundwater Flow Direction & Hydraulic Gradient
- Former Location 1500-gals. Heating Oil UST. Removed 10/16/07
- Approximate UST Excavation
- x — UST Confirmation Soil Sample 8938-C-11 (from 11fbg. on 10/16/07)
- UST — Underground Storage Tank
- fbg — Feet Bellow Grade
- Underground Product Lines. Removed 10/16/07
- Residual Underground Product Lines.
- Underground Gas Meter
- Landscaped Areas
- Light Pole
- PL — Property Line Boundary

N

Scale in Feet
(1" = 20')

0 20

PL

Parking Garage

Parking Area

Parking Area
Slopping North

759 C Santa Clara Ave.
(Residential)

759 B Santa Clara Ave.
(Residential)

759 A Santa Clara Ave.
(Residential)

765 Santa Clara Ave.
(Residential)

753 Santa Clara Ave.
(Residential)

755 Santa Clara Ave.
(Residential)

757 Santa Clara Ave.
(Multi-Unit Residential)

S30E 0.02 ft/ft

?

Garage Door

Building Entrance

Parking Entrance 7' High

B2 (10.43)

B1 (10.44)

B4 (10.31)

B3 (10.19)

10.40

10.30

10.20

Driveway

Driveway

Driveway

Sidewalk

Parking Lane

Bicycle Lane

Sewer Manhole

Santa Clara Avenue

Bicycle Lane

Parking Lane

Sidewalk

Residential

GOLDEN GATE ENVIRONMENTAL, INC. 3730 Mission Street, San Francisco, CA 94110 Phone: (415) 970-9088 Fax: (415) 970-9089	**GROUNDWATER POTENTIOMETRIC MAP** 757 Santa Clara Avenue Alameda, California 94501

GGE Project No. 2006	*Fn: 2006.psa.F2_GWP Map*	*Figure By: ed.3/08*	***Figure 3***

LEGEND

- B1 — Soil Boring (3/7/08)
- City Sanitary Sewer Utility Corridor & Flow Line Direction
- EBMUD Water Utility Corridor
- Gas Utility Corridor
- Existing Underground Product Lines
- Former Underground Product Lines (Removed 10/16/07)
- F.L. 5.87 / Rim 17.80 — Manhole Location showing Rim and Utility Flow Line Elevations in ft. above Mean Sea Level (MSL)
- Approx. Groundwater Flow Direction
- Former Location of 1500-gal. Heating Oil UST (Removed 10/16/07)
- Approx. Lateral Limits of UST Excavation
- A—A' — Cross Section (See Figure 5)
- Landscaped Areas
- Light Pole
- PL — Property Line Boundary
- Evergreen Tree

Note: All power and telecom lines are overhead

N

Scale in Feet (1" = 20')

0 20

755 Santa Clara Ave. (Residential)

759 B Santa Clara Ave. (Residential)

759 A Santa Clara Ave. (Residential)

765 Santa Clara Ave. (Residential)

757 Santa Clara Ave. (Multi-Unit Residential)

Boiler Room

Existing Product Line for Former UST (@ 1.5 - 2 fbg)

Gas/Water Service Laterals (@ 1-2 fbg)

Garage Door

Building Entrance

Parking Entrance 7' High

Sanitary Sewer Service Laterals (@ 3-6.8 fbg)

8"-Dia. Cast Iron Water Main (EBMUD)

B1, B2, B3, B4

A, A'

Gas Valve/Meter (@ 1 fbg)

Water Valve/Meter (@ 1 fbg)

Driveway

Sidewalk

Parking Lane

Bicycle Lane

Invert @ 2-3.5 fbg

Invert @ 4.8 fbg

Invert @ 5.8 fbg

Invert @ 6.8 fbg

F.L. 8.48 / Rim 15.30

Sewer Manhole #1

F.L. 9.99 / Rim 13.30

Invert @ 3.3 fbg

Sewer Manhole #2 located approximately 125 ' west of #1 at intersection with Page Street

F.L. 5.87 / Rim 17.80

Invert @ 11.9 fbg

Sewer Manhole #3 located approximately 223' east of #1 at intersection with Eighth Street

8"-Dia. Sanitary Sewer Main (City of Alameda)

Santa Clara Avenue

Residential

Front Yard & Driveway

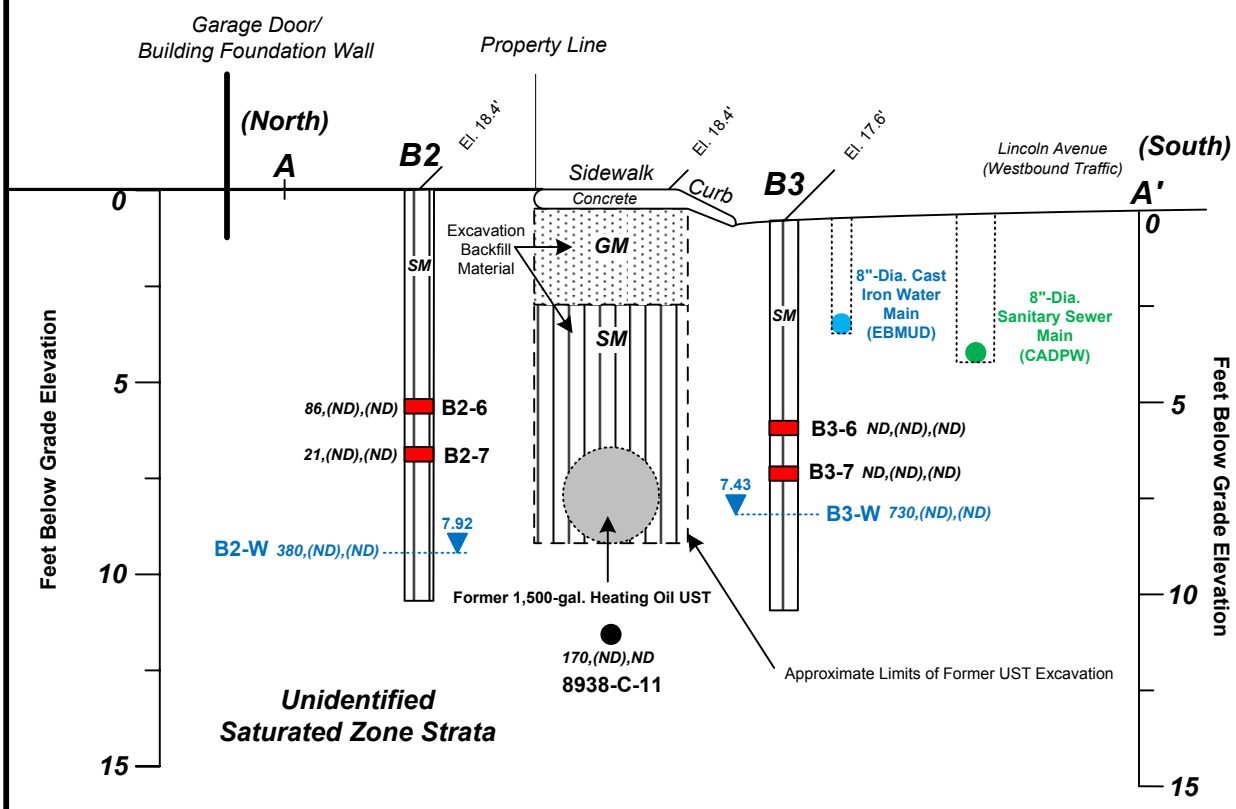
770 Santa Clara Ave. (Rising Star Children's Montessori School)

Public Library lies approximately 161' to East (788 Santa Clara Ave.)

