LIMITED PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

LINFORD MAGNOLIA PROPERTIES
2650 MAGNOLIA STREET
OAKLAND, CALIFORNIA

Prepared for:

ALAMEDA COUNTY HEALTH CARE SERVICES
ALAMEDA, CALIFORNIA

September 2010

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
GEOSCIENCE & ENGINEERING CONSULTING

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Prepared for:

ALAMEDA COUNTY HEALTH CARE SERVICES
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502

Prepared by:

STELLAR ENVIRONMENTAL SOLUTIONS, INC.
2198 SIXTH STREET, SUITE 201
BERKELEY, CALIFORNIA 94710

September 23, 2010

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.

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

September 23, 2010

Mr. Paresh C. Khatri
Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Subsurface Investigation Report Findings – 2650 Magnolia Street, Oakland, California—ACHCS RO0002961.

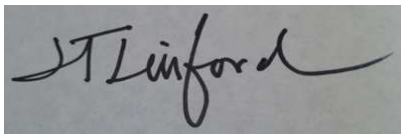
Dear Mr. Khatri:

Stellar Environmental Solutions Inc (Stellar Environmental) is submitting this report of findings on behalf of Linford Magnolia Properties, the responsible party (RP) for the Alameda County Environmental Health Care Services (ACHCS) case # RO0002961. The property is currently owned by Mr. Tommy Chang of San Francisco, California. The scope of this investigation was based on an August 2010 Work Plan prepared by Stellar Environmental. That Work Plan, approved by ACHCS on August 12, 2010, outlined limited soil and groundwater sampling downgradient of the site to evaluate the extent of residual fuel hydrocarbons detected in soil and groundwater after gasoline underground storage tanks (USTs) were removed from the site in 2007.

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 our knowledge. Please call the undersigned at (510) 644-3123 if you have any questions.

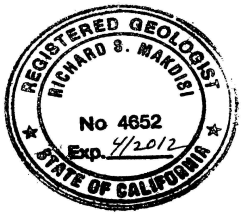
Sincerely,

Steve Bittman, R.E.A.
Senior Environmental Scientist



James T. Linford
Responsible Party

Richard Makdisi, R.G., R.E.A.
Principal Geochemist and President



cc: Mr. James T Linford

TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
	Introduction and Project Background	1
2.0	SUBSURFACE SITE INVESTIGATION	6
	Analytical Results	7
3.0	RE`GULATORY CONSIDERATIONS	11
	Groundwater Impacts and Beneficial Uses	13
4.0	CONCLUSIONS, RECOMMENDATIONS, PROPOSED ACTIONS	14
	CONCLUSIONS AND RECOMMENDATIONS	14
	PROPOSED ACTIONS	14
5.0	LIMITATIONS	16
6.0	REFERENCES	17

Appendices

Appendix A ACHCS Workplan Approval Letter

Appendix B Photodocumentation

Appendix C Boring Logs

Appendix D Drilling Permit

Appendix E Laboratory Analytical Results and Chain-of-Custody Documentation

TABLES AND FIGURES

Table **Page**

Table 1 Total and Volatile Petroleum Hydrocarbons in Soil and Groundwater 2650 Magnolia Street, Oakland, CA 9

Table 2 LUFT 5 Metals in Groundwater 2650 Magnolia Street, Oakland, CA 9

Figures **Page**

Figure 1 Site Location Map 3

Figure 2 Site Plan 4

Figure 3 Soil Boring Locations and Concentrations of Contaminants of Concern 10

1.0 INTRODUCTION

INTRODUCTION AND PROJECT BACKGROUND

On behalf of Linford Magnolia Properties (the responsible party), Stellar Environmental Solutions, Inc. (Stellar Environmental) is providing this report of findings for the subsurface investigation at the referenced property to address the investigation Work Plan, approved by ACHCS on August 2, 2010. The property is currently owned by Mr. Tommy Chang of San Francisco, California.

The site is located on the east side of Magnolia Street in Oakland between 26th and 28th Streets. Removal of two, 1,150 gallon USTs from beneath the Magnolia Street sidewalk was conducted in June and July 2007. The northernmost UST contained a corrosion hole at one end, and there was field evidence of contamination in the excavation sidewalls, at the base of the excavation, and in the excavated soil. The southern tank was structurally sound, and the surrounding soil, although discolored, did not exhibit significant contamination.

