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SECOND SEMI-ANNUAL 2006 GROUNDWATER MONITORING REPORT

FORMER RUSS ELLIOTT, INC. FACILITY
2526 WOOD STREET
OAKLAND, CALIFORNIA

ALAMEDA COUNTY HEALTH
CASE NO. RO000040

Prepared for

MS. JEANNETTE ELLIOTT
SAN LEANDRO, CALIFORNIA

September 2006

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
GEOSCIENCE & ENGINEERING CONSULTING

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Prepared for:

MS. JEANNETTE ELLIOTT
1744 SKYVIEW DRIVE
SAN LEANDRO, CALIFORNIA 94577

Prepared by:

STELLAR ENVIRONMENTAL SOLUTIONS, INC.
2198 SIXTH STREET
BERKELEY, CALIFORNIA 94710

October 3, 2006

Project No. 2003-41

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
2198 SIXTH STREET, SUITE 201·BERKELEY, CA 94710
TEL: (510)644-3123 · FAX: (510)644-3859
GEOSCIENCE & ENGINEERING CONSULTING

October 3, 2006

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health, Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Second Semi-Annual 2006 Groundwater Monitoring Report
Former Russ Elliott, Inc. Facility – 2526 Wood Street, Oakland, California
Alameda County Health Case No. RO000040 (UST State Fund Claim No. 017990)

Dear Mr. Chan:

This report documents the tenth consecutive groundwater monitoring event conducted in August 2006 by Stellar Environmental Solutions, Inc. (SES) at the referenced site. This event marks the second semi-annual monitoring event in accordance with the reduced groundwater monitoring schedule—from quarterly to semi-annually—approved by Alameda County Health. Three site groundwater monitoring wells were installed and first sampled in February 2004 to evaluate impacts from two former onsite underground fuel storage tanks. The scope of work was conducted in accordance with the Alameda County Health-approved technical workplan. This report was uploaded to the State Water Resources Control Board's GeoTracker system and Alameda County Health's ftp website.

In our professional opinion, continued semi-annual monitoring is no longer warranted, as the monitoring completed to date has established that the plume is stable (with only low levels of detectable MTBE). We 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. Please contact us at (510) 644-3123 if you have any questions.

Sincerely,

Teal Glass
Senior Environmental Scientist

Richard S. Makdisi, R.G. (#4652) R.E.A.
Principal

cc: Ms. Jeannette Elliott – Property Owner

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1.0 INTRODUCTION

PROJECT BACKGROUND

Stellar Environmental Solutions, Inc. (SES) was retained by Ms. Jeannette Elliott (property owner) to conduct ongoing groundwater monitoring and sampling activities at 2526 Wood Street in Oakland, California. The work is designed to evaluate impacts from former onsite underground fuel storage tanks (UFSTs). Previous site corrective actions and investigations are summarized later in this report. The Alameda County Health Care Services Agency, Department of Environmental Health (Alameda County Health) is the lead regulatory agency for the investigation, and has assigned the site as Fuel Leak Case No. RO000040. The California GeoTracker Global ID for the facility is T0600102110.

SITE AND VICINITY DESCRIPTION

The project site is a former roofing company (Russ Elliott, Inc.) located at 2526 Wood Street, Oakland, Alameda County, California (site). The business ceased operations at the site in early 2004; the site is currently occupied by a construction firm. Although the property was recently sold, the previous property owner (Ms. Jeannette Elliott) remains responsible for the UFST-related site investigation.

The property is approximately 380 feet long (between Wood Street and Willow Street) by approximately 120 feet wide. The long axis of the site (parallel to 26th Street) is oriented approximately northeast to southwest. Figure 1 is a site location map. Figure 2 shows the location of the former site UFSTs in relation to the site buildings and adjacent streets.

The former UFSTs and current area of investigation are situated in the largely unpaved service yard near the western border of the subject property (near 26th Street). Access to this area is provided either through a chain link gate on 26th Street or a gate operated by the current tenant on Willow Street. The area available for exterior drilling is limited by adjacent buildings and an active railroad spur that services an adjacent parcel. Nearby land use is wholly commercial and light industrial (there are no residential or other sensitive land uses in the immediate vicinity).

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SITE LOCATION ON U.S.G.S. TOPOGRAPHIC MAP

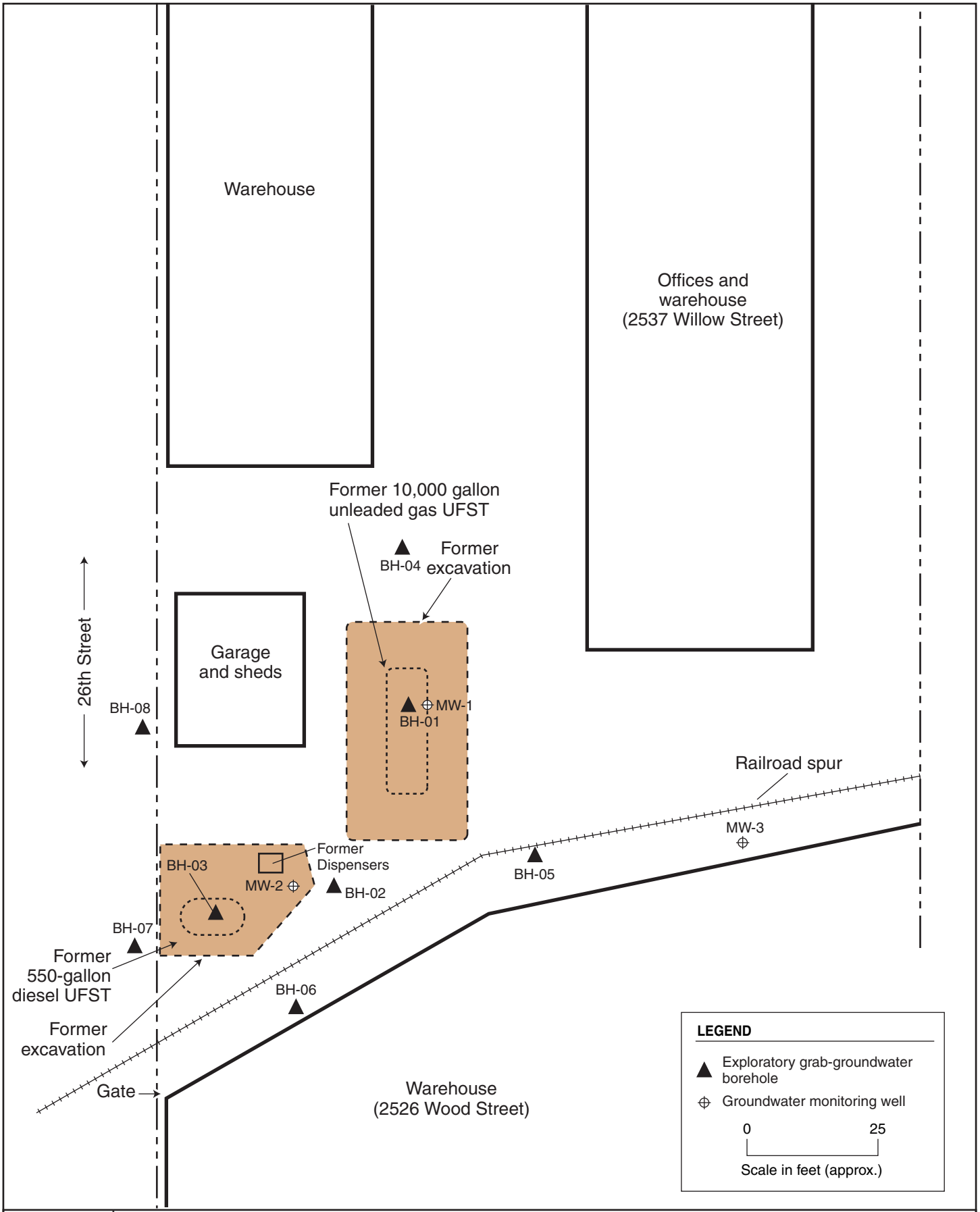
2526 Wood Street
Oakland, CA

By: MJC

JULY 2003

Figure 1

2003-36-01



SITE PLAN AND HISTORICAL SAMPLING LOCATIONS

2526 Wood Street Oakland, CA	By: MJC	SEPTEMBER 2006
	Figure 2	

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Downgradient land use (to the west beginning with the closest property) includes streets, undeveloped land with freeway overpasses, and San Francisco Bay (approximately 3,000 feet from the subject property).

PREVIOUS INVESTIGATIONS AND CORRECTIVE ACTIONS

UFST Removals

Two UFSTs were located near the western border of the subject property (near 26th Street), approximately 40 feet from each other. Both UFSTs were utilized for fueling company vehicles, and shared a common dispenser island that was located between them. Both UFSTs were removed under permit and regulatory oversight.

