R02518

ADDITIONAL SITE CHARACTERIZATION REPORT

BENNER AUTOMOTIVE FACILITY
488 - 25TH STREET
OAKLAND, CALIFORNIA

Prepared for

JOSEPH AND LORETTA BENNER FAMILY TRUST
OAKLAND, CALIFORNIA

August 2004

★ Stellar Environmental Solutions

Geoscience & Engineering Consulting

R02518

STELLAR ENVIRONMENTAL SOLUTIONS
2198 SIXTH STREET, SUITE 201, BERKELEY, CA 94710
TEL: 510.644.3123 ★ FAX: 510.644.3859

TRANSMITTAL MEMORANDUM

TO: **ALAMEDA COUNTY HEALTH DEPT.**
LOCAL OVERSIGHT PROGRAM

DATE: **AUGUST 16, 2004**

ATTENTION: **MR. DON HWANG**

FILE:

SUBJECT: **UST SITE INVESTIGATION**
488 25TH STREET, OAKLAND, CA

WE ARE SENDING:

- ☒ HEREWITH
- ☐ UNDER SEPARATE COVER
- ☒ VIA MAIL
- ☐ VIA

THE FOLLOWING: "ADDITIONAL SITE CHARACTERIZATION REPORT" (DATED 8/9/04)

- ☐ AS REQUESTED
- ☐ FOR YOUR APPROVAL
- ☐ FOR REVIEW
- ☒ FOR YOUR USE
- ☐ FOR SIGNATURE
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COPIES TO: **MR. MIKE BENNER**
(PROPERTY OWNER)

BY: B.M. Stelle

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.

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

August 9, 2004

Mr. Don Hwang - Hazardous Materials Specialist
Alameda County Health Care Services Agency, Environmental Health
Environmental Protection, Local Oversight Program
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Subject: Additional Site Characterization Report
Benner Automotive Facility, 488 - 25th Street, Oakland, California
Alameda County Health Fuel Leak Case No. RO0002518

Dear Mr. Hwang:

This report documents the July 2004 additional site characterization activities conducted by Stellar Environmental Solutions, Inc. (SES) at 488 - 25th Street, Oakland, California. The work was conducted in accordance with the Alameda County Health-approved technical workplan. The work included advancing, geologically logging, and (soil and groundwater) sampling of six exploratory boreholes in the immediate vicinity of a former gasoline underground fuel storage tank at the site, and sampling an adjacent site groundwater monitoring well.

The data indicate that shallow groundwater has been impacted by gasoline and related hydrocarbons above regulatory agency screening level criteria, and has migrated offsite. We recommend that groundwater monitoring wells be installed and sampled to evaluate the extent, magnitude, and hydrochemical trends of groundwater contamination.

Please contact us at (510) 644-3123 if you have any questions.

Sincerely,

Bruce M. Rucker

Bruce Rucker, R.G., R.E.A.
Project Manager and Senior Geologist

REGISTERED GEOLOGIST
BRUCE M. RUCKER
No. 6814
Exp. 9/04
STATE OF CALIFORNIA

Richard S. Makdisi

Richard S. Makdisi, R.G., R.E.A.
Principal

cc: Mr. Mike Benner – Trustee, Benner Family Trust

ADDITIONAL SITE CHARACTERIZATION REPORT

BENNER AUTOMOTIVE FACILITY
488 - 25TH STREET
OAKLAND, CALIFORNIA

Prepared for:

JOSEPH AND LORETTA BENNER FAMILY TRUST
488 - 25TH STREET
OAKLAND, CALIFORNIA 94612

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

August 9, 2004

Project No. 2002-55

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1.0 INTRODUCTION

PROJECT BACKGROUND

Stellar Environmental Solutions, Inc. (SES) was retained by the Joseph and Loretta Benner Family Trust (Benner Family Trust) (property owner) to conduct additional site characterization activities (exploratory borehole drilling and sampling investigation) at 488 - 25th Street in Oakland, California.

The following summarizes the underground fuel storage tank (UFST) history at the site, as well as historical corrective actions and investigations.

- According to the current property owner, the UFST has not been used since the Benner Family Trust purchased the property in the 1960s). At the time of purchase, the Benners were instructed by the Oakland Fire Department to either permit the UFST (for continued usage) or remove the dispenser and pave over the piping to prohibit further usage (i.e., decommission the UFST). The owner elected to decommission the UFST. No access to the UFST has been available since the 1960s.
- The UFST was removed in January 2003 under Oakland Fire Department oversight (Oakland Fire Department, 2003), and a UFST closure documentation report was prepared and submitted to the City of Oakland (SES, 2003a). The case was then transferred to the Alameda County Health Care Services Agency, Environmental Health Services, Environmental Protection, Local Oversight Program (Alameda County Health), and assigned as Fuel Leak Case No. RO0002518.
- Based on the SES report, Alameda County Health requested a technical workplan for a Preliminary Site Assessment (PSA) to address residual soil contamination and potential groundwater contamination (Alameda County Health, 2003a). On behalf of the property owner, SES submitted the requested technical workplan (Stellar Environmental Solutions, Inc., 2003b). Alameda County Health responded to the workplan with a request for workplan scope revisions (Alameda County Health, 2003b). SES responded with a workplan revision letter (SES, 2003c), which Alameda County Health approved (Alameda County Health, 2003c).

- The PSA was conducted in July 2003. The work included drilling and sampling five exploratory boreholes (SES, 2003d). The PSA report recommended the installation and sampling of groundwater monitoring wells.
- Alameda County Health responded to the PSA report with a letter requesting additional work, including: preferential pathway study, vicinity well search, and additional exploratory boreholes prior to well installations (Alameda County Health, 2003d).
- Per the PSA report recommendations, SES submitted to Alameda County Health a technical workplan for the proposed borehole locations (SES, 2004a). That workplan included the findings of the preferential pathway survey and vicinity well search. Alameda County Health responded to the workplan with a request for technical revisions (Alameda County Health, 2004). SES responded to the request for revisions with a workplan addendum (SES, 2004b). The implemented scope of work was in accordance with the SES workplan and subsequent revisions.

SITE AND VICINITY DESCRIPTION

The project site is an active automobile service facility (Benner Automotive) at 488 - 25th Street, Oakland, Alameda County, California (site). The site is located in downtown Oakland on the north side of 25th Street approximately 500 feet east of Telegraph Avenue. Figure 1 is a site location map. Figure 2 is a site plan.

PREVIOUS INVESTIGATION FINDINGS

Historical (and current investigation) soil and groundwater sample analytical results are discussed in Section 5.0 of this report. Figure 2 shows the location of the former UFST and historical (prior to the current investigation phase) borehole locations.

UFST Removal Findings

Gasoline-range hydrocarbons (2,500 mg/kg) were detected in one of the two base-of-excavation confirmation soil samples. Neither BTEX (benzene, toluene, ethylbenzene, and xylene) nor MTBE (methyl *tertiary*-butyl ether) were detected in that sample, although method reporting limits were elevated due to required dilution. No contamination was detected at the other end of the UFST excavation. Lead was detected at background concentrations, and was deemed not to be a site contaminant of concern. A total of 40 tons of backfill material—with visual and odiferous evidence of petroleum contamination—was offhauled for Class II landfill disposal. The excavation was then backfilled with clean imported fill and compacted to 95 percent relative compaction.

The base of the original UFST excavation, as evidenced by the interface between backfill material and native soils, was approximately 7 feet below ground surface (bgs), and was underlain by

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

488 25th Street
Oakland, CA

By: MJC | JANUARY 2003

Figure 1

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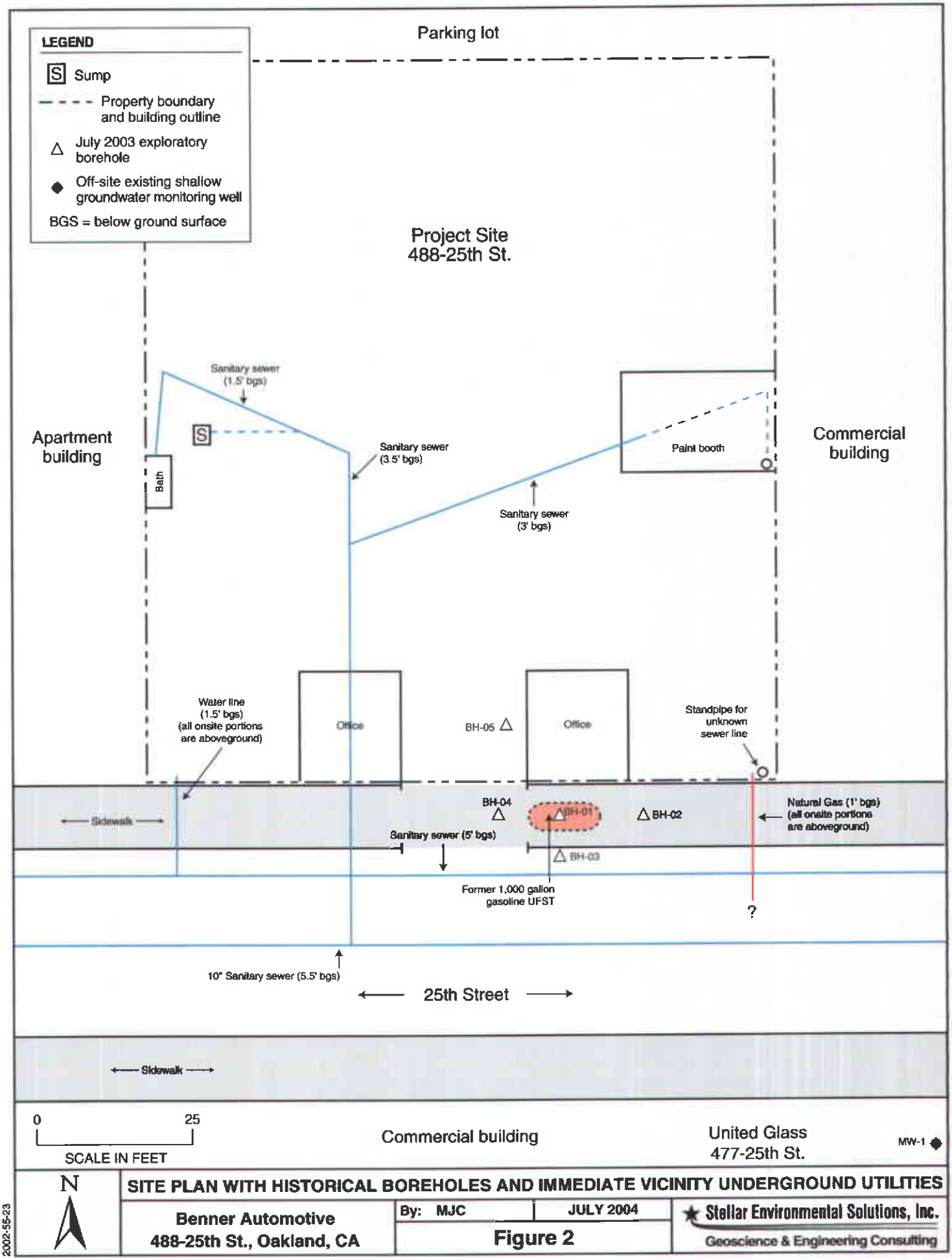
0202-05-01



SITE PLAN WITH HISTORICAL BOREHOLES AND IMMEDIATE VICINITY UNDERGROUND UTILITIES

Benner Automotive **488-25th St., Oakland, CA**	By: MJC	JULY 2004	★ Stellar Environmental Solutions, Inc. Geoscience & Engineering Consulting
	Figure 2		

2002-55-23

approximately 2 feet of sandy backfill material. Except for potholing with the backhoe bucket to obtain samples of native soil, no additional soil excavation was conducted (beyond that required to expose and remove the UFST). Groundwater was not encountered in the excavation.

July 2003 PSA Findings

Five exploratory boreholes were advanced to depths of 16 to 25 feet on three sides of the former UFST excavation (all within 10 feet of the former excavation), and one was advanced through the approximate center of the former excavation. A total of ten soil samples were collected for laboratory analysis from the unsaturated zone, at depths between 6.5 and 11.5 feet. An additional five soil samples (one from each borehole) were collected at depths below the upper water-bearing zone. One grab-groundwater sample was collected from each borehole. The boreholes were geologically logged from continuous soil cores.

Soil contamination above regulatory agency screening levels appeared to be constrained to an approximately 2-foot-thick zone above groundwater, in the immediate vicinity of the former UFST excavation.

Shallow groundwater in the immediate vicinity of the former UFST had been impacted by gasoline above screening-level criteria, with no apparent contamination by BTEX or MTBE. The area of maximum gasoline contamination appeared to be beneath the UFST and to the east and south, with minor to insignificant gasoline contamination to the west and northwest.

Exploratory borehole PID readings and soil sample analytical results suggested no soil or groundwater contamination beneath the upper water-bearing zone.

CURRENT OBJECTIVES AND SCOPE OF WORK

The objectives and scope of the current phase of the investigation included:

1. Further evaluation of the extent and magnitude of soil and groundwater contamination associated with the former UFST; and
2. Providing additional data on local groundwater flow direction and hydrogeologic conditions.

To accomplish these objectives, SES advanced and sampled (soil and groundwater) exploratory boreholes in areas likely to intercept any residual contamination, and sampled an offsite nearby shallow groundwater monitoring well.

This report also discusses in detail the findings of the preferential pathway survey and vicinity well search, reported in summary fashion in the previous SES technical workplan (SES, 2004a).

2.0 PREFENTIAL PATHWAY AND WATER WELL SURVEYS

This section presents the methods and findings of the preferential pathway and offsite well surveys requested by Alameda County Health (Alameda County Health, 2003d).

PREFERENTIAL PATHWAY SURVEY

Alameda County Health requested that a survey be conducted to identify potential preferential horizontal/vertical contaminant migration pathways that might be influencing site-sourced contaminant transport. This task focused on identifying both the location and depth of potential underground facilities, and included three components:

1. Contacting applicable municipal agencies and utility providers to obtain underground construction data.
2. Retaining a private utility locating firm to locate onsite utilities.
3. Contacting Underground Service Alert (USA), which notified all known utility providers in the area; the utility providers were then responsible for marking the locations of underground utilities servicing the property.

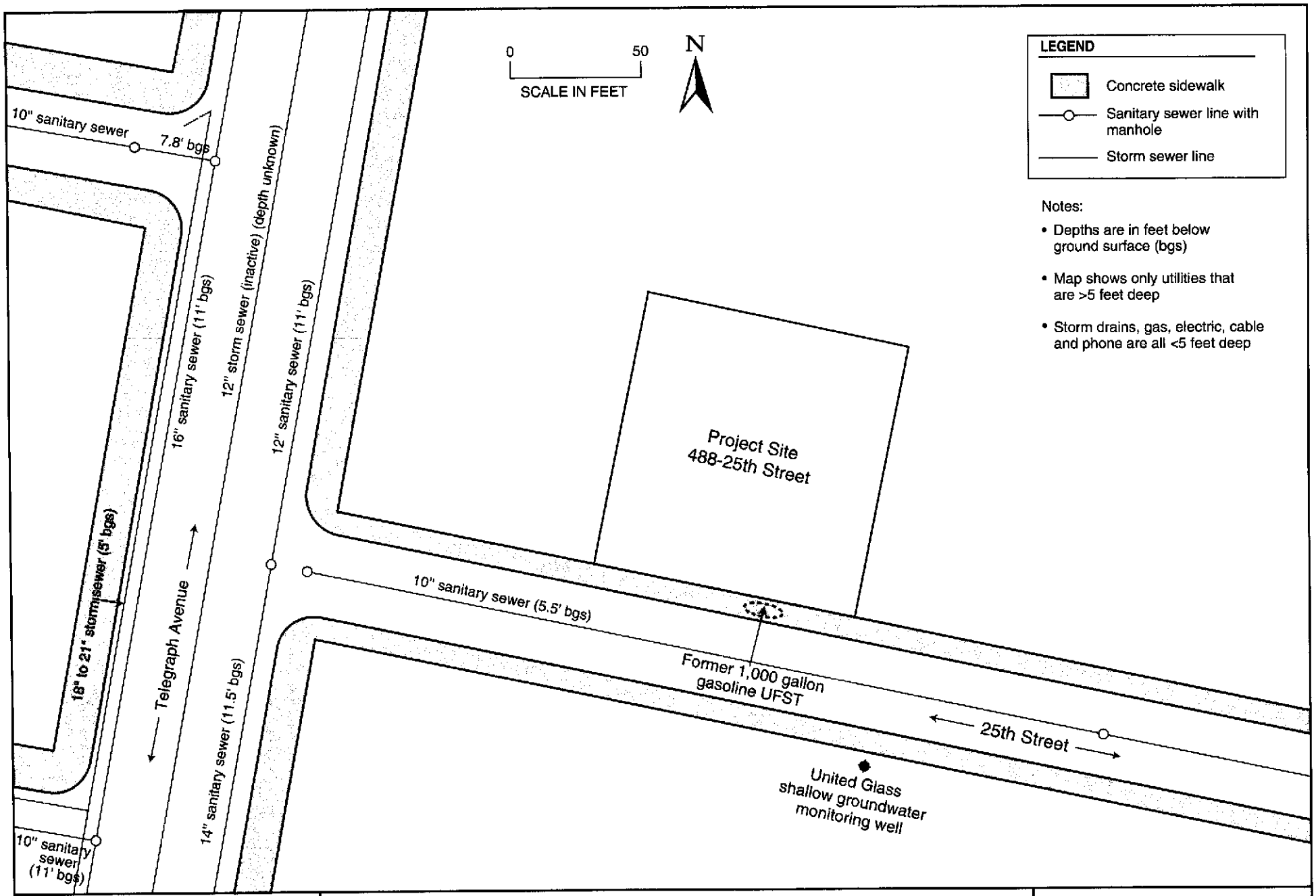
Table 1 summarizes the findings of the survey. Figure 2 (in the previous section) is a site plan showing the location of identified underground utilities on and in the immediate vicinity of the site. Figure 3 shows utilities deeper than 5 feet in a wider area. Figure 5 (in Section 4.0) shows two geologic cross-sections in the area of the known contamination, including the location of identified utilities.

The only below-grade onsite utility is a sanitary sewer line with flush-level sumps/cleanouts, no deeper than 3 to 4 feet deep; all other onsite utilities (electric, gas, water, and phone) are above grade. As discussed later in this report, groundwater depth is approximately 12 feet below grade, and there is no known soil contamination shallower than 6 feet deep. Therefore, there are no known onsite utilities that could act as a preferential pathway for contaminant migration.

Underground utilities in the immediate vicinity of the site (sidewalks and street) include sanitary and storm sewer lines, natural gas, electric, water, and phone. All of these lines are shallower than 6 feet, with the following exceptions:

Table 1
Preferential Pathway Survey Findings
Vicinity of 488 25th Street, Oakland, California

Underground Utility	Agency / Firm Contacted	Utility Description and Location	Estimated Maximum Depth (feet below grade)	Potential Preferential Pathway for Groundwater?
Sanitary Sewer	City of Oakland – Records and Maps	Offsite: 10" diameter line beneath 25th Street 12" and 16" diameter lines beneath Telegraph Avenue	5.5' 11'	No Possible but unlikely
	City of Oakland Public Works – Sewer Maintenance	Onsite: Service from 25th Street to subject property building.	3'	No
Storm Sewer	City of Oakland – Records and Maps	Offsite: 18" to 21" diameter line beneath Telegraph Avenue 12" diameter line, inactive, beneath Telegraph Avenue	5' Unknown	No Possible but unlikely
		Onsite: No underground components.	Not applicable	No
Drinking Water	East Bay Municipal Utility District	Offsite: Service from surrounding streets / sidewalks onto adjacent and vicinity parcels, including sidewalk in front of site.	1.5'	No
		Onsite: No underground components. Service from 25th Street into the subject property building.	3' to 4'	No
Electric	Pacific Gas & Electric – Service Planning Department	Offsite and Onsite: No underground components.	Not Applicable	No
Natural Gas	Pacific Gas & Electric – Service Planning Department	Offsite: Service from surrounding streets / sidewalks onto adjacent and vicinity parcels.	1' to 2'	No
		Onsite: Service from 25th Street into the subject property building.		



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UNDERGROUND UTILITIES AND POTENTIAL RECEPTORS IN VICINITY OF PROJECT SITE
488-25th Street, Oakland, CA

Figure 3

by: MJC | JULY 2004

2002-55-15

- Two 12- to 16-inch-diameter, 11-foot-deep sanitary sewer lines beneath Telegraph Avenue, approximately 150 feet west of the site.
- A 12-inch-diameter (of unknown depth) inactive storm sewer line beneath Telegraph Avenue, approximately 150 feet west of the site.

Based on the available groundwater contamination data (discussed in Section 5.0), it appears highly unlikely that site-sourced contamination has migrated to the west far enough to be intercepted by these sanitary and storm sewer lines.

The findings indicate that underground utilities are not considered potential preferential pathways for contaminant migration.

WELL SURVEY

Alameda County Health requested a survey to identify "wells" within ¼ mile of the subject property, and an evaluation of which wells are potential receptors with regard to site-sourced contamination. While the type of wells to be identified were not specifically delineated by Alameda County Health (e.g., water supply, groundwater monitoring), we subsequently received verbal instruction from Alameda County Health (Mr. Don Hwang) to evaluate all water wells. To accomplish this objective, SES submitted a formal well survey request to the California Department of Water Resources (DWR), the agency ultimately responsible for permitting water supply wells.

DWR identified 117 wells within the specified radius. While the lateral extent of site-sourced groundwater contamination has not yet been fully characterized, it is highly unlikely that it extends more than 500 feet from the source area. Only 5 of the 117 identified wells are located within 500 feet. All of these wells are located at 2633 Telegraph Avenue (Sears Automotive), at least 300 feet west-northwest of the subject property (likely to be crossgradient or downgradient of the subject property). The wells are all 22 to 25 feet deep, and screened across the first aquifer (approximately 8 to 25 feet deep). The wells were likely installed to monitor a petroleum release. Based on their distance and location relative to groundwater flow direction, and because they were likely installed to monitor petroleum contamination similar to the subject property, these wells should not be considered potential sensitive receptors with regard to subject property-sourced contamination. Appendix A contains the DWR documentation (DWR response letter and well logs for the five wells located within 500 feet of the subject property).

A shallow groundwater monitoring well is located at the adjacent (across 25th Street) property owned by United Glass (477 25th Street) (see Figure 2). Documentation of that well was not included in the DWR documentation. With the permission of United Glass, in 2003, SES reviewed its well installation documentation and inspected the well. We also sampled that well in the current

investigation, and found no detectable gasoline or related hydrocarbons. The well, which was installed to monitor a former fuel (gasoline) tank release confirmed in 1990, is located approximately 70 feet southeast of the subject property's former UFST (inside the United Glass building). The case was granted regulatory closure; however, the well was never closed. SES has confirmed by visual inspection that the well is intact, and has water. The well is an inactive monitoring well, installed specifically to monitor petroleum contamination. In our opinion, this well should not be considered a potential sensitive receptor with regard to subject property-sourced contamination because:

- Only trace levels of MTBE (and no other contaminants) were detected in the current investigation sampling.
- The well was installed specifically to monitor a petroleum release; the owners have full knowledge of the well and its history, and the only likely entry into the well would be for environmental sampling.
- The well is screened only across the upper aquifer, and could not act as a vertical pathway for contamination to reach deeper water-bearing units.

Appendix E contains the well construction information for this well, and Appendix D contains the analytical lab report for the July 2004 well sampling.

3.0 JULY 2004 BOREHOLE SAMPLING PROGRAM

This section summarizes exploratory borehole drilling and sampling investigation activities conducted by SES at the subject property in July 2004. Appendix B contains the Alameda County Public Works Agency drilling permit and the City of Oakland Excavation Permit. Appendix C contains photodocumentation of the investigation field activities. Appendix D contains the certified analytical laboratory report and chain-of-custody record. All current investigation soil and groundwater samples were analyzed by Curtis & Tompkins, Ltd. (Berkeley, California), which maintains current ELAP certifications for all the analytical methods utilized in this investigation.

DRILLING LOCATION RATIONALE AND SAMPLING METHODS

Exploratory borehole drilling and sampling was conducted on July 8, 2004. Drilling was conducted by Gregg Drilling & Testing, Inc. (C-57 License No. 485165) under direct supervision of a SES California Registered Geologist. Prior to drilling, USA was contacted with regard to potential underground utilities.

The primary objectives of the borehole program were to: 1) further evaluate the extent and magnitude of residual soil and groundwater contamination; and 2) further evaluate site hydrogeologic conditions (i.e., depth to groundwater and local groundwater flow direction). Boreholes were drilled in locations requested by Alameda County Health, as summarized in our workplan and technical addendum. Figure 4 (in Section 4.0) show the borehole locations.

The boreholes were drilled with a truck-mounted Geoprobe™ rig. Boreholes were drilled with approximately 2.5-inch-diameter steel drive casing lined with acetate sampling sleeves. Continuous soil cores were collected for geologic logging using the visual method of the Unified Soils Classification System (USCS). Borehole geologic logs are included in Appendix E. To evaluate the vertical extent of contamination, soil samples were collected for laboratory analysis from each borehole at a minimum of every 5 feet (when no contamination was obvious during drilling), and collected at key depth intervals (at lithologic changes, just above first occurrence of groundwater, and/or at depths of obvious soil contamination). Boreholes were collected in the unsaturated zone, in the saturated zone, and in the inferred aquitard unit beneath the upper water-bearing zone. All boreholes were terminated at 24 feet bgs.

Soil samples were field-screened with a calibrated, portable photoionization detector (PID) for evidence of contamination, to assist in the selection of soil samples for laboratory analysis and to provide additional (qualitative) data on contaminant extent. The PID readings are shown on the borehole geologic logs in Appendix E. Soil samples selected for laboratory analysis were sealed within an approximately 6-inch length of the acetate sampling sleeve, capped with non-reactive plastic caps, labeled, chilled, and transported to the analytical laboratory under chain-of-custody documentation.

Upon reaching groundwater, one grab-groundwater sample was collected from each borehole by installing a 1-inch-diameter PVC temporary well casing (temporary piezometers), inserting new Tygon tubing through the casing into groundwater, and withdrawing water directly into the sampling containers with a vacuum pump. The boreholes were then deepened for additional soil sampling and geologic logging.

We also collected a grab-groundwater sample from the adjacent property groundwater monitoring well, with a new disposable bailer.

PIEZOMETER SURVEYING AND WATER LEVEL MEASUREMENTS

The piezometers were left in place until the following day, to allow for measurement of equilibrated groundwater levels. The piezometer elevations were then surveyed (see following paragraph) to allow for determination of local groundwater flow direction. The adjacent property groundwater monitoring well (United Glass, 477-25th Street) elevation was also surveyed. The piezometer boreholes were then tremie-grouted (through the piezometer casing) to surface with a slurry of neat Portland cement and potable water, and the piezometer casings were removed.

The top of casing elevation at each piezometer, and at the adjacent property groundwater monitoring well, was surveyed by a licensed land surveyor on the morning of July 9, 2004. Elevations were determined relative to mean sea level, using a local municipal benchmark. Appendix F contains the survey documentation.

4.0 DISCUSSION OF FINDINGS

SITE LITHOLOGY AND HYDROGEOLOGY

A total of 11 exploratory boreholes have been geologically logged at and in the immediate vicinity of the site, to a maximum depth of 25 feet below grade. We also reviewed site lithology for a groundwater monitoring well located directly across 25th Street from the site (United Glass well MW-1). Appendix E contains borehole geologic logs for both the 2003 and 2004 borehole investigations, as well as for the United Glass well. Figure 4 is a site plan showing borehole locations and geologic cross-section line locations. Figure 5 shows three geologic-cross-sections based on the available data.