GOLDEN GATE ENVIRONMENTAL, INC.
3730 Mission Street, San Francisco, CA 94110
Phone: (415) 970-9088 Fax: (415) 970-9089

SUBSURFACE UTILITY MAP
757 Santa Clara Avenue
Alameda, California 94501

GGE Project No. 2006	Fn: 2006_F4_SUM	Figure By: BAW_03/08	**Figure 4**



LEGEND

B2	Soil Boring, March 5, 2008
B2-6 *86,(ND),(ND)*	Soil sample & TPH, BTEX, OXY concentration in mg/kg
B2-W *380,(ND),(ND)*	Grab groundwater sample & TPH, BTEX, OXY concentration in ug/l
8938-C-11 *170,(ND),ND*	UST Removal soil sample and TPH-D, BTEX, MTBE concentration in mg/kg 6/15/05
7.92	Depth to Static Groundwater measured on 3/7/08
SM	Silty Sand (See boring logs)
GM	Gravel, sand, silt mixture (Import Backfill)
ND	Not detected

TPH	Total Petroleum Hydrocarbons as diesel/motor oil (heating oil range)
TPH-D	Total Petroleum Hydrocarbons as diesel
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
MTBE	Methyl tertiary-butyl-ether
Oxy	Fuel Oxygenates (EDB, EDC, TBA, DIPE, TAME)
EDB	1,2-Dibromoethane
EDC	1,2-Dichloroethane
TBA	Tert-Butanol
DIPE	Diisopropyl Ether
TAME	Tert-Amyl Methyl Ether
mg/kg	Milligrams per kilograms
ug/l	Micrograms per liter

Horizontal
Scale in Feet
(1" = 10')

0 5 10

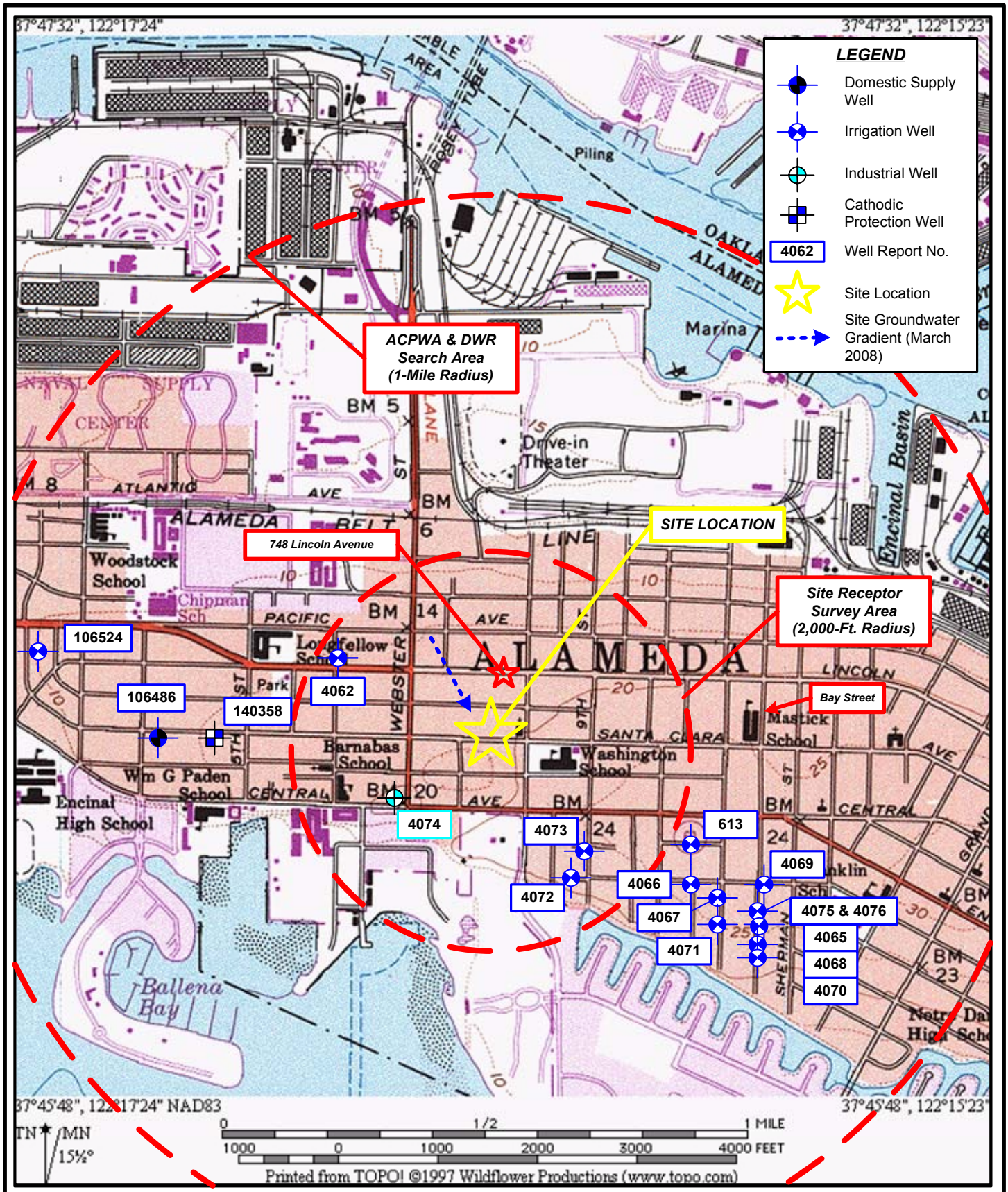
Vertical Exaggeration 1:2

Notes: See Figure 4 for Cross Section A-A'; grade elevations are based on 03/7/08 site survey activities, performed relative to arbitrary datum point with an assumed elevation of 18' (not Mean Sea Level).

GOLDEN GATE ENVIRONMENTAL, INC.
3730 Mission Street, San Francisco, CA 94110
Phone: (415) 970-9088 Fax: (415) 970-9089

CROSS SECTION A-A'
757 Santa Clara Avenue
Alameda, California

GGE Project No. 2006	Fn:2006_F5_Cross Section A-A'	Drawing By: baw_0308	**Figure 5**



GOLDEN GATE ENVIRONMENTAL, INC. 3730 Mission Street San Francisco, CA 94110 Ph (415) 970-9088 Fx (415) 970-9089		**SENSITIVE RECEPTOR SURVEY MAP** 757 Santa Clara Avenue Alameda, California	
GGE Project No. 2006	*Fn: 2006_F6_SRSM*	*Revision By: baw/03.08*	***Figure 6***

APPENDIX A

REGULATORY CORRESPONDENCE
PERMITS

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

February 13, 2008

Mr. Alvin & Aracel Selk
c/o Fred Selk
184 Basinside Way
Alameda, CA 94502-6407

Dear Mr. Selk

Subject: SLIC Case Number RO0002957, Selk Apartments, 757 Santa Clara Avenue, Alameda, CA.

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site and the document entitled, "Draft Work Plan Preliminary Site Characterization," dated December 7, 2008 prepare by Golden Gate Environmental. In October 2007, one 1,500 gallon underground storage tank (UST) was removed for the site and TPHd was detected in soil at concentrations of up to 170 parts per million. Subsequently, additional site assessment was requested to evaluate the extent of the unauthorized release associated with the UST and appurtenances.

The scope of work in the Work Plan proposes the installation of four soil borings near the former UST location. ACEH generally agrees with the proposed scope of work as recommended in the Work Plan, provided the following technical comments are addressed prior to the implementation of the Work Plan. We request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Soil Boring Locations and Soil Sampling.** Golden Gate has recommended the installation of four soil boring placed near the former USTs. After the soil borings have been advanced to a total depth of 20 feet bgs, the borings will be converted into temporary piezometers. ACEH generally agrees with the number of proposed soil boring and the boring locations. The proposed soil sample analysis is acceptable, with the addition of EDB, EDC, TAME, DIPE and TBA.