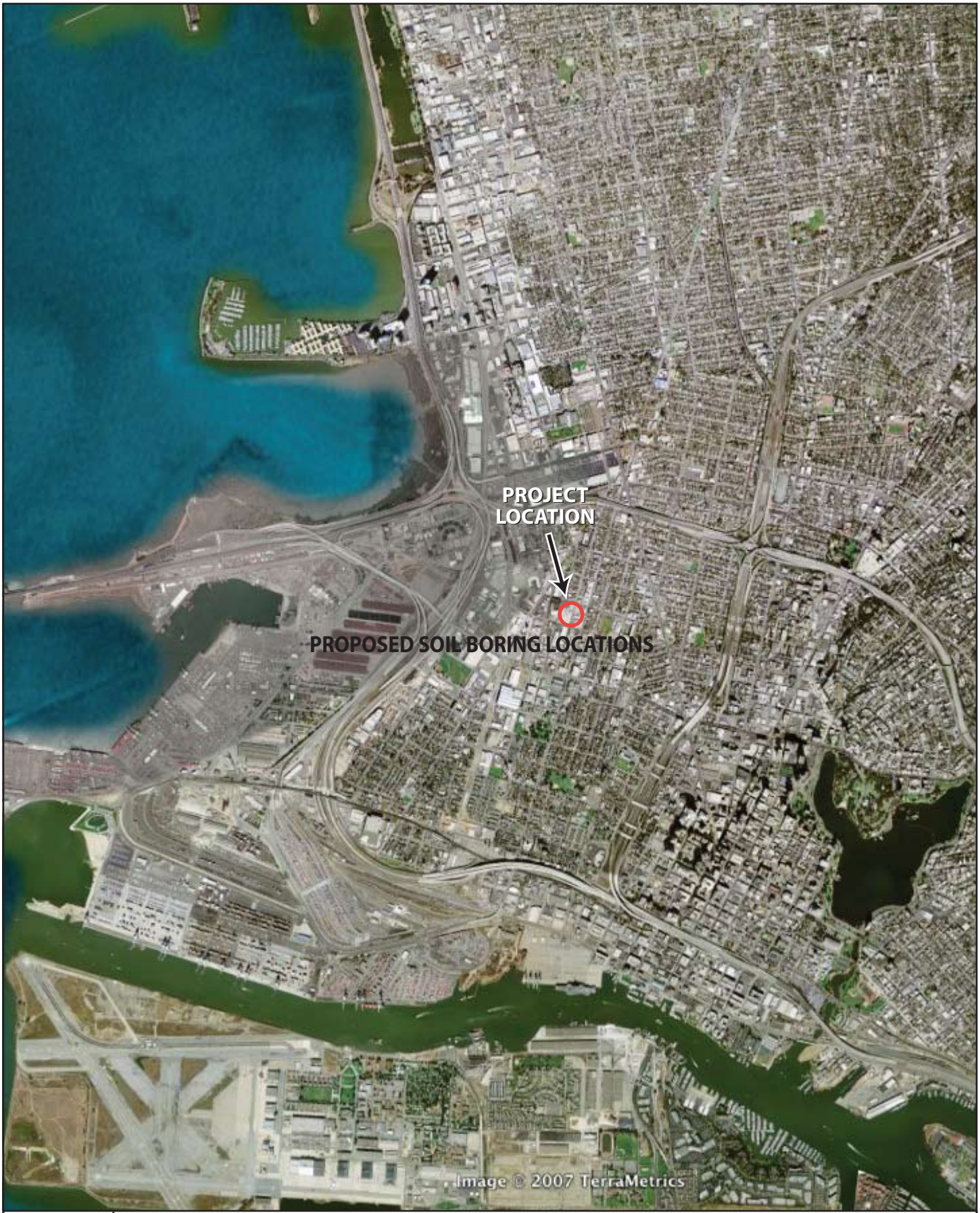
Initial soil sampling in the tank excavations consisted of collecting samples from opposite the tank ends and sidewalls at depths of 5 to 6 feet below ground surface (bgs). These samples were collected from just above what was thought to be the soil/groundwater interface, based on the observation that water had collected in the excavations. Subsequent over-excavation of the north tank pit to 13 feet bgs revealed that this was merely water that had collected in the surrounding backfill, and the actual groundwater depth was 11 to 13 feet bgs.

Two soil samples collected from the north tank excavation floor at the final excavated depth of about 13 feet bgs did not contain detectable concentrations of total volatile hydrocarbons as gasoline (TVHg). A sidewall soil sample collected from 6 feet bgs at the north end of the excavation (NT-N-6) contained 1,500 milligrams per kilogram (mg/kg) TVHg. Access to over-excavate the north wall of the north tank was restricted by underground utilities on that side. The south tank excavation soil samples contained no detectable concentrations of gasoline hydrocarbons. No significant concentrations of gasoline hydrocarbons were found either in the dispenser area or product line soil samples.

Initial grab groundwater sample analytical results from the north tank excavation detected concentrations of TVHg and benzene at 830 micrograms per liter (µg/L) and 4.5 µg/L respectively. A second groundwater sample was collected from the north tank excavation after one volume of collected groundwater had been pumped out and then allowed to re-accumulate. This sample contained concentrations of TVHg and benzene at 68 µg/L and 1.8 µg/L respectively. LUFT metals were detected above their respective ELSs in the initial excavation grab sample but were reduced below ESLs in all but the nickel results in the second sample. No other gasoline constituents or fuel oxygenates were detected in the groundwater sample. Both excavations were subsequently backfilled with controlled density fill, and the sidewalk concrete was replaced.

Groundwater beneath the site is assumed to flow approximately in a west-northwest direction based upon groundwater monitoring data from the nearest (within 600 feet) active site at 2836 Union Street (TO600105641) and on the local topographic gradient.

In a letter dated June 10, 2010, the ACHCS requested an investigation to define the extent of soil and groundwater contamination downgradient of the former location of the UST. The scope of this investigation implements the August 2, 2010 Work Plan prepared by Stellar Environmental, that was approved by the ACHCS in with minor modifications. Appendix A contains the ACHCS workplan approval letter. Figures 1 and 2 on the following pages indicate the location of the subject site and site features including boring locations.



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SITE LOCATION MAP

2650 Magnolia St.
Oakland, CA

By: MJC

SEPTEMBER 2010

Figure 1

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2007-23-01

N

SOIL BORING LOCATIONS

2650 Magnolia St.
Oakland, CA

By: MJC

SEPTEMBER 2010

Figure 2

STELLAR ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

2010-24-02

Purpose and Scope of Work

The objective of the work was to address the ACEH concerns that contamination may have migrated downgradient from the former north tank location via groundwater before the USTs were removed. The scope of work includes modifications to the Work Plan boring location, sampling protocols and laboratory analytical requirements as described by the technical comments made by the ACHCS in that Agency's letter referenced above.

The principal approved objectives of this site evaluation study are to:

- Collect soil and groundwater samples at three off site locations approved by ACHCS in August 2010, to determine if contaminants of concern are present in soil and groundwater including: gasoline range hydrocarbons, benzene, toluene, ethylbenzene, xylenes, methyl-butyl-tertiary-ether (MBTEX) and the LUFT 5 metals, at concentrations that exceed State Environmental Screening Levels (ESLs).
- Assess the site data in the context of business risk to a potential property owner in terms of existing site use, future residential or commercial use associated with site redevelopment and potential regulatory considerations and/or requirements.

The proposed scope of work therefore is specifically designed to: 1) provide additional data on the extent and magnitude of groundwater contamination; and 2) evaluate whether residual groundwater contamination warrants permanent groundwater monitoring points.

2.0 SUBSURFACE SITE INVESTIGATION

This section describes the drilling completed and sampling methods used to evaluate for presence of subsurface contamination in areas downgradient of the former north UST location.

Drilling Location Rationale and Sampling Methods

The bore locations were designed to evaluate the extent of residual hydrocarbons in soil and for the presence of groundwater contamination. The three exploratory bores were situated in the parking strips on both sides of Magnolia Street in the presumed downgradient direction of the former north UST location. Borehole B1 was located in the Magnolia Street parking strip within 3 feet of the former location of the north UST where maximum soil contaminants were previously detected. Boreholes B2 and B3 were be located on the west side of Magnolia Street in the parking strip approximately 40 to 60 feet in the estimated downgradient direction from the source area to evaluate potential migration and/or attenuation of the hydrocarbon contamination away from the residual source. Soil samples in Boring B1 were collected both above and below the groundwater table per ACHCS's preferences to document a vertical profile in the unsaturated and saturated zone. Two vertical soil samples were collected at bore B1 near the area of the former UST at depth of 9 unsaturated and 14 feet (saturated).