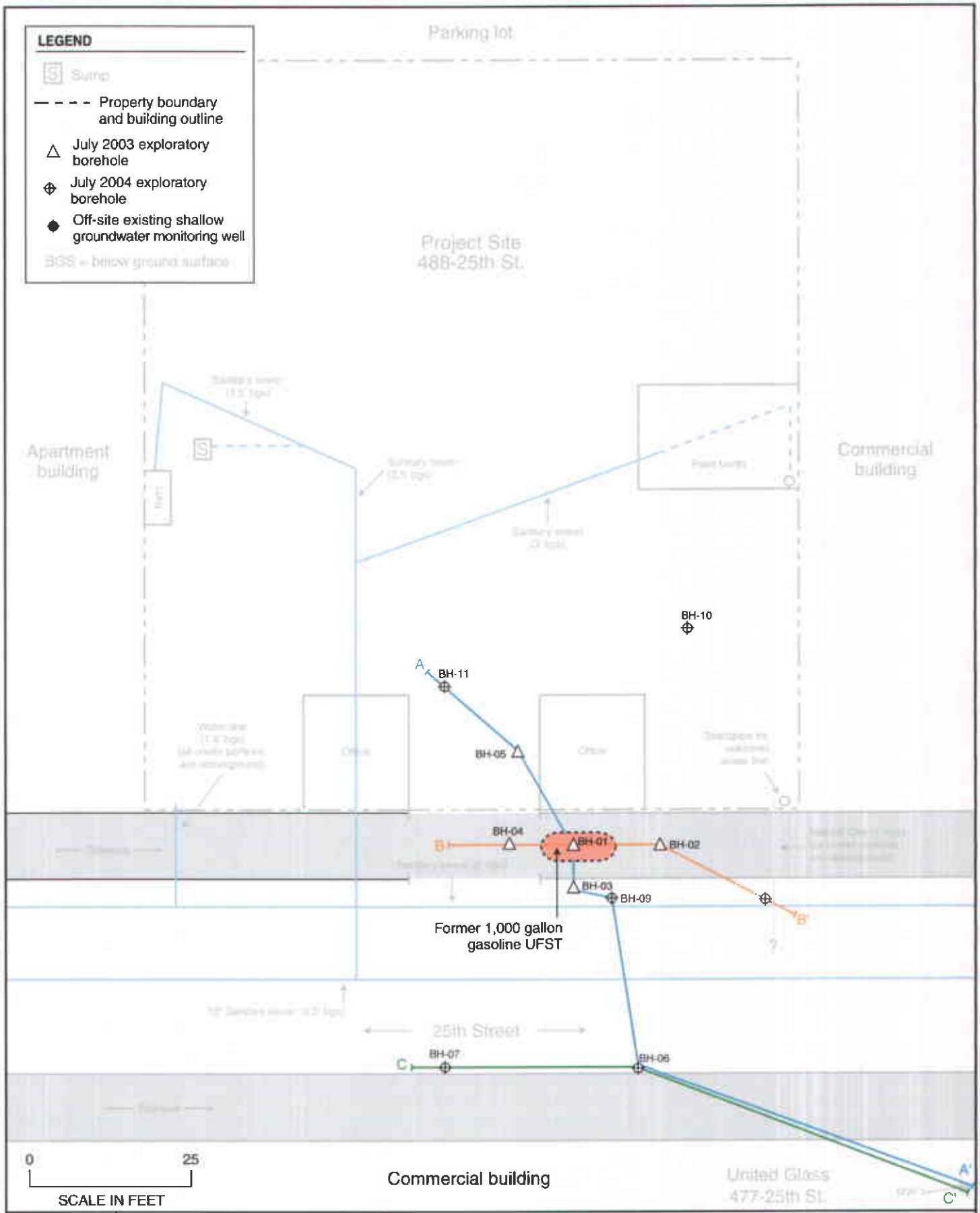
Site Lithology

A laterally-extensive clay (occasionally gravelly) is present in all boreholes, extending from ground surface to approximately 17 to 20 feet bgs. Two of the boreholes (BH-02 and MW-1) contain a thin (1- to 3-foot-thick) sandy lens between 10 and 15 feet bgs. The clay layer is generally underlain by a sand or gravel unit, beginning at depths of 18.5 to 21.5 feet bgs. This more permeable unit varies in thickness from 2.5 feet to at least 5.5 feet. In the majority of boreholes, this unit consists of sand grading downward into gravel. In two of the six boreholes that are deeper than 20 feet, a clay unit was encountered below this sand/gravel unit. In the other four boreholes, the total depth of the sand/gravel unit is unknown.

Borehole BH-01, advanced through the former UFST excavation, encountered excavation backfill material (gravelly, clayey silt) to a depth of approximately 9 feet bgs, underlain by native soil (as described above).

Site Hydrogeology

In the July 2003 borehole program, very moist to wet soil samples were encountered in site boreholes, at depths of approximately 9.5 to 12 feet bgs, with equilibrated groundwater levels in boreholes at approximately 10 feet bgs.



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SITE PLAN WITH 2004 BOREHOLES AND CROSS-SECTION LOCATIONS

Benner Automotive **488-25th St., Oakland, CA**	By: MJC	JULY 2004
	Figure 4	

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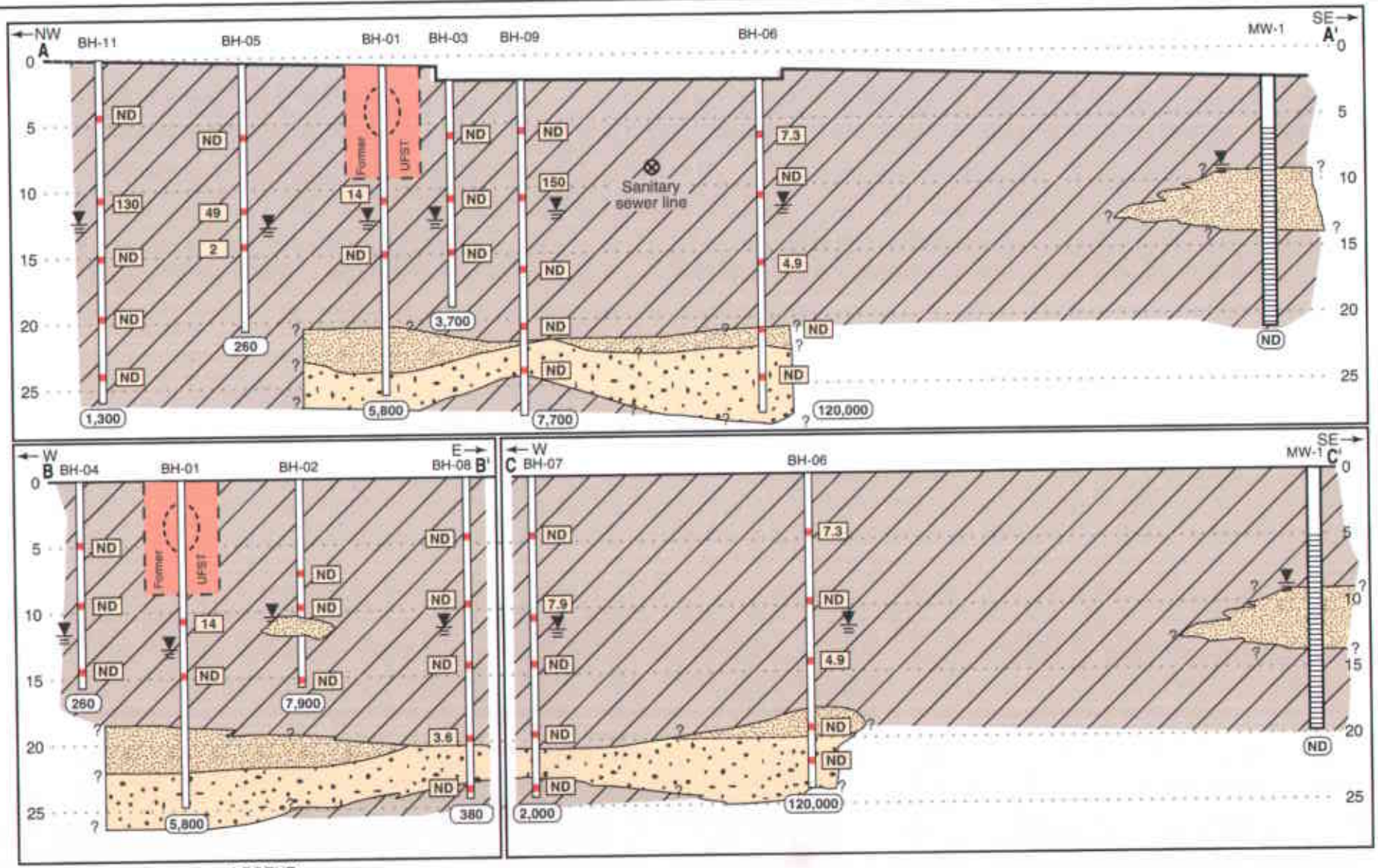

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GEOLOGIC CROSS-SECTIONS
488-25th Street, Oakland, CA

Figure 5

by: MJC | AUGUST 2004

2002-55-27

In the July 2004 boreholes, there was no evidence of water in any boreholes above 12 feet bgs (either saturated samples or measurable water in boreholes). Water entered the boreholes after the sampling rods were advanced from 12 to 16 feet bgs, and the water quickly rose to depths between approximately 7 and 10 feet bgs. In the majority of boreholes, groundwater was first encountered in the upper clay unit rather than the underlying sand/gravel unit. Over this interval of first groundwater (12 to 16 feet bgs), soil samples were wet (at the extreme), and in all boreholes became moist (at the extreme) between 16 and 20 feet. Below this zone, in the sand/gravel unit, another water-bearing zone was encountered, as evidenced by saturated, extremely loose (non-competent) soil samples. In the majority of boreholes, this saturated unit was underlain by non-saturated samples. It is unclear whether two discrete water-bearing zones exist within the first 20 feet (the upper zone being a seasonally-perched zone), or only one water-bearing zone exists with the sands at approximately 20 feet bgs with water extending upward into the overlaying clay another 4+ feet.

Field evidence (examination of soil cores) that showed relatively dry conditions between 16 and 20 feet bgs suggests that the water-bearing zone may be somewhat separate; however, that has yet to be determined. The total depth/thickness of the lower water-bearing zone (sand/gravel) has not been determined in all boreholes.

The available data suggest the following:

- Depth to first occurrence of groundwater appears to have dropped in the year duration between the 2003 and 2004 borehole programs.
- In the current investigation, water was first encountered between approximately 12 and 16 feet bgs, with a relatively dry zone between that area and the approximately 20-foot depth where fully-saturated sands were encountered in most boreholes. There is not sufficient evidence to conclude whether two discrete upper and lower water-bearing zones exist (at approximately 16 and 20 feet bgs).
- Groundwater appears to occur under semi-confining conditions.

As discussed in Section 3.0, equilibrated water levels were obtained from the surveyed temporary piezometers installed in July 2004. We also measured the water level in the shallow groundwater monitoring well at the adjacent property (477 25th Street), and had that well elevation surveyed. Table 2 summarizes water level elevation data. Figure 6 is a groundwater elevation map constructed from those data. Local groundwater flow direction appears to be to the south, with a relatively shallow hydraulic gradient of approximately 0.003 feet/foot. While subregional groundwater flow direction is likely to the west (toward San Francisco Bay), the local groundwater flow direction may be influenced by the nearest surface water body (Lake Merritt), located approximately 2,000 feet to the southeast).

Table 2
Temporary Piezometer/Well Construction and Groundwater Elevation Data
July 9, 2004 Monitoring Event
488 25th Street, Oakland, California

Piezometer / Well	Piezometer / Well Depth (feet)	Screened Interval (depth in feet)	Ground Surface Elevation [a]	TOC Elevation [a]	Groundwater Depth [b]	Groundwater Elevation [b]
BH-06	12	5 – 12	24.06	23.76	9.14	14.62
BH-07	23	13- 23	24.30	24.10	9.45	14.65
BH-08	24	10 – 24	24.54	24.37	9.62	14.75
BH-09	24	10 – 24	24.68	24.11	9.37	14.74
BH-10	24	10 – 24	25.65	25.55	10.71	14.84
BH-11	24	10 – 24	25.56	25.33	10.53	14.80
MW-1 [c]	14	5.3 – 20	24.53	23.97	9.39	14.58

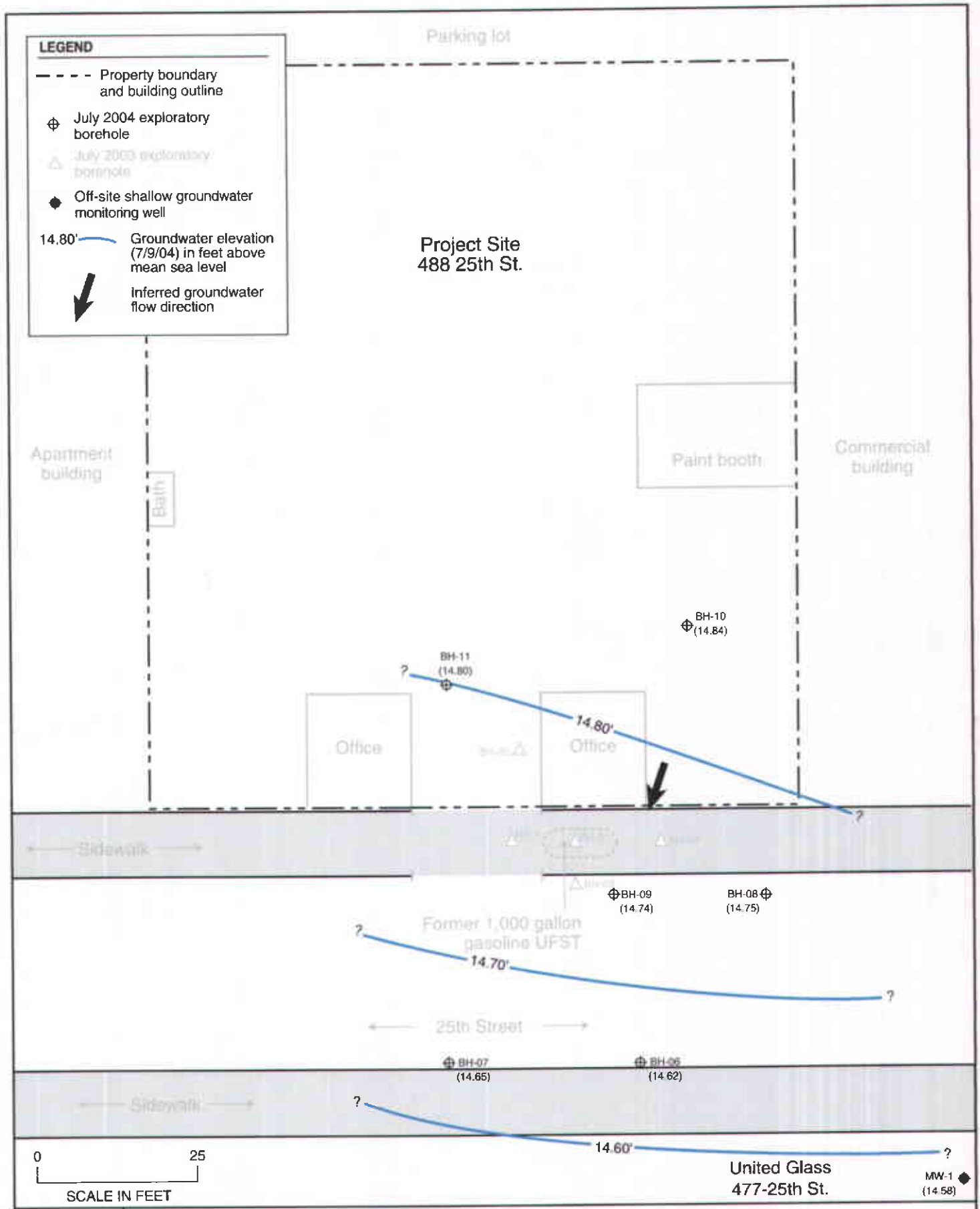
Notes:

[a] All elevations are expressed as feet above mean sea level, measured immediately adjacent to the wellhead.

[b] Depths are in feet below TOC.

[c] 2-inch-diameter PVC groundwater monitoring well located at an adjacent property.

TOC = Top of piezometer or well casing.



GROUNDWATER ELEVATION MAP — JULY 9, 2004

Benner Auto Repair 488-25th St., Oakland, CA	By: MJC	JULY 2004	★ Stellar Environmental Solutions, Inc. Geoscience & Engineering Consulting
	Figure 6		

2002-55-22

ANALYTICAL RESULTS AND EXTENT AND MAGNITUDE OF RESIDUAL CONTAMINATION

All soil and groundwater samples were analyzed for the potential site contaminants of concern:

- Total volatile hydrocarbons, gasoline range (TVHg)
- BTEX
- MTBE
- Various lead scavengers (EDB and EDC) and fuel oxygenates (TAME, ETBE, DIPE, TBA, and ethanol)

Soil Contamination

Table 3 summarizes historical and current soil sample analytical results. A detailed discussion of regulatory considerations is presented in Section 6.0. The soil and groundwater concentrations are compared to the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs).

January 2003 UFST Removal

Gasoline was detected in the January 2003 base of excavation sample UST-BASE-East-9', which showed 2,500 mg/kg TVH. No BTEX, MTBE, nor other contaminants were detected in the west-end UFST excavation sample.

June 2003 Borehole Program

The only soil contaminant detected in the five June 2003 exploratory boreholes was gasoline, which was detected at a maximum of 49 mg/kg (borehole BH-5, at 11.5 feet deep). Trace levels of gasoline were also detected at the 13-foot-deep soil sample in BH-5 (1.7 mg/kg) and in the 10-foot-deep sample collected in borehole BH-1. Neither BTEX nor MTBE compounds were detected in any of the borehole soil samples. No contamination was detected in any of the five borehole soil samples collected beneath the upper water-bearing zone.

Borehole soil samples were screened with a PID as qualitative evidence of soil contamination. Elevated PID readings were encountered at depths between the top of the capillary fringe (approximately 9 feet deep) and the bottom of the upper water-bearing zone (approximately 12 feet deep) in boreholes immediately adjacent to the former UFST. This is consistent with the soil sample analytical results.

Table 3
Historical and Current Soil Analytical Results
488 25th Street, Oakland, California [a]

Sample I.D.	Sample Depth (feet)	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead Scavengers and Fuel Oxygenates [c]
January 2003 Base of UFST Excavation Soil Samples								
UFST Base-East	9.0	**2,500**	*<1.7* [b]	*<1.7* [b]	*<1.7* [b]	*<1.7* [b]	*<1.7* [b]	*NA*
UFST Base-West	9.0	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*NA*
July 2003 Exploratory Borehole Soil Samples								
BH-1-10'	10.0	**14**	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.022*	*NA*
BH-1-14'	14.0	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.021*	*NA*
BH-2-6.5'	6.5	*<1.1*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<00022*	*NA*
BH-2-9'	9.0	*<1.0*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.020*	*NA*
BH-2-15'	15.0	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.021*	*NA*
BH-3-5'	5.0	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.021*	*NA*
BH-3-9'	9.0	*<1.1*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.022*	*NA*
BH-3-13'	13.0	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.021*	*NA*
BH-4-5'	5.0	*<1.0*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.020*	*NA*
BH-4-9'	9.0	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.021*	*NA*
BH-4-13'	13.0	*<1.1*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.022*	*NA*
BH-5-6.5'	6.5	*<1.1*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.022*	*NA*
BH-5-11.5'	11.5	**49**	*<0.010*	*<0.010*	*<0.010*	*<0.010*	*<0.040*	*NA*
BH-5-13'	13.0	**1.7**	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.021*	*NA*
July 2004 Exploratory Borehole Soil Samples								
BH-06-4.5'	4.5	**7.3**	*<0.0056*	*<0.0056*	*<0.0056*	*<0.0056*	*<0.0048*	*ND*
BH-06-9.5'	9.5	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0049*	*ND*
BH-06-14.5'	14.5	**4.9**	*<0.0054*	**0.0082**	*<0.0054*	*<0.0054*	*<0.0047*	*ND*
BH-06-19.5'	19.5	*<1.1*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0049*	*ND*
BH-06-22.5'	22.5	*<1.0*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0045*	*ND*
BH-07-4.5'	4.5	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0050*	*ND*
BH-07-10.5'	10.5	**7.9**	*<0.0054*	**0.009**	*<0.0054*	*<0.0054*	*<0.0047*	*ND*
BH-07-14.5'	14.5	*<0.98*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0045*	*ND*
BH-07-19.5'	19.5	*<0.96*	*<0.0048*	*<0.0048*	*<0.0048*	*<0.0048*	*<0.0049*	*ND*
BH-07-23.5'	23.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0046*	*ND*
BH-08-4.5'	4.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0049*	*ND*
BH-08-9.5'	9.5	*<1.1*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0053*	*<0.0047*	*ND*
BH-08-14.5'	14.5	*<0.97*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0045*	*ND*
BH-08-20'	20	**3.6**	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0054*	*<0.0049*	*ND*

Table 3 continued

Sample I.D.	Sample Depth (feet)	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead Scavengers and Fuel Oxygenates [c]
July 2004 Exploratory Borehole Soil Samples (continued)								
BH-08-23.5'	23.5	*<1.1*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.0046*	*ND*
BH-09-4.5'	4.5	*<1.0*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0045*	*ND*
BH-09-11'	11	**150**	*<0.0500*	*<0.0500*	*<0.0500*	**0.120**	*<0.0049*	*ND*
BH-09-15.5'	15.5	*<0.99*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0045*	*ND*
BH-09-19.5'	19.5	*<0.98*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0047*	*ND*
BH-09-23.5'	23.5	*<1.0*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0049*	*ND*
BH-10-4.5'	4.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0049*	*ND*
BH-10-9.5'	9.5	*<1.1*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.0055*	*<0.0047*	*ND*
BH-10-14.5'	14.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0048*	*ND*
BH-10-19.5'	19.5	*<0.99*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0045*	*ND*
BH-10-23.5'	23.5	*<1.0*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0050*	*<0.0047*	*ND*
BH-11-4.5'	4.5	*<0.97*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0049*	*<0.0049*	*ND*
BH-11-11'	11	130	*<0.0250*	**0.240**	*<0.0250*	*<0.0250*	*<0.0047*	*ND*
BH-11-15'	15	*<1.0*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0050*	*ND*
BH-11-19.5	19.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0048*	*ND*
BH-11-23.5'	23.5	*<1.0*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0052*	*<0.0046*	*ND*
Soil ESLs [d]		**100 / NLP**	**0.045 / 0.5**	**2.6 / 420,000**	**2.5 / 13,000**	**1.0 / 100,000**	**0.028 / 5,600**	**Various**

Notes:

[a] All concentrations in mg/kg.

[b] High concentrations of gasoline required sample dilution, resulting in the listed increased method reporting limit.

[c] See Appendix D for full list of analytes.

[d] ESL = RWQCB Environmental Screening Levels for commercial/industrial sites with coarse-grained soil where groundwater is a potential drinking water source. First value is for shallow soils. Second value is for evaluation of potential indoor air impacts.

TVHg = Total volatile hydrocarbons – gasoline range.
NLP = No level published.
NA = Not analyzed for these constituents.
ND = Not detected (see Appendix D for reporting limits).

July 2004 Borehole Program

Soil contamination was detected in 6 of the 30 samples collected and submitted for analyses. The lateral and vertical extent of the soil contamination appears fairly limited and the maximum concentrations relatively low. In the current investigation, gasoline was detected above 100 mg/kg in only two soil samples (BH-09 and BH-11, both at 11 feet below grade). BH-09 is located directly adjacent to the former UFST, and BH-11 is located approximately 30 feet to the northwest. Both of these boreholes had elevated groundwater contaminant concentrations (discussed below). Three other boreholes had gasoline concentrations at 8 mg/kg or less. Related site contaminants detected include toluene and xylenes, in sporadic boreholes—all at or above 11 feet below grade, and all at concentrations less than regulatory agency screening level criteria (discussed in Section 6.0). Neither fuel oxygenates nor lead scavengers were detected in any of the soil samples.

Elevated PID levels were detected in boreholes BH-06, BH-07, BH-09, and BH-11, at depths between approximately 9 and 12 feet bgs, consistent with the laboratory analytical results.

Soil contamination at depths below 11 feet is limited to relatively trace concentration of less than 4.9 mg/kg TVHg. Field sample screening with a PID showed no indications of contamination at depths less than 11 feet.

The available data support the following conclusions.

- The primary residual soil contaminant is gasoline, with no other soil contaminants present above screening level criteria.
- Gasoline contamination in soil is limited to an approximately 3-foot-thick zone in the immediate vicinity of the former UFST, and a thinner zone up to approximately 30 feet from the former UFST, representing the capillary fringe.
- There is no appreciable soil contamination beneath the upper water-bearing zone.
- There does not appear to be a significant mass of residual soil contamination that will continue to be a long-term source of groundwater contamination.
- The relatively low contaminant concentrations in soil compared to the elevated contaminant levels in groundwater (discussed below) suggest an old release (consistent with the 30-plus year inactivity of the UFST), wherein original soil contamination at the release point has had sufficient time to migrate down to groundwater and subsequently attenuate, due to the absence of continuing source input.

Groundwater Contamination

Table 4 summarizes historical and current groundwater analytical results.

June 2003 Borehole Program

Gasoline was detected in all five exploratory borehole grab-groundwater samples, ranging from 260 µg/L to a maximum of 7,900 µg/L. The only other contaminant detected above ESL criteria was xylenes, and only in BH-02. Elevated gasoline concentrations in the BH-02 groundwater sample resulted in elevated method reporting limits for benzene (13 µg/L) and MTBE (50 µg/L), and these contaminants could have been present at concentrations between the reporting limit and their ESLs.

July 2004 Borehole and Well Sampling Program

Figure 7 shows site groundwater analytical results for the current investigation. Figure 8 shows gasoline isoconcentration contours. Gasoline was detected in five of the six exploratory borehole grab-groundwater samples, ranging from 380 µg/L to a maximum of 120,000 µg/L. Aside from the 120,000 µg/L maximum concentration, all other gasoline concentrations were at or below 7,700 µg/L.

Related site contaminants detected in groundwater include:

- Toluene: maximum concentration 15 µg/L (below the ESL)
- Ethylbenzene: maximum concentration 70 µg/L (above the ESL)
- Total xylenes: maximum concentration 540 µg/L (above the ESL)
- MTBE: maximum concentration 8.2 µg/L (above the ESL)

The only contaminant detected in the adjacent property groundwater monitoring well was MTBE (1.2 µg/L, below the ESL).

Sample dilution in the BH-06 groundwater sample resulted in the benzene method reporting limit (13 µg/L) being greater than the ESL criterion (1 µg/L); therefore, benzene could be present at this location at a concentrations of less than 13 µg/L in BH-06.

Neither lead scavengers nor fuel oxygenates were detected in any of the groundwater samples, including the adjacent property groundwater monitoring well.

The available data indicate the following:

- Groundwater contamination was found at the 12- to 16-foot-depth interval where the samples were collected.