   ACEH requests that any interval where staining, odor, or elevated PID readings occur a soil sample is to be collected and submitted for laboratory analysis. If no staining, odor, or elevated PID readings are observed, soil sample are to be collected from each boring at the capillary fringe, where groundwater is first encountered, at changes in lithology, and at approximately 5 foot intervals until the total depth of the boring is reached. ACEH agrees with the proposed laboratory analysis recommend by Golden Gate. Please present the results from soil sampling in the Soil and Groundwater Investigation Report requested below.

2. **Groundwater Sampling and Analysis.** ACEH agrees with the groundwater sample analysis as recommended in the Work Plan, with the addition of EDB, EDC, TAME, DIPE and TBA.. Please include results from groundwater sampling in the Soil and Groundwater Investigation Report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Steve Plunkett), according to the following schedule:

- **March 30, 2008** – Soil and Groundwater Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or

certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: Brent Wheeler
Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94901

Donna Drogos, ACEH, Steven Plunkett, ACEH, File

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

COPY

Application Approved on: 02/21/2008 By jamesy

Permit Numbers: W2008-0071
Permits Valid from 03/05/2008 to 03/10/2008

Application Id:	1203546356034	**City of Project Site:** Alameda
Site Location:	757 Santa Clara Avenue	
Project Start Date:	03/05/2008	**Completion Date:** 03/10/2008
Applicant:	Golden Gate Environmental, Inc. - Brent Wheeler 3730 Mission Street, San Francisco, CA 94110	**Phone:** 415-970-9088
Property Owner:	Alvin L. & Aracely Selk 184 Basinside Way, Alameda, CA 94502	**Phone:** --
Client:	Fred Selk 44 Basinside Way, Alameda, CA 94502	**Phone:** 510-484-7992
Contact:	Brent Wheeler	**Phone:** 415-970-9088 **Cell:** 415-686-8846

	Total Due:	$200.00
Receipt Number: WR2008-0055	**Total Amount Paid:**	$200.00
Payer Name : Brent A. Wheeler	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 4 Boreholes
Driller: John Carver Civil Engineer - Lic #: 407379 - Method: DP

Work Total: $200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0071	02/21/2008	06/03/2008	4	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. 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, properly damage, personal injury and wrongful death.

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

7. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

8. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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, properly damage, personal injury and wrongful death.

10. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

11. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

12. Prior to any drilling activities onto 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.

13. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

CITY OF ALAMEDA
2263 SANTA CLARA AVENUE, ROOM 190
ALAMEDA, CA 94501

COPY

(510) 747-6800
FAX (510) 747-6804

Right-of-Way Permit: EX08-0009

Applicant Information
GOLDEN GATE TANK REMOVAL
3730 MISSION ST
SAN FRANCISCO CA 94110
415-512-1555/BRENT WHEELER

Contractor Information
GOLDEN GATE TANK REMOVAL
3730 MISSION ST
SAN FRANCISCO CA 94110
415-512-1555

Owner Information
SELK ALVIN L & ARACELY
184 BASINSIDE WAY
ALAMEDA CA 94502-6407
510-484-7992

Project Information
Status: **Plan Review**
Type: **Right-of-Way Permit**
Category: **NA**
Sub-Type: **NA**
Parcel Number: **073-0420-010-00**
Job Address: **757 SANTA CLARA AVE**
Applied: **02/27/2008**
Finaled:
Issued:
Expired:
Valuation: **$16,000.00**
Work Description: WEDNESDAY, MARCH 5 & THURSDAY, MARCH 7, 2008 ~ DRILL 4 BORE HOLES IN CITY SIDEWALK & PARKING AREA

ITEM #	FEE DESCRIPTION	ACCOUNT CODE	UNITS	FEE AMOUNT	PAID
250	250-Filing Fee (per activity)	4140-37450 (1050)	1	$41.00	$41.00
2999	Technology Fee (enter 1 required)	4140-33063 (1051)	1	$2.05	$2.05
620	620-Records Management Fee	469409-37900 (6210)	1	$3.65	$3.65
782	782-Engineering Plan Check Fee (free form)	4225-37160 (6319)	67	$67.00	$67.00
965	965-Community Planning Fee (Enter 1)	4140-33064 (8765)	1	$48.00	$48.00
			TOTALS:	$161.70	$161.70

RECEIPT #	PAYMENT METHOD	CHECK #	PAYOR:	RECEIPT DATE	RECEIPT AMOUNT
445980 **Cashier:** NSOUZA	Check	20696	GOLDEN GATE TANK REMOVAL	02/27/2008	$161.70

Total Payments: $161.70

Balance Due: $0.00

Print Date: 2/27/2008

CITY OF ALAMEDA
2263 SANTA CLARA AVENUE, ROOM 190
ALAMEDA, CA 94501

COPY

(510) 747-6800
FAX (510) 747-6804

Encroachment Permit: EN08-0010

Applicant Information
GOLDEN GATE TANK REMOVAL
3730 MISSION ST
SAN FRANCISCO CA 94110
415-512-1555/BRENT WHEELER

Contractor Information
GOLDEN GATE TANK REMOVAL
3730 MISSION ST
SAN FRANCISCO CA 94110
415-512-1555

Owner Information
SELK ALVIN L & ARACELY
184 BASINSIDE WAY
ALAMEDA CA 94502-6407
510-484-7992

Project Information
Status: **Plan Review**
Type: **Encroachment Permit**
Category: **NA**
Sub-Type: **NA**
Parcel Number: **073-0420-010-00**
Job Address: **757 SANTA CLARA AVE**

Applied: **02/27/2008**
Finaled:

Issued:
Expired:

Valuation: **$500.00**

Work Description: WEDNESDAY, MARCH 5 & THURSDAY, MARCH 7, 2008 ~ DRILL 4 BORE HOLES IN CITY SIDEWALK & PARKING AREA; POST "NO PARKING" SIGNS FOR 7:00 AM TO 5:00 PM/SAME DAYS, 2 NON-METERED SPACES.

ITEM #	FEE DESCRIPTION	ACCOUNT CODE	UNITS	FEE AMOUNT	PAID
250	250-Filing Fee (per activity)	4140-37450 (1050)	1	$41.00	$41.00
2999	Technology Fee (enter 1 required)	4140-33063 (1051)	1	$2.05	$2.05
782	782-Engineering Plan Check Fee (free form)	4225-37160 (6319)	67	$67.00	$67.00
835	835-Engineering - Other Revenue (free form)	4225-39900 (1590)	20	$20.00	$20.00
965	965-Community Planning Fee (Enter 1)	4140-33064 (8765)	1	$1.50	$1.50
			TOTALS:	$131.55	$131.55

RECEIPT #	PAYMENT METHOD	CHECK #	PAYOR:	RECEIPT DATE	RECEIPT AMOUNT
445979	Check	20696	GOLDEN GATE TANK REMOVAL	02/27/2008	$131.55
Cashier: NSOUZA					

Total Payments: $131.55

Balance Due: $0.00

Print Date: 2/27/2008

APPENDIX B

SOIL BORING LOGS

SOIL BORING LOG B1

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	Hand Auger				4" Concrete	Concrete (0-4")
					(4"-6') **Silty Sand (SM)**. 10YR3/6 Dark yellowish Brown. Damp. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	
5	B1-6	NA	0.0	SM		
	B1-7		0.0		(6'-10.5') **Silty Sand (SM)**. 10YR3/6 Dark yellowish Brown. Saturated at 7.5 fbg. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	Neat Portland Cement (4"-10.5')
(7.87)		NA				
10		NA				
					Total Borehole Depth = 10.5 fbg	2.5"
					Installed temporary 1" piezometer	
					Collected grab groundwater sample B1-W on 3/05/08 at 12:25 hrs.	
15						
20						
25						

BORING NUMBER: B1
LOCATION: 757 Santa Clare Ave., Alameda, CA
PROJECT No: 2006
DRILLING CONTRACTOR: John Carver Civil Eng.
DRILLING METHOD: Hand Auger/DPT (Geoprobe)
DRILLING DATE: March 05, 2008
Logged By: E. Diaz **Checked By:** B. Wheeler

Legend/Notes:

fbg = feet below grade
NA = Not applicable
ppm = parts per million
☒ = Lithologic sample interval
▨ = Analytical sample
(7.87) ▼ = Depth to groundwater measured on 3/07/08

Golden Gate Environmental, Inc.