Drilling was conducted by Vapor Tech Services (C-57 License No. 916085) under the direct supervision of Stellar Environmental Geologist Steve Bittman, who continuously logged the bores. The boreholes were drilled with a GeoProbe™ 7720 DT rig using 2½-inch-diameter steel outer drive casing lined with acetate sleeves. The soil samples were retained in their acetate sleeves and sealed with inert Teflon® tape and plastic caps. Groundwater samples were collected using a peristaltic pump equipped with new tubing and stored in appropriate glass containers. All soil and groundwater samples were immediately placed on ice at 4° C., and transported to McCampbell Analytical, a State of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory, via laboratory courier under chain-of-custody documentation. Prior to drilling, Underground Service Alert (USA) was contacted with regard to potential underground utilities, and a drilling permit was obtained from the Alameda County Public Works Agency, and an Excavation Permit was obtained from the City of Oakland.

Appendix A contains the ACHCS Workplan Approval Letter, Appendix B contains photodocumentation of the field work, Appendix C the bore logs and Appendix D copies of the permits.

The drilling program objective involved collecting continuous soil cores in the acetate liners to the total depth of the boring in all three locations, logging the soil using the Unified Soils Classification System, and submitting selected samples for laboratory analysis. Groundwater samples were to be collected from all three boring locations and submitted for analysis. The following summarizes the depths reached and sampling protocol used for each boring:

- Borehole B1 was drilled to a depth of 14.5 feet bgs and boreholes B2 and B3 were drilled to a depth of 15 feet bgs. Two soil samples from boring B1 were selected for laboratory analyses based on visual inspection and lithology as described above. Temporary wells constructed of ¾-inch diameter pvc, screened across the bottom 5-feet of each boring, were placed in each boring.

Following completion of drilling and sampling activities, the temporary pvc wells were removed and the boreholes tremie-grouted to surface with a mixture of neat Portland cement and potable water. Mr. John Shouldice of the Alameda County Department of Public Works approved the grouting. Waste soil and groundwater from this investigation was contained onsite in two 5-gallon buckets labeled "Non-Hazardous Waste" pending analysis.

Lithology and Hydrogeology

Site-specific lithology to a depth of 14.5 feet bgs was characterized at boring B1, and to a depth of 15 feet bgs in borings B2 and B3. Beneath the approximately 8 to 10-inches of asphalt and baserock, subsurface lithology can be described as dark grey to blue-grey silty clay to a depth of approximately 8 feet bgs. This fine grained material is underlain by coarser grained material consisting of brown to reddish brown, moist to wet, silty/sandy clay to clayey sand to about 15 feet bgs. Groundwater did not immediately flow into the borings, which prompted the installation of pvc casing into the borings. All borings had water levels of about 12 to 13 feet bgs after 1 to 2 hours after installation of the pvc pipe. Geologic logs of the borings were completed using the uniform classification system (see Appendix C).

ANALYTICAL RESULTS

Samples collected were analyzed for the following constituents by McCampbell Analytical of Pittsburg, California by the methods described below:

- Total Volatile Hydrocarbons as gasoline (TVH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX) and the fuel oxygenate methyl-tertiary-butyl-ether (MTBE), by EPA Method 8021B (soil and groundwater).

- LUFT 5 metals by EPA Method E200.8 (groundwater only).

Appendix E contains the certified analytical laboratory report and chain-of-custody record.

Soil Analytical Results

Neither of the two soil samples collected from boring B1 contained detectable concentrations of TVH-g or MBTEX compounds.

Groundwater Analytical Results

None of the groundwater samples collected from the three borings contained detectable concentrations of TVH-g or MBTEX compounds.

Concentrations of the LUFT 5 metals chromium, lead and zinc were either below laboratory detection limits, or below established ESLs. Cadmium was below detection limits in groundwater samples from B1 and B2, but was 0.30 mg/kg in the sample from B3 which exceed the ESL of 0.25 mg/kg. Concentrations of nickel in groundwater samples from borings B2 and B3 were 14mg/kg and 34mg/kg respectively, exceeding the ESL of 8.2 mg/kg for nickel while the sample from B1 was below the laboratory detection limit.

Table 1 on the following page shows the total and volatile petroleum hydrocarbon data; Table 2 summarizes the laboratory results for the LUFT 5 metals. Figure 3 graphically summarizes the soil and groundwater analytical results.

Table 1
Total and Volatile Petroleum Hydrocarbons in Soil and Groundwater
2650 Magnolia Street, Oakland, CA

Sample ID	TVHg	MTBE	Benzene	Toluene	Ethyl Benzene	Xylenes
B1- 9.5	< 1	<0.05	<0.005	<0.005	<0.005	<0.005
B1- 14	< 1	<0.05	<0.005	<0.005	<0.005	<0.005
ESLs Residential[(a)]	83 / 100	0.23	0.044 / 0.27	2.9 / 9.3	3.3 / 4.7	2.3 / 11
ESLs Industrial[(a)]	83 / 180	0.23	0.044 / 0.12	2.9 / 9.3	2.3 / 2.3	2.3 / 11
B1-W	< 50	<5	<0.5	<0.5	<0.5	<0.5
B2-W	< 50	<5	<0.5	<0.5	<0.5	<0.5
B3-W	< 50	<5	<0.5	<0.5	<0.5	<0.5
ESLs Residential and Industrial [(b)]	100 / 210	5.0/5.0	1.0 / 46	40 / 130	30 / 43	20 / 100

Notes:

ESLs = Environmental Screening Levels

[(a)] Water Board Tier 1 shallow soil Environmental Screening Levels for sites where groundwater is/is not a likely drinking water resource.

[(b)] Water Board Tier 1 groundwater Environmental Screening Levels for both residential and industrial sites where groundwater is/is not a likely drinking water resource.