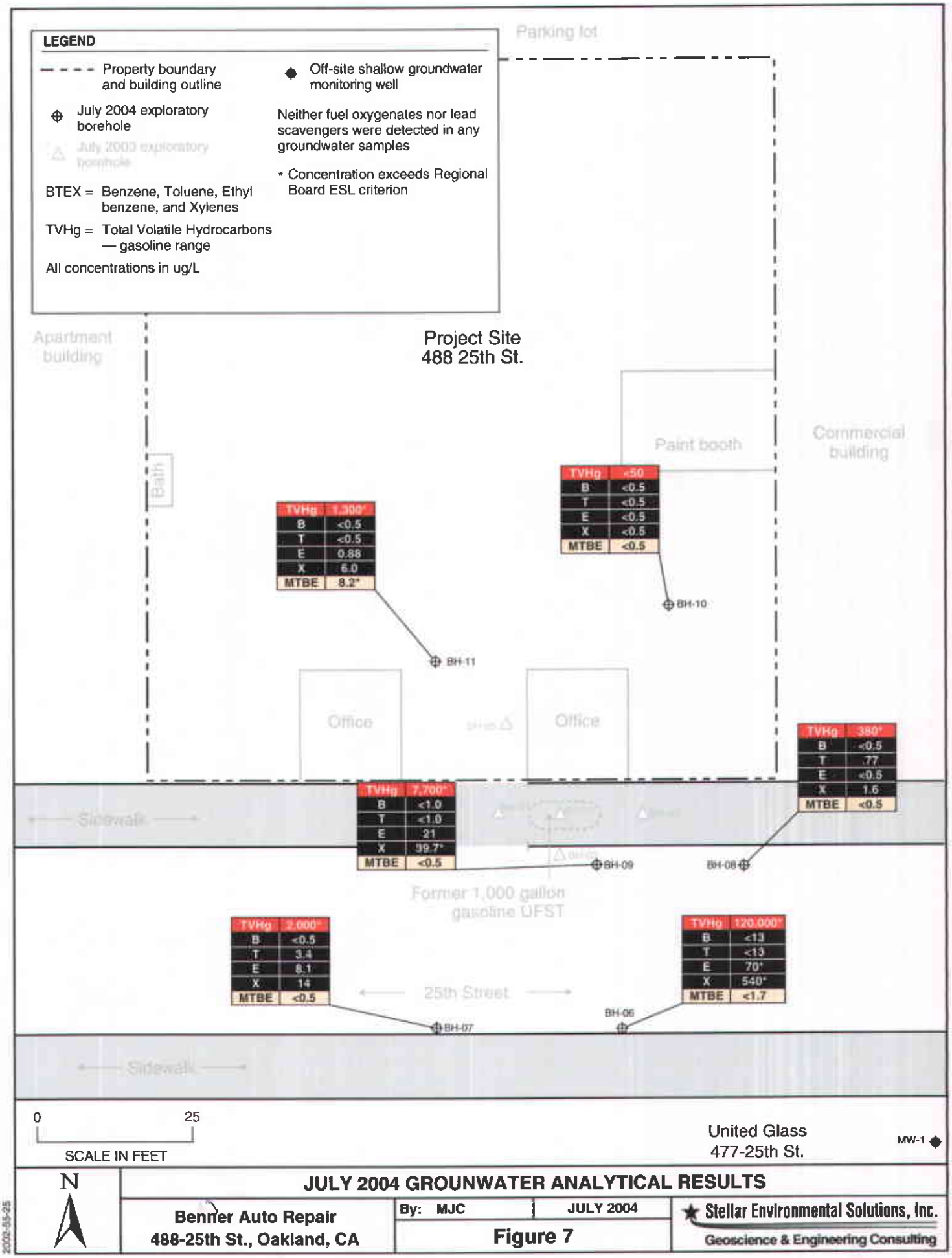
Table 4
Current and Historical Groundwater Analytical Results
488 25th Street, Oakland, California [a]

Sample I.D.	Sample Depth (feet)	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead Scavengers and Fuel Oxygenates [b]
July 2003 Borehole Groundwater Samples								
BH-01-GW	~ 10-11	**5,800**	*<0.50*	*<0.50*	**7.4**	**4.5**	*<2.0*	*NA*
BH-02-GW	~ 10-11	**7,900**	*<13*	**15**	**24**	**61**	*<50*	*NA*
BH-03-GW	~ 10-11	**3,700**	*<1.0*	*<1.0*	*<1.0*	*<1.0*	*<4.0*	*NA*
BH-04-GW	~ 10-11	**260**	*<0.50*	*<0.50*	*<0.50*	*<0.50*	*<2.0*	*NA*
BH-05-GW	~ 10-11	**260**	*<0.50*	*<0.50*	*<0.50*	*<0.50*	**3.1**	*NA*
July 2004 Borehole Groundwater Samples								
BH-06-GW	~ 12-16	**120,000**	*<13*	*<13*	**70**	**540**	*<1.7*	*ND*
BH-07-GW	~ 12-16	**2,000**	*<0.50*	**3.4**	**8.1**	**14**	*<0.50*	*ND*
BH-08-GW	~ 12-16	**380**	*<0.50*	**0.77**	*<0.50*	**1.6**	*<0.50*	*ND*
BH-09-GW	~ 12-16	**7,700**	*<1.0*	*<1.0*	**21**	**39.7**	*<0.50*	*ND*
BH-10-GW	~ 12-16	*<50*	*<0.50*	*<0.50*	*<0.50*	*<0.50*	*<0.50*	*ND*
BH-11-GW	~ 12-16	**1,300**	*<0.50*	*<0.50*	0.88	**6.0**	**8.2**	*ND*
July 2004 United Glass Groundwater Monitoring Well Sample (grab sample)								
MW-1	NA	*<50*	*<0.50*	*<0.50*	*<0.50*	*<0.50*	**1.2**	*ND*
Groundwater ESLs [c]		**100 / NLP**	**1.0 / 1,800**	**40 / 530,000**	**30 / 47,000**	**13 / 160,000**	**5.0 / 80,000**	**Various**
Drinking Water Standards [d]		**NLP**	**1.0**	**40**	**30**	**20**	**5.0 [e] / 13**	**Various**

Notes:

[a] All concentrations in µg/L.
[b] See Appendix D for full list of analytes.
[c] ESL = RWQCB Environmental Screening Levels for commercial/industrial sites with coarse-grained soil where groundwater is a potential drinking water source. First value is groundwater ESL. Second value is for evaluation of potential indoor air impacts (high permeability soil).
[d] Primary Maximum Contaminant Level (MCL), unless specified otherwise.
[e] Secondary (nuisance) MCL.

TVHg = Total volatile hydrocarbons – gasoline range.
NLP = No level published.
NA = Not analyzed for these constituents.
ND = Not detected (see Appendix D for reporting limits).

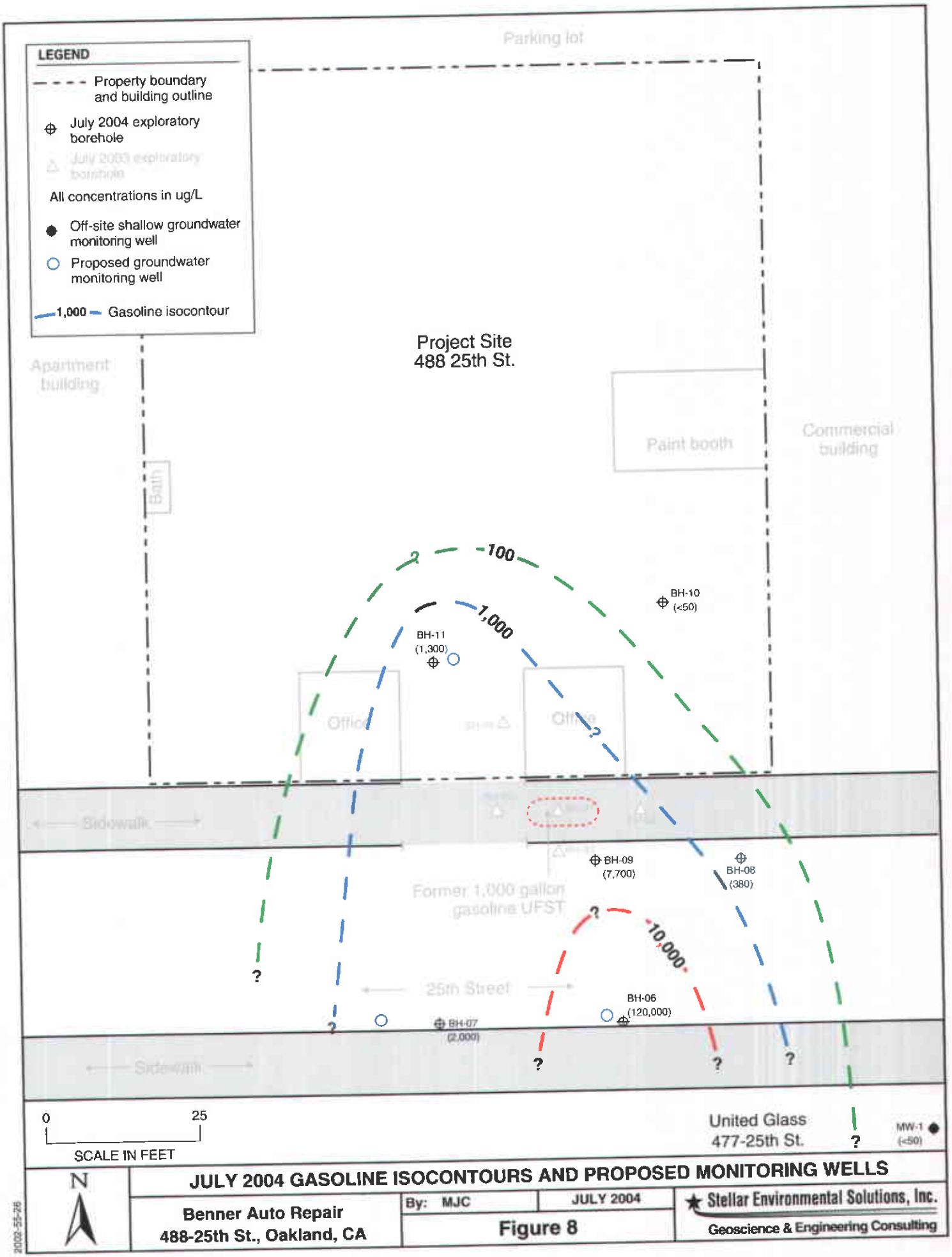


JULY 2004 GROUNWATER ANALYTICAL RESULTS

Benner Auto Repair 488-25th St., Oakland, CA	By: MJC	JULY 2004
	Figure 7	

Stellar Environmental Solutions, Inc.
Geoscience & Engineering Consulting

2002-55-25



JULY 2004 GASOLINE ISOCONTOURS AND PROPOSED MONITORING WELLS

Benner Auto Repair **488-25th St., Oakland, CA**	By: MJC	JULY 2004	★ Stellar Environmental Solutions, Inc. Geoscience & Engineering Consulting
	Figure 8		

2002-55-28

- The primary groundwater contaminant is gasoline, with lesser impact by ethylbenzene, xylenes, and MTBE. Ethylbenzene and xylene maximum concentrations correlated with maximum gasoline concentration (BH-06, to the south of the former UFST). Maximum MTBE was to the northwest (BH-11).
- The long axis of the gasoline plume is oriented approximately north-south (consistent with local groundwater flow direction) and appears to be constrained onsite to the north, east, and west of the subject property, with strong attenuation laterally from the centerline of the plume. Groundwater contamination in BH-11 (to the northwest of the former UFST) suggests a limited degree of contaminant "back-flow" against the apparent southward groundwater flow direction. This may be due to its proximity to the former dispenser that was located just to the southeast.
- Gasoline has migrated to the south, southeast, and southwest of the subject property, under 25th Street, and under the adjacent property to the south, an unknown distance. The elliptical plume (defined as gasoline above 100 µg/L) is approximately 100 feet wide where it crosses beneath the 25th Street south sidewalk, and is approximately 80 feet long at that point.
- The center of contaminant mass (maximum gasoline concentration) is approximately 35 feet south of the former UFST, and may extend farther to the south under the 477 25th Street property.
- The 477 25th Street groundwater monitoring well (MW-1) constrains the plume's eastern edge to the south of the subject property.
- The 477 25th Street UFST release (closed case), represented by MW-1, does not appear to have impacted the subject property, nor does this site appear to be the source of the detected contamination.

5.0 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 State Water Resources Control Board (covering Region 2 of the RWQCB). As such, Alameda County Health directly oversees soil and groundwater investigations/remediation on UFST sites (with or without RWQCB guidance) until determining that case closure is appropriate, at which time Alameda County Health recommends case closure to the RWQCB. Alameda County Health has designated the case as Fuel Leak Case No. RO0002518.

RESIDUAL CONTAMINATION REGULATORY CONSIDERATIONS

The most applicable published numerical criteria governing residual soil and groundwater contamination are the RWQCB's ESLs (RWQCB, 2004). These are screening-level criteria used to evaluate if additional investigation and/or remediation is warranted. Criteria to be considered in using the ESLs include: contamination limited to surface soil (less than 10 feet deep) or to subsurface soil; fine-grained vs. coarse-grained soil; residential or commercial/industrial land use; and whether 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.

There are ESLs published for soil, groundwater, surface water, and soil gas. Surface water ESLs are not appropriate to this site, and no site soil gas sampling has been conducted. ESLs are also published for soil and groundwater, to evaluate the potential for volatilization and upward migration through the soil contamination (i.e., potential indoor air impacts).

The appropriate ESLs for this site are for coarse-grained soil (a conservative assumption because 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 RWQCB. The RWQCB completed an East Bay Beneficial Use Study (RWQCB, 1999) that covers the Richmond to Hayward East Bay Basin Area. Based on multiple technical criteria, this study divided the basin into Zone A (Significant Drinking

Water Resource Potential), Zone B (Groundwater Unlikely to be used as Drinking Water Source), and Zone C (Shallow Groundwater Unusable). The subject site falls within Zone A.

RESIDUAL SOIL CONTAMINATION

Gasoline is the only site contaminant detected in soil in excess of its ESL criterion. Of the 46 soil samples collected, three have gasoline concentrations exceeding the 100 mg/kg ESL—120 mg/kg and 130 mg/kg (July 2004 boreholes) and 2,500 mg/kg (base of UFST excavation soil sample). No soil contamination has been detected in any soil samples collected below 11 feet bgs, including boreholes immediately adjacent to the former UFST.

Due to elevated analytical method reporting limits in the base-of-UFST-excavation soil sample with elevated gasoline concentration, it is possible that benzene and/or MTBE may also be present above their respective ESL values at that location.

None of the historical soil concentrations exceed the ESL soil criterion for evaluating potential indoor air impacts. There is no such ESL published for gasoline.

GROUNDWATER CONTAMINATION

Site contaminants detected in groundwater in excess of their respective ESLs include gasoline, ethylbenzene, total xylenes, and MTBE. Groundwater site contaminants detected in excess of drinking water standards include ethylbenzene, total xylenes, and MTBE. Due to elevated analytical method reporting limits in two groundwater samples with elevated gasoline concentrations (BH-02 and BH-06), it is possible that benzene and/or MTBE may also be present in groundwater above their RBSLs.

None of the historical groundwater concentrations exceed the ESL groundwater criterion for evaluating potential indoor air impacts. There is no such ESL published for gasoline.

SITE CLOSURE CRITERIA

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

1. The contaminant source has been removed (i.e., the UFST and obviously-contaminated backfill material). This criterion has been met.
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 would be met by installing and sampling groundwater monitoring wells.

3. If residual contamination (soil or groundwater) exists, there is no reasonable risk to sensitive receptors (i.e., contaminant discharge to surface water or water supply wells) or to site occupants. This criterion is generally met by conducting 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 "risk driver" compound for this site) and the likely absence of sensitive receptors, the site would likely pass the RBCA assessment.

6.0 SUMMARY, CONCLUSIONS, OPINION AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

The available data support the following findings and conclusions:

- According to the current site owner, the UFST was used after the property was purchased. In accordance with Oakland Fire Department guidance at that time, the dispenser was removed, and the dispenser piping and fill port were paved over (i.e., the UFST was decomissioned). Thus, the fuel release into the environment may be up to 40 years old.
- One site 1,000-gallon gasoline UFST was removed in January 2003 under regulatory oversight, along with 40 tons of obviously-contaminated backfill material. Gasoline was detected at 2,500 mg/kg in native soil 2 feet beneath the UFST (at a depth of 9 feet); BTEX and MTBE concentrations were less than approximately 2 mg/kg each. Groundwater was not encountered (excavation depth of 9 feet).
- The lead agency for UFST-related petroleum contamination sites is Alameda County Health, which has provided oversight of this case since the UFST removal report was submitted in January 2003.
- The subject property is located within the RWQCB Zone A (Significant Drinking Water Source Potential) designation as described in the 1999 East Bay Plain Beneficial Use Study.
- A PSA was conducted in July 2003. Five exploratory boreholes were advanced to depths of 16 to 25 feet on three sides of the former UFST excavation (all within 10 feet of the former excavation), and one was advanced through the approximate center of the former excavation. A total of ten soil samples were collected for laboratory analysis from the unsaturated zone, at depths between 6.5 and 11.5 feet. An additional five soil samples (one from each borehole) were collected at depths below the upper water-bearing zone. One grab-groundwater sample was collected from each borehole.
- Additional site characterization was conducted in July 2004. Six exploratory boreholes were drilled and sampled in the vicinity of the former UFSTs. Thirty soil samples and six borehole grab-groundwater samples were collected for analysis. One adjacent property groundwater monitoring well was also sampled.

- Site lithology consists of a laterally-extensive clay unit to depths of approximately 17 feet to 20 feet, underlain by a more permeable sand/gravel unit with thicknesses between 2.5 feet and up to 5.5 feet. Groundwater was first encountered at the 15- to 16-foot depth, with a relatively dry zone between that area and the approximately 20-foot depth where fully saturated sands were encountered in most bores. There is not sufficient evidence to conclude whether there are two discrete upper and lower water-bearing zones (at approximately 16 and 20 feet bgs).
- Groundwater occurs under semi-confining conditions. Local groundwater flow direction in July 2004 (measured in surveyed temporary piezometers) was to the south. Sub-regional groundwater flow direction is expected to be to the west (toward San Francisco Bay).
- The lateral and vertical extent of soil contamination above regulatory agency screening levels is well defined by available data, and appears to be limited to an approximately 2-foot-thick zone above groundwater, in the immediate vicinity of the former UFST excavation. The data suggest that there is not a significant mass of residual soil contamination to act as a long-term source of groundwater contamination, likely due to the age of the release and subsequent diffusion of the hydrocarbons to groundwater.
- The water-bearing zone sampled from at a maximum depth of 16 feet bgs has been impacted above RWQCB ESL criteria—primarily by gasoline, with lesser concentrations of ethylbenzene, xylenes, and MTBE. There is no apparent contamination above ESLs by benzene, toluene, fuel oxygenates, or lead scavengers. There are no depth-specific grab-groundwater samples collected from the deeper water-bearing zone.
- The long axis of the groundwater contaminant plume is oriented north-south (consistent with local groundwater flow direction), with the eastern and western lateral limits well defined. The contaminant plume has migrated offsite to the south, with gasoline concentrations up to 120,000 mg/L in a borehole approximately 35 feet south of the property. The southern extent of the groundwater contaminant plume has not been defined.
- Neither soil nor groundwater concentrations exceed ESL criteria for potential indoor air impacts.
- Exploratory borehole PID readings and soil sample analytical results suggest no soil or groundwater contamination beneath the upper water-bearing zone (i.e., deeper than 11 feet below grade).
- The contaminant geometry and relatively lower concentrations of volatile components (i.e., benzene) suggest an old release; there is downgradient migration through groundwater such that the center of contaminant mass is at least 35 feet from the UFST, and the plume appears

be disconnecting from the source area. This distribution corroborates with the absence of a continuing contaminant source to groundwater (i.e., residual contaminated soil).

- No vicinity water wells were identified that could intercept site-sourced groundwater contamination, except for an inactive groundwater monitoring well (installed to monitor a fuel release) at a property across the street. This well is not considered a receptor as it was installed specifically to monitor similar petroleum contamination.
- The only underground utilities identified at a possible groundwater depth are sanitary and storm sewer lines located approximately 150 feet west (apparently crossgradient) of the subject property. Based on the distance of these lines from the site, it is unlikely that they are located near enough to intercept site-sourced groundwater, and to therefore act as preferential contaminant migration pathways.
- An adjacent property groundwater monitoring well (across 25th Street) was installed to monitor a former UFST. Based on July 2004 groundwater sampling conducted by SES, that well appears to define the eastern lateral edge of the contaminant plume. While that site has been granted regulatory closure, groundwater monitoring has not been conducted by the property owner in recent years. Subject to approval by that property owner, this well could provide future data on groundwater hydrology and the extent of groundwater contamination sourced from the 488 25th Street site.
- Part or all of the costs incurred by the property owner may be eligible for reimbursement under the State of California Underground Storage Tank Cleanup Fund (Fund). The claimant has submitted a claim application and is awaiting the Fund's response.

OPINION AND PROPOSED ACTIONS

Opinion

Based on the elevated gasoline contamination in groundwater, it is unlikely that Alameda County Health (or the RWQCB, from which Alameda County Health would request concurrence) would grant regulatory closure at this time. Alameda County Health will likely require that groundwater monitoring wells be installed and sampled on a quarterly basis (likely for a minimum of 1 year) to evaluate the stability of the groundwater contaminant plume. Should contaminant concentrations in wells be shown to be stable and reducing and the site passes a RBCA assessment, regulatory closure would likely be granted.

A data gap that might need to be filled before regulators can grant regulatory closure, or if contaminant corrective action is required, is the extent to which the lower water-bearing zone may be impacted. These data would be needed to evaluate total dissolved-phase contaminant mass. Methods used for closing the gap would be: 1) depth-specific grab-groundwater sampling from the

groundwater in the sand unit encountered at 20 feet bgs; and/or 2) installing "nested" (depth-restricted) well screened intervals.

Proposed Actions

The property owner proposes the following actions to address residual groundwater contamination.

1. Install three groundwater monitoring wells to provide sampling points in critical areas of the contaminant plume and to allow for the calculation of groundwater flow direction and hydraulic gradient. We propose the following well locations (as shown on Figure 8):
   - One well approximately 35 feet south-southeast of the former UFST, on the south side of 25th Street (near BH-06). This well would monitor the area of maximum groundwater contamination detected in the current investigation. If only one well were to have two depth-discrete "nested" screened intervals, we recommend that it be this well. Deeper geologic logging (below the 25-foot-bgs level achieved in BH-06) during well installation should also be conducted to determine the depth to the bottom of the sand/gravel unit in this location.
   - One well approximately 40 feet southwest of the former UFST (approximately 10 feet west of BH-07). This well would monitor the western lateral edge of the groundwater plume.
   - One well approximately 30 feet northwest of the former UFST (at BH-11). This upgradient well would allow for well triangulation for groundwater flow direction calculation, and would also monitor the apparent "back-flow" migration of groundwater contamination in that direction.
2. Seek approval from the adjacent property owner (United Glass) to allow for its currently inactive groundwater monitoring well to be included in the proposed groundwater sampling program. This would be a cost-effective means of obtaining additional supporting data.
3. Implement a quarterly groundwater monitoring, sampling, and reporting program to evaluate hydrochemical and hydraulic trends, with the ultimate objective of obtaining regulatory closure.
4. Continue to pursue cost reimbursement from the California Underground Storage Tank Cleanup Fund.

6.0 REFERENCES

Alameda County Health Care Services Agency, Environmental Health Services (Alameda County Health), 2004. Letter requesting scope of work revisions to technical workplan for 488 25th Street, Oakland, California. March 23.

Alameda County Health, 2003a. Letter requesting technical workplan for 488 25th Street, Oakland, California. April 2.

Alameda County Health, 2003b. Letter requesting scope of work revisions to technical workplan for 488 25th Street, Oakland, California. June 26.

Alameda County Health, 2003c. Letter approving technical workplan for 488 25th Street, Oakland, California. July 8.

Alameda County Health, 2003d. Letter requesting additional site characterization activities for 488 25th Street, Oakland, California. December 17.

Oakland Fire Department, 2003. Letter regarding review of underground storage tank closure report for 488 25th Street, Oakland, CA. March 4.

Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2004. Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater. Updated February 2004.

RWQCB, 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report. June.

Stellar Environmental Solutions, Inc. (SES), 2004a. Workplan for Groundwater Characterization, Benner Automotive, 488 25th Street, Oakland, California. February 13.

SES, 2004b. Workplan Addendum for Groundwater Characterization, Benner Automotive, 488 25th Street, Oakland, California. March 26..

SES, 2003a. Gasoline Underground Storage Tank Removal Report, Benner Automotive, 488 25th Street, Oakland, California. January 24.

SES, 2003b. Workplan for Site Investigation – Benner Auto Repair, Inc. Facility, 488 25th Street, Oakland, California. April 21.

SES, 2003c. Revisions to Workplan for Site Investigation – Benner Auto Repair, Inc. Facility, 488 25th Street, Oakland, California. July 2.

SES, 2003d. Preliminary Site Assessment Report – Benner Automotive, 488 25th Street, Oakland, California. July 2.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of the Joseph and Loretta Benner Family Trust, Benner Automotive, their 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 the review of previous investigators' findings at the site. 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. 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 present. 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.

STATE OF CALIFORNIA – THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES
CENTRAL DISTRICT
3251 S STREET
SACRAMENTO, CA 95816-7017

JAN 2 7 2004

Mr. Bruce Rucker
Stellar Environmental Solutions
2198 Sixth Street, Suite 201
Berkeley, California 94710

Dear Mr. Rucker:

In response to your request, enclosed is the well location information for all types of water wells in the following area:

A one-quarter mile radius of 488 – 25th Street, Oakland
Township 01 South, Range 04 West, Section 26

Your data request required one hour of staff time. We located 115 well drillers reports as a result of this search. The total charge to reproduce the copies is $157 ($50 per hour of staff time plus 25 cents per page for 428 pages). Your remittance should be made payable to the Department of Water Resources, General Accounting Office, Post Office Box 942836, Sacramento, California 94236-0001. Please show **"Invoice JAN 23-3"** on your remittance and return it with the enclosed copy of this letter to our Accounting Office.

If you need additional information or have any questions, please contact Anne Roth at (916) 227-7632 or fax (916) 227-7600.

Sincerely,

Robert L. Niblack, Chief
Geology and Groundwater Section

Enclosures

SAP #15204, FY 2003-04, Section 6203

★ **Stellar Environmental Solutions, Inc.**

2198 Sixth Street, Berkeley, CA 94710
Tel: (510) 644-3123 • Fax: (510) 644-3859
Geoscience & Engineering Consulting

January 8, 2004

California Department of Water Resources
Central District
Sacramento, CA 95816
Attention: Ms. Ann Roth
(Sent via facsmile)

Subject: Request for Well Records Search
Oakland, Alameda County, California

Dear Ms. Roth:

INTRODUCTION

Stellar Environmental Solutions, Inc. (SES) is requesting that the California Department of Water Resources conduct a search of all wells in the vicinity of a site in Oakland, Alameda County, California, as part of a risk assessment for the site. Attached is the lead agency (Alameda County Environmental Health) letter requesting that this records search be conducted.

- The subject site address is 488 25th Street, Oakland, Alameda County, California. Per the USGS Western Section, there is no Township/Range/Section designation for this area. The requested search radius is ¼ mile (in all directions). Two site location maps are attached showing the subject property location and the approximate search radius.

- The Alameda County Environmental Health Department is requesting information for "all wells, " which they have verbally indicated us to should include: water supply wells (municipal, domestic, and industrial); groundwater monitoring wells; cathodic protection wells; and vapor monitoring/extraction wells. We understand that this request may include well types not usually be requested, however we are responding directly to Alameda County's direction.

- For all of the identified wells, we need well location, construction and completion form data.

Thank you in advance for your prompt response to this request. Please call if you have questions.

Sincerely,

Bruce M. Rucker

Bruce M. Rucker, R.G., R.E.A.
Project Manager

01-5333 01S04W 26G16

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well **MW-1**

2633 Telegraph Ave.

Project Sears Automotive Owner Sears Roebuck & Co.

Location Oakland, CA Project No. 020503392 Date drilled 12/8/92

Surface Elev. 26.95 ft. Total Hole Depth 22.0 ft. Diameter 10.5 in.

Top of Casing 26.20 ft. Water Level Initial 11.7 ft. Static 12.2 ft.

Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.