SOIL BORING LOG B2

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	Hand Auger			SM	(0-6') **Silty Sand (SM)**. 10YR3/3 Dark Brown. Damp. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	Neat Portland Cement (0-10.5')
5	B2-6	NA	0.0			
	B2-7		0.0		(6'-10.5') **Silty Sand (SM)**. 10YR3/3 Dark Brown. Saturated at 7.5 feet. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	
(7.92)		NA				
10		NA			Total Borehole Depth = 10.5 fbg Installed temporary 1" piezometer Collected grab groundwater sample B2-W on 3/05/08 at 13:50 hrs.	2.5"
15						
20						
25						

BORING NUMBER: B2
LOCATION: 757 Santa Clare Ave., Alameda, CA
PROJECT No: 2006
DRILLING CONTRACTOR: John Carver Civil Eng.
DRILLING METHOD: Hand Auger/DPT (Geoprobe)
DRILLING DATE: March 05, 2008
Logged By: E. Diaz **Checked By:** B. Wheeler

Legend/Notes:

fbg = feet below grade
NA = Not applicable
ppm = parts per million
☒ = Lithologic sample interval
▨ = Analytical sample
(7.92) ▼ = Depth to groundwater measured on 3/07/08

Golden Gate Environmental, Inc.

SOIL BORING LOG B3

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
					5" Concrete	Concrete (0-5")
1	Hand Auger				(5"-6') **Silty Sand (SM)**. 10YR3/6 Dark yellowish Brown. Damp. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	
5	B3-6	NA	0.0	SM		
(7.43)	B3-7		0.0		(6'-10.5') **Silty Sand (SM)**. 10YR3/6 Dark yellowish Brown. Saturated at 8.0 fbg. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	Neat Portland Cement (5"-10.5')
		NA				
10		NA				
					Total Borehole Depth = 10.5 fbg	2.5"
					Installed temporary 1" piezometer	
					Collected grab groundwater sample B3-W on 3/05/08 at 11:00 hrs.	
15						
20						
25						

BORING NUMBER: B3
LOCATION: 757 Santa Clare Ave., Alameda, CA
PROJECT No: 2006
DRILLING CONTRACTOR: John Carver Civil Eng.
DRILLING METHOD: Hand Auger/DPT (Geoprobe)
DRILLING DATE: March 05, 2008
Logged By: E. Diaz **Checked By:** B. Wheeler

Legend/Notes:

fbg = feet below grade
NA = Not applicable
ppm = parts per million
☒ = Lithologic sample interval
▨ = Analytical sample
(7.43) ▼ = Depth to groundwater measured on 3/07/08

Golden Gate Environmental, Inc.

SOIL BORING LOG B4

Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type	Description	Boring Backfill Detail
1	Hand Auger				4" Concrete	Concrete (0-4")
				SM	(4"-6') **Silty Sand (SM)**. 10YR4/4 Dark yellowish Brown. Damp. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	
5	B4-6	NA	0.0			
	B4-7		4.8		(6'-10.5') **Silty Sand (SM)**. 10YR4/4 Dark yellowish Brown. Saturated at 7.5 fbg. Loose. Very fine to fine grained. Moderately graded. No HC odor . No stain. Approx. 70% sand and 30% fines.	Neat Portland Cement (4"-10.5')
(8.31)		NA				
10		NA			Total Borehole Depth = 10.5 fbg Installed temporary 1" piezometer Collected grab groundwater sample B4-W on 3/05/08 at 15:15 hrs.	2.5"
15						
20						
25						

BORING NUMBER: B4
LOCATION: 757 Santa Clare Ave., Alameda, CA
PROJECT No: 2006
DRILLING CONTRACTOR: John Carver Civil Eng.
DRILLING METHOD: Hand Auger/DPT (Geoprobe)
DRILLING DATE: March 05, 2008
Logged By: E. Diaz **Checked By:** B. Wheeler

Legend/Notes:

fbg = feet below grade
NA = Not applicable
ppm = parts per million
☒ = Lithologic sample interval
▨ = Analytical sample
(8.31)▼ = Depth to groundwater measured on 3/07/08

Golden Gate Environmental, Inc.

APPENDIX C

LABORATORY ANALYTICAL REPORTS
CHAIN OF CUSTODY RECORDS
FLUID-LEVEL MONITORING DATA SHEET
SURVEY DATA SHEET
CITY OF ALAMEDA SANITARY SEWER MAP
LIQUID WASTE MANIFEST
GEOTRACKER UPLOAD CONFIRMATION FORMS
MSDS

ACCUTEST Laboratories

ENTECH ANALYTICAL LABS, INC.

Northern California *3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201*

Brent Wheeler
Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110

Lab Order Number: C0067
Issued: 03/12/2008

Project ID: 2006

Global ID: T0600123091

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA

Certificate of Analysis - Final Report

On March 06, 2008, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix	Test / Comments
Liquid	VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater TPH-Extractable: EPA 3510C / EPA 8015B(M)
Solid	VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B Electronic Deliverables for Geotracker TPH-Extractable: EPA 3545A / EPA 8015B(M)

Case Narrative: Heating Oil is not a unique pattern. Historically Heating Oil has been various petroleum hydrocarbon mixtures from C9-C32; this includes the Diesel and/or Motor Oil ranges. Therefore TPH in either range could be Heating Oil.

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
Subcontracted work is the responsibility of the subcontract laboratory, this includes turn-around-time and data quality.
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

C. L. Thom
Laboratory Director

ACCUTEST Laboratories

Northern California *3334 Victor Court, Santa Clara, CA 95054* *Phone: (408) 588-0200* *Fax: (408) 588-0201*

Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110
Attn: Brent Wheeler

Project ID: 2006

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA
GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-001 **Sample ID: B3-6** **Matrix:** Solid **Sample Date:** 3/5/2008 9:30 AM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	88.6	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94.5	60 - 130
Dibromofluoromethane	96.8	60 - 130
Toluene-d8	100	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

ACCUTEST Laboratories

Northern California *3334 Victor Court, Santa Clara, CA 95054* *Phone: (408) 588-0200* *Fax: (408) 588-0201*

Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110
Attn: Brent Wheeler

Project ID: 2006

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA
GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-002 **Sample ID: B3-7** **Matrix:** Solid **Sample Date:** 3/5/2008 9:42 AM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	89.2	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95.8	60 - 130
Dibromofluoromethane	96.2	60 - 130
Toluene-d8	99.8	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

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Attn: Brent Wheeler

Project ID: 2006

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA
GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-003 **Sample ID: B1-6** **Matrix:** Solid **Sample Date:** 3/5/2008 11:02 AM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	81.6	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94.4	60 - 130
Dibromofluoromethane	97.4	60 - 130
Toluene-d8	100	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
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ND = Not Detected at or above the Detection Limit.
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San Francisco, CA 94110
Attn: Brent Wheeler