MTBE = methyl-tertiary-butyl-ether (MTBE).
TEHd = total extractable hydrocarbons as diesel
TVHg = total volatile hydrocarbons as gasoline

Table 2
LUFT 5 Metals in Groundwater
2650 Magnolia Street, Oakland, CA

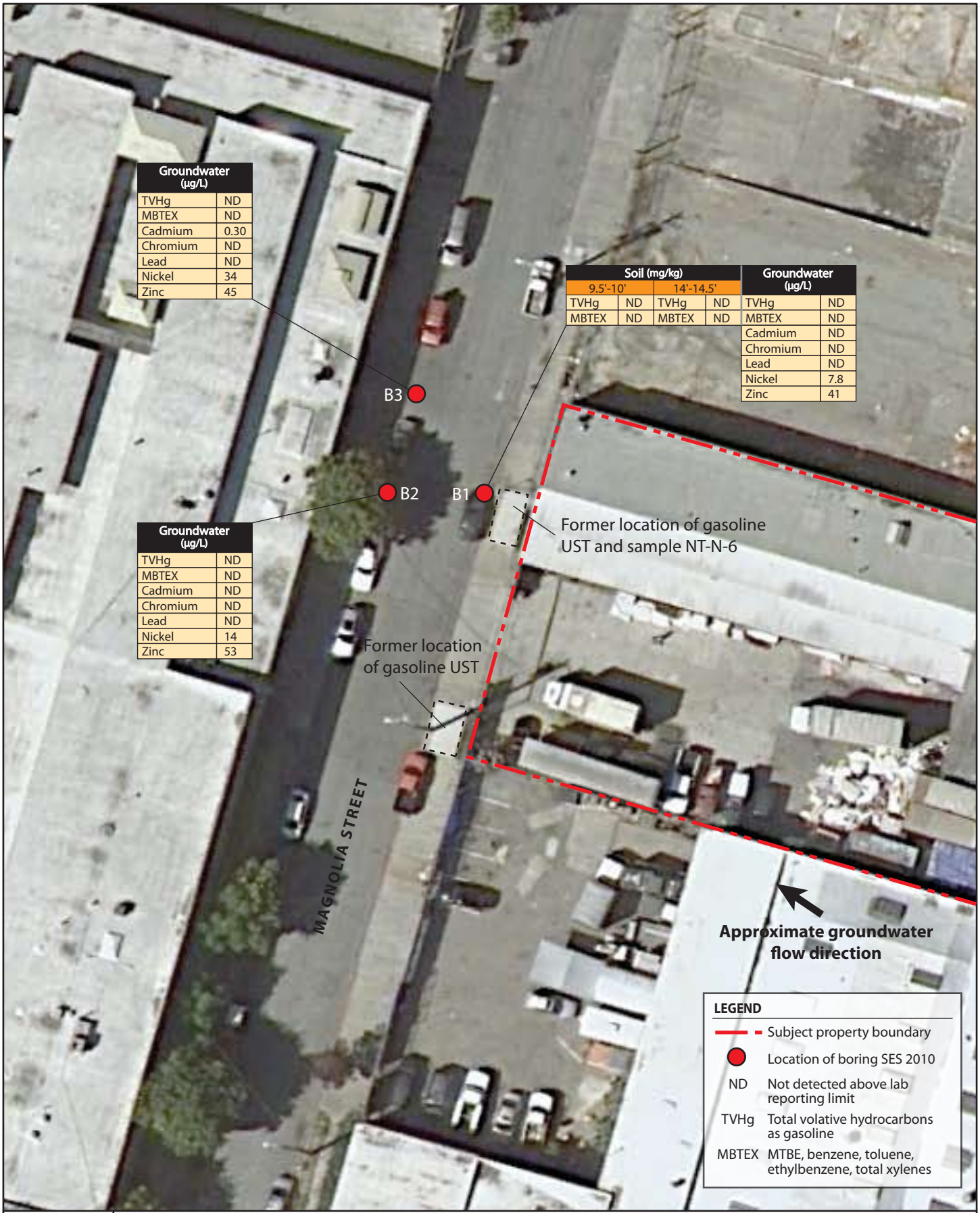
Sample ID	Cadmium	Chromium	Lead	Nickel	Zinc
B1-W	< 0.25	<0.5	<0.5	7.8	41
B2-W	< 0.25	<0.5	<0.5	**14**	53
B3-W	**< 0.3**	<0.5	<0.5	**34**	45
ESLs Residential and Industrial [(b)]	0.25 / 0.25	50/50	2.5/2.5	8.2 / 8.2	81/81

Notes:

ESLs = Environmental Screening Levels

[(b)] Water Board Tier 1 groundwater Environmental Screening Levels for both residential and industrial sites where groundwater is/is not a likely drinking water resource.

Concentrations of contaminants exceeding their appropriate ESL are indicated in **BOLD** type.



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SOIL AND GROUNDWATER ANALYTICAL RESULTS

2650 Magnolia St.
Oakland, CA

By: MJC

SEPTEMBER 2010

Figure 3

STELLAR ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

2010-24-06

3.0 REGULATORY CONSIDERATIONS

The concentrations reported in soil and groundwater samples are compared to regulatory limits and guidance to evaluate the extent of any potential impact on the property and the environment.

The Water Board has established Environmental Screening Levels (ESLs) for evaluating the likelihood of environmental impact. ESLs are conservative screening-level criteria for soil and groundwater, designed to be generally protective of both drinking water resources and aquatic environments; they incorporate both environmental and human health risk considerations. ESLs are not cleanup criteria (i.e., health-based numerical values or disposal-based values). Rather, they are used as a preliminary guide in determining whether additional remediation and/or investigation may be warranted. Exceedance of ESLs suggests that additional investigation and/or remediation is warranted.

Different ESLs are published for commercial/industrial vs. residential land use, for sites where groundwater is a likely versus unlikely drinking water resource, and the type of receiving water body. A Water Board-published "proposed groundwater management zones and designated areas map" in their East Bay Plains Beneficial Use Study (Water Board, 1999) shows the property area in a location where groundwater is unlikely to be used for drinking water.

The appropriate ESLs for the subject site are based on the following:

- Based on both the property zoning status (commercial/industrial) and the designation of this area of Oakland as "Zone A – Potential Drinking Water Resource (Water Board, 1999) the appropriate ESLs for the subject site are *commercial/industrial land use* and *groundwater is a potential drinking water resource.* Note that, for groundwater contaminants, all ESLs for the site contaminants are the same for both residential and commercial/industrial land use.
- The receiving body for groundwater discharge is an estuary (San Francisco Bay).