Casing: Dia 2.0 in. Length 6.5 ft. Type PVC

Filter Pack Material #3 Lonestar Rig/Core Type B-53

Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601

Driller Mike Crocker Log By Kenneth Johnson

Checked By David Kleesattel License No. RG 5136 David Kleesattel

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
0					Asp/GM	ASPHALT over clayey GRAVEL (coarse base aggregate)
2					ML	Grayish brown clayey SILT (soft, moist, no odor)
4					CL	Dark yellowish brown silty CLAY (soft, moist, some sand, no odor)
6		1			CL	Moderate yellowish brown gravelly CLAY (soft, moist, no odor, angular to subangular gravel)
10		2				(slight product odor)
12		>2000				Groundwater Encountered 12/8/92; 900 hours. Static water level 12/8/92
14					SM	Olive gray coarse SAND (loose, saturated, strong product odor, some silt)
16		123				
18					SM	Dark yellowish orange to moderate yellowish brown silty SAND (loose, saturated slight product odor)
20					CL	Dark yellowish orange to moderate yellowish brown silty CLAY (soft, saturated, very slight product odor, little very fine sand)
22		1				End of boring, installed groundwater monitoring well.
24						
26						

02/05/1993 lithlog-mar92

01-533T

01S04W26G17

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well MW-2

Project Sears Automotive — Owner Sears Roebuck & Co.
Location Oakland, CA — Project No. 020503392 — Date drilled 12/8/92
Surface Elev. 26.83 ft. — Total Hole Depth 22.0 ft. — Diameter 10.5 in.
Top of Casing 26.50 ft. — Water Level Initial 11.7 ft. — Static 11.6 ft.
Screen: Dia 2.0 in. — Length 15 ft. — Type/Size 0.020 in.
Casing: Dia 2.0 in. — Length 6.5 ft. — Type PVC
Filter Pack Material #3 Lonestar — Rig/Core Type B-53
Drilling Company Kvilhaug Well Drilling — Method Hollow Stem Auger — Permit # 92601
Driller Mike Crocker — Log By Kenneth Johnson
Checked By David Kleesattel — License No. RG 5136

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	PID (ppm)	Sample ID Blow Count/ Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0					Asph/GC	ASPHALT over clayey GRAVEL (coarse base aggregate)
2					ML	Grayish brown clayey sandy SILT (soft, moist, no odor)
4						Dark yellowish brown silty CLAY (soft, moist, trace organic material, no odor)
6		ND			CL	
8						
10						
12		2 25				*Static Water Level 12/9/92* Olive gray clayey, very fine SAND (loose, saturated, strong product odor, trace gravel)
14					SC	*Groundwater Encountered 12/8/92; 1100 hours* (grades to moderate product odor)
16		2				(moderate product odor)
18					CL	Dark yellowish orange to moderate yellowish brown sandy CLAY (soft, saturated, very slight product odor)
20						
22		ND			GC	Dark gray silty clayey GRAVEL (dense, saturated, no odor) End of boring, installed groundwater monitoring well.
24						
26						

OL 533 U

D1S04W26G18

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well MW-3

Project Sears Automotive — Owner Sears Roebuck & Co.
Location Oakland, CA — Project No. 020503392 — Date drilled 12/7/92
Surface Elev. 26.83 ft. — Total Hole Depth 25.0 ft. — Diameter 10.5 in.
Top of Casing 26.34 ft. — Water Level Initial 15.0 ft. — Static 13.2 ft.
Screen: Dia 2.0 in. — Length 15 ft. — Type/Size 0.020 in.
Casing: Dia 2.0 in. — Length 9.5 ft. — Type PVC
Filter Pack Material #3 Lonestar — Rig/Core Type B-53
Drilling Company Kvilhaug Well Drilling — Method Hollow Stem Auger — Permit # 92601
Driller Mike Crocker — Log By Kenneth Johnson
Checked By David Kleesattel — License No. RG 5136

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0					Asp/GC	ASPHALT over clayey GRAVEL (coarse base aggregate)
2						Dusky yellowish brown sandy CLAY (soft, moist to wet, no odor)
4						
6		ND			CL	(sand interbed)
8						
10						
12		12			CL	Olive gray fine sandy CLAY (soft, wet, strong product odor)
14		1216				(very strong product odor)
16		12				Static Water Level 12/8/92
18					CL	Groundwater Encountered 12/7/92; 1320 hours Dark yellowish brown sandy CLAY (soft, saturated, moderate product odor) (fine clayey sand interbed)
20		28				
22					SM	Grayish olive silty SAND (loose, saturated, slight product odor)
24		2			SW	Dark yellowish orange to Moderate yellowish brown gravelly SAND (loose, saturated, no odor)
26						End of boring, installed groundwater monitoring well.

02/05/1993 ttlog-mar92

01-533V

01S04W26G19

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well MW-4

Project Sears Automotive — Owner Sears Roebuck & Co.
Location Oakland, CA — Project No. 020503392 — Date drilled 12/8/92
Surface Elev. 26.84 ft. — Total Hole Depth 23.0 ft. — Diameter 10.5 in.
Top of Casing 26.17 ft. — Water Level Initial 12.7 ft. — Static 12.5 ft.
Screen: Dia 2.0 in. — Length 15 ft. — Type/Size 0.020 in.
Casing: Dia 2.0 in. — Length 7.5 ft. — Type PVC
Filter Pack Material #3 Lonestar — Rig/Core Type B-53
Drilling Company Kvilhaug Well Drilling — Method Hollow Stem Auger — Permit # 92601
Driller Mike Crocker — Log By Kenneth Johnson
Checked By David Kleesattel — License No. RG 5136

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	PID (ppm)	Sample ID / Blow Count / % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) — Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0					Asp	ASPHALT over clayey GRAVEL (coarse base aggregate)
2					GC	
					OL	Grayish brown silty organic CLAY (soft, moist, no odor)
4					CL	Dark yellowish brown silty CLAY (soft, moist, no odor)
6		ND				
		1				
8					CL	Olive gray very fine sandy CLAY (soft, saturated, no odor)
10		25				
12		198			CL	Oliver gray silty CLAY (soft, saturated, moderate product odor)
						Static Water Level 12/8/92
14						*Groundwater Encountered 12/8/92; 1500 hours*
16					SC	Light olive gray clayey fine SAND (soft, saturated, moderate petroleum odor)
18						(grades yellowish orange)
20					SW	
22		ND				Yellowish orange gravelly coarse SAND (medium dense, saturated, no odor)
		ND				
24						End of boring, installed groundwater monitoring well.
26						

01-533W

01S04W26G20

Drilling Log

GROUNDWATER TECHNOLOGY

Monitoring Well **MW-5**

Project *Sears Automotive* Owner *Sears Roebuck & Co.*
Location *Oakland, CA* Project No. *020503392* Date drilled *12/7/92*
Surface Elev. *27.31 ft.* Total Hole Depth *25.0 ft.* Diameter *10.5 in.*
Top of Casing *26.98 ft.* Water Level Initial *16.0 ft.* Static *11.1 ft.*
Screen: Dia *2.0 in.* Length *15 ft.* Type/Size *0.020 in.*
Casing: Dia *2.0 in.* Length *9.5 ft.* Type *PVC*
Filter Pack Material *#3 Lonestar* Rig/Core Type *B-53*
Drilling Company *Kvilhaug Well Drilling* Method *Hollow Stem Auger* Permit # *92601*
Driller *Mike Crocker* Log By *Kenneth Johnson*
Checked By *David Kleesattel* License No. *RG 5136* *David Kleesattel*

See Site Map For Boring Location

COMMENTS:

Depth (ft.)	Well Completion	PID (ppm)	Sample ID Blow Count/ % Recovery	Graphic Log	USCS Class.	Description (Color, Texture, Structure) Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%
-2						
0					Asp GC	ASPHALT over clayey GRAVEL (coarse base aggregate)
2					OL	Dark gray silty organic CLAY (stiff, moist, no odor)
4					CL	Dark yellowish brown silty CLAY (soft, moist, no odor)
6		ND ND				
8						
10		5			CL	Grayish olive sandy CLAY (soft, moist to wet, very slight product odor)
12					SC	*Static Water Level 12/8/92* Light olive gray clayey SAND (loose, wet, no odor)
14						
16		2			SC	Dark yellowish brown clayey SAND (loose, saturated, no odor) *Groundwater Encountered 12/7/92; 1040 hours*
18						
20		ND			CL	Dark yellowish brown sandy CLAY (soft, saturated, no odor)
22					ML	Moderate yellowish brown gravelly SILT (soft, saturated, no odor)
24		ND			SM	Moderate yellowish brown silty SAND (loose, saturated, no odor, some organics)
26					CL	Moderate yellowish brown sandy CLAY (soft, saturated, no odor)
						End of boring, installed groundwater monitoring well.

ALAMEDA COUNTY PUBLIC WORKS AGENCY

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

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

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 488 - 45th Street
Oakland CA

CLIENT
Name Bonner Auto Repair
Address 488 - 45th Street Phone 510-832-1144
City Oakland Zip

APPLICANT
Name Stellar Environmental Solutions Fax 510-644-3859
Address 2198 Sixth Street Phone 510-644-3123
City Berkeley, CA Zip 94710

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection		Geotech	
Water Supply		Contamination	X
Monitoring		Well Destruction	

PROPOSED WATER SUPPLY WELL USE

New Domestic		Replacement Domestic	
Municipal		Irrigation	
Industrial		Other	

DRILLING METHOD:

Mud Rotary	Air Rotary	Auger (Geoprobe)
Cable	Other	

DRILLER'S NAME Gregg Drilling / Testing, Inc

DRILLER'S LICENSE NO 485165

WELL PROJECTS
Drill Hole Diameter ___ in Maximum
Casing Diameter ___ in Depth ___ ft
Surface Seal Depth ___ ft Owner's Well Number ___

GEOTECHNICAL/CONTAMINATION PROJECTS (BH-06 through BH-11)
Number of Borings 6 Maximum
Hole Diameter 2 in Depth 30 ft

STARTING DATE 7/8/04

COMPLETION DATE 7/9/04

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

APPLICANT'S SIGNATURE [signature] DATE 6/4/04

PLEASE PRINT NAME Bruce Kukke

Rev 5-11-04

FOR OFFICE USE

PERMIT NUMBER W04-0680
WELL NUMBER ___
APN ___

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

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

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie
2. Maximum seal depth for monitoring wells is the maximum depth practicable or 20 feet

D. GEOTECHNICAL/CONTAMINATION
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compatible native material.

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

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

G. SPECIAL CONDITIONS BA1

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

APPROVED [signature] DATE 7-1-04

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X0402105	488 25th Street, OAKLAND
APPROX. START DATE: July 8 2004 / APPROX. END DATE: July 9 2004	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number): Bruce Rucker 510/644-3123
CONTRACTOR'S LICENSE # AND CLASS: Grace Drilling C-57 485165	CITY BUSINESS TAX #

ATTENTION:

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

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

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

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

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

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

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

WORKER'S COMPENSATION

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

Policy # _____ Company Name _____

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

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

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

Signature of Permittee: [signature] ☒ Agent for ☐ Contractor ☐ Owner

Date: June 14 2004

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☒ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☒ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☒ NO
ISSUED BY		DATE ISSUED	

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

Job Site 488 25TH ST Parcel# 009 -0683-017-00 Appl# OB040348

soil boring
reserve parking

Permit Issued 06/14/04

488 25TH ST

Nbr of days: 2 Linear feet: 75
Effective: 07/08/04 Expiration: 07/09/04

SHORT TERM NON-METERED

		Applcnt	Phone#	Lic#	--License Classes--
Owner	BENNER JOSEPH L TR				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	JOE DINAN				
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$82.08 TOTAL FEES PAID AT ISSUANCE

$.00	Applic	$72.00	Permit
$.00	Process	$6.48	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$3.60	Tech Enh

JOB SITE

CITY OF OAKLAND

ADDRESS:

DIST:

Applicant: _____ 6/14/04

Issued by: _____ h

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

Job Site 488 25TH ST Parcel# 009 -0683-017-00 Appl# X0402105

Descr soil boring Permit Issued 06/14/04

Work Type EXCAVATION-PRIVATE P

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

		Applcnt	Phone#	Lic#	--License Classes--
Owner	BENNER JOSEPH L TR				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent					
pplic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$291.84 TOTAL FEES PAID AT ISSUANCE

$51.00	Applic	$205.00	Permit
$.00	Process	$23.04	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$12.80	Tech Enh

ADDRESS:

JOB SITE

CITY OF OAKLAND

DIST:

GREGG DRILLING & TESTING, INC.
950 Howe Road
Martinez, California 94553
Telephone: 925-313-5800
Fax: 925-313-0302

June 8, 2004

To Whom It May Concern:

Gregg Drilling & Testing, Inc. has been contracted by Stellar Environmental Solutions, Inc. (SES) to conduct environmental drilling in the street near the property located at 488 25th Street in Oakland, California. We understand that SES (as the property owner's environmental consultant) will be obtaining an Excavation Permit from the City of Oakland Engineering Department for this work, and that the City of Oakland requires that the permit be completed under our corporate name (since we hold the California driller's license).

This letter authorizes Stellar Environmental Solutions, Inc. to act as agent for Gregg Drilling & Testing, Inc. in completing any required permits for this project, naming Gregg Drilling & Testing, Inc. as the contractor of record. The following information on our company may be helpful:

- California driller's license (C-57) number: 485165 Expiration: 1/31/06
- City of Oakland Business Tax number: 585033

We trust that this meets the needs of your agency. If you have any questions, please contact me directly.

Sincerely,

Gregg Drilling & Testing, Inc.

Chris Pruner
Operations Manager

\\Server\stellarenv\PROJECTS\2002 & 2003 Active Projects\2002-55-Bender Auto UST Removal\Planning and Field Work\Gregg 3rd Party Authorization Letter.doc

Subject: Direct push drill rig at location BH-06, looking south from Benner Auto facility. United Glass facility is in background.	
Site: Benner Automotive, 488 25th Street, Oakland, California	
Date Taken: July 8, 2004	Project No.: SES 2002-55
Photographer: Bruce Rucker	Photo No.: 01

Subject: Direct push drill rig at location BH-07 looking to northwest from BH-06 location.	
Site: Benner Automotive, 488 25th Street, Oakland, California	
Date Taken: July 8, 2004	Project No.: SES 2002-55
Photographer: Bruce Rucker	Photo No.: 02

Subject: Direct push drill rig at location BH-08, looking to the northwest.	
Site: Benner Automotive, 488 25th Street, Oakland, California	
Date Taken: July 8, 2004	Project No.: SES 2002-55
Photographer: Bruce Rucker	Photo No.: 03

Subject: Direct push drill rig at location BH-08.	
Site: Benner Automotive, 488 25th Street, Oakland, California	
Date Taken: July 8, 2004	Project No.: SES 2002-55
Photographer: Bruce Rucker	Photo No.: 04

Subject: Direct push drill rig at location BH-09, looking to the northeast.	
Site: Benner Automotive, 488 25th Street, Oakland, California	
Date Taken: July 8, 2004	Project No.: SES 2002-55
Photographer: Bruce Rucker	Photo No.: 05

STELLAR ENVIRONMENTAL SOLUTIONS, INC.

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Stellar Environmental Solutions
2198 6th Street
Suite 201
Berkeley, CA 94710

Date: 22-JUL-04
Lab Job Number: 173318
Project ID: 2002-55
Location: Benner Automotive

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Numbers: **173318**
Client: **Stellar Environmental Solutions**
Location: **Benner Automotive**
Project #: **2002-55**

Sampled Date: **07/08/04**
Received Date: **07/08/04**

CASE NARRATIVE

This hardcopy data package contains sample and QC results for thirty soil samples and seven water samples, which were received from the site referenced above on July 08, 2004. The samples were received cold and intact.

TVH/BTXE:
High surrogate recoveries were observed for many samples and matrix spike recoveries as a result of hydrocarbons coeluting with the surrogate. Low matrix spike duplicate recovery was observed for sample CT# 173302-001. High relative percent difference (RPD) was observed for the matrix spikes due to the samples being non-homogenous. The sample spiked was not from the site above and the associated laboratory control sample passed all criteria. No other analytical problems were encountered.

GASOX by (EPA 8260B):
No analytical problems were encountered.

Chain of Custody Record

Lab job #

Date 7/8/09

Laboratory: Curtis + Tomkins, Ltd.
Address: 2323 Fifth Street, Berkeley CA 94710, 510/486-0900
Project Owner: Benner Family Trust
Site Address: 488-25th St. Oakland CA
Project Name: Benner Auto Facility
SES Project Number: 2002-55

Method of Shipment: hand delivery
Shipment No.: –
Airbill No.: –
Cooler No.: –
Project Manager: Bruce M. Rucker
Telephone No.: (510) 644-3123
Fax No.: (510) 644-3859
Samplers: (Signature) B.M. Rucker

Analysis Required: Filtered; No. of Containers; TVH-gas/BTEX (↓); ~~BTEX~~ MTBE / EDB EDC (↓); Fuel Oxygenates, Ethanol (EPA 8260); Remarks

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation Cooler	Preservation Chemical	Filtered	No. of Containers	TVH-gas/BTEX	MTBE / EDB EDC	Fuel Oxygenates, Ethanol (EPA 8260)	Remarks
-1	BH-06-4.5'	4.5'	7/8/09		Soil	6" acetate sleeve	✓	–		1	X	X	→	
-2	BH-06-9.5'	9.5'	↓		↓	↓	↓	–		1	X	X	→	
-3	BH-06-14.5'	14.5'						–		1	X	X	→	
-4	BH-06-19.5'	19.5'						–		1	X	X	→	
-5	BH-06-22.5'	22.5'						–		1	X	X	→	
-6	BH-06-GW	–			H_2O	VOA vials		HCl		3	X	X	→	
-7	BH-07-4.5'	4.5'			Soil	6" acetate sleeve		–		1	X	X	→	
-8	BH-07-10.5'	10.5'			↓	↓		–		1	X	X	→	
-9	BH-07-14.5'	14.5'						–		1	X	X	→	
-10	BH-07-19.5'	19.5'						–		1	X	X	→	
-11	BH-07-23.5'	23.5'	↓		↓	↓	↓	–		1	X	X	→	

Relinquished by:	Date	Received by:	Date	Relinquished by:	Date	Received by:	Date
Signature: B.M. Rucker	7/8/09	Signature: Tracy Babjar	7/8/09	Signature:		Signature:	
Printed: Bruce Rucker	Time	Printed: Tracy Babjar	Time	Printed:	Time	Printed:	Time
Company: Stellar Env. Solutions	1740	Company: Curtis + Tompkins	1740	Company:		Company:	

Turnaround Time: 1 week

Comments: Cold & intact.

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

Chain of Custody Record

Lab job no. 115518
Date 7/8/09
Page 2 of 4

Laboratory: Curtis + Tomkins, Ltd.
Address: 2323 Fifth Street, Berkeley CA 94710, 510/486-0900
Project Owner: Benner Family Trust
Site Address: 488-25th St. Oakland CA
Project Name: Benner Auto Facility
Project Number: 2002-55

Method of Shipment: hand delivery
Shipment No.: —
Airbill No.: —
Cooler No.: —
Project Manager: Bruce M. Rucker
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: (Signature) B.M. Rucker

Analysis Required: Filtered; No. of Containers; TVH-gas/BTEX GC; BTEX MTBE, EDB, EDC; Fuel Oxygenates, Ethanol (EPA 8260)

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation Cooler	Preservation Chemical	Filtered	No. of Containers	TVH-gas/BTEX GC	BTEX MTBE, EDB, EDC / Fuel Oxygenates, Ethanol (EPA 8260)	Remarks
-12	BH-07-GW	—	7/8/09		H_2O	Voa vials	✓	HCl		3	X	→	
-13	BH-08-4.5'	4.5'	↓		Soil	6" acetate sleeve	↓	—		1	X	→	
-14	BH-08-9.5'	9.5'			↓	↓		—		1	X	→	
-15	BH-08-14.5'	14.5'						—		1	X	→	
-16	BH-08-20'	20'						—		1	X	→	
-17	BH-08-23.5'	23.5'						—		1	X	→	
-18	BH-08-GW	—			H_2O	VOA vials		HCl		3	X	→	
-19	BH-09-4.5'	4.5'			Soil	6" acetate sleeve		—		1	X	→	
-20	BH-09-11'	11'			↓	↓				1	X	→	
-21	BH-09-15.5'	15.5'								1	X	→	
-22	BH-09-19.5'	19.5'								1	X	→	
-23	BH-09-23.5'	23.5'								1	X	→	

Relinquished by:	Date	Received by:	Date	Relinquished by:	Date	Received by:	Date
Signature B.M. Rucker	7/8/09	Signature Tracey Babjar	7/8/09	Signature		Signature	
Printed Bruce Rucker	Time 1740	Printed Tracy Babjar	Time 1740	Printed	Time	Printed	Time
Company Stellar Env. Solutions		Company Curtis + Tompkins		Company		Company	

Turnaround Time: 1 Week

Comments: cold & intact

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

Chain of Custody Record

Lab job no.
Date 7/8/09
Page 3 of 4

Laboratory: Curtis + Tomkins, Ltd.
Address: 2323 Fifth Street, Berkeley CA 94710, 510/486-0900

Project Owner: Benner Family Trust
Site Address: 488-25th St., Oakland CA
Project Name: Benner Auto Facility
Project Number: 2002-55

Method of Shipment: hand delivery
Shipment No.: —
Airbill No.: —
Cooler No.: —
Project Manager: Bruce M. Rucker
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: (Signature) B.M. Rucker

Analysis Required: TVH-gas/BTEX by ~~BTEX MTBE~~ / EDB, EDC / Fuel Oxygenates Ethanol (EPA 8260)

	Field Sample Number	Location/Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	TVH-gas/BTEX, EDB, EDC, Fuel Oxygenates Ethanol (EPA 8260)	Remarks
-24	BH-09-GW	—	7/8/09		H_2O	VOA vials	✓	HCl		3	X →	
-25	BH-10-4.5'	4.5'	↓		Soil	6" acetate sleeve	↓	—		1	X →	
-26	BH-10-9.5'	9.5'			↓	↓		—		1	X →	
-27	BH-10-14.5'	14.5'						—		1	X →	
-28	BH-10-19.5'	19.5'						—		1	X →	
-29	BH-10-23.5'	23.5'						—		1	X →	
-30	BH-10-GW	—			H_2O	VOA vials		HCl		3	X →	
-31	BH-11-4.5'	4.5'			Soil	6" acetate sleeve		—		1	X →	
-32	BH-11-11'	11'			↓	↓		—		1	X →	
-33	BH-11-15'	15'						—		1	X →	
-34	BH-11-19.5'	19.5'						—		1	X →	
-35	BH-11-23.5'	23.5'	↓		↓	↓	↓	—		1	X	

Relinquished by:	Date / Time	Received by:	Date / Time	Relinquished by:	Date / Time	Received by:	Date / Time
Signature: B.M. Rucker Printed: Bruce Rucker Company: Stellar Env. Solutions	7/8/09 1740	Signature: Tracy Babjes Printed: Tracy Babjes Company: Curtis + Tompkins	7/8/09 1740	Signature: Printed: Company:		Signature: Printed: Company:	
				Signature: Printed: Company:		Signature: Printed: Company:	

Turnaround Time: 1 week

Comments: Cold & intact

Chain of Custody Record

Lab job no. _____
Date 7/8/09
Page 4 of 4

Laboratory Curtis + Tomkins, Ltd.
Address 2323 Fifth Street
Berkeley CA 94710
510 | 486-0900

Project Owner Benner Family Trust
Site Address 488-25th St.
Oakland CA
Project Name Benner Auto Facility
Project Number 2004-55

Method of Shipment hand delivery
Shipment No. —
Airbill No. —
Cooler No. —
Project Manager Bruce M. Rueker
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: (Signature) B.M. Rueker

Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	Analysis Required: TVH-gas / BTEX+MTBE+EDB,EDC	Fuel Oxygenates (EPA 8260)	Remarks
36 BH-11-GW	—	7/8/09		H_2O	VOA vials	✓	HCl		3	X	→	
37 United Glass well	—	"		"	" "	✓	HCl		3	X	→	

Relinquished by: Signature	Date	Received by: Signature	Date	Relinquished by: Signature	Date	Received by: Signature	Date
Printed Bruce Rueker	Time	Printed Tracy Babyar	Time	Printed	Time	Printed	Time
Company Stellar Enviro Solutions	1740	Company Curtis + Tomkins	1740	Company		Company	

Turnaround Time: 1 week

Comments: cold & intact

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04
Batch#:	92670	Analyzed:	07/09/04

Field ID: BH-06-GW
Type: SAMPLE
Lab ID: 173318-006
Diln Fac: 25.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	120,000	1,300	EPA 8015B
Benzene	ND	13	EPA 8021B
Toluene	ND	13	EPA 8021B
Ethylbenzene	70 C	13	EPA 8021B
m,p-Xylenes	100 C	13	EPA 8021B
o-Xylene	440 C	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	226 *	>LR b 74-142	EPA 8015B
Bromofluorobenzene (FID)	171 *	80-139	EPA 8015B
Trifluorotoluene (PID)	174 *	55-139	EPA 8021B
Bromofluorobenzene (PID)	122	62-134	EPA 8021B

Field ID: BH-07-GW
Type: SAMPLE
Lab ID: 173318-012
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	2,000	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	3.4 C	0.50	EPA 8021B
Ethylbenzene	8.1	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	14 C	0.50	EPA 8021B

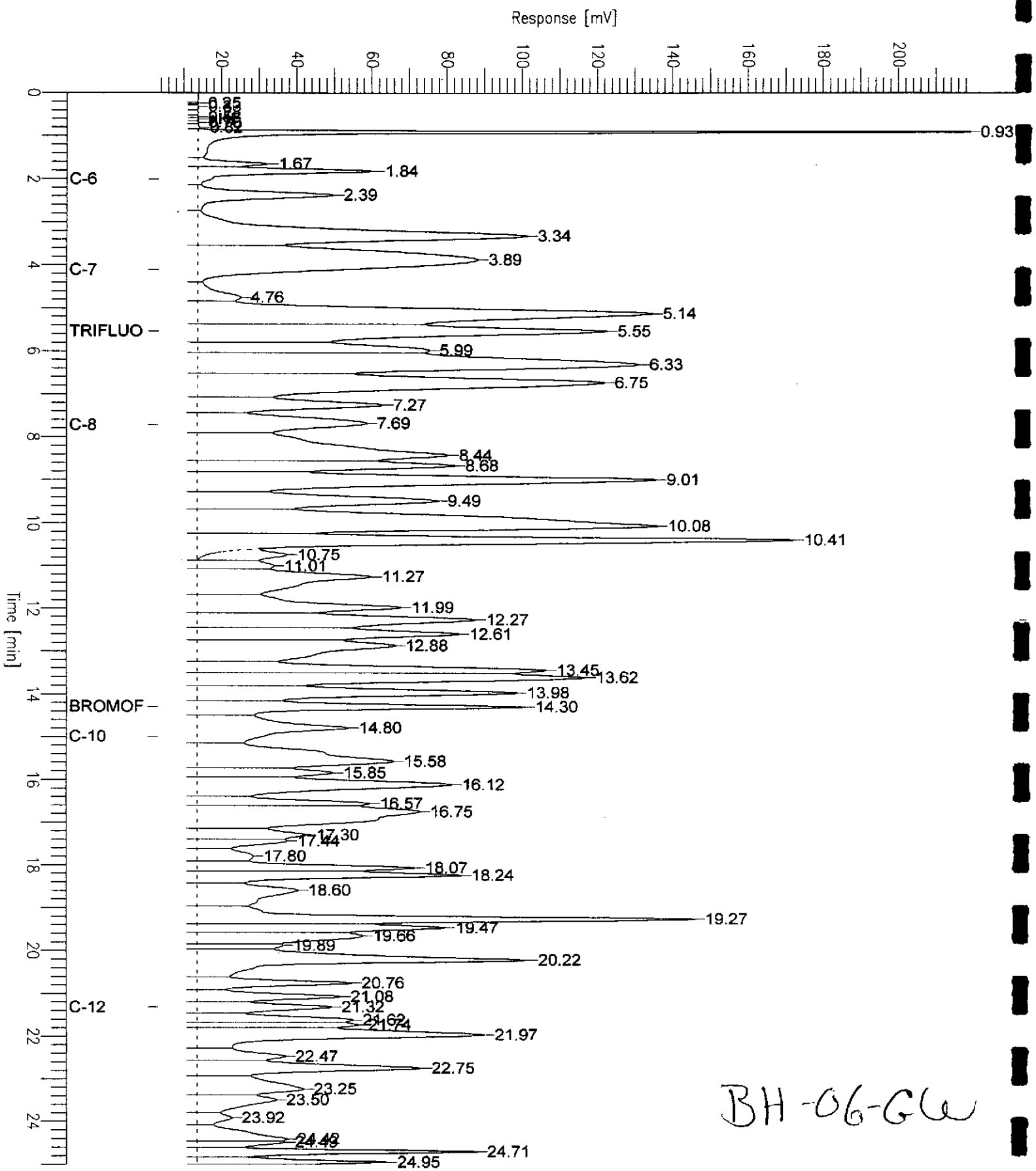
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	128	74-142	EPA 8015B
Bromofluorobenzene (FID)	185 *	80-139	EPA 8015B
Trifluorotoluene (PID)	105	55-139	EPA 8021B
Bromofluorobenzene (PID)	136 *	62-134	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Chromatogram

Sample Name : 173318-006,92670
FileName : G:\GC05\DATA\191G009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #: b1.9 Page 1 of 1
Date : 7/9/04 08:00 PM
Time of Injection: 7/9/04 03:02 PM
Low Point : 3.33 mV High Point : 219.22 mV
Plot Scale: 215.9 mV