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GlobalID: T0600123091

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Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-004 **Sample ID: B1-7** **Matrix:** Solid **Sample Date:** 3/5/2008 11:10 AM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	89.0	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94.9	60 - 130
Dibromofluoromethane	96.9	60 - 130
Toluene-d8	99.5	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

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Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-005 **Sample ID: B2-6** **Matrix:** Solid **Sample Date:** 3/5/2008 11:50 AM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	**86**		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

Discrete peaks mixed with Motor Oil. See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	89.2	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94.7	60 - 130
Dibromofluoromethane	98.1	60 - 130
Toluene-d8	102	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

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D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
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Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-006 **Sample ID: B2-7** **Matrix:** Solid **Sample Date:** 3/5/2008 12:50 PM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	**21**		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

Discrete peaks mixed with Motor Oil. See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	82.1	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95.1	60 - 130
Dibromofluoromethane	96.5	60 - 130
Toluene-d8	101	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
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Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-007 **Sample ID: B4-6** **Matrix:** Solid **Sample Date:** 3/5/2008 2:35 PM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	90.2	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.3	60 - 130
Dibromofluoromethane	94.1	60 - 130
Toluene-d8	99.6	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

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Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-008 **Sample ID: B4-7** **Matrix:** Solid **Sample Date:** 3/5/2008 2:40 PM

TPH-Extractable: EPA 3545A / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	5.0	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306
TPH as Motor Oil	ND		1.0	20	mg/Kg	3/6/2008	SDA080306	3/10/2008	SDA080306

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	90.2	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Toluene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Ethyl Benzene	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Xylenes, Total	ND		1.0	10	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Methyl-t-butyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Butanol (TBA)	ND		1.0	40	µg/Kg	N/A	N/A	3/11/2008	SM3080311
Diisopropyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/Kg	N/A	N/A	3/11/2008	SM3080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	96.1	60 - 130
Dibromofluoromethane	97.8	60 - 130
Toluene-d8	100	60 - 130

Analyzed by: MaiChiTu
Reviewed by: TFulton

Detection Limit = Detection Limit for Reporting.
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Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-009 **Sample ID: B1-W** **Matrix:** Liquid **Sample Date:** 3/5/2008 12:25 PM

TPH-Extractable: EPA 3510C / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		0.96	48	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307
TPH as Motor Oil	ND		0.96	190	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	86.3	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	3/11/2008	WM1080311
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	103	60 - 130
Dibromofluoromethane	92.0	60 - 130
Toluene-d8	103	60 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
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Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-010 **Sample ID: B2-W** **Matrix:** Liquid **Sample Date:** 3/5/2008 1:54 PM

TPH-Extractable: EPA 3510C / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		0.96	48	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307
TPH as Motor Oil	**380**		0.96	190	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	82.2	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	3/11/2008	WM1080311
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	107	60 - 130
Dibromofluoromethane	94.4	60 - 130
Toluene-d8	102	60 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

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D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
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San Francisco, CA 94110
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GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-011 **Sample ID: B3-W** **Matrix:** Liquid **Sample Date:** 3/5/2008 11:00 AM

TPH-Extractable: EPA 3510C / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		0.96	48	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307
TPH as Motor Oil	**730**		0.96	190	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307

See Case Narrative on the cover of this report.

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	96.0	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	3/11/2008	WM1080311
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	104	60 - 130
Dibromofluoromethane	95.5	60 - 130
Toluene-d8	102	60 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

ACCUTEST Laboratories

Northern California *3334 Victor Court, Santa Clara, CA 95054* *Phone: (408) 588-0200* *Fax: (408) 588-0201*

Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110
Attn: Brent Wheeler

Project ID: 2006

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA
GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/06/2008
Sample Collected by: Client

Lab # : C0067-012 **Sample ID: B4-W** **Matrix:** Liquid **Sample Date:** 3/5/2008 3:15 PM

TPH-Extractable: EPA 3510C / EPA 8015B(M)

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		0.98	49	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307
The sample contains 700 µg/L discrete peaks in the Diesel range (C10-C28).									
TPH as Motor Oil	ND		0.98	200	µg/L	3/7/2008	WDA080307	3/10/2008	WDA080307
See Case Narrative on the cover of this report.									

Surrogate	Surrogate Recovery	Control Limits (%)
n-Hexacosane	91.4	50 - 150

Analyzed by: JHsiang
Reviewed by: mtran

VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	3/11/2008	WM1080311
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	3/11/2008	WM1080311
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	3/11/2008	WM1080311
Sample contains high concentration of a non-target compound (Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-)									

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	103	60 - 130
Dibromofluoromethane	93.3	60 - 130
Toluene-d8	103	60 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Solid - TPH-Extractable: EPA 3545A / EPA 8015B(M)

QC/Prep Batch ID: SDA080306

Validated by: mtran - 03/07/08

QC/Prep Date: 3/6/2008

Parameter	Result	DF	PQLR	Units
TPH as Diesel	ND	1	5.0	mg/Kg
TPH as Kerosene	ND	1	5.0	mg/Kg
TPH as Mineral Spirits (Stoddard)	ND	1	5.0	mg/Kg
TPH as Motor Oil	ND	1	20	mg/Kg

Surrogate for Blank	% Recovery	Control Limits
n-Hexacosane	**83.8**	50 - 150

LCS / LCSD - Solid - TPH-Extractable: EPA 3545A / EPA 8015B(M)

QC Batch ID: SDA080306

Reviewed by: mtran - 03/07/08

QC/Prep Date: 3/6/2008

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<5.0	100	84.3	mg/Kg	84.3	45 - 140
TPH as Motor Oil	<20	100	89.1	mg/Kg	89.1	45 - 140

Surrogate	% Recovery	Control Limits
n-Hexacosane	**90.8**	50 - 150

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<5.0	100	87.0	mg/Kg	87.0	3.1	30.0	45 - 140
TPH as Motor Oil	<20	100	90.6	mg/Kg	90.6	1.7	30.0	45 - 140

Surrogate	% Recovery	Control Limits
n-Hexacosane	**95.1**	50 - 150

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Method Blank - Liquid - TPH-Extractable: EPA 3510C / EPA 8015B(M)

QC/Prep Batch ID: WDA080307

Validated by: mtran - 03/11/08

QC/Prep Date: 3/7/2008

Parameter	Result	DF	PQLR	Units
TPH as Diesel	ND	1	50	µg/L
TPH as Kerosene	ND	1	50	µg/L
TPH as Mineral Spirits (Stoddard)	ND	1	50	µg/L
TPH as Motor Oil	ND	1	200	µg/L

Surrogate for Blank	% Recovery	Control Limits
n-Hexacosane	**88.1**	50 - 150

LCS / LCSD - Liquid - TPH-Extractable: EPA 3510C / EPA 8015B(M)

QC Batch ID: WDA080307

Reviewed by: mtran - 03/11/08

QC/Prep Date: 3/7/2008

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<50	1000	835	µg/L	83.5	45 - 140
TPH as Motor Oil	<200	1000	715	µg/L	71.5	45 - 140

Surrogate	% Recovery	Control Limits
n-Hexacosane	**88.2**	50 - 150

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<50	1000	831	µg/L	83.1	0.44	25.0	45 - 140
TPH as Motor Oil	<200	1000	759	µg/L	75.9	6.0	25.0	45 - 140

Surrogate	% Recovery	Control Limits
n-Hexacosane	**88.2**	50 - 150

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Solid - VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