The 550-gallon diesel UFST was removed in 1995, and the 10,000-gallon gasoline UFST was removed in 2002. The confirmation soil and water sampling conducted during the UFST removals suggested a historical leak in the UFST and/or piping. The abatement contractor in charge of the removal did not submit a UFST closure documentation report.

A UFST closure documentation report prepared by SES (SES, 2003a), that discussed the UFST removals, was submitted to both the Oakland Fire Department and Alameda County Health.

2003 Preliminary Site Assessment

Concurrent with the UFST closure documentation report, SES submitted to Alameda County Health a technical workplan for a Preliminary Site Assessment (PSA) (consisting of exploratory borehole drilling and sampling) to evaluate the potential for residual contamination (SES, 2003b). Alameda County Health subsequently approved the technical workplan (Alameda County Health, 2003). The investigation, conducted in 2003, included advancing and sampling (of soil and groundwater) from eight exploratory boreholes. A PSA documentation report was submitted to Alameda County Health (SES, 2003c).

Groundwater contaminants detected above screening-level criteria include diesel, gasoline, benzene, methyl *tertiary*-butyl ether (MTBE), and *tertiary*-butyl alcohol (TBA). The only soil contaminant detected above screening-level criteria was MTBE. The contamination was confined to the immediate vicinity of the former gasoline UFST. No soil contamination was detected beneath the upper water-bearing zone.

Groundwater Monitoring Well Installation

On behalf of the property owner, SES submitted to Alameda County Health a technical workplan for a program of groundwater monitoring well installation, sampling, and reporting (SES, 2004a).

Alameda County Health subsequently approved the well installation workplan (Alameda County Health, 2004). Three groundwater monitoring wells were installed, developed, surveyed, and sampled in February 2004 (SES, 2004b).

Groundwater Monitoring Well Sampling

Ten groundwater monitoring well monitoring/sampling events were conducted on a quarterly basis between February 2004 and August 2006. Groundwater monitoring frequency was reduced from quarterly to semi-annual following the February 2006 event, in accordance with the Alameda County Health-approved reduced groundwater monitoring schedule. Appendix C contains historical groundwater well monitoring analytical results.

OBJECTIVES AND SCOPE OF WORK

This report discusses the following activities conducted/coordinated by SES in the semi-annual (6-month) period between April 1 and September 30, 2006:

- Collecting water levels in site wells to determine shallow groundwater flow direction.
- Sampling site wells for contaminant analysis and indicators of natural attenuation.

REGULATORY OVERSIGHT

The lead regulatory agency for the site investigation and remediation is Alameda County Health. All work plans and reports are submitted to this agency. The most recent Alameda County Health directive regarding the site (email dated January 26, 2006) approved the reduction of groundwater monitoring events from quarterly to semi-annually (two events per year) and the discontinuing of analysis for diesel (shown to not be a site contaminant of concern). The previous Alameda County Health directive regarding the site (letter dated January 6, 2004) approved the well installation and quarterly groundwater monitoring and sampling.

The site is in compliance with the State Water Resources Control Board's GeoTracker requirements for uploading of electronic data and reports. In addition, electronic copies of technical documentation reports published since Q3 2005 have been uploaded to Alameda County Health's file transfer protocol (ftp) system. Per Alameda County Health's October 31, 2005 "Miscellaneous Administrative Topics and Procedures" directive, effective January 31, 2006, paper copies of reports will no longer be provided to Alameda County Health.

2.0 PHYSICAL SETTING

Following is a brief summary of the site hydrogeologic conditions based on geologic logging and water level measurements collected at the site since October 2003.

A detailed discussion of site lithology and hydrogeology was provided in the well installation report (SES, 2004a). The following summarizes site conditions. A total of 11 exploratory boreholes at the subject property have been geologically logged by a California Registered Geologist using the visual method of the Unified Soils Classification System. The majority of site boreholes have been advanced to 20 feet below ground surface (bgs). That interval includes the upper water-bearing zone and the underlying low-permeability non-water-bearing zone (aquitard).

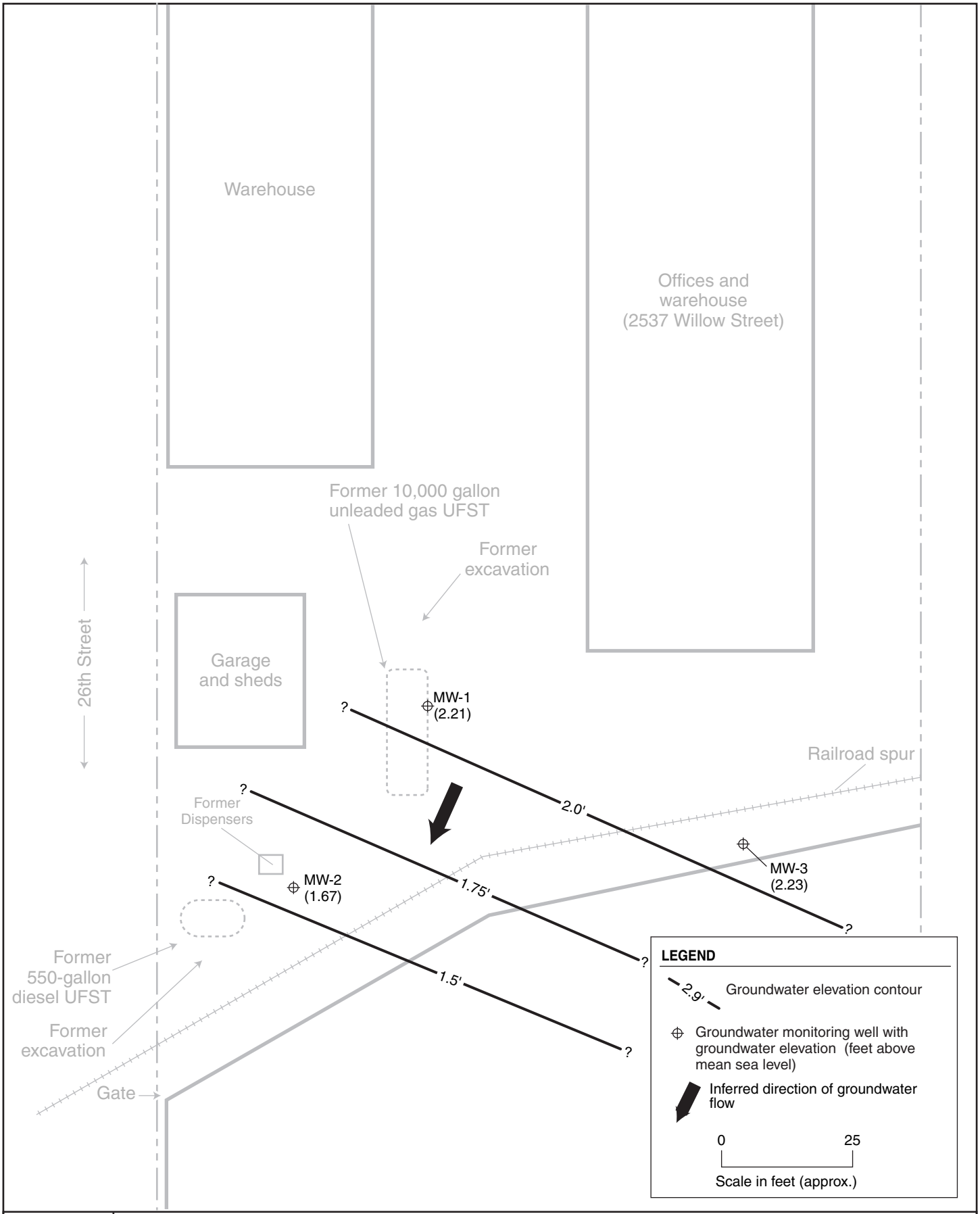
LITHOLOGY

In general, native soil consists primarily of clay (often silty), with interbedded sandy and gravelly zones. The upper 2 to 3 feet is dry, gravelly, sandy fill material. In the majority of the boreholes, this was underlain by a sand (often silty and clayey) varying in thickness from 1 to 6 feet, in which water was encountered (see below). This is underlain by a clay unit, occasionally with interbedded sand stringers. In some of the boreholes, this clay unit extends to total depth. In other boreholes, this clay unit is underlain by a sand unit, which in turn is underlain by a low-permeability clay (often gravelly). The shallow site lithology is typical of alluvial fan and stream depositional environments in this area, with lower-permeability (clay and silt) overbank deposits, and higher-permeability (sand and gravel) channel deposits, with significant lateral and depth variation over short distances.

GROUNDWATER HYDROLOGY

Two shallow water-bearing zones were encountered in native soils in the majority of site boreholes. The top of the upper zone (possibly a perched water zone) was encountered at depths between approximately 4 and 8 feet bgs, in a sandy zone. Water was then encountered again at depths between approximately 13.5 and 17.5 feet bgs. In some of the boreholes, this deeper water was encountered at the top of the sand zone (when present); in other boreholes, it was within the lower clay unit. Water levels in wells MW-1 and MW-2 (installed in the former UFST backfill areas) are likely influenced by direct infiltration during winter recharge events due to the higher permeability of excavation backfill material.