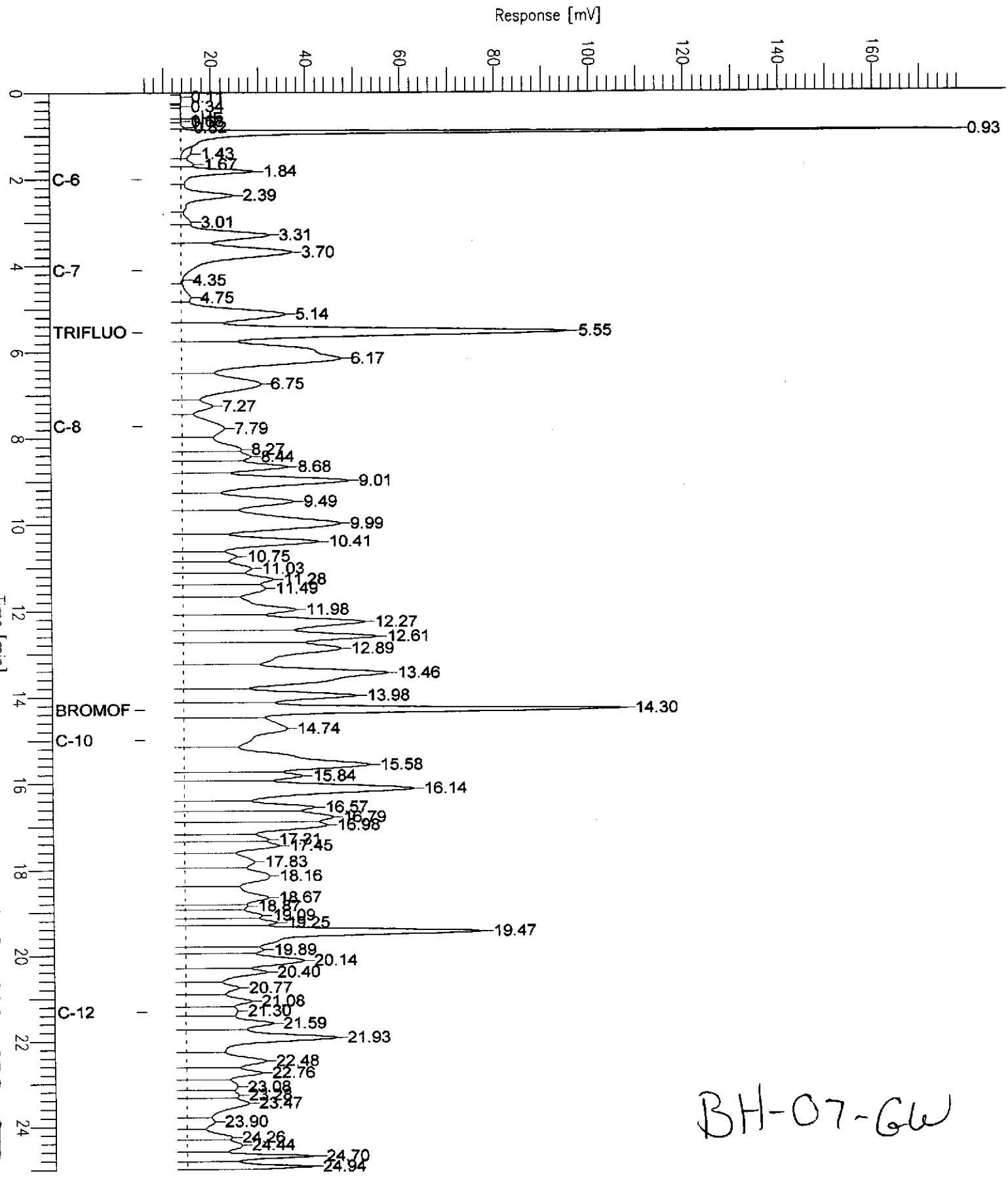


BH-06-GW

Chromatogram

Sample Name : 173318-012,92670
FileName : G:\GC05\DATA\191G007.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: b1.0
Date : 7/9/04 08:00 PM
Time of Injection: 7/9/04 01:59 PM
Low Point : 5.39 mV High Point : 178.08 mV
Plot Scale: 172.7 mV



BH-07-GW

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04
Batch#:	92670	Analyzed:	07/09/04

Field ID: BH-08-GW
Type: SAMPLE
Lab ID: 173318-018
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	380	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	0.77 C	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	1.6 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	110	74-142	EPA 8015B
Bromofluorobenzene (FID)	147 *	80-139	EPA 8015B
Trifluorotoluene (PID)	102	55-139	EPA 8021B
Bromofluorobenzene (PID)	144 *	62-134	EPA 8021B

Field ID: BH-09-GW
Type: SAMPLE
Lab ID: 173318-024
Diln Fac: 2.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	7,700	100	EPA 8015B
Benzene	ND	1.0	EPA 8021B
Toluene	ND	1.0	EPA 8021B
Ethylbenzene	21	1.0	EPA 8021B
m,p-Xylenes	7.7 C	1.0	EPA 8021B
o-Xylene	32 C	1.0	EPA 8021B

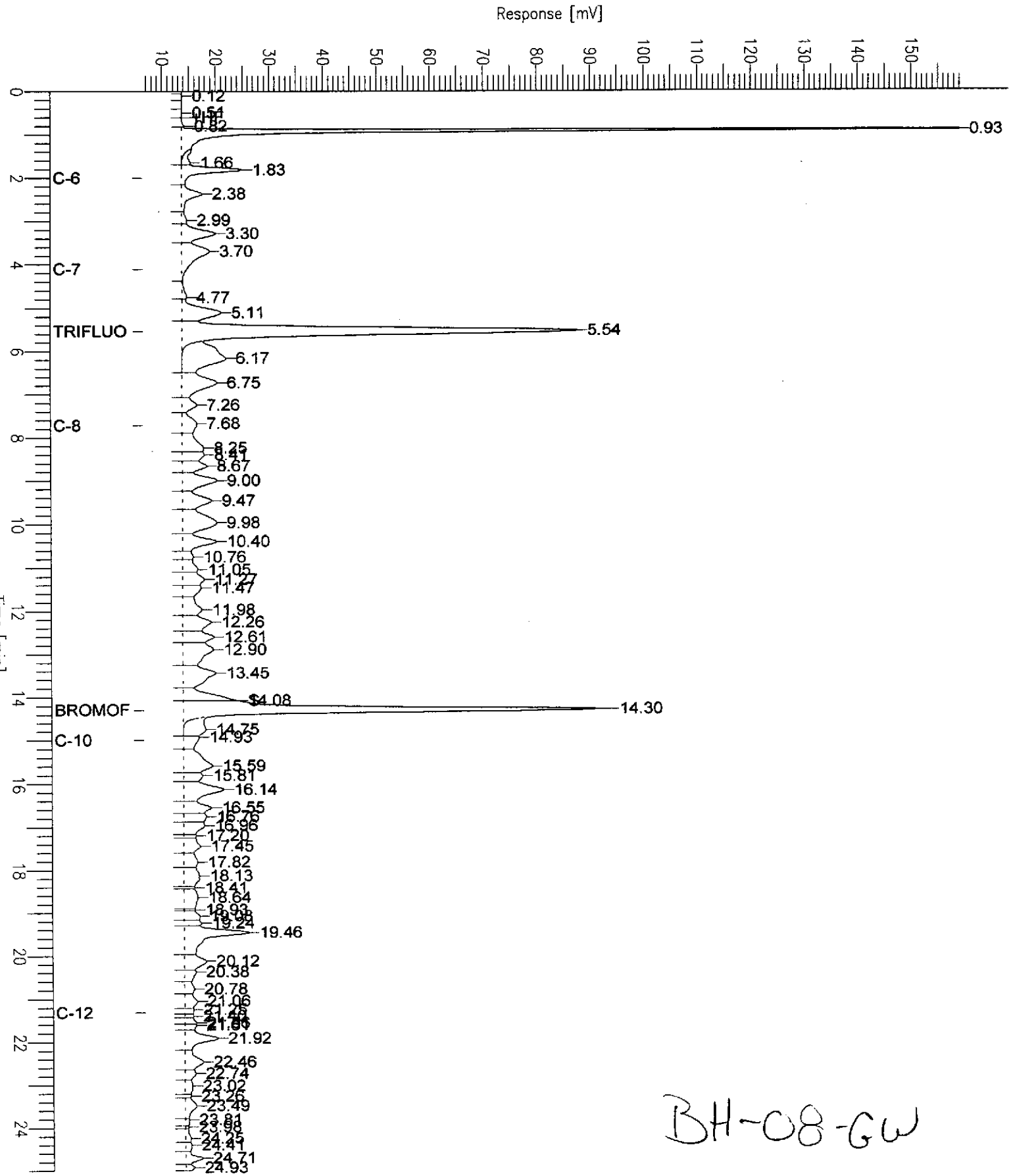
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	199 *	74-142	EPA 8015B
Bromofluorobenzene (FID)	166 *	80-139	EPA 8015B
Trifluorotoluene (PID)	151 *	55-139	EPA 8021B
Bromofluorobenzene (PID)	125	62-134	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Chromatogram

Sample Name : 173318-018,92670
FileName : G:\GC05\DATA\191G017.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: b1.0 Page 1 of 1
Date : 7/10/04 10:07 AM
Time of Injection: 7/9/04 07:27 PM
Low Point : 6.33 mV High Point : 159.03 mV
Plot Scale: 152.7 mV

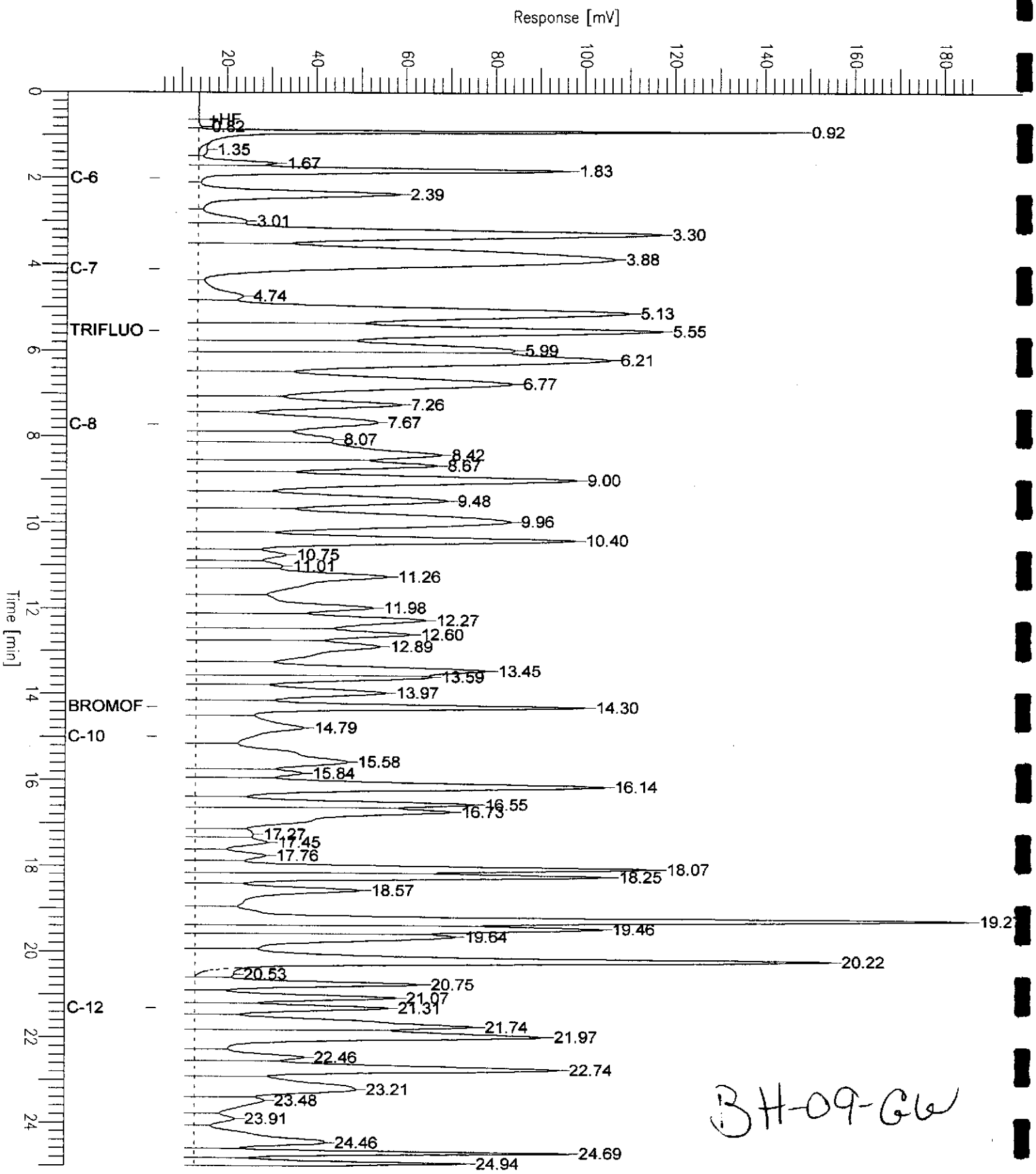


BH-08-GW

Chromatogram

Sample Name : 173318-024,92670
FileName : G:\GC05\DATA\191G018.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: b2.5 Page 1 of 1
Date : 7/10/04 10:07 AM
Time of Injection: 7/9/04 07:59 PM
Low Point : 5.01 mV High Point : 186.28 mV
Plot Scale: 181.3 mV



BH-09-GW

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04
Batch#:	92670	Analyzed:	07/09/04

Field ID: BH-10-GW
Type: SAMPLE
Lab ID: 173318-030
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	74-142	EPA 8015B
Bromofluorobenzene (FID)	121	80-139	EPA 8015B
Trifluorotoluene (PID)	94	55-139	EPA 8021B
Bromofluorobenzene (PID)	114	62-134	EPA 8021B

Field ID: BH-11-GW
Type: SAMPLE
Lab ID: 173318-036
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,300	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	0.88 C	0.50	EPA 8021B
m,p-Xylenes	1.4 C	0.50	EPA 8021B
o-Xylene	4.6 C	0.50	EPA 8021B

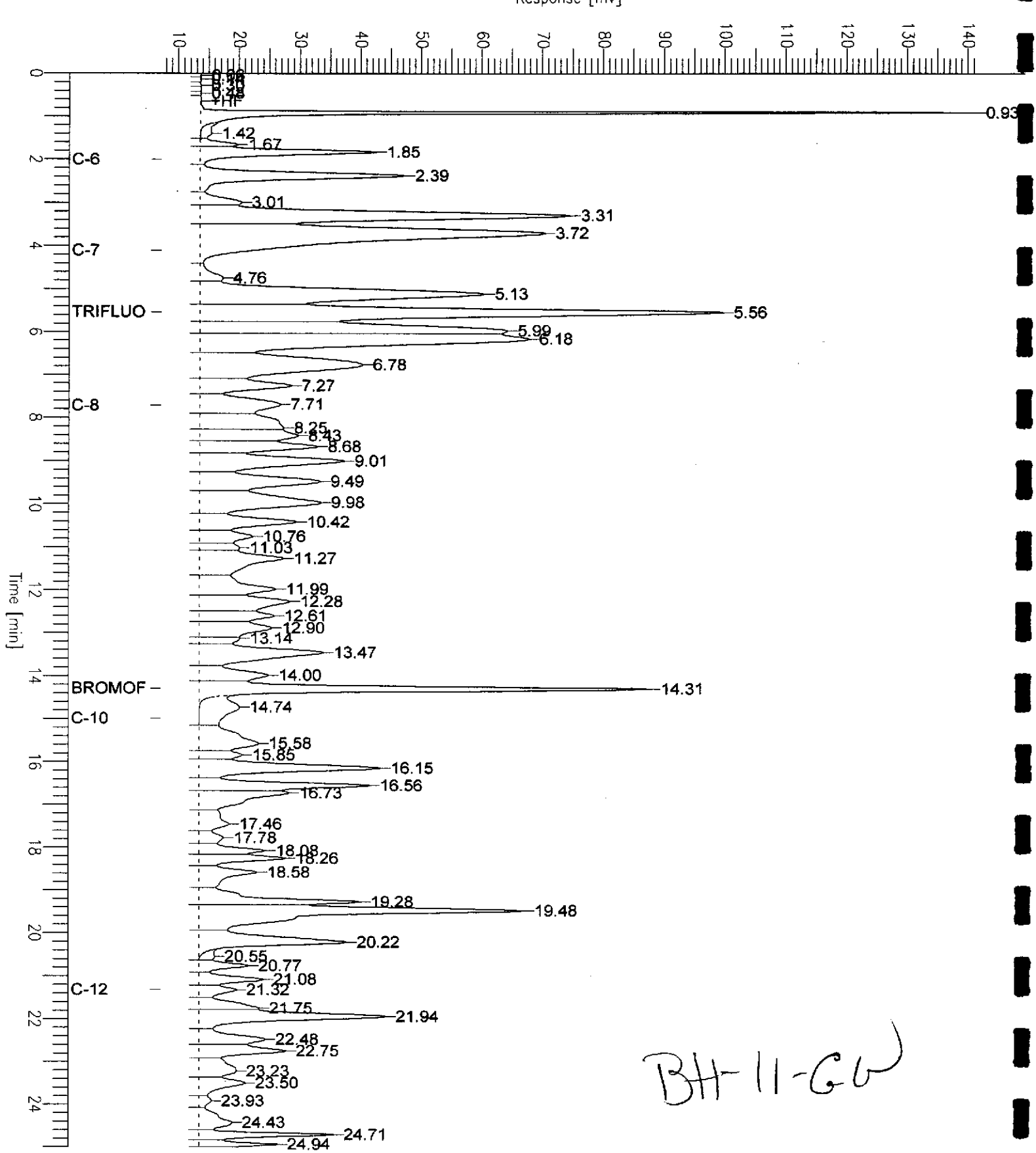
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	148 *	74-142	EPA 8015B
Bromofluorobenzene (FID)	128	80-139	EPA 8015B
Trifluorotoluene (PID)	121	55-139	EPA 8021B
Bromofluorobenzene (PID)	114	62-134	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Chromatogram

Sample Name : 173318-036,92670
FileName : G:\GC05\DATA\191G010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 7 mV

Sample #: b1.0 Page 1 of 1
Date : 7/9/04 08:00 PM
Time of Injection: 7/9/04 03:45 PM
Low Point : 7.18 mV High Point : 141.31 mV
Plot Scale: 134.1 mV

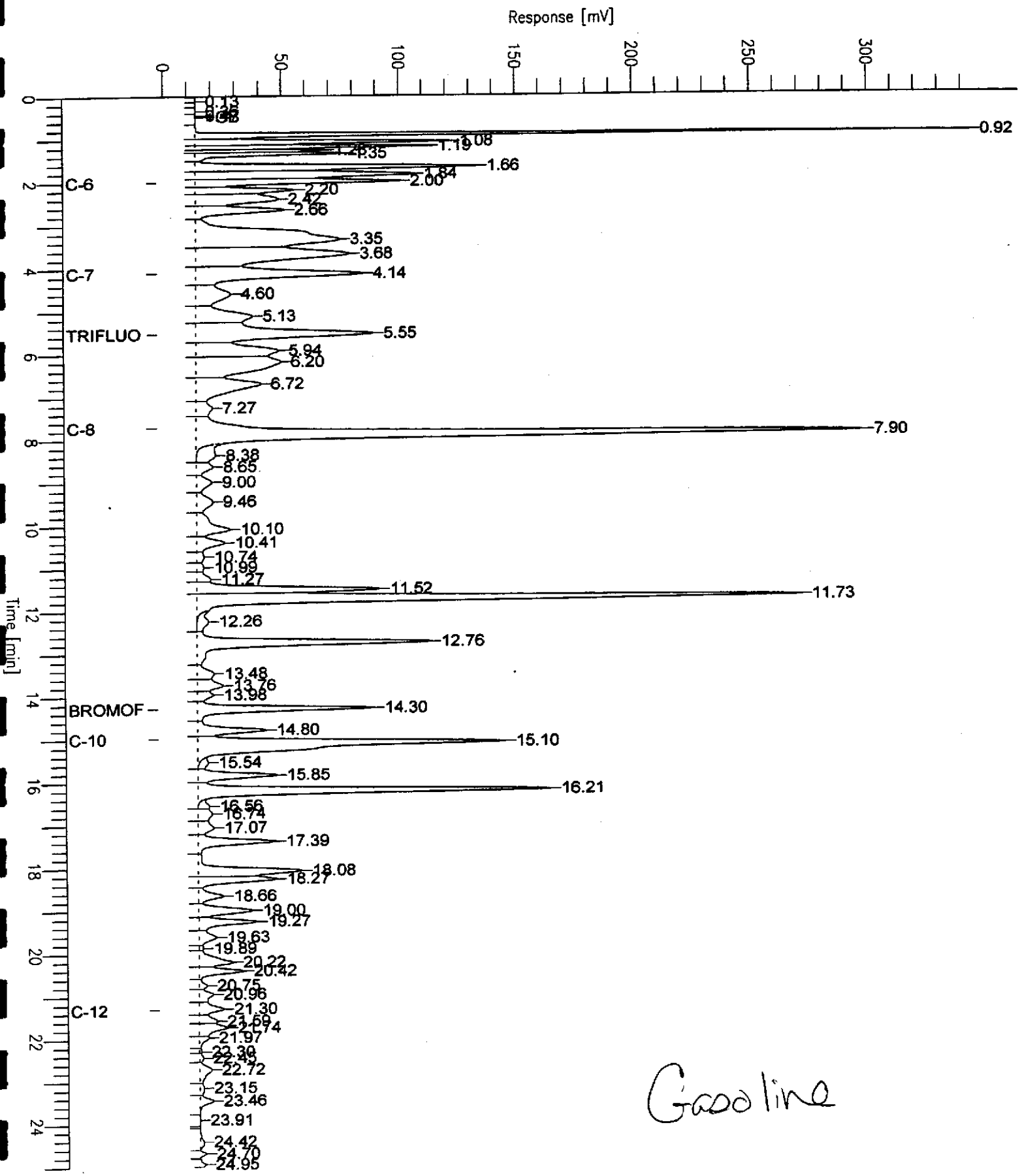


BH-11-GW

Chromatogram

Sample Name : ccv/lcs,qc257013,92670,04ws1279,5/5000
FileName : G:\GC05\DATA\191G002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -3 mV

Sample #:
Date : 7/9/04 11:18 AM
Time of Injection: 7/9/04 10:53 AM
Low Point : -2.75 mV High Point : 344.12 mV
Plot Scale: 346.9 mV



Gasoline

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04
Batch#:	92670	Analyzed:	07/09/04

Field ID: UNITED GLASS WELL
Type: SAMPLE
Lab ID: 173318-037
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	74-142	EPA 8015B
Bromofluorobenzene (FID)	111	80-139	EPA 8015B
Trifluorotoluene (PID)	92	55-139	EPA 8021B
Bromofluorobenzene (PID)	108	62-134	EPA 8021B

Type: BLANK
Lab ID: QC257011
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	74-142	EPA 8015B
Bromofluorobenzene (FID)	107	80-139	EPA 8015B
Trifluorotoluene (PID)	99	55-139	EPA 8021B
Bromofluorobenzene (PID)	108	62-134	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC257013	Batch#:	92670
Matrix:	Water	Analyzed:	07/09/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,026	101	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	137	74-142
Bromofluorobenzene (FID)	119	80-139

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8021B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC257012	Batch#:	92670
Matrix:	Water	Analyzed:	07/09/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	18.92	95	80-120
Toluene	20.00	20.15	101	80-120
Ethylbenzene	20.00	20.19	101	80-120
m,p-Xylenes	20.00	20.32	102	80-120
o-Xylene	20.00	20.37	102	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	95	55-139
Bromofluorobenzene (PID)	102	62-134

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8021B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC257083	Batch#:	92670
Matrix:	Water	Analyzed:	07/09/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	18.83	94	80-120	0	20
Toluene	20.00	18.39	92	80-120	9	20
Ethylbenzene	20.00	19.65	98	80-120	3	20
m,p-Xylenes	20.00	20.71	104	80-120	2	20
o-Xylene	20.00	20.55	103	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	93	55-139
Bromofluorobenzene (PID)	101	62-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	92670
MSS Lab ID:	173313-001	Sampled:	07/08/04
Matrix:	Water	Received:	07/08/04
Units:	ug/L	Analyzed:	07/09/04
Diln Fac:	1.000		

Type: MS Lab ID: QC257041

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.65	2,000	1,996	99	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	74-142
Bromofluorobenzene (FID)	111	80-139

Type: MSD Lab ID: QC257042

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,057	102	80-120	3	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	141	74-142
Bromofluorobenzene (FID)	128	80-139

RPD= Relative Percent Difference

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-06-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-001	Analyzed:	07/09/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	7.3 H Y	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.6	ug/Kg	EPA 8021B
Toluene	ND	5.6	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.6	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.6	ug/Kg	EPA 8021B
o-Xylene	ND	5.6	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	71-138	EPA 8015B
Bromofluorobenzene (FID)	104	73-143	EPA 8015B
Trifluorotoluene (PID)	100	55-135	EPA 8021B
Bromofluorobenzene (PID)	99	58-135	EPA 8021B

Field ID:	BH-06-9.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-002	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

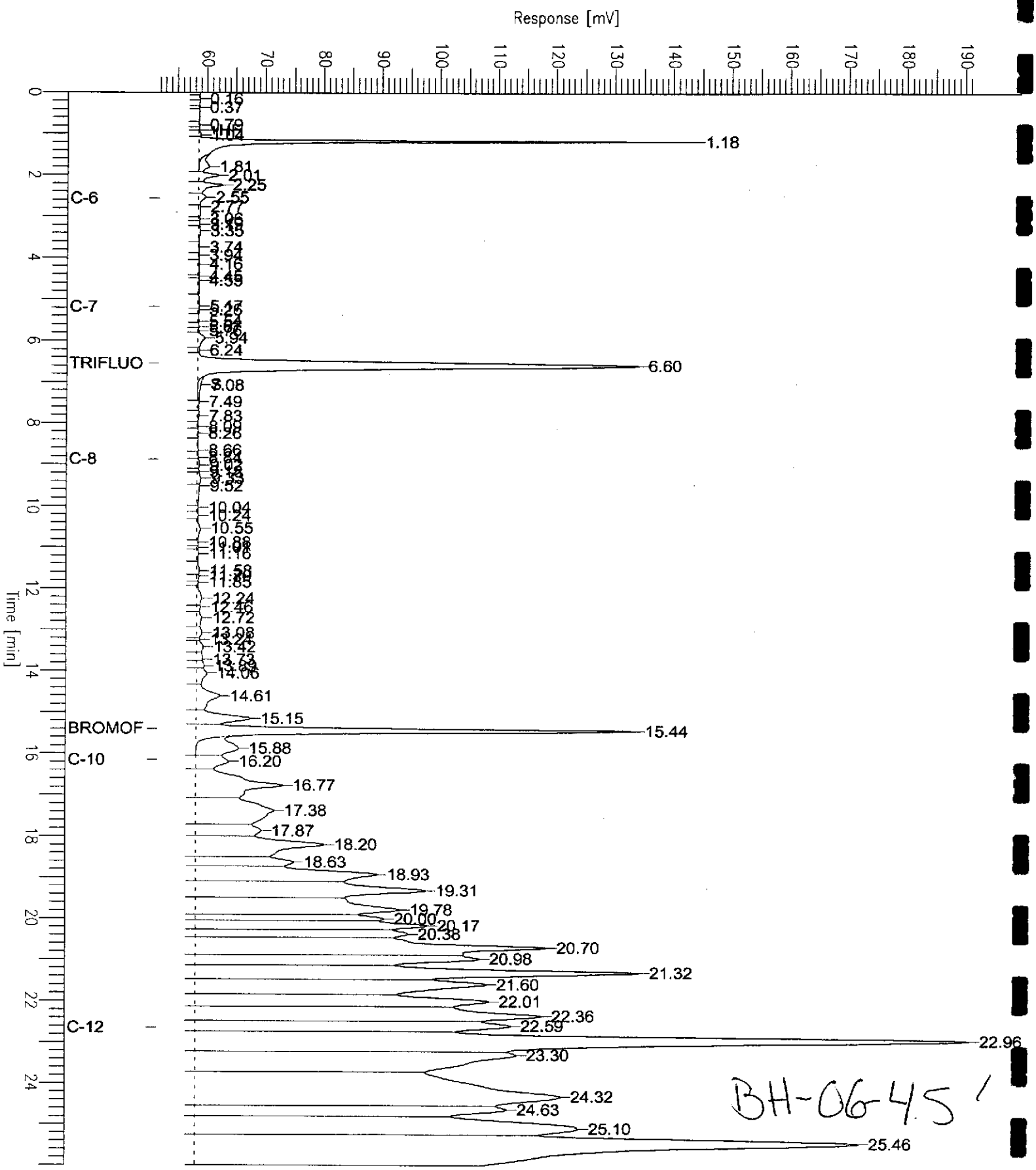
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	89	71-138	EPA 8015B
Bromofluorobenzene (FID)	96	73-143	EPA 8015B
Trifluorotoluene (PID)	84	55-135	EPA 8021B
Bromofluorobenzene (PID)	93	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

Sample Name : 173318-001,92674
FileName : G:\GC04\DATA\191J005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 52 mV

Sample #: a Page 1 of 1
Date : 7/9/04 05:17 PM
Time of Injection: 7/9/04 04:07 PM
Low Point : 51.86 mV High Point : 191.14 mV
Plot Scale: 139.3 mV



BH-0645'

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-06-14.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-003	Analyzed:	07/09/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	4.9	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.4	ug/Kg	EPA 8021B
Toluene	8.2 C	5.4	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.4	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.4	ug/Kg	EPA 8021B
o-Xylene	ND	5.4	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	71-138	EPA 8015B
Bromofluorobenzene (FID)	112	73-143	EPA 8015B
Trifluorotoluene (PID)	104	55-135	EPA 8021B
Bromofluorobenzene (PID)	108	58-135	EPA 8021B

Field ID:	BH-06-19.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-004	Analyzed:	07/09/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.4	ug/Kg	EPA 8021B
Toluene	ND	5.4	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.4	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.4	ug/Kg	EPA 8021B
o-Xylene	ND	5.4	ug/Kg	EPA 8021B

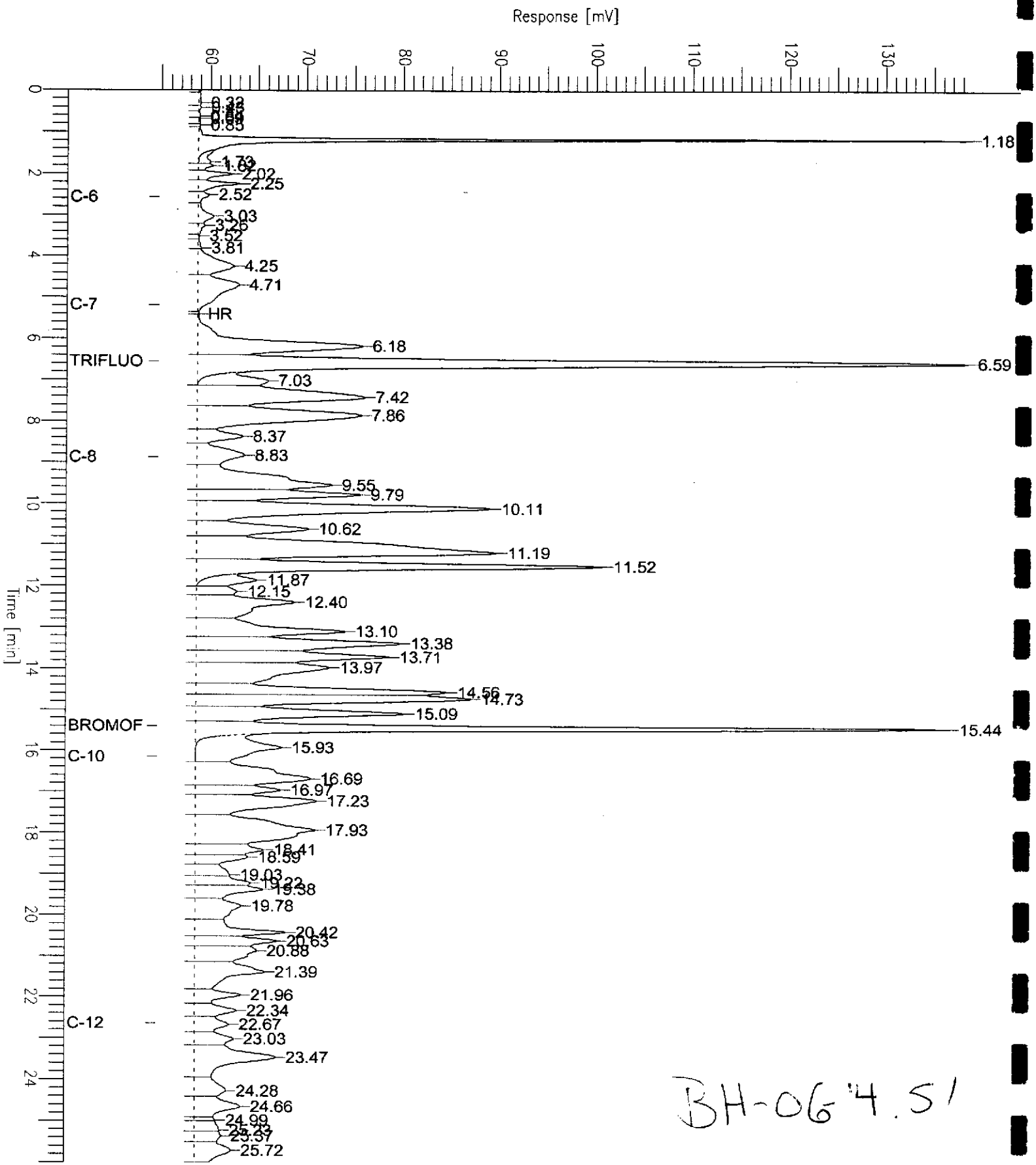
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	71-138	EPA 8015B
Bromofluorobenzene (FID)	93	73-143	EPA 8015B
Trifluorotoluene (PID)	96	55-135	EPA 8021B
Bromofluorobenzene (PID)	97	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

Sample Name : 173318-003,92674
FileName : G:\GC04\DATA\191J006.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #: a Page 1 of 1
Date : 7/9/04 07:37 PM
Time of Injection: 7/9/04 04:43 PM
Low Point : 54.71 mV High Point : 138.80 mV
Plot Scale: 84.1 mV



BH-06 4.5'

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-06-22.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-005	Analyzed:	07/09/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.1	ug/Kg	EPA 8021B
Toluene	ND	5.1	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.1	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.1	ug/Kg	EPA 8021B
o-Xylene	ND	5.1	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	71-138	EPA 8015B
Bromofluorobenzene (FID)	93	73-143	EPA 8015B
Trifluorotoluene (PID)	91	55-135	EPA 8021B
Bromofluorobenzene (PID)	93	58-135	EPA 8021B

Field ID:	BH-07-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-007	Analyzed:	07/09/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	71-138	EPA 8015B
Bromofluorobenzene (FID)	94	73-143	EPA 8015B
Trifluorotoluene (PID)	92	55-135	EPA 8021B
Bromofluorobenzene (PID)	95	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID: BH-07-10.5' Lab ID: 173318-008
Type: SAMPLE Diln Fac: 1.000

Analyte	Result	RL	Units	Batch#	Analyzed	Analysis
Gasoline C7-C12	7.9 H Y	1.1	mg/Kg	92674	07/09/04	EPA 8015B
Benzene	ND	5.4	ug/Kg	92674	07/09/04	EPA 8021B
Toluene	9.0 C	5.4	ug/Kg	92674	07/09/04	EPA 8021B
Ethylbenzene	ND	5.4	ug/Kg	92674	07/09/04	EPA 8021B
m,p-Xylenes	ND	5.4	ug/Kg	92674	07/09/04	EPA 8021B
o-Xylene	ND	5.6	ug/Kg	92700	07/11/04	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	101	71-138	92674	07/09/04	EPA 8015B
Bromofluorobenzene (FID)	137	73-143	92674	07/09/04	EPA 8015B
Trifluorotoluene (PID)	98	55-135	92674	07/09/04	EPA 8021B
Bromofluorobenzene (PID)	111	58-135	92674	07/09/04	EPA 8021B

Field ID: BH-07-14.5' Diln Fac: 1.000
Type: SAMPLE Batch#: 92674
Lab ID: 173318-009 Analyzed: 07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.98	mg/Kg	EPA 8015B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	71-138	EPA 8015B
Bromofluorobenzene (FID)	105	73-143	EPA 8015B
Trifluorotoluene (PID)	95	55-135	EPA 8021B
Bromofluorobenzene (PID)	103	58-135	EPA 8021B

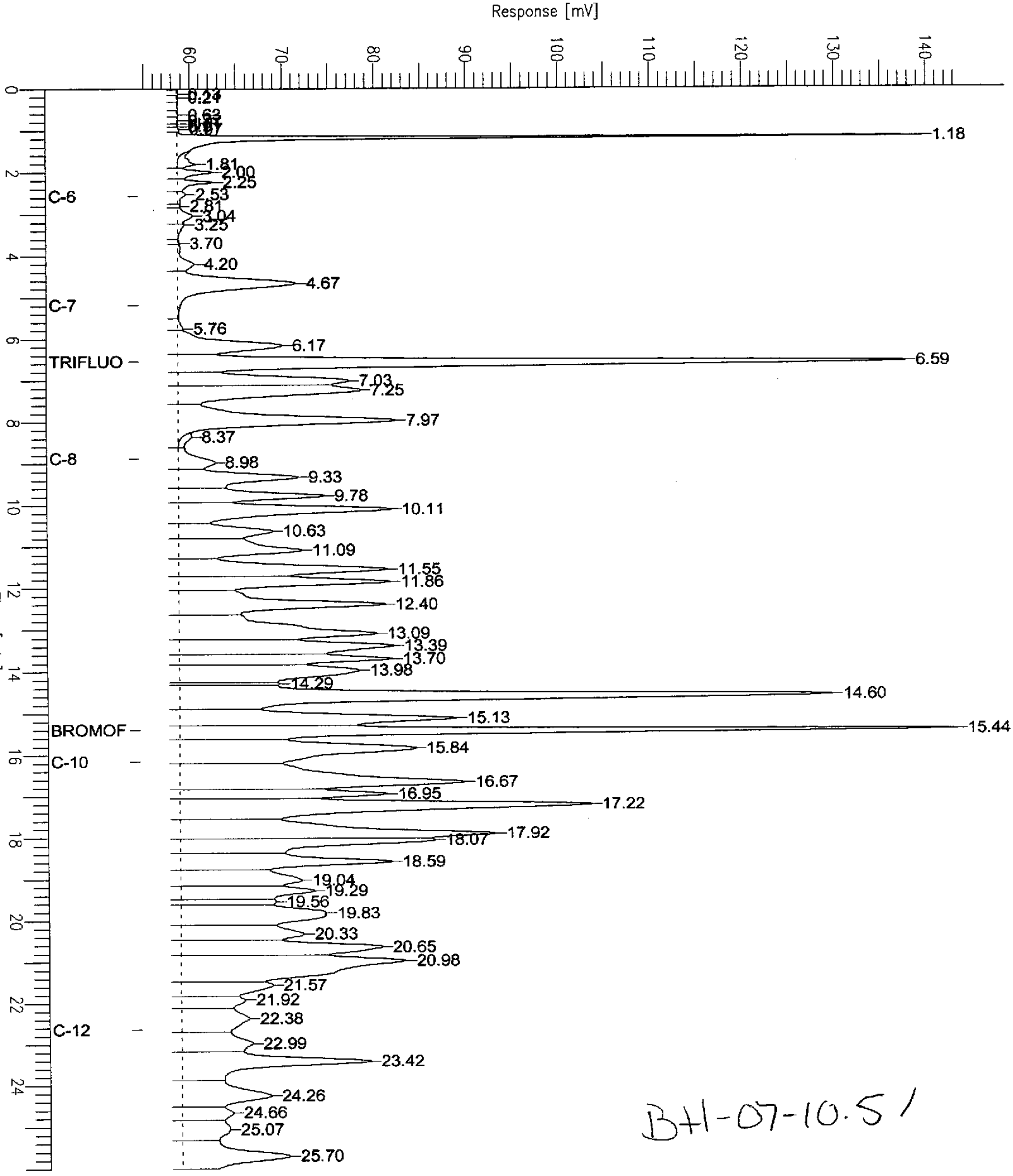
*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

Sample Name : 173318-008,92674
FileName : G:\GC04\DATA\191J010.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor: 1.0
End Time : 26.00 min
Plot Offset: 54 mV

Sample #: a
Date : 7/10/04 11:01 AM
Time of Injection: 7/9/04 07:40 PM
Low Point : 54.38 mV
Plot Scale: 88.9 mV

High Point : 143.28 mV



BH-07-10.5'

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-07-19.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-010	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.96	mg/Kg	EPA 8015B
Benzene	ND	4.8	ug/Kg	EPA 8021B
Toluene	ND	4.8	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.8	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.8	ug/Kg	EPA 8021B
o-Xylene	ND	4.8	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	71-138	EPA 8015B
Bromofluorobenzene (FID)	100	73-143	EPA 8015B
Trifluorotoluene (PID)	95	55-135	EPA 8021B
Bromofluorobenzene (PID)	98	58-135	EPA 8021B

Field ID:	BH-07-23.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-011	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	71-138	EPA 8015B
Bromofluorobenzene (FID)	94	73-143	EPA 8015B
Trifluorotoluene (PID)	92	55-135	EPA 8021B
Bromofluorobenzene (PID)	94	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-08-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-013	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	71-138	EPA 8015B
Bromofluorobenzene (FID)	104	73-143	EPA 8015B
Trifluorotoluene (PID)	93	55-135	EPA 8021B
Bromofluorobenzene (PID)	100	58-135	EPA 8021B

Field ID:	BH-08-9.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-014	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.3	ug/Kg	EPA 8021B
Toluene	ND	5.3	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.3	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.3	ug/Kg	EPA 8021B
o-Xylene	ND	5.3	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	71-138	EPA 8015B
Bromofluorobenzene (FID)	103	73-143	EPA 8015B
Trifluorotoluene (PID)	99	55-135	EPA 8021B
Bromofluorobenzene (PID)	100	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-08-14.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92674
Lab ID:	173318-015	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.97	mg/Kg	EPA 8015B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	71-138	EPA 8015B
Bromofluorobenzene (FID)	95	73-143	EPA 8015B
Trifluorotoluene (PID)	92	55-135	EPA 8021B
Bromofluorobenzene (PID)	95	58-135	EPA 8021B

Field ID:	BH-08-20'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-016	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	3.6 H Y	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.4	ug/Kg	EPA 8021B
Toluene	ND	5.4	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.4	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.4	ug/Kg	EPA 8021B
o-Xylene	ND	5.4	ug/Kg	EPA 8021B

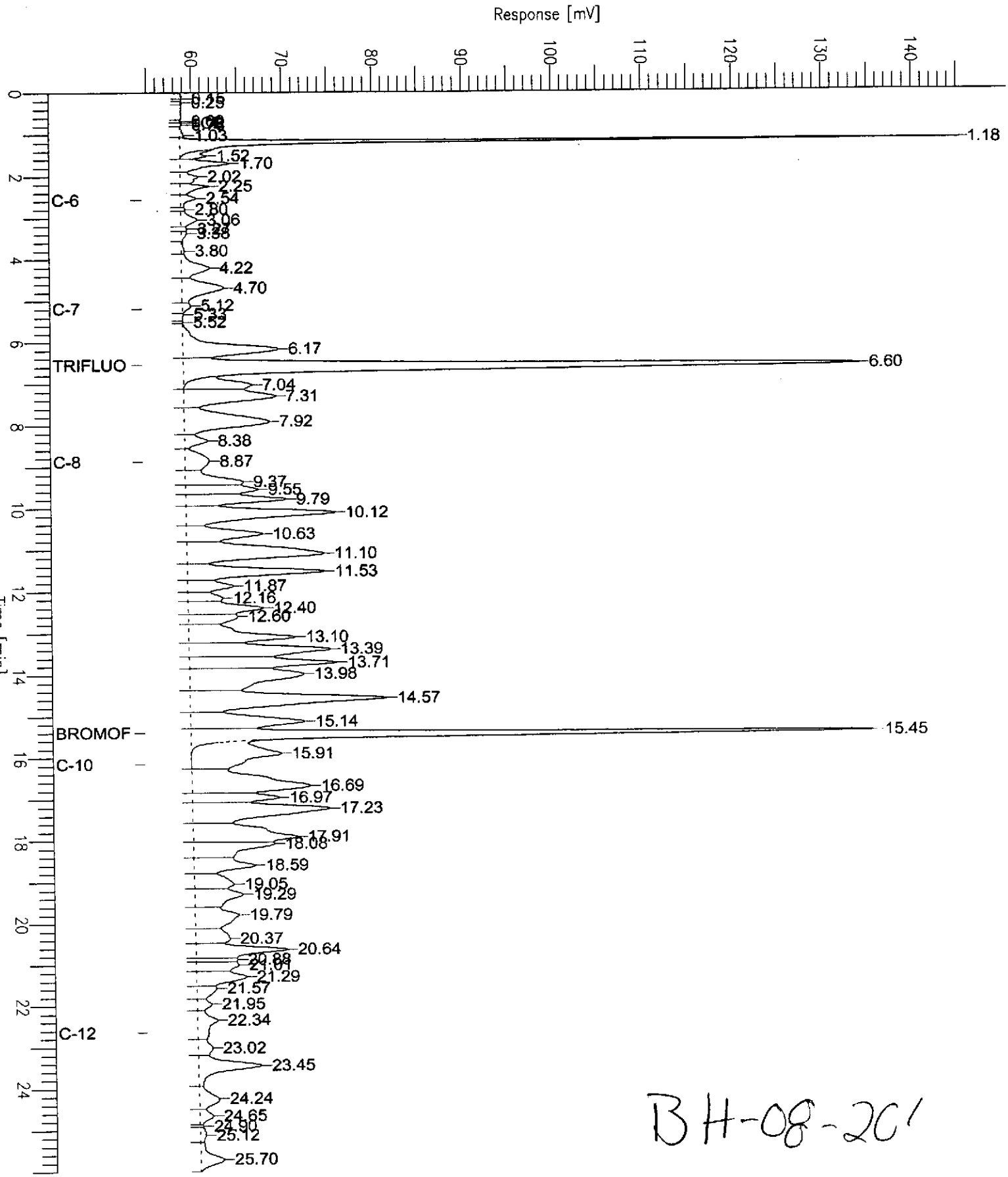
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	71-138	EPA 8015B
Bromofluorobenzene (FID)	110	73-143	EPA 8015B
Trifluorotoluene (PID)	91	55-135	EPA 8021B
Bromofluorobenzene (PID)	96	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

Sample Name : 173318-016,92700
FileName : G:\GC04\DATA\192J005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 54 mV

Sample #: a
Date : 7/10/04 02:49 PM
Time of Injection: 7/10/04 02:23 PM
Low Point : 54.41 mV High Point : 145.16 mV
Plot Scale: 90.8 mV



BH-08-201

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-08-23.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-017	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	ND	5.5	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.5	ug/Kg	EPA 8021B
o-Xylene	ND	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	71-138	EPA 8015B
Bromofluorobenzene (FID)	95	73-143	EPA 8015B
Trifluorotoluene (PID)	90	55-135	EPA 8021B
Bromofluorobenzene (PID)	92	58-135	EPA 8021B

Field ID:	BH-09-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-019	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.1	ug/Kg	EPA 8021B
Toluene	ND	5.1	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.1	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.1	ug/Kg	EPA 8021B
o-Xylene	ND	5.1	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	71-138	EPA 8015B
Bromofluorobenzene (FID)	94	73-143	EPA 8015B
Trifluorotoluene (PID)	87	55-135	EPA 8021B
Bromofluorobenzene (PID)	93	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-09-11'	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	92736
Lab ID:	173318-020	Analyzed:	07/12/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	150	10	mg/Kg	EPA 8015B
Benzene	ND	50	ug/Kg	EPA 8021B
Toluene	ND	50	ug/Kg	EPA 8021B
Ethylbenzene	ND	50	ug/Kg	EPA 8021B
m,p-Xylenes	120 C	50	ug/Kg	EPA 8021B
o-Xylene	ND	50	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	157 *	71-138	EPA 8015B
Bromofluorobenzene (FID)	145 *	73-143	EPA 8015B
Trifluorotoluene (PID)	125	55-135	EPA 8021B
Bromofluorobenzene (PID)	116	58-135	EPA 8021B

Field ID:	BH-09-15.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-021	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.99	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	71-138	EPA 8015B
Bromofluorobenzene (FID)	105	73-143	EPA 8015B
Trifluorotoluene (PID)	89	55-135	EPA 8021B
Bromofluorobenzene (PID)	96	58-135	EPA 8021B

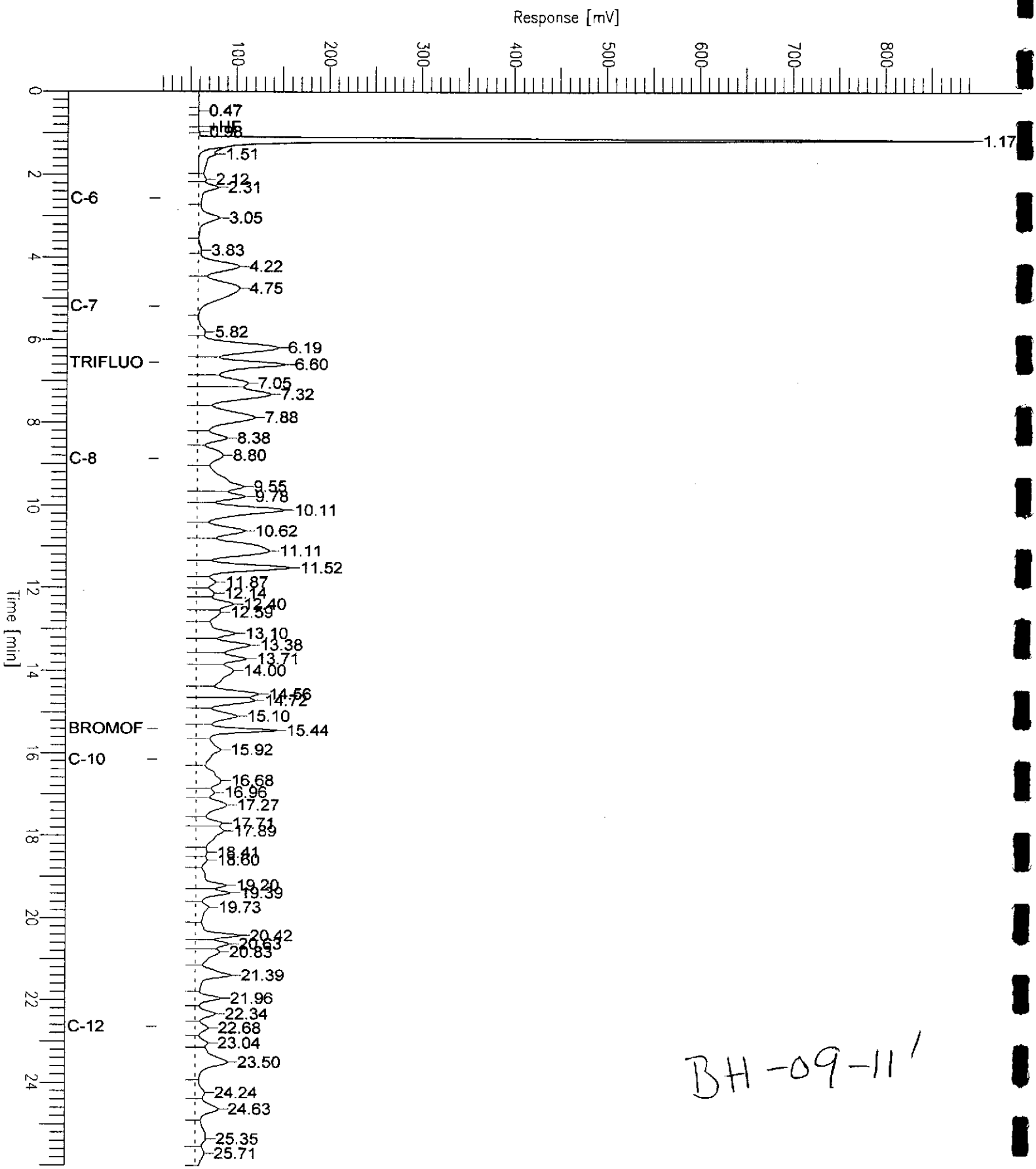
*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

020

Sample Name : 173318-028,92736
FileName : G:\GC04\DATA\194J007.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 17 mV

Sample #: a Page 1 of 1
Date : 7/13/04 08:10 AM
Time of Injection: 7/12/04 04:25 PM
Low Point : 16.83 mV High Point : 894.20 mV
Plot Scale: 877.4 mV



BH-09-11

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-09-19.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-022	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.98	mg/Kg	EPA 8015B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	71-138	EPA 8015B
Bromofluorobenzene (FID)	99	73-143	EPA 8015B
Trifluorotoluene (PID)	86	55-135	EPA 8021B
Bromofluorobenzene (PID)	90	58-135	EPA 8021B

Field ID:	BH-09-23.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-023	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.1	ug/Kg	EPA 8021B
Toluene	ND	5.1	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.1	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.1	ug/Kg	EPA 8021B
o-Xylene	ND	5.1	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	71-138	EPA 8015B
Bromofluorobenzene (FID)	103	73-143	EPA 8015B
Trifluorotoluene (PID)	87	55-135	EPA 8021B
Bromofluorobenzene (PID)	95	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-10-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-025	Analyzed:	07/10/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	71-138	EPA 8015B
Bromofluorobenzene (FID)	98	73-143	EPA 8015B
Trifluorotoluene (PID)	84	55-135	EPA 8021B
Bromofluorobenzene (PID)	91	58-135	EPA 8021B

Field ID:	BH-10-9.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-026	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.1	mg/Kg	EPA 8015B
Benzene	ND	5.5	ug/Kg	EPA 8021B
Toluene	ND	5.5	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.5	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.5	ug/Kg	EPA 8021B
o-Xylene	ND	5.5	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	71-138	EPA 8015B
Bromofluorobenzene (FID)	102	73-143	EPA 8015B
Trifluorotoluene (PID)	87	55-135	EPA 8021B
Bromofluorobenzene (PID)	96	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-10-14.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-027	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	71-138	EPA 8015B
Bromofluorobenzene (FID)	94	73-143	EPA 8015B
Trifluorotoluene (PID)	83	55-135	EPA 8021B
Bromofluorobenzene (PID)	89	58-135	EPA 8021B

Field ID:	BH-10-19.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-028	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.99	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	71-138	EPA 8015B
Bromofluorobenzene (FID)	98	73-143	EPA 8015B
Trifluorotoluene (PID)	86	55-135	EPA 8021B
Bromofluorobenzene (PID)	91	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-10-23.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-029	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	71-138	EPA 8015B
Bromofluorobenzene (FID)	100	73-143	EPA 8015B
Trifluorotoluene (PID)	86	55-135	EPA 8021B
Bromofluorobenzene (PID)	93	58-135	EPA 8021B

Field ID:	BH-11-4.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-031	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.97	mg/Kg	EPA 8015B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	99	71-138	EPA 8015B
Bromofluorobenzene (FID)	102	73-143	EPA 8015B
Trifluorotoluene (PID)	90	55-135	EPA 8021B
Bromofluorobenzene (PID)	95	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-11-11'	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	92736
Lab ID:	173318-032	Analyzed:	07/12/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	130	5.0	mg/Kg	EPA 8015B
Benzene	ND	25	ug/Kg	EPA 8021B
Toluene	240 C	25	ug/Kg	EPA 8021B
Ethylbenzene	ND	25	ug/Kg	EPA 8021B
m,p-Xylenes	ND	25	ug/Kg	EPA 8021B
o-Xylene	ND	25	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	187 *	71-138	EPA 8015B
Bromofluorobenzene (FID)	189 *	73-143	EPA 8015B
Trifluorotoluene (PID)	129	55-135	EPA 8021B
Bromofluorobenzene (PID)	126	58-135	EPA 8021B

Field ID:	BH-11-15'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-033	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.1	ug/Kg	EPA 8021B
Toluene	ND	5.1	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.1	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.1	ug/Kg	EPA 8021B
o-Xylene	ND	5.1	ug/Kg	EPA 8021B

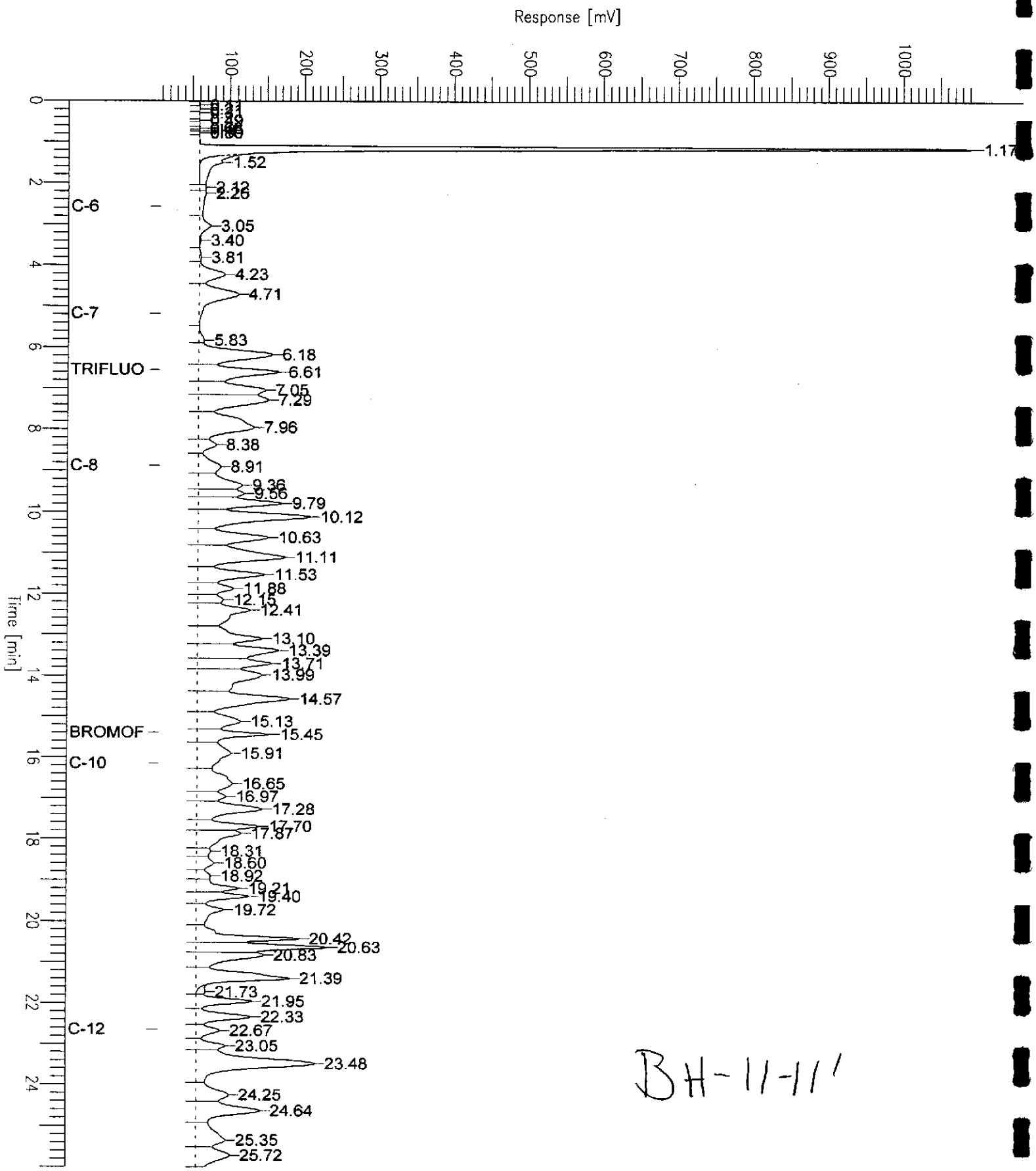
Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	71-138	EPA 8015B
Bromofluorobenzene (FID)	99	73-143	EPA 8015B
Trifluorotoluene (PID)	92	55-135	EPA 8021B
Bromofluorobenzene (PID)	100	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC04 TVH 'J' Data File FID

Sample Name : 173318-032,92736
FileName : G:\GC04\DATA\194J006.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 7 mV

Sample #: a Page 1 of 1
Date : 7/13/04 08:10 AM
Time of Injection: 7/12/04 03:49 PM
Low Point : 6.72 mV High Point : 1094.32 mV
Plot Scale: 1087.6 mV

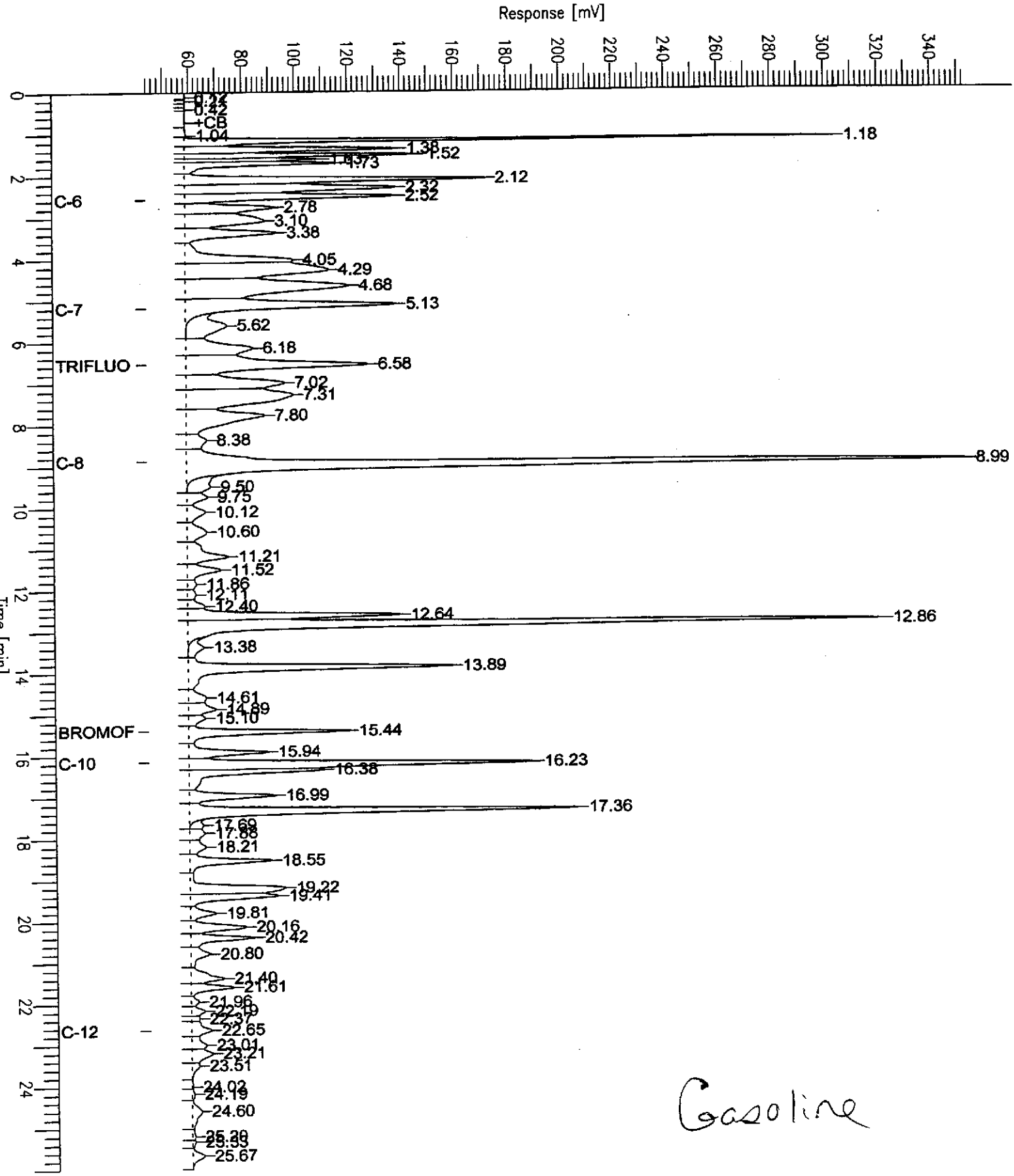


BH-11-11'

GC04 TVH 'J' Data File FID

Sample Name : ccv/lcs,qc257034,92674,04ws1279,5/5000
FileName : G:\GC04\DATA\191J002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 44 mV

Sample #: Page 1 of 1
Date : 7/9/04 02:39 PM
Time of Injection: 7/9/04 02:12 PM
Low Point : 43.89 mV High Point : 352.84 mV
Plot Scale: 309.0 mV



Gasoline

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Field ID:	BH-11-19.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-034	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	71-138	EPA 8015B
Bromofluorobenzene (FID)	102	73-143	EPA 8015B
Trifluorotoluene (PID)	91	55-135	EPA 8021B
Bromofluorobenzene (PID)	100	58-135	EPA 8021B

Field ID:	BH-11-23.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92700
Lab ID:	173318-035	Analyzed:	07/11/04

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.2	ug/Kg	EPA 8021B
Toluene	ND	5.2	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.2	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.2	ug/Kg	EPA 8021B
o-Xylene	ND	5.2	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	72	71-138	EPA 8015B
Bromofluorobenzene (FID)	75	73-143	EPA 8015B
Trifluorotoluene (PID)	64	55-135	EPA 8021B
Bromofluorobenzene (PID)	70	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Type: BLANK Batch#: 92674
Lab ID: QC257033 Analyzed: 07/09/04
Diln Fac: 1.000

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	87	71-138	EPA 8015B
Bromofluorobenzene (FID)	87	73-143	EPA 8015B
Trifluorotoluene (PID)	91	55-135	EPA 8021B
Bromofluorobenzene (PID)	90	58-135	EPA 8021B

Type: BLANK Batch#: 92700
Lab ID: QC257143 Analyzed: 07/10/04
Diln Fac: 1.000

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	71-138	EPA 8015B
Bromofluorobenzene (FID)	96	73-143	EPA 8015B
Trifluorotoluene (PID)	94	55-135	EPA 8021B
Bromofluorobenzene (PID)	95	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Matrix:	Soil	Sampled:	07/08/04
Basis:	as received	Received:	07/08/04

Type:	BLANK	Batch#:	92736
Lab ID:	QC257284	Analyzed:	07/12/04
Diln Fac:	1.000		

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	1.0	mg/Kg	EPA 8015B
Benzene	ND	5.0	ug/Kg	EPA 8021B
Toluene	ND	5.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	5.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	5.0	ug/Kg	EPA 8021B
o-Xylene	ND	5.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	71-138	EPA 8015B
Bromofluorobenzene (FID)	102	73-143	EPA 8015B
Trifluorotoluene (PID)	96	55-135	EPA 8021B
Bromofluorobenzene (PID)	101	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
C= Presence confirmed, but RPD between columns exceeds 40%
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC257034	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92674
Units:	mg/Kg	Analyzed:	07/09/04

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.457	95	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	71-138
Bromofluorobenzene (FID)	84	73-143

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC257035	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92674
Units:	ug/Kg	Analyzed:	07/09/04

Analyte	Spiked	Result	%REC	Limits
Benzene	100.0	94.11	94	80-120
Toluene	100.0	94.76	95	80-120
Ethylbenzene	100.0	93.81	94	79-120
m,p-Xylenes	100.0	96.12	96	80-120
o-Xylene	100.0	91.42	91	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	55-135
Bromofluorobenzene (PID)	82	58-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC257144	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92700
Units:	mg/Kg	Analyzed:	07/10/04

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	10.97	110	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	133	71-138
Bromofluorobenzene (FID)	102	73-143

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC257145	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92700
Units:	ug/Kg	Analyzed:	07/10/04

Analyte	Spiked	Result	%REC	Limits
Benzene	100.0	96.44	96	80-120
Toluene	100.0	98.37	98	80-120
Ethylbenzene	100.0	100.8	101	79-120
m,p-Xylenes	100.0	101.0	101	80-120
o-Xylene	100.0	98.41	98	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	55-135
Bromofluorobenzene (PID)	93	58-135

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC257286	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92736
Units:	mg/Kg	Analyzed:	07/12/04

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	10.77	108	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	71-138
Bromofluorobenzene (FID)	106	73-143

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC257285	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92736
Units:	ug/Kg	Analyzed:	07/12/04

Analyte	Spiked	Result	%REC	Limits
Benzene	100.0	94.23	94	80-120
Toluene	100.0	93.90	94	80-120
Ethylbenzene	100.0	95.65	96	79-120
m,p-Xylenes	100.0	97.34	97	80-120
o-Xylene	100.0	94.92	95	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	89	55-135
Bromofluorobenzene (PID)	93	58-135

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55		
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	173302-001	Batch#:	92674
Matrix:	Soil	Sampled:	07/07/04
Units:	mg/Kg	Received:	07/07/04
Basis:	as received	Analyzed:	07/10/04

Type: MS Lab ID: QC257119

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	18.87	10.10	29.45	105	47-120	EPA 8015B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	120	71-138	EPA 8015B
Bromofluorobenzene (FID)	174 *	73-143	EPA 8015B
Trifluorotoluene (PID)	114	55-135	EPA 8021B
Bromofluorobenzene (PID)	108	58-135	EPA 8021B

Type: MSD Lab ID: QC257120

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
Gasoline C7-C12	10.20	23.02	41 *	47-120	25 *	23	EPA 8015B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	116	71-138	EPA 8015B
Bromofluorobenzene (FID)	151 *	73-143	EPA 8015B
Trifluorotoluene (PID)	115	55-135	EPA 8021B
Bromofluorobenzene (PID)	107	58-135	EPA 8021B

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Field ID:	BH-06-GW	Diln Fac:	3.333
Type:	SAMPLE	Batch#:	92673
Lab ID:	173318-006	Analyzed:	07/10/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	33
MTBE	ND	1.7
Isopropyl Ether (DIPE)	ND	1.7
Ethyl tert-Butyl Ether (ETBE)	ND	1.7
Methyl tert-Amyl Ether (TAME)	ND	1.7
1,2-Dichloroethane	ND	1.7
1,2-Dibromoethane	ND	1.7
Ethanol	ND	3,300

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	106	80-124
Toluene-d8	112	80-120
Bromofluorobenzene	103	80-120

Field ID:	BH-07-GW	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92673
Lab ID:	173318-012	Analyzed:	07/10/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	105	80-124
Toluene-d8	109	80-120
Bromofluorobenzene	102	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Field ID:	BH-08-GW	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92727
Lab ID:	173318-018	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	107	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

Field ID:	BH-09-GW	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92763
Lab ID:	173318-024	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	102	80-124
Toluene-d8	108	80-120
Bromofluorobenzene	95	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Field ID:	BH-10-GW	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92727
Lab ID:	173318-030	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	102	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	105	80-120

Field ID:	BH-11-GW	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92727
Lab ID:	173318-036	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	8.2	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	94	80-124
Toluene-d8	90	80-120
Bromofluorobenzene	103	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Field ID:	UNITED GLASS WELL	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	92727
Lab ID:	173318-037	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	1.2	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	107	80-124
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-120

Type:	BLANK	Batch#:	92673
Lab ID:	QC257031	Analyzed:	07/09/04
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	103	80-124
Toluene-d8	106	80-120
Bromofluorobenzene	107	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Type: BLANK Lab ID: QC257032

Analyte	Result
tert-Butyl Alcohol (TBA)	NA
MTBE	NA
Isopropyl Ether (DIPE)	NA
Ethyl tert-Butyl Ether (ETBE)	NA
Methyl tert-Amyl Ether (TAME)	NA
1,2-Dichloroethane	NA
1,2-Dibromoethane	NA
Ethanol	NA

Surrogate	Result
Dibromofluoromethane	NA
1,2-Dichloroethane-d4	NA
Toluene-d8	NA
Bromofluorobenzene	NA

Type:	BLANK	Batch#:	92727
Lab ID:	QC257250	Analyzed:	07/12/04
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	108	80-124
Toluene-d8	105	80-120
Bromofluorobenzene	99	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	07/08/04
Units:	ug/L	Received:	07/08/04

Type:	BLANK	Batch#:	92763
Lab ID:	QC257401	Analyzed:	07/13/04
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
1,2-Dichloroethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	103	80-124
Toluene-d8	105	80-120
Bromofluorobenzene	106	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	92673
Units:	ug/L	Analyzed:	07/09/04
Diln Fac:	1.000		

Type: BS Lab ID: QC257029

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	257.6	103	80-140
MTBE	50.00	50.90	102	76-123
Isopropyl Ether (DIPE)	50.00	53.91	108	80-124
Ethyl tert-Butyl Ether (ETBE)	50.00	51.84	104	80-120
Methyl tert-Amyl Ether (TAME)	50.00	48.69	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	103	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

Type: BSD Lab ID: QC257030

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	248.4	99	80-140	4	20
MTBE	50.00	52.18	104	76-123	2	20
Isopropyl Ether (DIPE)	50.00	53.37	107	80-124	1	20
Ethyl tert-Butyl Ether (ETBE)	50.00	52.35	105	80-120	1	20
Methyl tert-Amyl Ether (TAME)	50.00	47.03	94	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	101	80-124
Toluene-d8	104	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	92727
Units:	ug/L	Analyzed:	07/12/04
Diln Fac:	1.000		

Type: BS Lab ID: QC257248

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	254.6	102	80-140
MTBE	50.00	49.02	98	76-123
Isopropyl Ether (DIPE)	50.00	49.98	100	80-124
Ethyl tert-Butyl Ether (ETBE)	50.00	51.10	102	80-120
Methyl tert-Amyl Ether (TAME)	50.00	44.36	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	99	80-124
Toluene-d8	95	80-120
Bromofluorobenzene	104	80-120

Type: BSD Lab ID: QC257249

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	262.5	105	80-140	3	20
MTBE	50.00	52.91	106	76-123	8	20
Isopropyl Ether (DIPE)	50.00	54.79	110	80-124	9	20
Ethyl tert-Butyl Ether (ETBE)	50.00	53.40	107	80-120	4	20
Methyl tert-Amyl Ether (TAME)	50.00	45.31	91	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	103	80-124
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	92763
Units:	ug/L	Analyzed:	07/13/04
Diln Fac:	1.000		

Type: BS Lab ID: QC257399

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	282.8	113	80-140
MTBE	50.00	53.79	108	76-123
Isopropyl Ether (DIPE)	50.00	54.07	108	80-124
Ethyl tert-Butyl Ether (ETBE)	50.00	53.58	107	80-120
Methyl tert-Amyl Ether (TAME)	50.00	48.36	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	104	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC257400

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	269.7	108	80-140	5	20
MTBE	50.00	52.60	105	76-123	2	20
Isopropyl Ether (DIPE)	50.00	52.83	106	80-124	2	20
Ethyl tert-Butyl Ether (ETBE)	50.00	52.94	106	80-120	1	20
Methyl tert-Amyl Ether (TAME)	50.00	47.49	95	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-06-4.5'	Diln Fac:	0.9615
Lab ID:	173318-001	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
1,2-Dichloroethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethanol	ND	960

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	99	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-06-9.5'	Diln Fac:	0.9804
Lab ID:	173318-002	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	103	80-120
Bromofluorobenzene	108	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-06-14.5'	Diln Fac:	0.9434
Lab ID:	173318-003	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	110	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-06-19.5'	Diln Fac:	0.9804
Lab ID:	173318-004	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	100	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-06-22.5'	Diln Fac:	0.8929
Lab ID:	173318-005	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	89
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	890

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	98	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-07-4.5'	Diln Fac:	1.000
Lab ID:	173318-007	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	100	80-120
Toluene-d8	105	80-120
Bromofluorobenzene	103	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-07-10.5'	Diln Fac:	0.9434
Lab ID:	173318-008	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	99	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-07-14.5'	Diln Fac:	0.9091
Lab ID:	173318-009	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	910

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	100	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-07-19.5'	Diln Fac:	0.9804
Lab ID:	173318-010	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-07-23.5'	Diln Fac:	0.9259
Lab ID:	173318-011	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
1,2-Dichloroethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethanol	ND	930

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	103	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-08-4.5'	Diln Fac:	0.9804
Lab ID:	173318-013	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-08-9.5'	Diln Fac:	0.9434
Lab ID:	173318-014	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-08-14.5'	Diln Fac:	0.8929
Lab ID:	173318-015	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	89
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	890

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	103	80-120
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-08-20'	Diln Fac:	0.9804
Lab ID:	173318-016	Batch#:	92731
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	99	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-08-23.5'	Diln Fac:	0.9259
Lab ID:	173318-017	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
1,2-Dichloroethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethanol	ND	930

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	110	80-120
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-09-4.5'	Diln Fac:	0.9091
Lab ID:	173318-019	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	910

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	106	80-120
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-09-11'	Diln Fac:	0.9804
Lab ID:	173318-020	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-120
Toluene-d8	106	80-120
Bromofluorobenzene	97	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-09-15.5'	Diln Fac:	0.9091
Lab ID:	173318-021	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	910

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-120
1,2-Dichloroethane-d4	88	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	88	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-09-19.5'	Diln Fac:	0.9434
Lab ID:	173318-022	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	86	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	89	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-09-23.5'	Diln Fac:	0.9804
Lab ID:	173318-023	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	86	80-120
1,2-Dichloroethane-d4	84	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	86	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-10-4.5'	Diln Fac:	0.9804
Lab ID:	173318-025	Batch#:	92739
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	87	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	89	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-10-9.5'	Diln Fac:	0.9434
Lab ID:	173318-026	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	103	80-120
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-10-14.5'	Diln Fac:	0.9615
Lab ID:	173318-027	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
1,2-Dichloroethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethanol	ND	960

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	109	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-10-19.5'	Diln Fac:	0.9091
Lab ID:	173318-028	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
1,2-Dichloroethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethanol	ND	910

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-120
1,2-Dichloroethane-d4	107	80-120
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-10-23.5'	Diln Fac:	0.9434
Lab ID:	173318-029	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	116	80-120
1,2-Dichloroethane-d4	108	80-120
Toluene-d8	103	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-11-4.5'	Diln Fac:	0.9804
Lab ID:	173318-031	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
1,2-Dichloroethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethanol	ND	980

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-120
1,2-Dichloroethane-d4	108	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	94	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-11-11'	Diln Fac:	0.9434
Lab ID:	173318-032	Batch#:	92856
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/15/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
1,2-Dichloroethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethanol	ND	940

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	97	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	96	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-11-15'	Diln Fac:	1.000
Lab ID:	173318-033	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	85	80-120
1,2-Dichloroethane-d4	82	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	90	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-11-19.5'	Diln Fac:	0.9615
Lab ID:	173318-034	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
1,2-Dichloroethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethanol	ND	960

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	83	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	85	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Field ID:	BH-11-23.5'	Diln Fac:	0.9259
Lab ID:	173318-035	Batch#:	92764
Matrix:	Soil	Sampled:	07/08/04
Units:	ug/Kg	Received:	07/08/04
Basis:	as received	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
1,2-Dichloroethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethanol	ND	930

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-120
1,2-Dichloroethane-d4	83	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	89	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC257269	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92731
Units:	ug/Kg	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	95	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC257300	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92739
Units:	ug/Kg	Analyzed:	07/12/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	105	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	104	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC257405	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92764
Units:	ug/Kg	Analyzed:	07/13/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	98	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC257747	Diln Fac:	1.000
Matrix:	Soil	Batch#:	92856
Units:	ug/Kg	Analyzed:	07/15/04

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethanol	ND	1,000

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-120
1,2-Dichloroethane-d4	105	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected
RL= Reporting Limit

57.0

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Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Batch#:	92731
Basis:	as received	Analyzed:	07/12/04

Type: BS Lab ID: QC257267

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	313.9	126	70-130
MTBE	50.00	47.35	95	74-120
Isopropyl Ether (DIPE)	50.00	62.32	125	70-130
Ethyl tert-Butyl Ether (ETBE)	50.00	54.61	109	70-130
Methyl tert-Amyl Ether (TAME)	50.00	48.07	96	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	98	80-120
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-123

Type: BSD Lab ID: QC257268

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	314.3	126	70-130	0	20
MTBE	50.00	47.99	96	74-120	1	20
Isopropyl Ether (DIPE)	50.00	63.64	127	70-130	2	20
Ethyl tert-Butyl Ether (ETBE)	50.00	55.40	111	70-130	1	20
Methyl tert-Amyl Ether (TAME)	50.00	48.69	97	70-130	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	99	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-123

RPD= Relative Percent Difference

S9.0

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Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Batch#:	92739
Basis:	as received	Analyzed:	07/12/04

Type: BS Lab ID: QC257298

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	210.8	84	70-130
MTBE	50.00	54.12	108	74-120
Isopropyl Ether (DIPE)	50.00	49.41	99	70-130
Ethyl tert-Butyl Ether (ETBE)	50.00	42.36	85	70-130
Methyl tert-Amyl Ether (TAME)	50.00	36.81	74	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	97	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	101	80-123

Type: BSD Lab ID: QC257299

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	218.7	87	70-130	4	20
MTBE	50.00	56.63	113	74-120	5	20
Isopropyl Ether (DIPE)	50.00	50.73	101	70-130	3	20
Ethyl tert-Butyl Ether (ETBE)	50.00	44.47	89	70-130	5	20
Methyl tert-Amyl Ether (TAME)	50.00	36.89	74	70-130	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	103	80-120
Toluene-d8	93	80-120
Bromofluorobenzene	106	80-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Batch#:	92764
Basis:	as received	Analyzed:	07/13/04

Type: BS Lab ID: QC257403

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	227.4	91	70-130
MTBE	50.00	52.91	106	74-120
Isopropyl Ether (DIPE)	50.00	49.27	99	70-130
Ethyl tert-Butyl Ether (ETBE)	50.00	41.35	83	70-130
Methyl tert-Amyl Ether (TAME)	50.00	35.17	70	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	96	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-123

Type: BSD Lab ID: QC257404

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	242.4	97	70-130	6	20
MTBE	50.00	54.64	109	74-120	3	20
Isopropyl Ether (DIPE)	50.00	45.51	91	70-130	8	20
Ethyl tert-Butyl Ether (ETBE)	50.00	40.40	81	70-130	2	20
Methyl tert-Amyl Ether (TAME)	50.00	35.72	71	70-130	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	98	80-120
Toluene-d8	92	80-120
Bromofluorobenzene	102	80-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline Oxygenates by GC/MS

Lab #:	173318	Location:	Benner Automotive
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2002-55	Analysis:	EPA 8260B
Matrix:	Soil	Diln Fac:	1.000
Units:	ug/Kg	Batch#:	92856
Basis:	as received	Analyzed:	07/15/04

Type: BS Lab ID: QC257745

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	233.1	93	70-130
MTBE	50.00	56.13	112	74-120
Isopropyl Ether (DIPE)	50.00	47.61	95	70-130
Ethyl tert-Butyl Ether (ETBE)	50.00	42.02	84	70-130
Methyl tert-Amyl Ether (TAME)	50.00	36.17	72	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	97	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-123

Type: BSD Lab ID: QC257746

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	234.6	94	70-130	1	20
MTBE	50.00	57.64	115	74-120	3	20
Isopropyl Ether (DIPE)	50.00	50.60	101	70-130	6	20
Ethyl tert-Butyl Ether (ETBE)	50.00	43.93	88	70-130	4	20
Methyl tert-Amyl Ether (TAME)	50.00	38.29	77	70-130	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-120
1,2-Dichloroethane-d4	102	80-120
Toluene-d8	95	80-120
Bromofluorobenzene	101	80-123

RPD= Relative Percent Difference

Stellar Environmental Solutions, Inc.
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Geoscience & Engineering Consulting

Soil Boring Log

BORING NUMBER BH-1 Page 1 of 2

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 25 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~11 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03

DEPTH (feet)	GRAPHIC LOG	SAMPLE INTERVAL/ RECOVERY	BLOW COUNTS	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0					Concrete sidewalk	Continuous core soil sampling
2				<1	Tank excavation backfill: gravelly, clayey silt, dry, friable, not cohesive	"Instrument" is a photoionization detector (PID); readings are in ppmv
4				<1		
6				<1		Sample recovery is 100% unless indicated otherwise
8				<1		
10		BH-1-10'		<1	Dark grey clay (CL), sl. stiff, v. cohesive, not friable, sl. moist	Water level = 10.2' deep after advancing to 12'
12				<1		
14		BH-1-14'		<1		
16				<1	15.5': Becomes silty	Collect BH-1-GW (840 am) after advancing to 12'
18				<1	18.5': Color change to brown	
20				<1	Brown clayey sand (SC), sl. friable, mod. cohesive, soft, wet	

2002-55-04

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Soil Boring Log

BORING NUMBER BH-1 Page 2 of 2

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 25 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~11 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03

DEPTH (feet)	GRAPHIC LOG	SAMPLE INTERVAL/ RECOVERY	BLOW COUNTS	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20						2" sample recovery from 20.5'-22.5'
22				<1		
					— ? — — ? — — ? — — ? —	
24				<1	Grey and brown clayey gravel (GC), fully friable, wet. Gravel is small and subangular	8" sample recovery from 23'-25'
					Bottom of borehole = 25'	
26						
28						
30						
32						
34						
36						
38						
40						

2002-55-05

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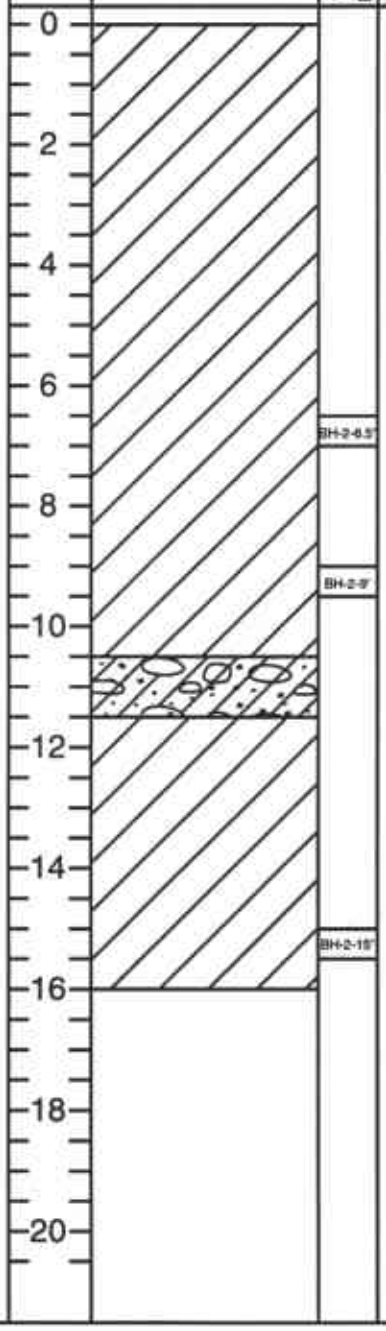
Soil Boring Log

BORING NUMBER BH-2 Page 1 of 1

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 16 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~11 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03



INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
	Concrete sidewalk	Continuous core soil sampling
<1	Black silty clay (CL), mod. stiff, cohesive, sl. friable, sl. moist	"Instrument" is a photoionization detector (PID); readings are in ppmv
<1		
<1	~6′: Gradational color change to grey, silt absent, becomes stiff	Sample recovery is 100% unless indicated otherwise
<1	8.5′: Becomes silty, sl. stiff	
8.5	9.5′: Becomes v. moist and sandy (fine-grained), soft, cohesive	
105		Water level = 10.2′ deep after driving to 11′
140	Grey gravelly clay (GC), soft, wet, cohesive, gravel is small, ~20% and subrounded	
100		Collect BH-2-GW (950 am)
70	Blue-grey clay (CL), mod. stiff, cohesive, not friable, sl. moist	
25		
<1		
<1	Bottom of borehole: 16′	

2002-55-06

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Soil Boring Log

BORING NUMBER BH-3 Page 1 of 1

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 16 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~11 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03

DEPTH (feet)	GRAPHIC LOG	SAMPLE INTERVAL/ RECOVERY	BLOW COUNTS	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0					Asphalt, base rock & underlying concrete	Continuous core soil sampling
2				<1	Black silty clay (CL), mod. stiff, cohesive, sl. friable, sl. moist	"Instrument" is a photoionization detector (PID); readings are in ppmv
4				<1	4.5′: Color change to dark brown	
		BH-3-5′				
6				<1		Sample recovery is 100% unless indicated otherwise
8				<1	8′: Color change to grey	
		BH-3-9′		4	9′–9.5′: Gravelly lens (gravel is small-medium)	
10				18	9.5′: Becomes soft and moist	Water level = 10.3′ deep after advancing to 11′
				80	10.5′: Sl. stiff, cohesive, not friable, sl. moist	
12				8	11′: Becomes stiff	Collect sample BH-3-GW (1200)
		BH-3-13′		<1		
14				<1	14.5′:Becomes sl.-mod. stiff	
				<1		
16					Bottom of borehole: 16′	
18						
20						

2002-55-07

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Soil Boring Log

BORING NUMBER BH-4 Page 1 of 1

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 16 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~11 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03

DEPTH (feet)	GRAPHIC LOG	SAMPLE INTERVAL/ RECOVERY	BLOW COUNTS	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0					Concrete	
					Black silty clay (CL), mod. stiff, cohesive, sl. friable, sl. moist	Continuous core soil sampling
2				<1		
						"Instrument" is a photoionization detector (PID); readings are in ppmv
4				<1	4.5′: Color change to dark brown, stiff, cohesive, not friable, sl. moist	
		BH-4-5′				
6				<1		Sample recovery is 100% unless indicated otherwise
8				<1		
					8.5′: Blue grey silty, gravelly clay, Gravel is ~10% and small, stiff, cohesive, sl. friable, sl. moist	
		BH-4-9′		4		
10				7	9′: Gravel absent	
				80	9.5′: Becomes moist to wet, soft to sl. stiff, cohesive	Water level = 10′ deep after advancing to 15′
12				110	10.5′:Mod. stiff, v. cohesive, not friable, sl. moist	
		BH-4-13′		7		Collect sample BH-4-GW (1100)
14				3		
				<1		
16					Bottom of borehole: 16′	
18						
20						

2002-55-08

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Soil Boring Log

BORING NUMBER BH-5 Page 1 of 1

PROJECT Benner Automotive
OWNER Benner Automotive
LOCATION 488 25th St., Oakland
PROJECT NUMBER 2002-55
TOTAL DEPTH 19 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. Unknown
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY EnProb
DRILLING METHOD GeoProbe
DRILLER Jeff Edmond
GEOLOGIST Bruce Rucker
DATE DRILLED 7/7/03

DEPTH (feet)	GRAPHIC LOG	SAMPLE INTERVAL/ RECOVERY	BLOW COUNTS	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0					Concrete	
					Black silty clay (CL), mod. stiff, cohesive, sl. friable, sl. moist	Continuous core soil sampling
2				<1		
						"Instrument" is a photoionization detector (PID); readings are in ppmv
4				<1	4.5′: Color change to dark brown, stiff, cohesive, not friable, sl. moist	
6				<1		Sample recovery is 100% unless indicated otherwise
		BH-5-6.5′				
8				<1		
				10	9′: Color change to grey, sl. stiff, cohesive, not friable, sl. moist	Borehole dry after advancing to 11′
10				3		
				1,230	12′: Becomes soft to sl. stiff, minor free water in sample	Water level = 10.6′ deep after advancing to 15′
12		BH-5-11.5′		780		
		BH-5-13′		9		Collect sample BH-5-GW (1240)
14				26		
				25	15′: Becomes mod. stiff	
16				<1		
				<1	18′: Color change to red brown	
18				<1	18.5′: Becomes sandy clay, sand is fine-grained, sl. moist, sl. cohesive, friable	
20					Bottom of borehole: 19′	

2002-55-09

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Soil Boring Log

BORING NUMBER BH-06 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.06 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			asphalt then concrete (roadbed)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), mod stiff, cohesive, sl. friable, sl. moist, organics	Continuous core soil sampling. 100% sample recovery unless specified otherwise
2				
3				1' hand-augered to 2.5' to clear utilities
4		94		
	BH-06-4.5'			
5		17		
6		7	5.5' color change to dark brown, v. stiff, dry	
7		14		
8		15	7.5' color change to blue-grey, mod. stiff, sl. moist	7.5' petroleum odor begins
9		9		
	BH-06-9.5'			
10		14	9.5' becomes sandy (fine-grained), silty clay (CL), cohesive, sl. friable, v. moist	

2002-55-28

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Soil Boring Log

BORING NUMBER BH-06 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.06 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10				
11		310		
12		487	11.5' brown with grey mottling, cohesive, not friable 12' Mod. stiff, sl. moist	12' Water enters borehole after the 8' to 12' sampling run, but borehole swells shut at 11'. 5' long, 1" diameter PVC slotted casing installed to 12'. Water level is 9.7' within several minutes. Grab-groundwater sample "BH-06-GW" collected at 845 a.m. Remove casing, continue direct-push drilling and sampling. 12.5' petroleum odor absent
13		84		
14	BH-06-14.5'	41		
15		27		
16		12	15.5' Olive grey clay (CL), soft, sticky, moist, no discernible silt	
17		42		
18		38	17.5' Color change to red brown, sl. moist 18' Mod. stiff	
19	BH-06-19.5'	10	Red-brown clayey sand (SC), sl. cohesive, friable, sl. moist, sand is fine-grained	
20		6	19.5' Becomes gravelly, clayey sand (SC), moist to wet, gravel is small, ~20%, angular to sub-angular	

2003-55-29

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Soil Boring Log

BORING NUMBER BH-06 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.06 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20–24	BH-06-22.5'	4 38	50% sample recovery from 20' to 24' Saturated. Deepest competent sample (within sampling sleeve) was at 23'. Generlly same lithology as at 19.5'	
24			TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 20' (borehole swelled shut at 20'), cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 9.14' (relative to top of piezometer casing)
25–30				

2002-55-30

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Soil Boring Log

BORING NUMBER BH-07 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.30 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			asphalt then concrete (roadbed)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), mod stiff, cohesive, sl. friable, sl. moist, organics	Continuous core soil sampling. 100% sample recovery unless specified otherwise
2				
3		4		1' hand-augered to 2.5' to clear utilities
4	BH-07-4.5'	5		~2" water in borehole after the 8' to 12' sampling run, but insufficient to sample. Water enters borehole after 12' to 16' sampling run. 10' long, 1" diameter PVC slotted casing installed to 16'. Water level is 9.5' within several minutes. Grab-groundwater sample "BH-07-GW" collected at 1015 a.m. Remove casing, continue direct-push drilling and sampling.
5		6		
6		6		
7		5	7' color change to grey	
8		5		
9		6	8.5' to 9.5' becomes gravelly clay (CL), mod. cohesive, dry	
10		8	9.5' blue-grey silty clay, silt is trace, sl. stiff, cohesive, sl. moist	

2002-55-31

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Soil Boring Log

BORING NUMBER BH-07 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.30 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10	BH-07-10.5'			
11		120	11' color change to brown, with red-brown mottling, mod. stiff, cohesive	
12		23	12' v. stiff, v. moist	
			12.5' mod-sl. stiff, sl. moist	
13		17	13' mod. stiff, silt is trace	
14	BH-07-14.5'	21	14' becomes red-brown	
15		5		
			15.5' sl-mod. stiff	
16		3		
17		4	17' sl. stiff-soft, cohesive, sl. moist, silt is trace	
			17.5' to 18' wet	
18		2		
19		2	18.5' becomes sandy clay (CL), cohesive, sl. moist, sand is v. fine-grained	
	BH-07-19.5'			
20		2	19.5' becomes gravelly, sandy clay (CL), sl. cohesive, friable, sl. moist, gravel is small-med., ~30%, angular-subangular	

2002-55-32

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Soil Boring Log

BORING NUMBER BH-07 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.30 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20				
21		2	Red-brown clayey, sandy gravel (GC), cohesive, sl. friable, wet, gravel is small, subrounded	
22		2		
23	BH-07-23.5'	3	Red-brown sandy clay (CL), sl. cohesive, sl. stiff, friable, wet	
24		1	TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 23' (borehole swelled shut at 23'), cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 9.45' (relative to top of piezometer casing)
25				
26				
27				
28				
29				
30				

2002-55-33

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Soil Boring Log

BORING NUMBER BH-08 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.54 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			asphalt then concrete (roadbed)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), v. stiff, cohesive, dry	
2		<3		Continuous core soil sampling. 100% sample recovery unless specified otherwise
3		<3		
4		<3		1' hand-augered to 2.5' to clear utilities
	BH-08-4.5'			
5		<3		No water in borehole after the 8' to 12' sampling run. Water enters borehole after 12' to 16' sampling run. 10' long, 1" diameter PVC slotted casing installed to 16'. Water level is 10' within several minutes. Grab-groundwater sample "BH-08-GW" collected at 1130 a.m. Remove casing, continue direct-push drilling and sampling.
6		<3		
7		<3	7' to 8' gradational color change to grey	
8		<3		
9		<3		
	BH-08-9.5'			
10		6	9.5' becomes gravelly, sandy clay (CL), dry, v. stiff, gravel is small, ~20%	

2002-55-34

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Soil Boring Log

BORING NUMBER BH-08 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.54 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10				
11		8	10.5' silty, sandy clay (CL), sl. stiff, cohesive, sl. moist, sand is very fine-grained	
12		8		
13		6	13' dark grey silty (trace) clay (CL), sl. - mod. stiff, v. cohesive, sl. moist	
14		<3		
	BH-08-14.5'		14.5' becomes red-brown	
15		<3		
16		<3		
17		18	16.5' becomes olive-grey, soft, v. cohesive, wet,	
			17.5' becomes red-brown	
18		<3		
19		<3	18.5' sl.-mod. stiff, sl. moist	
20	BH-08-20'	<3	19.5' gravelly sandy clay (CL), sl. moist, gravel is small, ~30%, angular-subrounded, sand is fine-med. grained	

2002-55-35

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Geoscience & Engineering Consulting

Soil Boring Log

BORING NUMBER BH-08 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.54 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20				
21		<3	Red-brown sand (SP), saturated, sand is fine-grained and well-sorted	
22		<3	Red-brown sandy, clayey gravel (GC), wet, gravel is v. small	
23	BH-08-23.5'	<3	Black silty clay (CL), v. stiff, sl. moist 23' becomes sl. stiff	
24		<3	TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 24', cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 9.62' (relative to top of piezometer casing)
25				
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2002-55-36

Stellar Environmental Solutions, Inc.
2198 Sixth Street, Berkeley, CA 94710
Geoscience & Engineering Consulting

Soil Boring Log

BORING NUMBER BH-09 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.68 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			asphalt then concrete (roadbed)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), v. stiff, cohesive, dry	
2		<3		Continuous core soil sampling. 100% sample recovery unless specified otherwise
3		<3		
4		<3		1' hand-augered to 2.5' to clear utilities
5	BH-09-4.5'	<3		No water in borehole after the 8' to 12' sampling run. Water enters borehole after 12' to 16' sampling run. 10' long, 1" diameter PVC slotted casing installed to 16'. Water level is 6.5' within several minutes. Grab-groundwater sample "BH-09-GW" collected at 1330 a.m. Remove casing, continue direct-push drilling and sampling.
6		<3		
7		<3	6.5' color change to dark grey	
8		<3	7.5' becomes dark brown with grey mottling	
9		<3	9' becomes olive-grey	
10		6	9.5' becomes sl. stiff, moist	

2002-55-37

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Soil Boring Log

BORING NUMBER BH-09 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.68 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10			10' sl. moist	
11	BH-09-11'	146	11' v. stiff, dry	
12		6		
13		<3	12.5' dark grey with red-brown mottling, mod. stiff, cohesive, sl. moist	
14		<3		
15	BH-09-15.5'	<3		
16		<3		
17		13	16.5' wet	
18		<3	17.5' v. stiff, sl. moist 18' becomes red-brown, no silt	
19		<3	18.5' sl. stiff – soft, wet	
20	BH-09-19.5'	<3	19.5' red-brown, sandy clayey gravel (GC), sl. cohesive, friable, v. moist, sand is fine-grained, gravel is small	

2002-55-3B

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Geoscience & Engineering Consulting

Soil Boring Log

BORING NUMBER BH-09 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 24.68 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20				
21		<3		
22		<3	Red-brown sandy clay (CL), soft, cohesive, wet	
23	BH-09-23.5'	<3	Black silty clay (CL), cohesive, mod. - stiff, sl. moist-dry	
24		<3	TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 24', cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 9.37' (relative to top of piezometer casing)
25				
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2002-55-39

Stellar Environmental Solutions, Inc.
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Soil Boring Log

BORING NUMBER BH-10 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.65 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			Concrete (floor)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), v. stiff, cohesive, dry	Continuous core soil sampling. 100% sample recovery unless specified otherwise
2				
3		<3		1' hand-augered to 2.5' to clear utilities
4		<3		~1" water in borehole after the 8' to 12' sampling run, insufficient to sample. Water enters borehole after 12' to 16' sampling run. 10' long, 1" diameter PVC slotted casing installed to 16'. Water level is 11' within several minutes. Grab-groundwater sample "BH-10-GW" collected at 1445 a.m. Remove casing, continue direct-push drilling and sampling.
	BH-10-4.5'		4.5' color change to olive-grey	
5		<3		
6		<3		
			6.5' becomes dark brown	
7		<3		
8		<3		
			8.5' to 9' minor small gravel	
9		<3		
	BH-10-9.5'			
10		<3		

2002-55-40

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Soil Boring Log

BORING NUMBER BH-10 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.65 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10				
			10.5' sl.-mod. stiff, sl. moist, organics,	
11		<3		
			11.5' color change to blue-grey, silt is trace	
12		8		
13		<3		
14		<3		
	BH-10-14.5'		14.5' sl. stiff	
15		<3	15' mod. stiff	
16		<3	16' v. soft	
			16.5' wet	
17		<3		
			17.5' mod. stiff, sl. moist	
18		<3	18' v. stiff, sl. moist	
19		<3		
	BH-10-19.5'			
20		<3		

2002-55-41

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Soil Boring Log

BORING NUMBER BH-10 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.65 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20			Red-brown, sandy clayey gravel (GC), sl. cohesive, friable, v. moist, sand is fine-grained, gravel is small	
21		<3	Clayey sand (SC), wet	
22			Clayey gravel (GC), wet	
		<3	Clayey sand (SC), wet	
23		<3		
	BH-10-23.5'		Dark grey sandy clay (CL), sl. cohesive, friable, moist, sand is fine-grained	
24		<3		
			TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 24', cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 10.71' (relative to top of piezometer casing)
25				
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2002-55-42

Stellar Environmental Solutions, Inc.
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Soil Boring Log

BORING NUMBER BH-11 Page 1 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.57 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
0			Concrete (floor)	"Instrument" is a photoionization detector calibrated for gasoline. "Readings" are in parts per million per volume air (ppmv)
1			1' Black silty clay (CL), v. stiff, cohesive, dry	Continuous core soil sampling. 100% sample recovery unless specified otherwise
2				1' hand-augered to 2.5' to clear utilities
3				No water in borehole after the 8' to 12' sampling run. Water enters borehole after 12' to 16' sampling run. 10' long, 1" diameter PVC slotted casing installed to 16'. Water level is 10.8' within several minutes. Grab-groundwater sample "BH-11-GW" collected at 1540 a.m. Remove casing, continue direct-push drilling and sampling.
4	BH-11-4.5'	<3		
5		<3		
6		<3		
7		<3		
8		<3		
9		11	8.5' color change to olive-grey	
10		15		

2002-55-43

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Soil Boring Log

BORING NUMBER BH-11 Page 2 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.57 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
10				
11	BH-11-11'	152	10.5' mod. stiff, sl. moist 11' petroleum odor begins	
12		54		
13		71	12.5' sl. stiff, v. cohesive 13' petroleum odor ends	
14		3	13.5' mod. stiff	
15	BH-11-15'	4	14.5' gradational color change to red-brown with blue-grey mottling 15' soft and wet	
16		4		
17		3	17' sl. - mod. stiff, v. moist	
18		3		
19		4	19' mod. stiff, sl. moist	
	BH-11-19.5'			
20		8		

2002-55-44

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Soil Boring Log

BORING NUMBER BH-11 Page 3 of 3

PROJECT Benner Auto Repair
OWNER Joseph & Loretta Benner Trust
LOCATION 488-25th Street
PROJECT NUMBER 2003-55
TOTAL DEPTH 24 feet
BOREHOLE DIA. 2-inch
SURFACE ELEV. 25.57 feet amsl
WATER FIRST ENCOUNTERED ~12 feet
DRILLING COMPANY Gregg Drilling
DRILLING METHOD GeoProbe (direct push)
DRILLER Don
GEOLOGIST B. Rucker
DATE DRILLED 7/8/04

DEPTH (feet)	GRAPHIC LOG	INSTRUMENT READING	DESCRIPTION/SOIL CLASSIFICATION	REMARKS
20–24	BH-11-23.5'	<3 <3 <3 <3	Dark brown, silty clay (CL), saturated, sl. stiff	
24			TD = 24'	24' Following all sampling, install 10' long, 1" diameter PVC casing to 24', cap the piezometer and enshroud near-surface annulus with plastic and clay clumps Water level on 7/9/04 = 10.53' (relative to top of piezometer casing)
25–30				

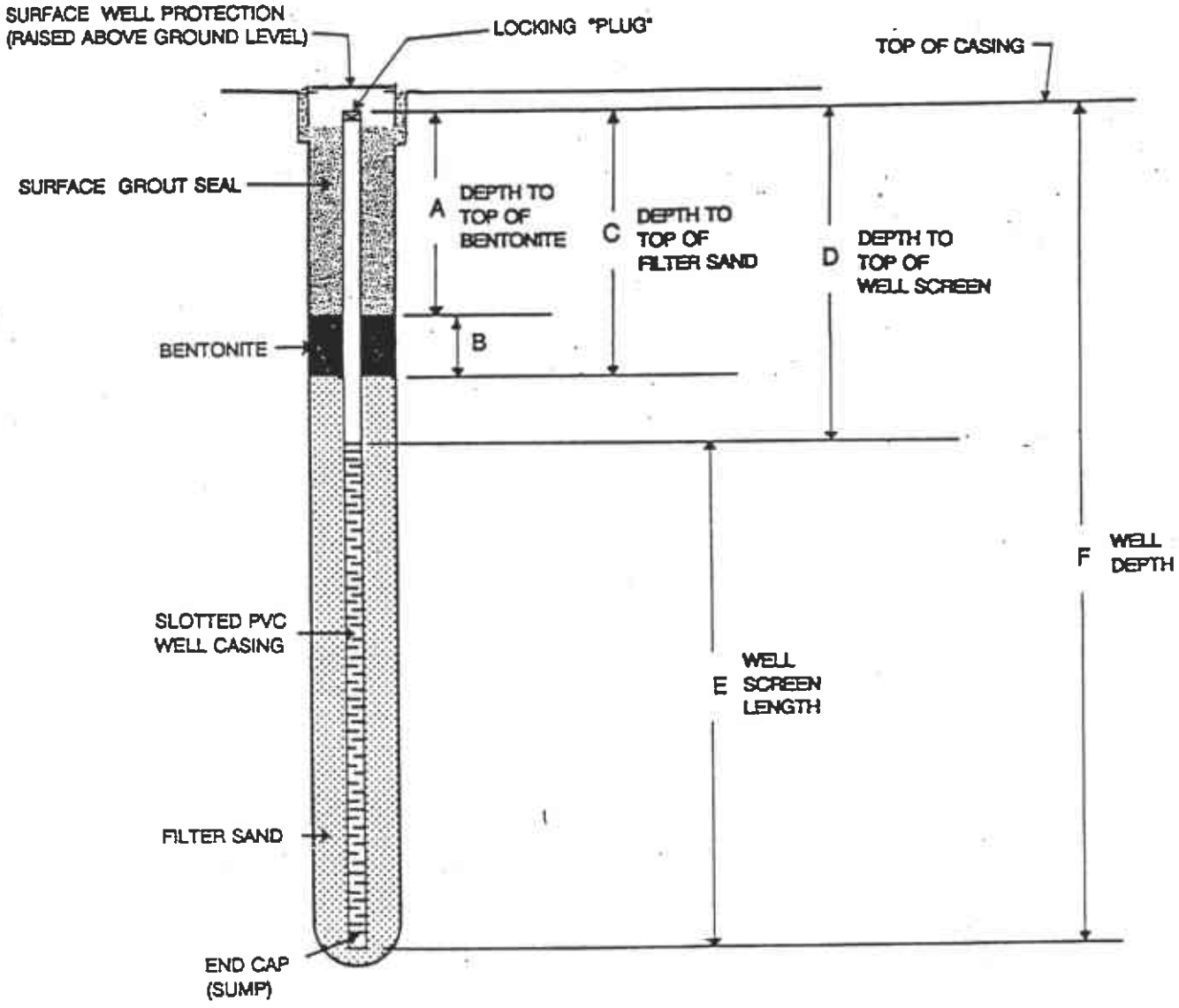
2002-55-45

WELL BORING LOG MW-1

Century West Engineering

Site Location: 477 25TH STREET, OAKLAND	Boring ID: MW-1
Boring Location: (inside building, downgradient from UST)	Elevation:
Purpose: Subsurface Investigation	Logged By: Bob Bogar
Date: 01/25/94	Blank Casing: From: 0.0 To: 5.25
Consulting Firm: Century West Engineering	Perforations: From: 5.25 To: 20.0
Project Number: 20511-010-01	Filter Sand: From: 20.0 To: 4.5
Drilling Contractor: Kvilhaug Well Drillers	Bentonite: From: 4.5 To:3.5
Drilling Method: Hollow Stem Auger	Grout: From: 3.5 To: 1.0

Depth	Lab Results TPH-gas	Sample ID	Blow Counts	Profile	Soil Description		Remarks
01 02 03 04 05					0 - 1.0 ft	Concrete and soil (non-native).	A 4in lens of soil separates two slabs of concrete in the area of the monitoring well.
					1.0 - 6.0 ft	Dark brown, sligtly moist,clayey SILT. No hydrocarbon odor or discoloration.	
06 07 08 09 10	ND	SB-1 SB-2	9 15 22 9 7 5	▽	6.0 - 9.0 ft	Dark grey to green, SILT; with clasts (angular pebbles) 1-4mm. Some rust color, no hydrocarbon odor.	
11 12 13 14 15					9.0 - 13.0 ft	Wet, dark green, coarse SAND. Strong gasoline odor.	
16 17 18 19 20					13.0 - 20.0 ft	Wet, light to dark green, clayey SILT. Slight to moderate gasoline odor.	
					Ground Water Depth - 9.0 feet Final Auger Well Depth - 20.0 feet		



WELL SPECIFICATIONS		MW-1	
WELL CASING:	Two-inch Sch. 40 PVC	A	3.0 feet
WELL SLOT SIZE:	0.020 inch	B	1.0 feet
BENTONITE:	Hydrated pellets	C	4.0 feet
SURFACE SEAL:	Cement slurry (bent. < 5%)	D	5.25 feet
WELL PLUG:	Locking expandable cap	E	14.81 feet
SURFACE PROTECTION:	Traffic rated, water tight	F	20.06 feet

DESIGN BY		CHECKED BY		WELL CONSTRUCTION DIAGRAM	APPROVED
SURVEY BY		SCALE	NO SCALE		DATE
DRAWN BY	JEG	DWG. NO.			

CENTURY WEST ENGINEERING CORPORATION

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

July 12, 2004
Project No.: 2324-02

Bruce Rucker
Stellar Environmental Solutions, Inc.
2198 Sixth Street
Berkeley, CA 94710

Subject: Benner Auto Repair
488 25th St.
Oakland, CA

Dear Bruce:

This is to confirm that we have proceeded at your request to survey the boring holes monitoring wells located at the above referenced location. The survey was completed on July 9, 2004. The benchmark for this survey was a City of Oakland benchmark being a well monument at approximate centerline of Telegraph & 26th Street.
Benchmark Elevation = 27.54 feet (NGVD 29).

Desc.	Elev.
TOC BH-6	23.76
GRD BH-6	24.06
TOC BH-7	24.10
GRD BH-7	24.30
TOC BH-8	24.37
GRD BH-8	24.54
TOC BH-9	24.11
GRD BH-9	24.68
TOC BH-10	25.55
GRD BH-10	25.65
TOC BH-11	25.33
GRD BH-11	25.56
TOC United Glass	23.97
RIM United Glass	24.53

Sincerely,

Virgil D. Chavez, PLS 6323