QC Batch ID: SM3080311

Validated by: mfelix - 03/11/08

QC Batch Analysis Date: 3/11/2008

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	5.0	µg/Kg
Diisopropyl Ether	ND	1	5.0	µg/Kg
Ethyl Benzene	ND	1	5.0	µg/Kg
Methyl-t-butyl Ether	ND	1	5.0	µg/Kg
tert-Amyl Methyl Ether	ND	1	5.0	µg/Kg
tert-Butanol (TBA)	ND	1	40	µg/Kg
tert-Butyl Ethyl Ether	ND	1	5.0	µg/Kg
Toluene	ND	1	5.0	µg/Kg
Xylenes, Total	ND	1	10	µg/Kg

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**94.2**	60 - 130
Dibromofluoromethane	**93.2**	60 - 130
Toluene-d8	**99.4**	60 - 130

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

LCS / LCSD - Solid - VOCs: EPA 5030B (or 5035A for Encore Samples only)/EPA 8260B

QC Batch ID: SM3080311

Reviewed by: mfelix - 03/11/08

QC Batch ID Analysis Date: 3/11/2008

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	0.0	40	33.4	µg/Kg	83.5	65 - 135
Benzene	<5.0	40	39.5	µg/Kg	98.8	65 - 135
Chlorobenzene	0.0	40	43.3	µg/Kg	108	65 - 135
Methyl-t-butyl Ether	<5.0	40	38.2	µg/Kg	95.5	65 - 135
Toluene	<5.0	40	42.1	µg/Kg	105	65 - 135
Trichloroethene	0.0	40	40.4	µg/Kg	101	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**99.5**	60 - 130
Dibromofluoromethane	**89.1**	60 - 130
Toluene-d8	**105.0**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	0.0	40	36.6	µg/Kg	91.5	9.1	30.0	65 - 135
Benzene	<5.0	40	42.4	µg/Kg	106	7.1	30.0	65 - 135
Chlorobenzene	0.0	40	45.2	µg/Kg	113	4.3	30.0	65 - 135
Methyl-t-butyl Ether	<5.0	40	36.9	µg/Kg	92.2	3.5	30.0	65 - 135
Toluene	<5.0	40	44.6	µg/Kg	112	5.8	30.0	65 - 135
Trichloroethene	0.0	40	44.2	µg/Kg	110	9.0	30.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**97.9**	60 - 130
Dibromofluoromethane	**88.8**	60 - 130
Toluene-d8	**104.0**	60 - 130

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

QC Batch ID: WM1080311

Validated by: MaiChiTu - 03/12/08

QC Batch Analysis Date: 3/11/2008

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**104**	60 - 130
Dibromofluoromethane	**90.8**	60 - 130
Toluene-d8	**102**	60 - 130

Northern California *3334 Victor Court, Santa Clara, CA 95054* *Phone: (408) 588-0200* *Fax: (408) 588-0201*

LCS / LCSD - Liquid - VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

QC Batch ID: WM1080311

Reviewed by: MaiChiTu - 03/12/08

QC Batch ID Analysis Date: 3/11/2008

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	21.7	µg/L	108	70 - 130
Methyl-t-butyl Ether	<1.0	20	19.4	µg/L	97.0	70 - 130
Toluene	<0.50	20	20.8	µg/L	104	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**103.0**	60 - 130
Dibromofluoromethane	**94.1**	60 - 130
Toluene-d8	**101.0**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	24.0	µg/L	120	10	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	21.7	µg/L	108	11	25.0	70 - 130
Toluene	<0.50	20	22.8	µg/L	114	9.2	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**108.0**	60 - 130
Dibromofluoromethane	**97.9**	60 - 130
Toluene-d8	**99.5**	60 - 130

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

MS / MSD - Liquid - VOCs: EPA 5030B / EPA 8260B for Groundwater and Water - EPA 624 for Wastewater

QC Batch ID: WM1080311

Reviewed by: MaiChiTu - 03/12/08

QC Batch ID Analysis Date: 3/11/2008

MS Sample Spiked: C0067-009

Parameter	Sample Result	DF	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	1	20	22.1	µg/L	3/11/2008	110	70 - 130
Methyl-t-butyl Ether	ND	1	20	20.5	µg/L	3/11/2008	102	70 - 130
Toluene	ND	1	20	21.3	µg/L	3/11/2008	106	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**104.0**	60 - 130
Dibromofluoromethane	**97.6**	60 - 130
Toluene-d8	**104.0**	60 - 130

MSD Sample Spiked: C0067-009

Parameter	Sample Result	DF	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	1	20	20.4	µg/L	3/11/2008	102	8.0	25.0	70 - 130
Methyl-t-butyl Ether	ND	1	20	19.6	µg/L	3/11/2008	98.0	4.5	25.0	70 - 130
Toluene	ND	1	20	20.3	µg/L	3/11/2008	102	4.8	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**102.0**	60 - 130
Dibromofluoromethane	**97.2**	60 - 130
Toluene-d8	**104.0**	60 - 130

From:	Eugenio Diaz
To:	Diane Theesen;
CC:	
Subject:	Additional Analysis for soil and water samples
Date:	Monday, March 10, 2008 2:18:13 PM
Attachments:	

Dear Diane.

Please add the following analysis to the soil and water samples collected from the site located at 757 Santa Clara Ave. , Alameda, CA. The samples were collected on 3/5/08 and picked up by ACCUTEST on 3/6/08. GGE project number is 2006.

For all the soil and groundwater samples we need to analyze for fuel oxygenates (EDB, TAME, DIPE, TBA, etc). In the CoC I requested BTEX and MTBE by 8015/8021. Wonder if is not to late to replace that request for the 8260 method, which includes BTEX, MTBE and fuel oxygenates (we do not need gasoline though).

Please call me if you have any question.

Eugenio

Eugenio Diaz, P. G.
Golden Gate Environmental, Inc.
3730 Mission Street
San Francisco, CA 94110
415-512-1555 (fax) 415-512-0964

Entech Analytical Labs, Inc. Chain of Custody / Analysis Request

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax
ELAP No. 2346

Attention to: BRENT WHEELER	Phone No.: 415-512-1555	Purchase Order No.: 2006	Invoice to: (If Different) GINA WEE — Phone: 415-512-1555
Company Name: GGE	Fax No.: 415-512 0964	Project No. / Name: 2006 / PSI	Company:
Mailing Address: 3730 MISSION St.	Email Address: DATA@GGTR.COM		Billing Address: (If Different)
City: SF	State: CA Zip Code: 94110	Project Location: 757 Santa Clara Ave.	City: ALAMEDA CA. State: Zip:

Entech Order ID: C0067

EDF ☒ Global ID:

Turn Around Time: ❑ Same Day ❑ 1 Day ❑ 2 Day ❑ 3 Day ☒ 4 Day ❑ 5 Day ❑ 10 Day

Sample Information — Sampler

Circle Applicable: EPA 8260B Full List; 8260 Petroleum: List includes: Gas, BTEX, MtBE, EtBE, TBA, TAME, DIPE, 1,2-DCA, EDB; EPA 8270: Base/Neutral/Acid Organics, 8270 Full List, PAHs Only, PAHs - SIM; Pesticides-8081, PCBs - 8082; (TPH Extractables): Diesel, Motor Oil, Other HEATING OIL w/ Si-Gel Cleanup; TPH Gas, (BTEX), (MtBE) by EPA 8015/8021B; TOTAL DISSOLVED SOLIDS 160.1; Metals - Circle Below: Total, Dissolved, STLC, TCLP