The State of California has also promulgated drinking water standards (Maximum Contaminant Levels [MCLs]) for some of the site contaminants. Drinking water standards may also be utilized by regulatory agencies to evaluate the potential risk associated with groundwater

contamination. For the established site contaminants, MCLs are generally the same as the ESLs (except that there is no MCL for petroleum compounds such as gasoline or diesel).

Once ESLs or drinking water standards are exceeded, the need for, and/or type of additional investigative and corrective actions are generally driven by the potential risk associated with the contamination. Minimum regulatory criteria generally applied to fuel leak cases in groundwater include:

- The contaminant source has been removed, including reasonably accessible contaminated soils that pose a long-term impact to groundwater;

This criteria has been met to the extent practical, with the USTs having been removed in 2007 along with 140 cubic yards of contaminated soil, but with 1,500 mg/kg TVHg remaining in the soil of the north wall (NT-N-6) of the north tank excavation due to access restrictions imposed by utilities.

- The extent of residual contamination has been fully characterized to obtain sufficient lithologic and hydrogeologic understanding (generally referred to as a Site Conceptual Model);

This criterion has been met with respect to the onsite and offsite residual contamination. No offsite groundwater plume is indicated to be present as a result of the historical soil contamination based on the recent offsite grab-groundwater samples

- Groundwater wells have been installed and are monitored periodically to evaluate groundwater contaminant concentrations and hydrochemical trends;

This criterion has not been met, and will not be required.

- The stability of the contaminant plume has been evaluated to determine whether it is moving or increasing in concentration;

This criterion is not applicable as the data collected demonstrates that no plume exists, and groundwater wells have not been installed (see above).

- A determination has been made as to whether the residual contamination poses an unacceptable risk to sensitive receptors.

This criterion has been met- no significant impact to groundwater downgradient of the site was detected.

As stated above, ESLs are used as a preliminary guide in determining whether additional remediation or other action is warranted. Exceeding ESLs may warrant additional actions, such as monitoring plume stability to demonstrate no risk to sensitive receptors in the case of sites where drinking water is not threatened.

GROUNDWATER IMPACTS AND BENEFICIAL USES

There are no known immediate impacts to the groundwater that affect current beneficial use. The nearest surface water body is San Francisco Bay, located approximately 1.4 miles to the west of the site. The primary source (USTs) and secondary source (contaminated soil) have been remediated to the extent practical by the 2007 UST removals and over-excavation of contaminated soil. The property owner has no plans for any future UST or hydrocarbon use, or to utilize site groundwater for any purpose.

PETITION FOR REGULTORY CLOSURE

Based on there being no apparent immediate or probable future environmental impacts from the former fuel USTs, Stellar Environmental petitions ACEH on behalf of Linford Magnolia Properties for regulatory case closure or no-further-action status.

4.0 CONCLUSIONS, RECOMMENDATIONS, PROPOSED ACTIONS

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions are based on the Phase II Environmental Site Assessment for the subject property located at 2650 Magnolia Street, Oakland, Alameda County, California.

- Two USTs containing gasoline were removed from the site in 2007. Confirmation soil samples collected from the final excavated depth of 13 feet bgs did not contain detectable concentrations of gasoline hydrocarbons. A sidewall soil sample collected from 6 feet bgs at the north end of the excavation (NT-N-6) contained 1,500 milligrams per kilogram (mg/kg) TVHg. Access to over-excavate the north wall of the north tank was restricted by underground utilities on that side. A UFST closure documentation report discussing both UFST removals was submitted to the appropriate regulatory agencies in 2003.
- The lack of residual hydrocarbon contamination in soil downgradient of the former north UST location in the 9 to 14 feet bgs zone suggests that no significant hydrocarbon contaminant remains in soil as a source for continued significant impact to groundwater.
- Groundwater adjacent to and downgradient of the former north UST location and in areas downgraident of the site across Magnolia Street, has not been impacted with gasoline range hydrocarbons.
- The appropriate ESL criterion for groundwater at the site is commercial/industrial where groundwater *is* a potential drinking water resource.
- The exceedence of groundwater ESLs for cadmium in boring B3, and nickel in borings B2 and B3 does not pose a health risk and will not require further evaluation. The source of these metals in groundwater across Magnolia Street from the site is unknown. Former industrial uses in the area may have been contributors.

Based on the limited Phase II findings and Stellar Environmental Solutions' understanding of ACHCS's site closure evaluation criteria we recommend the following:

- Upload this report to the State Geotracker database to satisfy State requirements.

PROPOSED ACTIONS

- Based on the closure criteria described in this report, the site appears to meet the regulatory criteria for site closure. Criteria for closure were discussed between Stellar Environmental and the ACHCS in July 2010. The conclusion was that with no off-site

impact, site closure could be expected. Thus, Stellar Environmental is petitioning Alameda County Health, on behalf of our client Linford Magnolia Properties to grant case closure for the site.

5.0 LIMITATIONS

This report has been prepared for the use of Linford Magnolia Properties and their authorized representatives.

The findings and conclusions presented in this report are based solely on previous investigations at the subject site conducted by Stellar Environmental, and the current sampling investigation. This report provides neither a certification nor guarantee that the property is free of hazardous substance contamination. This report has been prepared in accordance with generally accepted methodologies and standards of practice of the area.

The personnel performing this assessment 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. Subject property conditions may change with the passage of time, natural processes or human intervention, which can invalidate the findings and conclusions presented in this report. Thank you again for the opportunity to provide you with the technical services described. Please call us directly at 510-644-3123 if you have any questions.

6.0 REFERENCES

Stellar Environmental Solutions, 2007. Underground fuel Storage Tank Removal and Hoist Removal Report, 2650 Magnolia Street, Oakland, California. September 14.

Regional Water Quality Control Board (Water Board), 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report – Alameda and Contra Costa Counties. June.

Regional Water Quality Control Board (Water Board), 2007. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. November.

APPENDIX A

ACHCS Workplan Approval Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

August 12, 2010

James Linford, (*Sent via E-mail to: jtlinford@comcast.net*)
Linford Magnolia Properties
P.O. Box 210598
San Francisco, CA 94121

Tommy Chang
Chang Tommy & Yang Mei ETAL
1282 24th Avenue
San Francisco, CA 94122-1615

Subject: Site Characterization for Fuel Leak Case No. RO0002961 and GeoTracker Global ID T0619700438, Linford Magnolia Property, 2650 Magnolia Street, Oakland, CA 94607

Dear Messrs. Linford and Chang:

Thank you for the recently submitted document entitled, "Workplan for Site Groundwater Investigation," dated August 2, 2010, which was prepared by Stellar Environmental *Solutions, Inc.* (Stellar) for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned work plan for the above-referenced site. Stellar has proposed to install three borings to determine the extent of soil and groundwater contamination.