Depth to groundwater (equilibrated in wells) in the current monitoring event ranged from approximately 4.62 to 4.74 feet below grade. Figure 3 is a groundwater elevation and contour map for the current event. Table 1 (in Section 3.0) summarizes current groundwater level data. Groundwater flow direction during the current event was to the west. The groundwater flow direction varies seasonally between west and southeast (SES, 2005e).



GROUNDWATER ELEVATION MAP — AUGUST 24, 2006

2526 Wood Street Oakland, CA	By: MJC	SEPTEMBER 2006
	Figure 3	

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3.0 SECOND SEMI-ANNUAL 2006 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

This section presents the groundwater monitoring and sampling methods for the most recent groundwater monitoring/sampling event. Analytical results are discussed in a subsequent section. Activities included:

- Measuring static water levels with an electric water level indicator;
- Purging wells to obtain representative formation water (and collecting aquifer stability parameters between each purging); and
- Collecting post-purge groundwater samples for laboratory analysis.

On August 23, 2006, groundwater monitoring well water level measurements, purging, and sampling activities were conducted by Dysert Environmental, Inc., under the supervision of SES personnel. Table 1 shows the well construction and groundwater elevation data. Appendix A contains the groundwater monitoring field records for the sampling event.

Table 1
Groundwater Monitoring Well Construction and Groundwater Elevation Data
August 23, 2006 Monitoring Event
2526 Wood Street, Oakland, California

Well	Well Depth [a]	Screened Interval	TOC Elevation [b]	Groundwater Depth [c]	Groundwater Elevation [b]
MW-1	20 [d]	5 to 20	6.95	4.74	2.21
MW-2	20	5 to 20	6.29	4.62	1.67
MW-3	20	5 to 20	6.94	4.71	2.23

Notes:

[a] Well depths are expressed in feet bgs, and are approximate.
[b] All elevations are expressed as feet above mean sea level.
[c] Groundwater depths are expressed in feet bgs relative to the top of well casing.
[c] Well has approximately 8 feet of gravel in bottom resulting from a wellbox displacement and gravel entry during construction in January 2004.

TOC = top of casing

All wells are 2-inch-diameter.

MW-1 elevation was resurveyed in April 2005 after the well box and casing tops were damaged and replaced.

As the first task of the monitoring event, static water levels were measured using an electric water level indicator. Each well was then purged (with a downhole pump) of three wetted casing volumes. Aquifer stability parameters were measured between each purged casing volume to ensure that representative formation water entered the well before sampling. Neither separate-phase petroleum product nor sheen was observed during well purging/sampling.

The "GeoWell" data for this event (water levels) were uploaded in electronic data file (EDF) format to the State Water Resources Control Board's GeoTracker online database.

In reviewing previous groundwater monitoring data, we have noted that measured well depths (during groundwater monitoring) in MW-2 and MW-3 are less than installed depth (approximately 1.5 feet in MW-3 and approximately 3 feet in MW-2). This is likely due to infiltration of sediment through the well screen, a common occurrence in fine-grained sediments. We have also determined that the measured well depth in MW-1 is approximately 6.5 feet less than the installed depth. This is almost certainly the result of gravel falling in the well in January 2005 when the MW-1 wellbox was damaged/removed during re-paving. In our professional opinion, these conditions do not significantly affect the ability of the wells to act as monitoring points for the contaminant plume (either by contaminant concentration or water level).

4.0 REGULATORY CONSIDERATIONS

REGULATORY STATUS

The lead regulatory agency for petroleum contamination cases in the City of Oakland is Alameda County Health, which is a Local Oversight Program (LOP) for the Regional Water Quality Control Board, San Francisco Bay Region (Water Board). As such, Alameda County Health directly oversees soil and groundwater investigations/remediation on UFST sites (with or without Water Board guidance) until determining that case closure is appropriate, at which time Alameda County Health recommends case closure to the Water Board. Alameda County Health has designated the subject property case as Fuel Leak Case No. RO00040. The site is listed in the Water Board's GeoTracker database of reported releases from petroleum UFSTs (Water Board Case No. 01-2294 and Global ID No. T0600102110).

RESIDUAL CONTAMINATION REGULATORY CONSIDERATIONS

The most applicable published numerical criteria governing residual soil and groundwater contamination at this site are the Water Board's Environmental Screening Levels (ESLs) (Water Board, 2005). ESLs are screening-level criteria used to evaluate whether additional investigation and/or remediation are warranted. Criteria to be considered in using the ESLs include:

- contamination is limited to surface soil (less than 10 feet deep) or to subsurface soil;
- soil is fine-grained or coarse-grained;
- land use is residential or commercial/industrial; and
- groundwater *is* or *is not* a known or potential drinking water source.

For the detected site contaminants, the ESL values are the same for surface soil and subsurface soil.

The appropriate ESLs for this site are for coarse-grained soil (a conservative assumption, as grain-size analysis has not been conducted) and commercial/industrial land use (because the owner has no plans to redevelop the property with residential land use). Qualifying for the (usually higher) ESL values for sites where groundwater *is not* a current or potential drinking water source requires obtaining a site-specific variance from the Water Board. The Water Board completed an East Bay Beneficial Use Study (Water Board, 1999) that covers the Richmond-to-Hayward East Bay Basin Area and, based on multiple technical criteria, divides the Basin into three zones:

- Zone A (significant drinking water resource);
- Zone B (groundwater unlikely to be used as drinking water source); and
- Zone C (shallow groundwater proposed for redesignation as Municipal Supply Beneficial Use). This classification indicates that groundwater could not reasonably be expected to serve a public water supply; however, it does not specifically address private water supply wells that might be used for drinking water. In accordance with State Water Resources Control Board Resolution 92-49, pollution sites within this zone must not pose a potential impact to human health or ecologic receptors, and the groundwater contamination plume must be stable or reducing.

The subject site falls within Zone C. The most conservative assumption for the site is that there is a potential for private drinking water wells to be impacted. However, the site location (with no residential downgradient land use) suggests that the less conservative ESLs ("a potential or current drinking water source is not threatened") may be appropriate when the site is considered for case closure. Until case closure is considered, this report (and future reports) will discuss residual soil and groundwater contamination in the context of the more conservative ESL criteria.

SITE CLOSURE CRITERIA

Alameda County Health and the Water Board generally require that the following criteria be met before issuing regulatory closure of petroleum release cases:

1. *The contaminant source (UFSTs and obviously-contaminated backfill material) has been removed.* This criterion has been met, and the available soil analytical results indicate that the residual MTBE soil contamination in the immediate vicinity of the former UFSTs will not be an appreciable long-term source of groundwater contamination.
2. *The groundwater contaminant plume is stable or reducing—i.e., groundwater contamination is not increasing in concentration or lateral extent.* This criterion has not yet been met, and will be evaluated based on the ongoing semi-annual groundwater sampling program.
3. *If residual contamination (soil or groundwater) exists, there is no reasonable risk to sensitive receptors (i.e., surface water or water supply wells) or to site occupants.* This criterion is generally met by conducting a sensitive receptor survey and/or a Risk-Based Corrective Action (RBCA) assessment that models the fate and transport of residual contamination in the context of potential impacts to sensitive receptors. This task is generally conducted after the previous two criteria have been met. Based on the apparent absence of benzene (the probable "risk driver" compound for this site) at elevated concentrations and the likely absence of sensitive receptors, if private wells are eliminated as potential receptors, the site would likely pass the RBCA assessment.

5.0 SECOND SEMI-ANNUAL 2006 MONITORING EVENT ANALYTICAL RESULTS

This section discusses the findings of the current sampling event. Historical groundwater monitoring well analytical results are included as Appendix C.

All groundwater samples in the current sampling event were analyzed for:

- Total volatile hydrocarbons (TVH) – gasoline range (TVHg), by modified EPA Method 8015;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX), by EPA Method 8020;
- MTBE, by EPA Method 8260;
- Fuel oxygenates (*tertiary*-amyl methyl ether [TAME], di-isopropyl ether [DIPE], and TBA), by EPA Method 8260; and
- Lead scavengers (1,2-dichloroethane [EDC] and 1,2-dibromomethane [EDB]), by EPA Method 8260.

All groundwater samples were analyzed by EnTech Analytical Labs, which maintains current ELAP certifications for all of the analytical methods utilized in this investigation. Appendix B contains the certified analytical laboratory report and chain-of-custody record for this event.

Table 2 summarizes the groundwater sample analytical results from the current well sampling event. Figure 4 displays the groundwater analytical results on the site plan.

Only two contaminants were detected in the current event. MTBE was detected at concentrations between 120 micrograms per liter (µg/L) (MW-2) and 240 µg/L (MW-1). The Water Board ESL for MTBE for a commercial/industrial site where the groundwater is not used as drinking water is 1,800 µg/L. TPH as gasoline (TPHg) was detected at concentrations between 50 µg/L (MW-3) and 120 µg/L (MW-2); the ESL for TPHg is 500 µg/L. Contaminants analyzed for and not detected in the current event include diesel, BTEX, lead scavengers, and fuel oxygenates.

The analytical laboratory report was uploaded in EDF format to the GeoTracker online database.

Table 2
August 23, 2006 Groundwater Analytical Results
2526 Wood Street, Oakland [a]

Sample I.D.	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE [b]	Fuel Oxygenates and Lead Scavengers [b]
MW-1	**82**	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	**240**	*ND*
MW-2	**50**	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	**120**	*ND*
MW-3	*< 50*	*< 0.5*	*< 0.5*	*< 0.5*	*< 1.0*	*< 1.0*	*ND*
Groundwater ESLs	500	46	130	290	100	1,800	**TBA = 1,800**

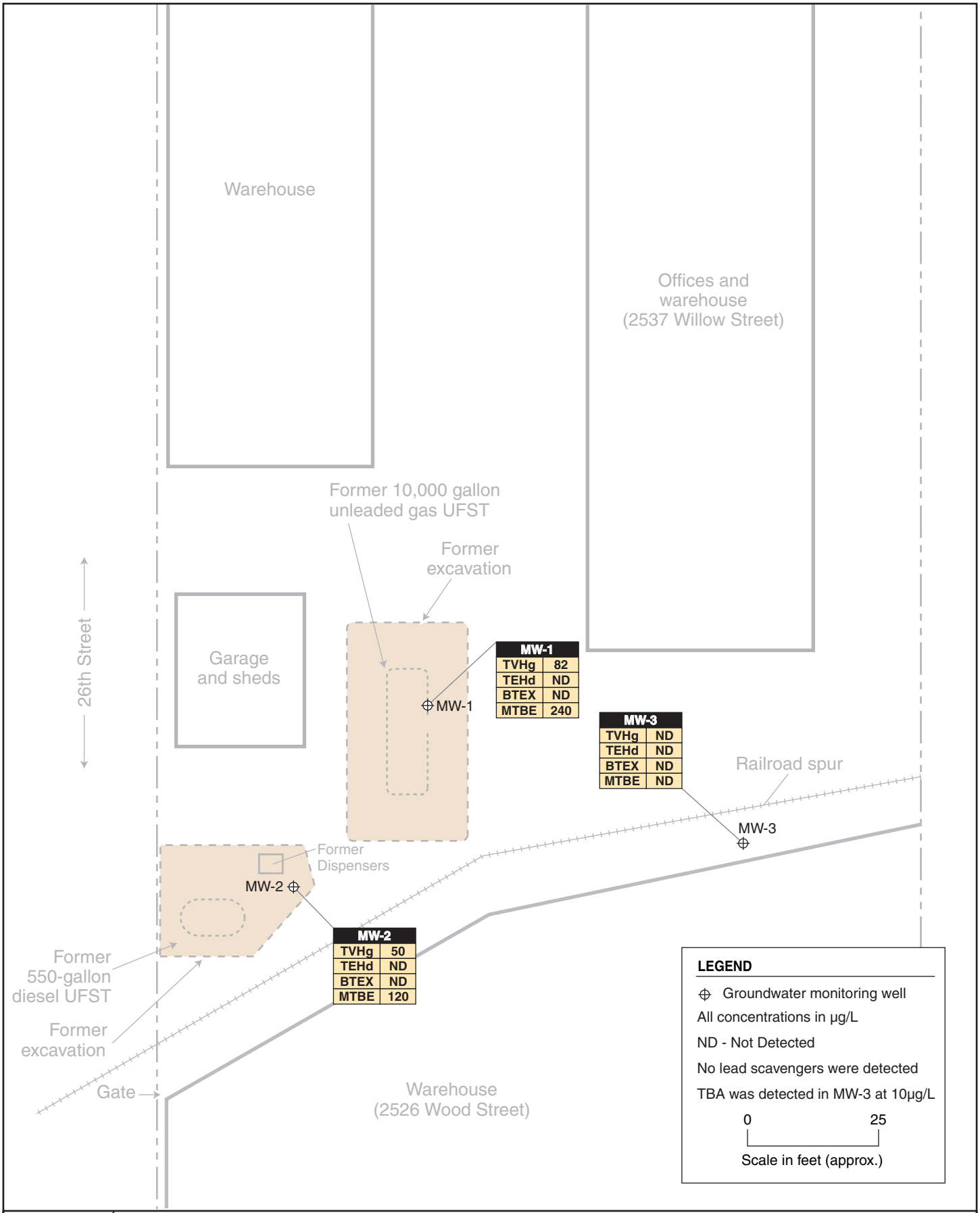
Notes:

[a] All concentrations are in µg/L.
[b] Full list of fuel oxygenates and lead scavengers is included in Appendix B.

MTBE = methyl *tertiary*-butyl ether
TBA = *tertiary*-butyl alcohol
TEHd = total extractable hydrocarbons – diesel range
TVHg = total volatile hydrocarbons – gasoline range

ESLs = Water Board Environmental Screening Levels (Water Board, 2005) for commercial/industrial sites where groundwater is not a potential drinking water source.

ND = not detected above method reporting limits



AUGUST 2006 GROUNDWATER ANALYTICAL RESULTS

2526 Wood Street Oakland, CA	By: MJC	SEPTEMBER 2006
	Figure 4	

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6.0 HYDROCHEMICAL TRENDS AND APPLICATION FOR CASE CLOSURE

Groundwater elevation monitoring and hydrochemical monitoring have been conducted at the site since 2004. First-year monitoring established to the satisfaction of the regulators that fuel oxygenates and lead scavengers were not a site contaminant of concern.

Quarterly monitoring for TVH, BTEX, and MTBE continued throughout 2005, and Alameda County Health agreed to a reduced (biannual) monitoring schedule in 2006. Ten groundwater monitoring events have occurred to date.

Figure 5 shows the trend line for TVH and MTBE. Figure 6 shows the TVHg trend line over the past ten monitoring events. In the past 2 years of groundwater monitoring (quarterly in 2005 and semiannually in 2006), no ESL has been exceeded.

Based on the closure criteria described in Section 4 of this report, the site appears to meet the regulatory criteria for site closure. Thus, on behalf of our client Ms. Jeannette Elliott (UST State Fund Claim No. 017990), SES is petitioning Alameda County Health to grant case closure for the site.

Figure 5: Historical MTBE Hydrochemical Trends
2526 Wood Street, Oakland, California

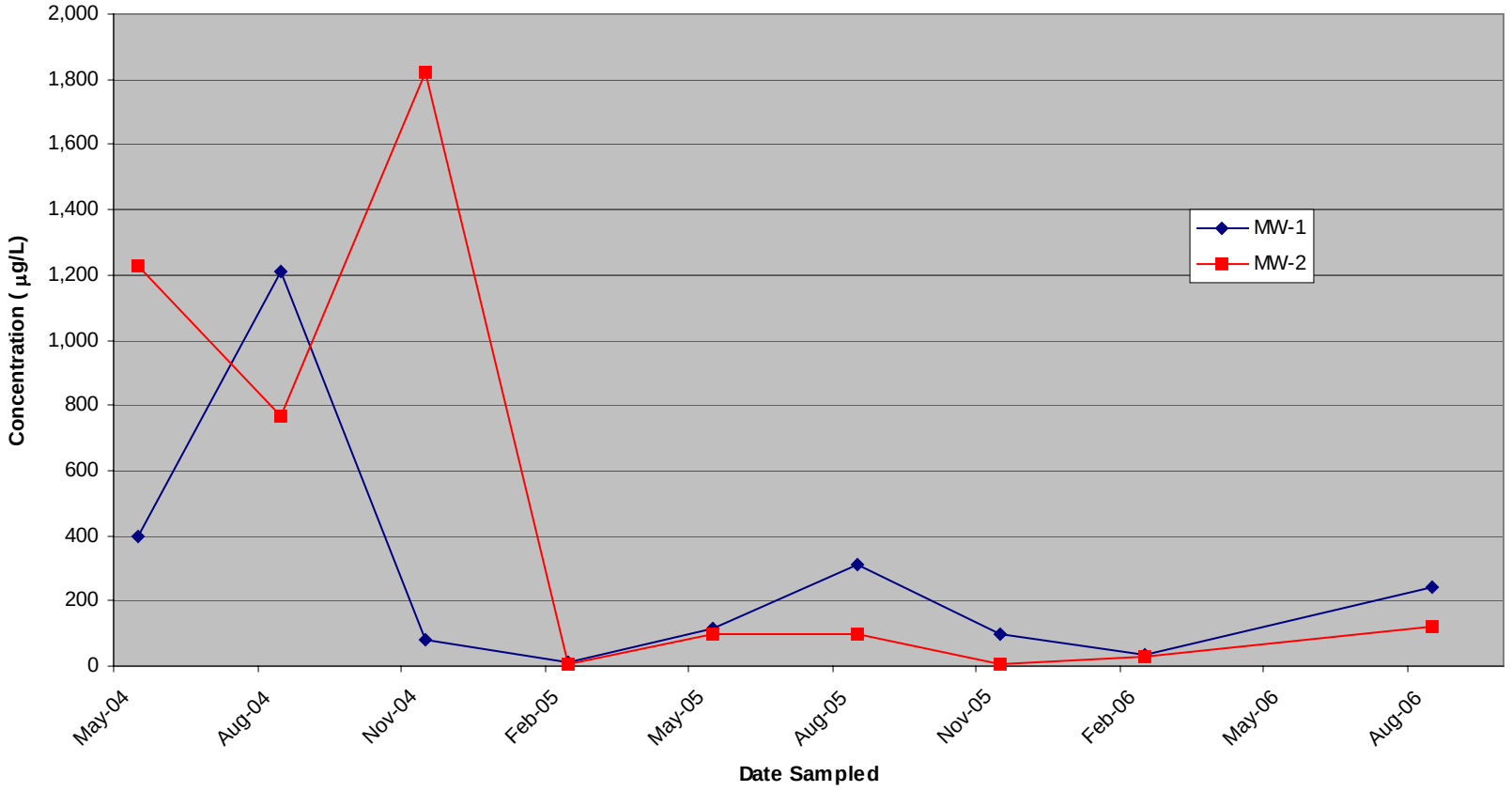
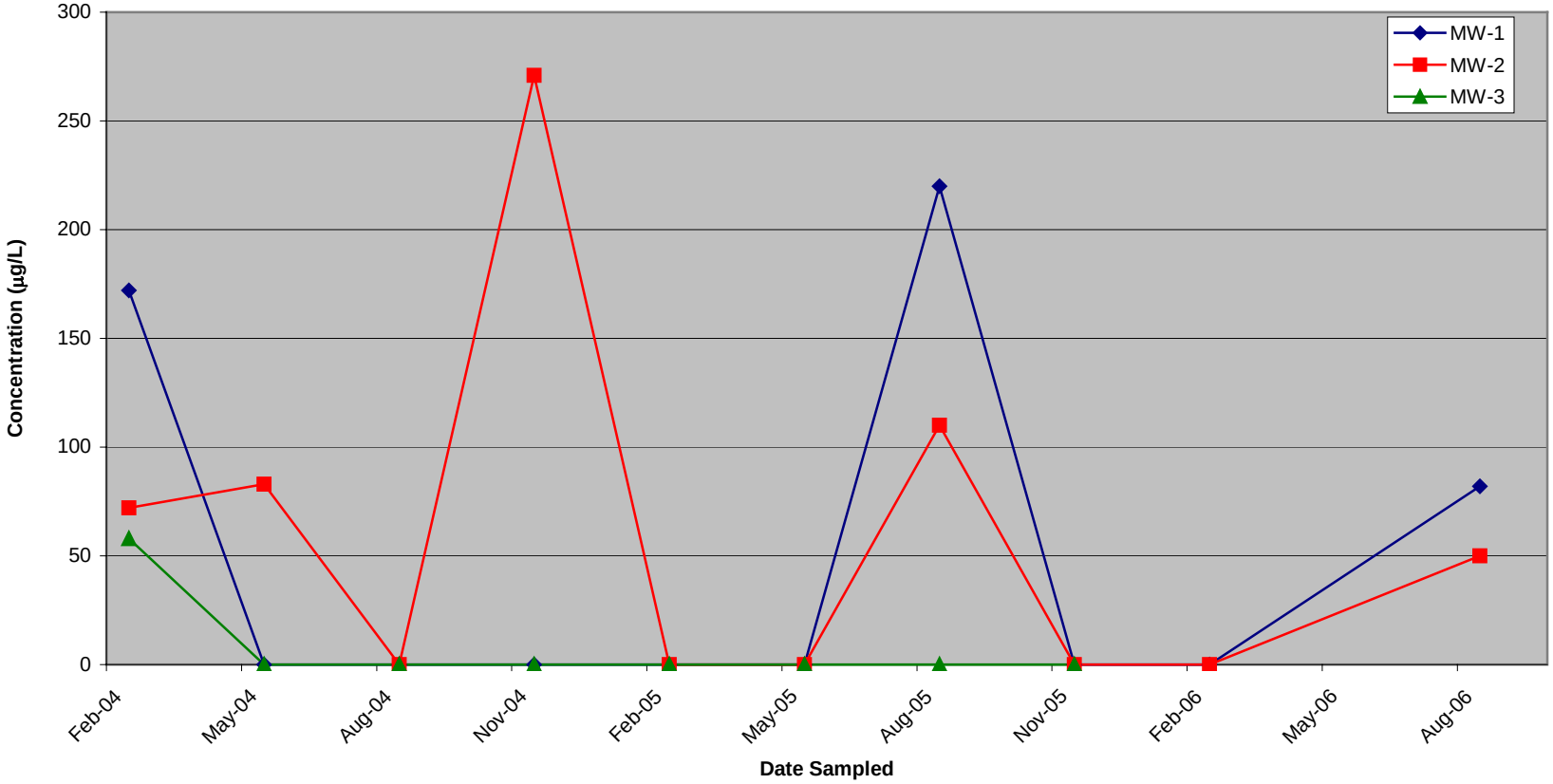


Figure 6: Historical Gasoline Hydrochemical Trends
2526 Wood Street, Oakland, California



7.0 SUMMARY, CONCLUSIONS, OPINION, AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

The available data support the following findings and conclusions:

- Two UFSTs containing diesel and gasoline were removed from the site in 1995 and 2002, respectively. Excavation confirmation soil samples indicated that MTBE was the sole contaminant of concern in soil, although pit water samples contained elevated levels of diesel, gasoline, and MTBE. A UFST closure documentation report discussing both UFST removals was submitted to the appropriate regulatory agencies in 2003.
- A PSA (exploratory borehole drilling and sampling program) was conducted in October 2003; activities included advancing and sampling eight exploratory boreholes to a maximum depth of 25 feet below grade. Hydrocarbon contamination was most pronounced in samples from the areas of the two former UFSTs and to the south-southwest.
- Three shallow site groundwater monitoring wells were installed, developed, and surveyed in August 2004, and have been sampled on a quarterly basis since that time. In January 2006, Alameda County Health approved a change in the site monitoring schedule from quarterly to semi-annually.
- Site lithology ranges from low-permeability silts and clays to higher-permeability (and water-bearing) sands and gravels. There are two shallow water bearing zones: the top of the upper zone (potentially a seasonally-perched zone), which is encountered at depths between 4 and 8 feet bgs; and the top of the third zone, which is encountered at depths between approximately 13.5 and 17.5 feet bgs. The lower water-bearing zone is underlain by a low-permeability, non-water-bearing zone.
- Local groundwater flow direction varies from south (generally in the rainy season) to west (generally in the dry season). Historical data show the expected seasonal trend of lower groundwater elevations in the dry season, increasing with the onset of rains. The site data suggest that backfill material in one or both of the former UFST excavations may be influencing apparent flow direction.

- The only soil contaminant historically detected above ESL criteria in residual soils (including UFST removal, borehole, and well installation phases) is MTBE, at locations within 15 feet of the former UFST excavations.
- In the current monitoring event, neither diesel, BTEX, fuel oxygenates, nor lead scavengers were detected. All contaminants were below the ESL criteria for a non-drinking water source. No contaminant was detected in MW-3.
- The current monitoring wells appear adequate to define local groundwater flow direction and to evaluate site-sourced hydrochemistry, although continued semi-annual groundwater monitoring is warranted to ensure that groundwater contamination above regulatory agency levels of concern is not migrating offsite.
- The property owner is pursuing reimbursement from the State of California Underground Storage Tank Cleanup Fund (Fund) for regulatory agency-directed corrective action and investigation costs. The initial Claim Application was submitted to the Fund in February 2004.
- The site is in compliance with State Water Resources Control Board requirements for electronic uploads of data and technical reports to the GeoTracker online database, as well as with Alameda County Health's requirement for electronic upload of technical reports.
- The hydrochemical trends over time show that no ESLs are exceeded. The latest monitoring event likely represents an anomalously high recharge year (with the high rainfall in spring 2006), in which residual concentration would be expected to be high from desorbing residual hydrocarbon mass; however, no ESLs were exceeded during this time.

PROPOSED ACTIONS

- Based on the closure criteria described in this report, the site appears to meet the regulatory criteria for site closure. Thus, SES is petitioning Alameda County Health, on behalf of our client Ms. Jeannette Elliott (UST State Fund claim No. 017990), to grant case closure for the site.

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Stellar Environmental Solutions, Inc. (SES), 2004c. Second Quarter 2004 Groundwater Monitoring Report – Russ Elliott, Inc. Facility, 2526 Wood Street, Oakland, California. July 1.

Stellar Environmental Solutions, Inc. (SES), 2004d. Third Quarter 2004 Groundwater Monitoring Report – Russ Elliott, Inc. Facility, 2526 Wood Street, Oakland, California. September 30.

Stellar Environmental Solutions, Inc. (SES), 2003a. Underground Fuel Storage Tanks Closure Documentation and Assessment Report, Russ Elliott, Inc. – 2526 Wood Street, Oakland, California. August 15.

Stellar Environmental Solutions, Inc. (SES), 2003b. Workplan for Preliminary Site Assessment – Russ Elliott, Inc. Facility, 2526 Wood Street, Oakland, California. August 20.

Stellar Environmental Solutions, Inc. (SES), 2003c. Preliminary Site Assessment Report – Russ Elliott, Inc. Facility, 2526 Wood Street, Oakland, California. November 19.

9.0 LIMITATIONS

This report has been prepared for the exclusive use of Ms. Jeannette Elliott, her authorized representatives, and the regulatory agencies. No reliance on this report shall be made by anyone other than those for whom it was prepared.

The findings and conclusions presented in this report are based on a review of previous investigators' findings at the site, as well as site investigations conducted by SES since 2003. This report has been prepared in accordance with generally accepted methodologies and standards of practice. The SES personnel who performed this limited remedial investigation are qualified to perform such investigations and have accurately reported the information available, but cannot attest to the validity of that information. No warranty, expressed or implied, is made as to the findings, conclusions, and recommendations included in the report.

The findings of this report are valid as of the date of this report. Site conditions may change with the passage of time, natural processes, or human intervention, which can invalidate the findings and conclusions presented in this report. As such, this report should be considered a reflection of the current site conditions as based on the activities completed.

APPENDIX A

Well Monitoring and Sampling Field Records

Dysert Environmental, Inc.

FLUID-LEVEL MONITORING DATA

Project Name: RUSS ELLIOT Date: 8/23/06

Project/Site Location: 2526 WOOD ST., OAKLAND, CA

Technician: SC Method: ELECTRONIC

Boring/ Well	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Total Well Depth (feet)	Comments
MW-1	4.74			11.27	@ 1305 H_2O IN WELL BOX BELOW CASING
MW-2	4.62			15.06	@ 1300
MW-3	4.71			18.18	@ 1255 H_2O IN WELL BOX BELOW CASING

Measurements referenced to top of well casing.

DYSERT ENVIRONMENTAL, INC.
WELL PURGING / SAMPLING DATA

Dysert Environmental, Inc.

PROJECT: Russ Elliot **DATE:** 8-23-06
SITE LOCATION: 2526 Wood St.

CITY: OAKLAND **STATE:** CA

PURGE DEVICE

circle one (12volt submersible pump) peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one bladder pump peristaltic pump (disposable bailer) other

casing diameter (inches)	*circle one*	0.75	(2)	4	6
casing volumes (gallons)	*circle one*	0.02	(0.2)	0.7	1.52

WELL DATA

SAMPLER/S: SC
WELL NUMBER / FIELD POINT ID: MW-1
A. TOTAL WELL DEPTH: 11.27
B. DEPTH TO WATER: 4.74
C. WATER HEIGHT (A-B): 6.53
D. WELL CASING DIAMETER: 2
E. CASING VOLUME: 0.2
F. SINGLE CASE VOLUME (CxE): 1.31
G. CASE VOLUME (s) (CxEx 3): 3.93
H: 80% RECHARGE LEVEL (F+B): 6.1

PURGE DATA

START TIME: 1450
PUMP DEPTH: 6'
FINISH TIME: 1505
PUMP DEPTH: 7'

RECHARGE / SAMPLE TIME

DEPTH TO WATER: 4.76 **TIME MEASURED:** 1525
GREATER THAN OR EQUAL TO 80% RECHARGE LEVEL (H): circle one (YES) NO
SAMPLE TIME: 1530 **DEPTH TO WATER:** 4.76
SAMPLE APPEARANCE / ODOR: YELLOWISH / GAS
TOTAL GALLONS PURGED: 3.95

WELL FLUID PARAMETERS

CASE VOL.	0	0.5	1	1.5	2	2.5	3	POST
Ph	8.39	8.17	8.05	7.99	7.95	7.91	7.92	7.96
TEMP in °C	23.5	23.1	23.1	22.9	23.0	23.1	23.0	22.6
COND / SC	1772	18.25	1822	1830	1851	1865	1871	1934
DTW								
Pump Depth								
Pump Rate								
D.O.								41.4

DYSERT ENVIRONMENTAL, INC.
WELL PURGING / SAMPLING DATA

Dysert Environmental, Inc.

PROJECT: Russ Elliot **DATE:** 8-23-06
SITE LOCATION: 2526 Wood St.

CITY: OAKLAND **STATE:** CA

PURGE DEVICE

circle one (12volt submersible pump) peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one bladder pump peristaltic pump (disposable bailer) other

casing diameter (inches)	*circle one*	0.75	(2)	4	6
casing volumes (gallons)	*circle one*	0.02	(0.2)	0.7	1.52

WELL DATA

SAMPLER/S: SC
WELL NUMBER / FIELD POINT ID: MW-2
A. TOTAL WELL DEPTH: 15.06
B. DEPTH TO WATER: 4.62
C. WATER HEIGHT (A-B): 10.44
D. WELL CASING DIAMETER: 2
E. CASING VOLUME: 0.2
F. SINGLE CASE VOLUME (CxE): 2.1
G. CASE VOLUME (s) (CxEx 3): 6.3
H: 80% RECHARGE LEVEL (F+B): 6.72

PURGE DATA

START TIME: 1400
PUMP DEPTH: 6
FINISH TIME: 1415
PUMP DEPTH: 9

RECHARGE / SAMPLE TIME

DEPTH TO WATER: 10.76 **TIME MEASURED:** 1420
GREATER THAN OR EQUAL TO 80% RECHARGE LEVEL (H): circle one YES (NO)
SAMPLE TIME: ~~1520~~ 1545 **DEPTH TO WATER:** 6.72
SAMPLE APPEARANCE / ODOR: CLEAR / N/A
TOTAL GALLONS PURGED: 6.3

WELL FLUID PARAMETERS

CASE VOL.	0	0.5	1	1.5	2	2.5	3	POST
Ph	7.93	7.20	7.09	7.13	7.15	7.18	7.17	7.15
TEMP in °C	24.8	24.4	24.3	23.7	23.2	22.5	21.9	21.3
COND / SC	1149	1198	1202	1192	1133	1251	1203	1242
DTW								
Pump Depth								
Pump Rate								
D.O.								30.3

DYSERT ENVIRONMENTAL, INC.
WELL PURGING / SAMPLING DATA

Dysert Environmental, Inc.

PROJECT: RUSS ELLIOT DATE: 8-23-06
SITE LOCATION: 2526 WOOD ST.
CITY: OAKLAND STATE: CA

PURGE DEVICE

circle one: (12volt submersible pump) peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one: bladder pump peristaltic pump (disposable bailer) other

casing diameter (inches)	circle one	0.75	(2)	4	6
casing volumes (gallons)	circle one	0.02	(0.2)	0.7	1.52

WELL DATA

SAMPLER/S:
WELL NUMBER / FIELD POINT ID: MW-3
A. TOTAL WELL DEPTH: 18.18
B. DEPTH TO WATER: 4.71
C. WATER HEIGHT (A-B): 13.47
D. WELL CASING DIAMETER: 2
E. CASING VOLUME: 0.2
F. SINGLE CASE VOLUME (CxE): 2.69
G. CASE VOLUME (s) (CxEx 3): 8.07
H: 80% RECHARGE LEVEL (F+B): 7.4

PURGE DATA

START TIME: 1310
PUMP DEPTH: 5'
FINISH TIME: 1340
PUMP DEPTH: 13'

RECHARGE / SAMPLE TIME

DEPTH TO WATER: 13.89 TIME MEASURED: 1350
GREATER THAN OR EQUAL TO 80% RECHARGE LEVEL (H): circle one (YES) (NO)
SAMPLE TIME: 1555 DEPTH TO WATER: 4.76
SAMPLE APPEARANCE / ODOR: CLEAR/N/A
TOTAL GALLONS PURGED: 8.10

WELL FLUID PARAMETERS

CASE VOL.	0	0.5	1	1.5	2	2.5	3	POST
Ph	6.84	6.92	6.94	6.97	6.99	7.00	7.02	7.04
TEMP in °C	25.6	22.3	22.5	21.8	21.2	20.9	20.7	20.2
COND / SC	304	3.33	3.52	3.59	3.53	3.55	3.52	3.55
DTW								
Pump Depth								
Pump Rate								
D.O.								72.2 *

APPENDIX B

Analytical Laboratory Report and Chain-of-Custody Record

Entech Analytical Labs, Inc.