Client ID	Field Point	Date	Time	Entech Lab. No.	Matrix	No. of Containers	TPH Extractables (Heating Oil)	TPH Gas/BTEX/MtBE	Total Dissolved Solids	Remarks / Instructions
B3-6	B3	3/5/08	0930	001	S	1	X	X		
B3-7	B3	↓	0942	002	S	1	X	X		
B1-6	B1		1102	003	S	1	X	X		
B1-7	B1		1110	004	S	1	X	X		
B2-6	B2		1150	005	S	1	X	X		
B2-7	B2		1250	006	S	1	X	X		
B4-6	B4		1435	007	S	1	X	X		
B4-7	B4		1440	008	S	1	X	X		
B1-W	B1		1225	009	W	4	X	X		
B2-W	B2		1354	010	W	4	X	X		
B3-W	B3		11:00	011	W	4	X	X		
B4-W	B4	↓	15:15	012	W	4	X	X		

Handwritten across TDS columns: No Analyses requested for Brent Wheeler phone conversation 3/6/08

Remarks: 4 Day TAT

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	3/6/08	0838
[signature]	[signature]	3/6/08	1035

Lab Use: Rec'd for first 8 samples (1) acetate tube and for water (3) VOA's HCL and (1) Lit Amber N/P each

Metals: Al, As, Sb, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Tl, Sn, Ti, Zn, V
❑ Plating ❑ LUFT-5 ❑ RCRA-8 ❑ PPM-13 ❑ CAM-17

Lab Use:
Samples: Iced (Y)/N Temperature: 8.7°
Appropriate Containers/Preservatives: (Y)/N
Labels match CoC? (Y)/N Headspace? Y/N N/A
Shipment Method: Accutest Courier
Custody Seals? Y/N N/A
Seperate Receipt Log Y/N N/A
If any N's, Explain:

ACCUTEST Laboratories

ENTECH ANALYTICAL LABS, INC.

Northern California *3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201*

Brent Wheeler
Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110

Lab Order Number: C0134
Issued: 03/14/2008

Project ID: 2006

Global ID: T0600123091

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA

On March 11, 2008, a sample was received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix	Test / Comments
Liquid	Electronic Deliverables for Geotracker
	Dissolved Solids, Total (TDS): EPA 160.1/Std. Methods (18th Ed.) 2540C

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
Subcontracted work is the responsibility of the subcontract laboratory, this includes turn-around-time and data quality.
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

C. L. Thom
Laboratory Director

ACCUTEST Laboratories

Northern California *3334 Victor Court, Santa Clara, CA 95054* *Phone: (408) 588-0200* *Fax: (408) 588-0201*

Golden Gate Environmental
3730 Mission Street
San Francisco, CA 94110
Attn: Brent Wheeler

Project ID: 2006

Project Name: 2006/PSI
Project Location: 757 Santa Clara Ave./Alameda, CA
GlobalID: T0600123091

Certificate of Analysis - Data Report

Samples Received: 03/11/2008
Sample Collected by: Client

Lab # : C0134-001 **Sample ID: B4-W** **Matrix:** Liquid **Sample Date:** 3/7/2008 11:55 AM

Dissolved Solids, Total (TDS): EPA 160.1/Std. Methods (18th Ed.) 2540C

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Total Dissolved Solids	**440**		2.0	20	mg/L	N/A	N/A	3/12/2008	WTDS080312

Analyzed by: Eblanco
Reviewed by: HDINH

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Northern California 3334 Victor Court, Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Replicate - liquid - Dissolved Solids, Total (TDS): EPA 160.1/Std. Methods (18th Ed.) 2540C

QC Batch ID: WTDS080312

Validated by: HDINH - 03/14/08

QC Batch Analysis Date: 3/12/2008

Parameter		Sample Result	Replicate Result	Units	RPD	QC Type	RPD Limits
Total Dissolved Solids	C0165-003	1050	1053	mg/L	**0.3**	Replicate	25.0

Entech Analytical Labs, Inc. Chain of Custody / Analysis Request

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax ELAP No. 2346

Attention to: BRENT A. WHEELER	Phone No.: 415-512-1555	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: GOLDEN GATE ENVIRO.	Fax No.: 415-512-0464	Project No. / Name: 2006 SELK APARTMENTS	Company:		
Mailing Address: 3780 MISSION ST.	Email Address: G.WHEELER@EGTR.COM		Billing Address: (If Different)		
City: SAN FRANCISCO	State: CA Zip Code:	Project Location: 757 SANTA CLARA AVE.	City: ALAMEDA	State:	Zip:

Entech Order ID: C0134

EDF ☒ Global ID: T0600123091

Turn Around Time

☐ Same Day ☐ 1 Day
☐ 2 Day ☐ 3 Day
☒ 4 Day ☐ 5 Day
☐ 10 Day

Sample Information

Sampler BAW

Client ID	Field Point	Date	Time	Entech Lab. No.	Matrix	No. of Containers	Circle Applicable: EPA 8260B Full List	8260 Petroleum: List includes: Gas, BTEX MtBE, EtBE, TBA, TAME, DIPE, 1,2-DCA, EDB	EPA 8270: Base/Neutral/Acid Organics 8270 Full List PAHs Only PAHs - SIM	Pesticides-8081 PCBs - 8082	TPH Extractable: Diesel, Motor Oil, Other w/ Si-Gel Cleanup	TPH Gas, BTEX, MtBE by EPA 8015/8021B	TDS (EPA 160.1)	Metals - Circle Below Total Dissolved STLC TCLP	Remarks Instructions
B4-W	B4	3/7/08	1156	-001	W	1							X		

4 DAYS AT

Relinquished by:	Received by:	Date:	Time:
		3/11/08	0840
Relinquished by:	Received by:	Date:	Time:
		3/11/08	1010
Relinquished by:	Received by:	Date:	Time:

Lab Use:

Metals: Al, As, Sb, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Tl, Sn, Ti, Zn, V

☐ Plating ☐ LUFT-5 ☐ RCRA-8 ☐ PPM-13 ☐ CAM-17

Lab Use:

Samples: Iced Y/N Temperature: _____ Shipment Method: _____
Appropriate Containers/Preservatives: Y/N Custody Seals? Y/N
Labels match CoC? Y/N Headspace? Y/N Seperate Receipt Log Y/N

If any N's, Explain:

Golden Gate Environmental, Inc.

FLUID-LEVEL MONITORING DATA

Project No: 2005 Date: 3-7-08

Project/Site Location: SELIK APARTMENTS, 757 SANTA CLARA AVE.

Technician: B. WHEELER Instrument: SOLINST WLI

Boring/ Well ID	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Total Well Depth (feet)	Comments
B-1	7.34	NM	NM	1140	NO ODOR
B-2	7.35	NM	NM	1142	NO ODOR
B-3	6.98	NM	NM	1145	NO ODOR
B-4	7.77	NM	NM	1149	

Measurements referenced to: ✓ TOC _____ Grade.

GOLDEN GATE ENVIRONMENTAL INC.

3730 Mission Street
San Francisco, California 94110
Ph 415-970-9088 Fx 415-970-9089

SURVEY DATA SHEET

Project No: 2006 Date: 3-7-08

Client: SELK APARTMENTS

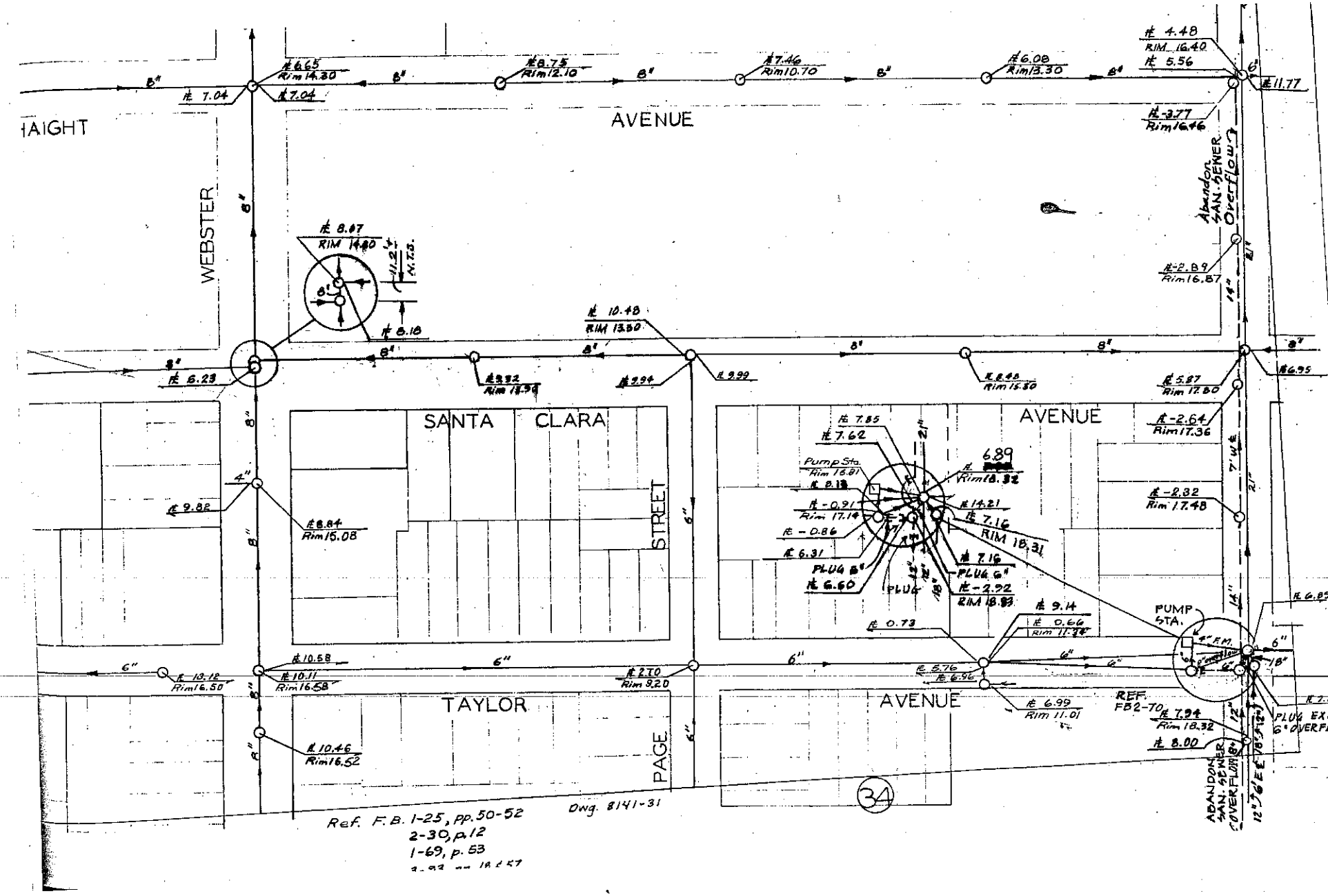
Site Location: 757 SANTA CLARA AVENUE

Surveyor: B. WHEELER Instrument: TOPCON RL-20

	STATION/ WELL	+ B.S. (feet)	H.I. (feet)	- F.S. (feet)	ELEV. (feet)	Comments
	X	6' 3 3/8"	24.28		~18	
X	B-1 TOC			6' 6"	17.78	
	B-1 GR			5' 11 5/8"	18.31	
X	B-2 TOC			6' 6"	17.78	
	B-2 GR			5' 11 1/8"	18.35	
X	B-3 TOC			7' 1 3/8"	17.17	
	B-3 GR			6' 7 15/16"	17.62	
X	B-4 TOC			6' 2 3/8"	18.08	
	B-4 GR			5' 7 15/16"	18.62	
✓	X	6' 3 3/8"				

Source and Description of Bench Mark/Arbitrary Datum: "X" ETCHED IN TOP OF CONCRETE AT WEST CURB RETURN OF DRIVEWAY AT 755 SANTA CLARA AVE (NEIGHBOR) ASSUMED ELEV. X @ 18' (NOT MSL)

Measurements Referenced To: TOC___ GRADE___ OTHER___


HAIGHT
AVENUE
WEBSTER
SANTA CLARA
STREET
AVENUE
TAYLOR
PAGE
AVENUE
Abandon SAN. SEWER Overflow
Pump Sta. Rim 16.81
689
PUMP STA.
REF. FB2-70
34
Ref. F.B. 1-25, pp. 50-52
2-30, p. 12
1-69, p. 53
Dwg. 8141-31

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number
		6951

GENERATOR

4. Generator's Name and Mailing Address
Alvin Selk Trust 4
44 Basin Side Way Alameda CA 94502
Generator's Phone (510) 484-7992

5. Transporter Company Name: CLEARWATER ENVIRONMENTAL
6. US EPA ID Number: CAR000007013
7. Transporter Phone: (510) 476-1740

8. Designated Facility Name and Site Address
ALVISO INDEPENDENT OIL
5002 ARCHER STREET
ALVISO, CA 95002
9. US EPA ID Number: CAL000161743
10. Facility's Phone: (510) 476-1740

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous waste - Liquid	001	DM	20	G
b.				

15. Special Handling Instructions and Additional Information
Wear PPE
Emergency Contact
(510) 476-1740
Attn: Kirk Hayward

Handling Codes for Wastes Listed Above	
11a.	11b.

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
BRENT WHEELER		4	4	08

TRANSPORTER

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
William Clark	Will Clark	4	4	08

FACILITY

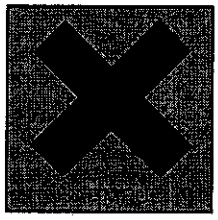
18. Discrepancy Indication Space

19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.

Printed/Typed Name	Signature	Month	Day	Year

WHITE – ORIGINAL (Return to Generator) YELLOW – TSDF (Retain Copy) PINK – TRANSPORTER COPY GOLDENROD – GENERATOR'S COPY

Safety data for (1R)-(+)-camphor



Glossary of terms on this data sheet.

The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers.

General

Synonyms: 1,7,7-trimethyl-bicyclo[2.2.1]heptan-2-one, (1R,4R)-(+)-camphor, (+)-camphor, alcanfor, d-camphor, d-(+)-camphor, (+)-2-bornanone, d-2-bornanone, Japanese camphor, camphor USP
Molecular formula: $C_{10}H_{16}O$

CAS No: 464-49-3
EINECS No: 207-355-2

Physical data

Appearance: white crystals
Melting point: 178 - 180 C
Boiling point:
Vapour density: 5.24 (air = 1)
Vapour pressure: 4 mm Hg at 70 C

Density (g cm^{-3}):
Flash point:
Explosion limits: 0.6 % - 3.5 %
Autoignition temperature: 465 C
Water solubility:

Stability

Stable. Incompatible with strong reducing agents, strong oxidizing agents,

chlorinated solvents. Protect from direct sunlight.

Toxicology

Harmful if inhaled, swallowed or absorbed through skin. Severe irritant. High concentrations are very destructive of mucous membranes.

Toxicity data
(The meaning of any toxicological abbreviations which appear in this section is given here.)
ORL-MUS LD50 1310 mg kg^{-1}

Irritation data
(The meaning of any toxicological abbreviations which appear in this section is given here.)
SKN-RBT 500 mg/24h mod

Risk phrases
(The meaning of any risk phrases which appear in this section is given here.)
R20 R21 R22 R36 R38 R41.

Transport information

Personal protection

Safety glasses, adequate ventilation.

Safety phrases
(The meaning of any safety phrases which appear in this section is given here.)
S16 S26 S36.

[Return to Physical & Theoretical Chemistry Lab. Safety home page.]