ACEH generally concurs with the proposed scope of work and the proposed scope of work may be implemented provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed.

TECHNICAL COMMENTS

1. **Boring Locations** – According to Stellar boring B1 "will be located in the Magnolia Street parking strip within 3 feet of the former location of the north UST where maximum soil contaminants were previously detected, to evaluate for the presence of groundwater contamination. Soil samples will be collected continuously for geologic logging purposes. The boring will be advanced approximately five feet deeper that first encountered groundwater to aid in the collection of a grab-groundwater sample." The proposed boring B1 location appears to be east of the former excavation as illustrated on Figure 2 of the above-mentioned work plan. Please note that total Petroleum Hydrocarbons (TPH) as gasoline (g) was

detected at concentrations as high as 1,500 mg/kg in the soil sample NT-N-6, located on the north excavation wall. The goal of the investigation is not only to delineate hydrocarbon contamination in groundwater, but to delineate soil contamination as well. Therefore, to address both data gaps, it is recommended to re-locate boring B1 near the northwest corner of the former excavation, north of its currently proposed position to evaluate the extent of soil and groundwater impact.

2. GeoTracker Compliance – A review of the State Water Resources Control Board's (SWRCB) GeoTracker website indicate that electronic copies of subject work plan have not been submitted, rendering the site to non-compliance status. Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the UST or LUST program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. Also, beginning January 1, 2002, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude to sub-meter accuracy using NAD 83. A California licensed surveyor may be required to perform this work. Additionally, pursuant to California Code of Regulations, Title 23, Division 3, Chapter 30, Articles 1 and 2, Sections 3893, 3894, and 3895, beginning July 1, 2005, the successful submittal of electronic information (i.e. report in PDF format) shall replace the requirement for the submittal of a paper copy. Please upload all applicable electronic submittal types such as the analytical data (EDF), survey data (GEO_XY and GEO_Z), including a PDF version of the subject work plan to GeoTracker by the date specified below. Electronic reporting is described below.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **November 10, 2010** – Soil and Water Investigation Report

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Digitally signed by Paresh Khatri
DN: cn=Paresh Khatri, o=Alameda County Environmental Health, ou=Local Oversight Program, email=Paresh.Khatri@acgov.org, c=US
Date: 2010.08.12 16:35:03 -07'00'

Paresh C. Khatri
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: Richard S. Makdisi, Stellar Environmental Solutions, Inc., 2198 Sixth Street, Suite 201, Berkeley, CA 94710
Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)
Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Paresh Khatri, ACEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
GeoTracker
File

APPENDIX B

Photodocumentation

Subject: View of boring B1 location near the north end of the former northern UST	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: September 1, 2010	Project No.: SES 2010-24
Photographer: Steve Bittman	Photo No.: 01

Subject: Soil cores from boring B1	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: September 1, 2010	Project No.: SES 2010-24
Photographer: Steve Bittman	Photo No.: 02

Subject: View Geoprobe equipment at location boring B3	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: September 1, 2010	Project No.: SES 2010-24
Photographer: Steve Bittman	Photo No.: 03

Subject: Soil core from boring B2	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: September 1, 2010	Project No.: SES 2010-24
Photographer: Steve Bittman	Photo No.: 04

Subject: Grouting boring B2	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: August 12, 2010	Project No.: SES 2010-20
Photographer: Steve Bittman	Photo No.: 05

Subject: Surface restored (typical)	
Site: 2650 Magnolia Street, Oakland, CA	
Date Taken: September 1, 2010	Project No.: SES 2010-24
Photographer: Steve Bittman	Photo No.: 06

APPENDIX C

Boring Logs

STELLAR
ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

Soil Boring Log

BORING NUMBER B-1 Page 1 of 1

PROJECT Linford-Magnolia
OWNER
LOCATION 2650 Magnolia St., Oakland, CA
PROJECT NUMBER 2010-24
TOTAL DEPTH 14.5 feet bgs
BOREHOLE DIA. 2.25”
SURFACE ELEV. Approx. 14 feet
WATER ENCOUNTERED 13 feet
DRILLING COMPANY VTS
DRILLING METHOD Direct Push
DRILLER Glenn
GEOLOGIST S. Bittman
DATE DRILLED 9/1/2010

DEPTH (feet)	GRAPHIC LOG	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0		Asphalt 2", Base rock 6"	
		CL, silty clay, black, damp, stiff	
5		CL/GC, silty clay to gravelly clay, brown, damp, stiff (fill)	
		CL, silty clay, blue-grey-brown, damp, medium plasticity, stiff	
10	B1-9.5	SC/CL, clayey sand to sandy clay, olive brown, moist to wet, low plasticity, stiff	
	B1-14		
15		Bottom of bore = 14.5 feet	
20			
25			
30			
35			
40			

Notes:
Continuous core sampling—100% recovery unless specified otherwise

Grab groundwater samples collected within temporary PVC casing

B1-14
Soil sample collected for analysis

▽ First encountered groundwater ▼ Equilibrated groundwater level

2010-24-03

STELLAR
ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

Soil Boring Log

BORING NUMBER B-2 Page 1 of 1

PROJECT Linford-Magnolia
OWNER
LOCATION 2650 Magnolia St., Oakland, CA
PROJECT NUMBER 2010-24
TOTAL DEPTH 15 feet bgs
BOREHOLE DIA. 2.25”
SURFACE ELEV. Approx. 14 feet
WATER ENCOUNTERED 13 feet
DRILLING COMPANY VTS
DRILLING METHOD Direct Push
DRILLER Glenn
GEOLOGIST S. Bittman
DATE DRILLED 9/1/2010

DEPTH (feet)	GRAPHIC LOG	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0		Asphalt 2", Base rock 6"	
		CL, silty clay, grey brown, damp, medium plasticity, stiff	
5			
10		SC/CL, clayey sand to sandy clay, olive brown, moist to wet, soft	
15		Bottom of bore = 15 feet	
20			
25			Notes: Continuous core sampling—100% recovery unless specified otherwise Grab groundwater samples collected within temporary PVC casing
30			
35			
40			