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

Bruce Rucker
Stellar Environmental Sol.
2198 Sixth Street Suite 201
Berkeley, CA 94710

Lab Certificate Number: 51039
Issued: 09/05/2006

Global ID: T0600102110

Project Name: Russ Elliott
Project Location: 2526 Wood St/Oakland

Certificate of Analysis - Final Report

On August 24, 2006, 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	Electronic Deliverables for Geotracker
	TPH-Extractable: EPA 3510C / EPA 8015B
	TPH-Purgeable: EPA 5030C / EPA 8015B
	VOCs: EPA 5030C / EPA 8021B
	VOCs: EPA 8260B

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

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

Stellar Environmental Sol.
2198 Sixth Street Suite 201
Berkeley, CA 94710
Attn: Bruce Rucker

Project Name: Russ Elliott
Project Location: 2526 Wood St/Oakland
GlobalID: T0600102110

Certificate of Analysis - Data Report

Samples Received: 08/24/2006
Sample Collected by: Client

Lab # : 51039-001 **Sample ID: MW-1** **Matrix:** Liquid **Sample Date:** 8/23/2006 3:30 PM

VOCs: EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Methyl-t-butyl Ether	**240**		5.0	5.0	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Butyl Ethyl Ether	ND		5.0	25	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Butanol (TBA)	ND		5.0	50	µg/L	N/A	N/A	9/1/2006	WM1060901
Diisopropyl Ether	ND		5.0	25	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Amyl Methyl Ether	ND		5.0	25	µg/L	N/A	N/A	9/1/2006	WM1060901
1,2-Dichloroethane	ND		5.0	2.5	µg/L	N/A	N/A	9/1/2006	WM1060901
1,2-Dibromoethane (EDB)	ND		5.0	2.5	µg/L	N/A	N/A	9/1/2006	WM1060901

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110	60 - 130
Dibromofluoromethane	100	60 - 130
Toluene-d8	106	60 - 130

Analyzed by: XBian
Reviewed by: dba

VOCs: EPA 5030C / EPA 8021B

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	8/31/2006	WGC060830
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	8/31/2006	WGC060830
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	8/31/2006	WGC060830
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	8/31/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	97.8	65 - 135

Analyzed by: mruan
Reviewed by: MaiChiTu

TPH-Purgeable: EPA 5030C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	**82**		1.0	50	µg/L	N/A	N/A	8/31/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95.9	65 - 135

Analyzed by: mruan
Reviewed by: MaiChiTu

TPH-Extractable: EPA 3510C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	8/24/2006	WD060824A	8/25/2006	WD060824A

370 ppb Motor Oil range organics. No Diesel pattern present.

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	44.3	22 - 133

Analyzed by: JHsiang
Reviewed by: dba

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

Entech Analytical Labs, Inc.

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

Stellar Environmental Sol.
2198 Sixth Street Suite 201
Berkeley, CA 94710
Attn: Bruce Rucker

Project Name: Russ Elliott
Project Location: 2526 Wood St/Oakland
GlobalID: T0600102110

Certificate of Analysis - Data Report

Samples Received: 08/24/2006
Sample Collected by: Client

Lab # : 51039-002 **Sample ID: MW-2** **Matrix:** Liquid **Sample Date:** 8/23/2006 3:45 PM

VOCs: EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Methyl-t-butyl Ether	**120**		2.0	2.0	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Butyl Ethyl Ether	ND		2.0	10	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Butanol (TBA)	ND		2.0	20	µg/L	N/A	N/A	9/1/2006	WM1060901
Diisopropyl Ether	ND		2.0	10	µg/L	N/A	N/A	9/1/2006	WM1060901
tert-Amyl Methyl Ether	ND		2.0	10	µg/L	N/A	N/A	9/1/2006	WM1060901
1,2-Dichloroethane	ND		2.0	1.0	µg/L	N/A	N/A	9/1/2006	WM1060901
1,2-Dibromoethane (EDB)	ND		2.0	1.0	µg/L	N/A	N/A	9/1/2006	WM1060901

Surrogate	Surrogate Recovery	Control Limits (%)	
4-Bromofluorobenzene	108	60 - 130	Analyzed by: XBian
Dibromofluoromethane	100	60 - 130	Reviewed by: dba
Toluene-d8	105	60 - 130	

VOCs: EPA 5030C / EPA 8021B

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	8/30/2006	WGC060830
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)	
4-Bromofluorobenzene	101	65 - 135	Analyzed by: mruan
			Reviewed by: MaiChiTu

TPH-Purgeable: EPA 5030C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	**50**		1.0	50	µg/L	N/A	N/A	8/30/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)	
4-Bromofluorobenzene	104	65 - 135	Analyzed by: mruan
			Reviewed by: MaiChiTu

TPH-Extractable: EPA 3510C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	8/24/2006	WD060824A	8/25/2006	WD060824A
230 ppb Motor Oil range organics. No Diesel pattern present.									

Surrogate	Surrogate Recovery	Control Limits (%)	
o-Terphenyl	62.8	22 - 133	Analyzed by: JHsiang
			Reviewed by: dba

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

Entech Analytical Labs, Inc.

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Stellar Environmental Sol.
2198 Sixth Street Suite 201
Berkeley, CA 94710
Attn: Bruce Rucker

Project Name: Russ Elliott
Project Location: 2526 Wood St/Oakland
GlobalID: T0600102110

Certificate of Analysis - Data Report

Samples Received: 08/24/2006
Sample Collected by: Client

Lab # : 51039-003 **Sample ID: MW-3** **Matrix:** Liquid **Sample Date:** 8/23/2006 3:55 PM

VOCs: EPA 8260B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	9/1/2006	WM1060831
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	9/1/2006	WM1060831
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	9/1/2006	WM1060831
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	9/1/2006	WM1060831
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	9/1/2006	WM1060831
1,2-Dichloroethane	ND		1.0	0.50	µg/L	N/A	N/A	9/1/2006	WM1060831
1,2-Dibromoethane (EDB)	ND		1.0	0.50	µg/L	N/A	N/A	9/1/2006	WM1060831

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	112	60 - 130
Dibromofluoromethane	105	60 - 130
Toluene-d8	107	60 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

VOCs: EPA 5030C / EPA 8021B

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	8/30/2006	WGC060830
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	8/30/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	100	65 - 135

Analyzed by: mruan
Reviewed by: MaiChiTu

TPH-Purgeable: EPA 5030C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	8/30/2006	WGC060830

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	104	65 - 135

Analyzed by: mruan
Reviewed by: MaiChiTu

TPH-Extractable: EPA 3510C / EPA 8015B

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	8/24/2006	WD060824A	8/25/2006	WD060824A

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	70.9	22 - 133

Analyzed by: JHsiang
Reviewed by: dba

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

Entech Analytical Labs, Inc.

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

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

QC/Prep Batch ID: WD060824A

Validated by: dba - 08/25/06

QC/Prep Date: 8/24/2006

Parameter	Result	DF	PQLR	Units
TPH as Diesel	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
o-Terphenyl	**46.2**	22 - 133

Entech Analytical Labs, Inc.

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

Method Blank - Liquid - TPH-Purgeable: EPA 5030C / EPA 8015B

QC Batch ID: WGC060830

Validated by: MaiChiTu - 08/31/06

QC Batch Analysis Date: 8/30/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**99.4**	65 - 135

Method Blank - Liquid - VOCs: EPA 5030C / EPA 8021B

QC Batch ID: WGC060830

Validated by: MaiChiTu - 08/31/06

QC Batch Analysis Date: 8/30/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Ethyl Benzene	ND	1	0.50	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	**99.8**	65 - 135

Entech Analytical Labs, Inc.

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

Method Blank - Liquid - VOCs: EPA 8260B

QC Batch ID: WM1060831

Validated by: MaiChiTu - 09/01/06

QC Batch Analysis Date: 8/31/2006

Parameter	Result	DF	PQLR	Units
1,2-Dibromoethane (EDB)	ND	1	0.50	µg/L
1,2-Dichloroethane	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	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

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**109**	60 - 130
Dibromofluoromethane	**94.1**	60 - 130
Toluene-d8	**105**	60 - 130

Entech Analytical Labs, Inc.

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

Method Blank - Liquid - VOCs: EPA 8260B

QC Batch ID: WM1060901

Validated by: dba - 09/05/06

QC Batch Analysis Date: 9/1/2006

Parameter	Result	DF	PQLR	Units
1,2-Dibromoethane (EDB)	ND	1	0.50	µg/L
1,2-Dichloroethane	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	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

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**106**	60 - 130
Dibromofluoromethane	**89.7**	60 - 130
Toluene-d8	**102**	60 - 130

Entech Analytical Labs, Inc.