▽ First encountered groundwater ▼ Equilibrated groundwater level

2010-24-04

STELLAR
ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

Soil Boring Log

BORING NUMBER B-3 Page 1 of 1

PROJECT Linford-Magnolia
OWNER
LOCATION 2650 Magnolia St., Oakland, CA
PROJECT NUMBER 2010-24
TOTAL DEPTH 15 feet bgs
BOREHOLE DIA. 2.25”
SURFACE ELEV. Approx. 14 feet
WATER ENCOUNTERED 13 feet
DRILLING COMPANY VTS
DRILLING METHOD Direct Push
DRILLER Glenn
GEOLOGIST S. Bittman
DATE DRILLED 9/1/2010

DEPTH (feet)	GRAPHIC LOG	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0		Asphalt 2", Base rock 6"	
		CL, silty clay, grey to olive brown, damp, low plasticity, stiff	
5			
		GC, gravelly clay, brown with red oxidation, moist, stiff	
10			
		SC/CL, clayey sand to sandy clay, olive brown, moist to wet, soft	
15		Bottom of bore = 15 feet	
20			
25			
30			
35			
40			

Notes:
Continuous core sampling—100% recovery unless specified otherwise

Grab groundwater samples collected within temporary PVC casing

▽ First encountered groundwater ▼ Equilibrated groundwater level

2010-24-05

APPENDIX D

Drilling Permit

Excavation Permit

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 08/19/2010 By jamesy

Permit Numbers: W2010-0638
Permits Valid from 09/01/2010 to 09/01/2010

Application Id:	1282064428524	**City of Project Site:**	Oakland
Site Location:	2650 Magnolia Street		
Project Start Date:	09/01/2010	**Completion Date:**	09/01/2010
Assigned Inspector:	Contact John Shouldice at (510) 670-5424 or johns@acpwa.org		
Applicant:	Stellar Environmental Solutions - Steve Bittman 2198 Sixth Street #201, Berkeley, CA 94710	**Phone:**	510-644-3123
Property Owner:	Tommy Chang 1282 24th Ave, San Francisco, CA 94122	**Phone:**	--
Client:	James Linford Linford Magnolia Properties PO Box 210598, San Francisco, CA 94121	**Phone:**	--
Contact:	Steve Bittman	**Phone:** **Cell:**	510-644-3123 510-612-8751

	Total Due:	$265.00
Receipt Number: WR2010-0290	**Total Amount Paid:**	$265.00
Payer Name : Teal Glass	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 3 Boreholes
Driller: Vapor Tech Services - Lic #: 916085 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0638	08/19/2010	11/30/2010	3	2.25 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 John Shouldice for an inspection time at 510-670-5424 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. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no

case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. 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.

7. 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.

8. 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 OAKLAND • Community and Economic Development Agency

250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund after 180 days when expired.

Appl# X1001095 Job Site 2650 MAGNOLIA ST Parcel# 005 -0446-007-00

Descr Soil boring(s) on Magnolia St
No impact on traffic lane allowed.
Call PWA INSPECTION prior to start: 510-238-3651.

Permit Issued 08/18/10

Work Type EXCAVATION-PRIVATE P

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

		Applcnt	Phone#	Lic#	--License Classes--
Owner	CHANG TOMMY & YANG MEI C ETAL				
Contractor	VAPOR TECH SERVICES	X	(415)378-0415	916085	C57
Arch/Engr					
Agent	STELLAR ENVIR/H PIETRAPAOLI		(510)644-3123		

Applic Addr 1348 66TH ST, BERKELEY CA, 94702

JOB SITE

$436.05 TOTAL FEES PAID AT ISSUANCE

$71.00 Applic	$309.00 Permit
$.00 Process	$36.10 Rec Mgmt
$.00 Gen Plan	$.00 Invstg
$.00 Other	$19.95 Tech Enh

Permit Issued By _____ Date: _____

Finaled By _____ Date: _____

ADDRESS:

DIST:

CITY OF OAKLAND

PAID
8/18/10

APPENDIX E

Laboratory Analytical Results and Chain-of-Custody Documentation

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Stellar Environmental Solutions	Client Project ID: #2010-24; Linford Magnolia	Date Sampled: 09/01/10
		Date Received: 09/02/10
2198 Sixth St. #201	Client Contact: Steve Bittman	Date Reported: 09/09/10
Berkeley, CA 94710	Client P.O.:	Date Completed: 09/09/10

WorkOrder: 1009055

September 09, 2010

Dear Steve:

Enclosed within are:

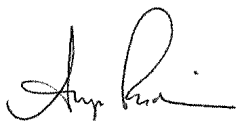
1) The results of the **5** analyzed samples from your project: **#2010-24; Linford Magnolia,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

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

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,



Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

Chain of Custody Record

Lab job no. 1009055

Date

Page 1 of 1

Laboratory McCampbell Analytical
Address 1534 Willow Pass Rd
Pittsburg, CA 94565
877-252-9262

Project Owner
Site Address 2650 Magnolia St
Oakland CA
Project Name Linford Magnolia
Project Number 2010-24

Method of Shipment Courrier
Shipment No.
Airbill No.
Cooler No. Stellar Environmental
Project Manager Steve Bittman
Telephone No. 510-644-3123
Fax No.
Samplers: (Signature) St Bittman

Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	TVHg BTEX MTBE	LUFT 5	Remarks
B1-W		9/1/10	1600	W	40 ml VOA	✓	HCl	no	2	X		Please Filter metals GW Sample in Lab
B1-W			1600	W	250 ml plastic	✓		no	1		X	
B2-W			1600	W	40 ml VOA	✓	HCl	no	2	X		
B2-W			1600	W	250 ml Plastic	✓		no	1		X	
B3-W			1600	W	40 ml VOA	✓	HCl	no	2	X		
B3-W			1600	W	250 ml Plastic	✓		no	1		X	
B1-9.5			1400	S	Acetate	✓			1	X		
B1-14		9/1/10	1400	S	Acetate	✓			1	X		

Relinquished by:	Date	Received by:	Date	Relinquished by:	Date	Received by:	Date
Signature St Bittman	9/2/10	Signature	9/2/10	Signature	9/2/10	Signature Melissa Valle	9/2/10
Printed Steve Bittman	Time 955	Printed	Time 955	Printed	Time 1010	Printed Melissa Valle	Time 9:55 am
Company SES		Company		Company		Company MAI	

Turnaround Time: 5 Day
Comments:

Relinquished by:	Date	Received by:	Date
Signature		Signature	
Printed	Time	Printed	Time
Company		Company	