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

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

QC Batch ID: WD060824A

Reviewed by: dba - 08/25/06

QC/Prep Date: 8/24/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<50	1000	691	µg/L	69.1	40 - 138
TPH as Motor Oil	<200	1000	694	µg/L	69.4	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	**64.7**	22 - 133

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<50	1000	686	µg/L	68.6	**0.76**	25.0	40 - 138
TPH as Motor Oil	<200	1000	628	µg/L	62.8	**10**	25.0	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	**58.0**	22 - 133

Entech Analytical Labs, Inc.

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

LCS / LCSD - Liquid - TPH-Purgeable: EPA 5030C / EPA 8015B

QC Batch ID: WGC060830 Reviewed by: MaiChiTu - 08/31/06

QC Batch ID Analysis Date: 8/30/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<50	120	123	µg/L	98.4	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**130.0**	65 - 135

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<50	120	101	µg/L	80.8	**20**	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**125.0**	65 - 135

LCS / LCSD - Liquid - VOCs: EPA 5030C / EPA 8021B

QC Batch ID: WGC060830 Reviewed by: MaiChiTu - 08/31/06

QC Batch ID Analysis Date: 8/30/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	4.0	4.25	µg/L	106	65 - 135
Ethyl Benzene	<0.50	4.0	4.50	µg/L	112	65 - 135
Toluene	<0.50	4.0	4.40	µg/L	110	65 - 135
Xylenes, total	<0.50	12	13.5	µg/L	112	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**99.9**	65 - 135

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	4.0	3.97	µg/L	99.2	**6.8**	25.0	65 - 135
Ethyl Benzene	<0.50	4.0	4.10	µg/L	102	**9.3**	25.0	65 - 135
Toluene	<0.50	4.0	4.17	µg/L	104	**5.4**	25.0	65 - 135
Xylenes, total	<0.50	12	12.3	µg/L	102	**9.3**	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**97.6**	65 - 135

Entech Analytical Labs, Inc.

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

LCS / LCSD - Liquid - VOCs: EPA 8260B

QC Batch ID: WM1060831

Reviewed by: MaiChiTu - 09/01/06

QC Batch ID Analysis Date: 8/31/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	20.6	µg/L	103	70 - 130
Methyl-t-butyl Ether	<1.0	20	16.3	µg/L	81.5	70 - 130
Toluene	0.58	20	19.1	µg/L	95.5	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**104.0**	60 - 130
Dibromofluoromethane	**92.3**	60 - 130
Toluene-d8	**100.0**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	21.3	µg/L	106	**3.3**	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	18.5	µg/L	92.5	**13**	25.0	70 - 130
Toluene	0.58	20	19.8	µg/L	99.0	**3.6**	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**105.0**	60 - 130
Dibromofluoromethane	**96.8**	60 - 130
Toluene-d8	**100.0**	60 - 130

Entech Analytical Labs, Inc.

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

LCS / LCSD - Liquid - VOCs: EPA 8260B

QC Batch ID: WM1060901

Reviewed by: dba - 09/05/06

QC Batch ID Analysis Date: 9/1/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	20.4	µg/L	102	70 - 130
Methyl-t-butyl Ether	<1.0	20	16.2	µg/L	81.0	70 - 130
Toluene	1.1	20	19.4	µg/L	97.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**104.0**	60 - 130
Dibromofluoromethane	**90.2**	60 - 130
Toluene-d8	**97.1**	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	22.7	µg/L	114	**11**	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	19.2	µg/L	96.0	**17**	25.0	70 - 130
Toluene	1.1	20	21.2	µg/L	106	**8.9**	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**106.0**	60 - 130
Dibromofluoromethane	**95.1**	60 - 130
Toluene-d8	**98.2**	60 - 130

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: JOE DINAN / BRUCE RUCKER	Phone No.: (510) 644-3123	Purchase Order No.:	Invoice to: (If Different)	Phone:	
Company Name: STELLAR ENVIROMENTAL SOL.	Fax No.: (510) 644-3859	Project No. / Name: • RUSS ELLIOT	Company:		
Mailing Address: 2198 SIXTH ST., STE. 201	Email Address: BRUCKER@STELLARENVIROMENTAL.COM		Billing Address: (If Different)		
City: BERKLEY	State: CA / Zip Code:	Project Location: 2526 WOOD ST., OAKLAND	City:	State: / Zip:	

Entech Order ID: 51039

EDF ☑ Global ID: T0600102110

Turn Around Time
☐ Same Day ☐ 1 Day
☐ 2 Day ☐ 3 Day
☐ 4 Day ☑ 10 Day

Sample Information
Sampler: SC

Circle Applicable

Client ID	Field Point	Date	Time	Entech Lab. No.	Matrix	No. of Containers	EPA 8260B Full List	8260 Petroleum: List includes: Gas, BTEX (MBE, EtBE, TBA, TAME, DIPE, 1,2-DCA, EDB)	EPA 8270: Base/Neutral/Acid Organics 8270 Full List	PAHs Only	Pesticides-8081	PCBs - 8082	TPH Extractable (Diesel) w/ Si-Gel Cleanup	Motor Oil, Other	TPH Gas (BTEX) MtBE by EPA 8015/8021B	Metals - Circle Below Total	Dissolved	STLC	TCLP	Remarks Instructions
MW-1	MW-1	8-23-06	1530	-001	GW	6		X					X	X						
MW-2	MW-2		1545	-002		6		X					X	X						
MW-3	MW-3		1555	-003		6		X					X	X						

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	8/24/06	1155
Relinquished by:	Received by:	Date:	Time:
Relinquished by:	Received by:	Date:	Time:

Lab Use: LOG CODE = SESB

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: 6° Shipment Method: Sent C
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:

APPENDIX C

Historical Groundwater Monitoring Well Analytical Results

Table C-1
Historical Groundwater Monitoring Well Groundwater Analytical Results
2526 Wood Street, Oakland

Sample I.D.	TEHd	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Fuel Oxygenates [(a)]
February 2004 Event								
MW-1	*<50*	**172**	**1.2**	*<0.5*	*<0.5*	*<1.0*	**578**	**TAME = 3 | TBA = 19**
MW-2	*<50*	**72**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**16.4**	*ND*
MW-3	*<50*	**58**	*<0.5*	**0.6**	*<0.5*	*<1.0*	*<0.5*	*ND*
May 2004 Event								
MW-1	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**399**	**TAME = 2**
MW-2	*<50*	**83**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**1,230**	**TAME = 52 | DIPE = 0.6 TBA = 243**
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<0.5*	*ND*
August 2004 Event								
MW-1	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**1,210**	**TAME = 3 | TBA = 78**
MW-2	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**769**	**TAME = 6 | TBA = 81**
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<0.5*	*ND*
November 2004 Event								
MW-1	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**83**	*ND*
MW-2	*<50*	**271**	**102**	*<0.5*	*<0.5*	**1.3**	**1,820**	**TAME = 139 | TBA = 486**
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<0.5*	*ND*
February 2005 Event								
MW-1	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**12.6**	*ND*
MW-2	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**4.8**	*ND*
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<0.5*	*ND*
May 2005 Event								
MW-1	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**116**	*ND*
MW-2	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**100**	TAME = 4 TBA = 48
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<0.5*	*ND*

Table C-1 *continued*

Sample I.D.	TEHd	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Fuel Oxygenates [(a)]
August 2005 Event								
MW-1	*<500*	**220**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**310**	*ND*
MW-2	*<50*	**110**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**100**	*ND*
MW-3	*<50*	*< 50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<1.0*	*ND*
November 2005 Event								
MW-1	*<50*	*<50*	*<4.0*	*<4.0*	*<4.0*	*<4.0*	**97**	*ND*
MW-2	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	**7.7**	*ND*
MW-3	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*ND*
February 2006 Event								
MW-1	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**36**	*ND*
MW-2	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**27**	*ND*
MW-3	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<1.0*	TBA = 10
August 2006 Event								
MW-1	*<50*	**82**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**240**	*ND*
MW-2	*<50*	**50**	*<0.5*	*<0.5*	*<0.5*	*<1.0*	**120**	*ND*
MW-3	*<50*	*<50*	*<0.5*	*<0.5*	*<0.5*	*<1.0*	*<1.0*	TBA = 10

Notes:

[(a)] Table reports only detected fuel oxygenates and lead scavengers.

DIPE = di-isopropyl ether
MTBE = methyl *tertiary*-butyl ether
TAME = *tertiary*-amyl methyl ether
TBA = *tertiary*-butyl alcohol
TEHd = total extractable hydrocarbons – diesel range
TVHg = total volatile hydrocarbons – gasoline range

ND = not detected above method reporting limits

All results are in µg/L.