ICE / t° 4°C
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ____ CONTAINERS ✓
DECHLORINATED IN LAB ____ PRESERVED IN LAB ____

PRESERVATION VOAS | O & G | METALS | OTHER

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1009055 **ClientCode: SESB**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Steve Bittman
Stellar Environmental Solutions
2198 Sixth St. #201
Berkeley, CA 94710
(510) 612-8751 FAX (510) 644-3859

Email: sbittman@stellar-environmental.com,inter
cc:
PO:
ProjectNo: #2010-24; Linford Magnolia

Bill to:
Accounts Payable
Stellar Enviormental Solutions
2198 Sixth St. #201
Berkeley, CA 94710

Requested TAT: 5 days

Date Received: **09/02/2010**
Date Printed: **09/02/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1009055-001	B1-W	Water	9/1/2010 16:00	☐		A	B	B								
1009055-002	B2-W	Water	9/1/2010 16:00	☐		A	B	B								
1009055-003	B3-W	Water	9/1/2010 16:00	☐		A	B	B								
1009055-004	B1-9.5	Soil	9/1/2010 14:00	☐	A											
1009055-005	B1-14	Soil	9/1/2010 14:00	☐	A											

Test Legend:

1	G-MBTEX_S	2	G-MBTEX_W	3	LUFTMS_DISS	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **Stellar Environmental Solutions**
Date and Time Received: **9/2/2010 12:33:18 PM**

Project Name: **#2010-24; Linford Magnolia**
Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1009055** Matrix Soil/Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 4.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Stellar Environmental Solutions	Client Project ID: #2010-24; Linford Magnolia	Date Sampled: 09/01/10
		Date Received: 09/02/10
2198 Sixth St. #201	Client Contact: Steve Bittman	Date Extracted: 09/02/10-09/08/10
Berkeley, CA 94710	Client P.O.:	Date Analyzed: 09/03/10-09/08/10

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1009055

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	B1-W	W	ND	ND	ND	ND	ND	ND	1	99	b1
002A	B2-W	W	ND	ND	ND	ND	ND	ND	1	97	
003A	B3-W	W	ND	ND	ND	ND	ND	ND	1	103	b1
004A	B1-9.5	S	ND	ND	ND	ND	ND	ND	1	90	
005A	B1-14	S	ND	ND	ND	ND	ND	ND	1	86	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Stellar Environmental Solutions	Client Project ID: #2010-24; Linford Magnolia	Date Sampled: 09/01/10
		Date Received: 09/02/10
2198 Sixth St. #201	Client Contact: Steve Bittman	Date Extracted: 09/02/10
Berkeley, CA 94710	Client P.O.:	Date Analyzed: 09/03/10

LUFT 5 Metals*

Extraction method: E200.8 Analytical methods: E200.8 Work Order: 1009055

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
001B	B1-W	W	DISS.	ND	ND	ND	7.8	41	1	N/A	b1
002B	B2-W	W	DISS.	ND	ND	ND	14	53	1	N/A	
003B	B3-W	W	DISS.	0.30	ND	ND	34	45	1	N/A	b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	DISS.	0.25	0.5	0.5	0.5	5.0	µg/L			
	S	TOTAL	NA	NA	NA	NA	NA	NA			

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.
TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 52889 WorkOrder 1009055

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1009031-011A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	109	99.4	9.67	104	105	0.637	70 - 130	20	70 - 130	20
MTBE	ND	0.10	102	103	1.45	101	104	3.11	70 - 130	20	70 - 130	20
Benzene	ND	0.10	84.1	81.5	3.11	84	85.1	1.37	70 - 130	20	70 - 130	20
Toluene	ND	0.10	93.1	90	3.39	92.4	93.8	1.47	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	96.5	93.7	2.84	96.2	97.6	1.46	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	95.9	93.3	2.69	95.5	96.6	1.13	70 - 130	20	70 - 130	20
%SS:	99	0.10	82	80	2.69	82	83	0.762	70 - 130	20	70 - 130	20

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

BATCH 52889 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009055-004A	09/01/10 2:00 PM	09/02/10	09/03/10 10:00 AM	1009055-005A	09/01/10 2:00 PM	09/02/10	09/03/10 11:23 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 52896 WorkOrder 1009055

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1009051-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	94.7	95.2	0.436	96.4	93.9	2.66	70 - 130	20	70 - 130	20
MTBE	ND	10	121	124	2.92	117	119	1.25	70 - 130	20	70 - 130	20
Benzene	ND	10	113	114	0.950	114	109	4.40	70 - 130	20	70 - 130	20
Toluene	ND	10	101	101	0	103	98.2	4.77	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	100	101	0.329	103	97.5	5.28	70 - 130	20	70 - 130	20
Xylenes	ND	30	113	113	0	117	110	5.47	70 - 130	20	70 - 130	20
%SS:	97	10	102	102	0	102	101	1.86	70 - 130	20	70 - 130	20

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

BATCH 52896 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009055-001A	09/01/10 4:00 PM	09/04/10	09/04/10 5:21 AM	1009055-002A	09/01/10 4:00 PM	09/08/10	09/08/10 5:59 AM
1009055-003A	09/01/10 4:00 PM	09/04/10	09/04/10 5:53 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

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QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 52866 WorkOrder 1009055

EPA Method E200.8 **Extraction E200.8** **Spiked Sample ID: 1008867-002A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Cadmium	ND	10	97.8	97.8	0	98.3	102	3.23	70 - 130	20	85 - 115	20
Chromium	ND	10	94.6	94	0.560	101	103	2.84	70 - 130	20	85 - 115	20
Lead	ND	10	94.9	95.4	0.610	93.5	96.7	3.39	70 - 130	20	85 - 115	20
Nickel	0.85	10	88.2	87.5	0.778	95.4	99.6	4.31	70 - 130	20	85 - 115	20
Zinc	ND	100	92.8	92.3	0.491	98.4	102	4.01	70 - 130	20	85 - 115	20
%SS:	109	750	113	109	3.86	113	108	4.49	70 - 130	20	70 - 130	20

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

BATCH 52866 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1009055-001B	09/01/10 4:00 PM	09/02/10	09/03/10 1:31 AM	1009055-002B	09/01/10 4:00 PM	09/02/10	09/03/10 1:39 AM
1009055-003B	09/01/10 4:00 PM	09/02/10	09/03/10 1:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer