SECOND QUARTER 2007 GROUNDWATER MONITORING REPORT

2836 UNION STREET
OAKLAND, CALIFORNIA

Prepared for:

THE ESTATE OF LAWRENCE WADLER
2525 MANDELA PARKWAY
OAKLAND, CA 94607

May 2007

STELLAR
ENVIRONMENTAL SOLUTIONS, INC.
GEOSCIENCE & ENGINEERING CONSULTING

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Prepared by:

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

May 1, 2007

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

May 1, 2007

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

Subject: Second Quarter 2007 Groundwater Monitoring Report
Former Modern Mail Service, 2836 Union Street, Oakland, California
Alameda County Environmental Health Department Fuel Leak Case No. RO2901

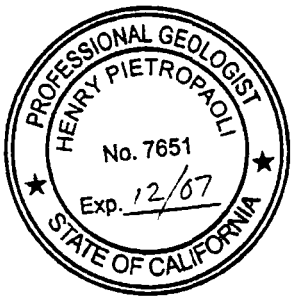
Dear Mr. Chan:

On behalf of the property owner and "Responsible Party" (Estate of Lawrence Wadler), Stellar Environmental Solutions, Inc. (SES) is submitting this Second Quarter 2007 Groundwater Monitoring Report for the former Modern Mail Service Facility at 2836 Union Street, Oakland, California. This report documents the Q2-2007 groundwater monitoring and sampling event of April 2007 related to petroleum contamination from a former underground fuel storage tank. This is the 3rd consecutive quarterly groundwater monitoring event conducted at this site. This report follows corrective action activities and a groundwater monitoring events conducted in October 2006 and January 2007; the reports of these activities were uploaded to Alameda County Environmental Health and to the State Water Resources Control Board's GeoTracker system.

In our professional opinion, the recent installation of ten monitoring wells to conduct quarterly groundwater monitoring is the appropriate action to further evaluate the magnitude and stability of the contaminant plume over time, and to determine whether additional corrective action might be warranted and if site closure criteria can be met. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report are true and correct to the best of my knowledge. If you have any questions regarding this report, please contact us at (510) 644-3123.

Sincerely,

Henry Pietropaoli, R.G., R.E.A.
Project Manager



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

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1.0 INTRODUCTION

PROJECT BACKGROUND

Stellar Environmental Solutions, Inc. (SES) was contracted by Mr. Lawrence Wadler (property owner currently referred to as the Estate of Lawrence Wadler) to conduct corrective actions related to soil and groundwater contamination associated with a 10,000-gallon underground fuel storage tank (UFST) at 2836 Union Street in Oakland, California. A list of all known environmental reports is included in Section 6.0. This report discusses scheduled site monitoring between April 2007 through June 2007 (specifically, the groundwater monitoring and sampling event conducted on April 6, 2007). Figure 1 shows the site location. Figure 2 shows the site plan with the locations of groundwater wells, borings, and the former UFST.

SITE DESCRIPTION AND HISTORY

The approximately 7,200-square foot rectangular subject property is developed with one approximately 1,500-square foot two-story building. A narrow driveway borders the building to the north, and the rear of the property is undeveloped (paved). Adjacent uses include:

- A residence (to the north);
- A paved parking area (to the east);
- A residence (to the south); and
- A sidewalk, then Union Street, then an auto body repair facility (to the west).

The property operated as an express courier facility (Modern Mail Services, Inc.) between 1951 and 2003. One 10,000-gallon gasoline UFST was installed in the late 1970s. The UFST operated under Alameda County Environmental Health permit (permit No. STID 4065) until it was removed in 1998. The tank closure report was submitted to the Oakland Fire Department (Golden Gate Tank Removal, 1998).

An initial site characterization conducted by SES in November 2005, which included the advancement of four borings, revealed gasoline and associated aromatic hydrocarbons at elevated levels in both soil and groundwater. That investigation was summarized in a technical report (SES, 2005b).

1000 ft Scale: 1 : 43,750 Detail: 12-2 Datum: WGS84

N

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

2836 Union Street
Oakland, CA

By: MJC | NOVEMBER 2005

Figure 1

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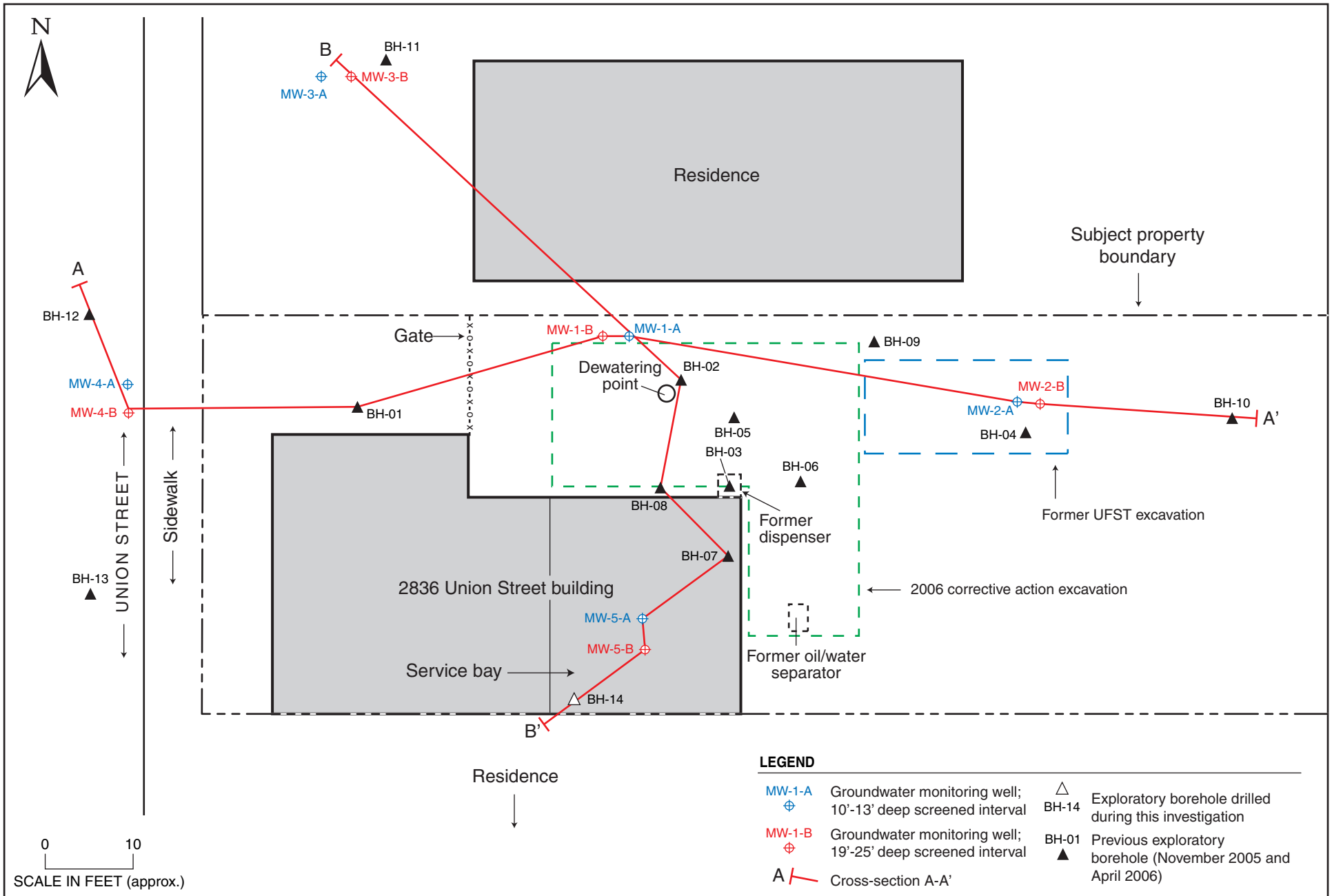
2005-65-01



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SITE PLAN SHOWING LOCATIONS OF SOIL BORINGS

2836 Union Street, Oakland, CA

Figure 2

by: MJC | NOVEMBER 2006

2005-65-47

Additional site investigation in April 2006 involved the advancing of nine exploratory boreholes to determine the areal and vertical extent of soil and groundwater contamination. Site data indicated the presence of petroleum hydrocarbons in soil and groundwater warranting groundwater monitoring and the removal of the remaining (accessible) contaminated soils by excavation, as an interim corrective action. That investigation is summarized in a technical report (SES, 2006b).

A corrective action implementing the April 2006 recommendations conducted between September and December 2006 involved: the installation of ten monitoring wells; the advancement of one soil boring; the removal of 398 tons of contaminated soil; the pumping of 5,100 gallons of contaminated groundwater from the backfilled excavation; and the first groundwater monitoring event. Approximately 30 to 40 cubic yards of petroleum hydrocarbon-contaminated soil, at estimated concentrations of 1,000+ milligrams per kilogram (mg/kg), was inaccessible for removal and still resides beneath the building on site (SES, 2006c).

In December 2006, an additional 4,000 gallons of petroleum-contaminated water was pumped from a temporary dewatering point in the backfilled excavation and disposed of at a certified recycler. This action is discussed along with the results of the second groundwater monitoring event (SES, 2007).

REGULATORY STATUS

The Alameda County Environmental Health Care Services Agency, Department of Environmental Health (Alameda County Environmental Health) is the lead regulatory agency for the case, acting as a Local Oversight Program (LOP) for the Regional Water Quality Control Board – San Francisco Bay Region (Water Board). There are no Alameda County Environmental Health or Water Board cleanup orders for the site; however, all site work has been conducted under oversight of Alameda County Environmental Health. Alameda County Environmental Health has assigned the site to its fuel leak case system (RO#2901), and a case officer has been assigned. The case has been assigned No. T0600105641 in the Water Board's GeoTracker system. Electronic uploads of required data/reports are submitted to both agencies.

The site has been granted a Letter of Commitment (and has been receiving financial reimbursement) from the California Underground Storage Tank Cleanup Fund.

SCOPE OF WORK

This report discusses the work conducted between April 1, 2007 and June 30, 2007 (specifically the second groundwater monitoring and sampling event conducted on April 6, 2007).

2.0 PHYSICAL SETTING

TOPOGRAPHY AND DRAINAGE

The mean elevation of the property is approximately 18 feet above mean sea level (amsl), and the general topographic gradient in the site vicinity is slight and to the west-southwest (toward San Francisco Bay). The site itself has no discernible slope. The nearest downgradient (to the west) permanent surface water body is the Airport Channel of San Leandro Bay (which is connected to San Francisco Bay), approximately 2 miles west of the subject property. According to the commercially available database, the site is not located within a flood zone or wetland.

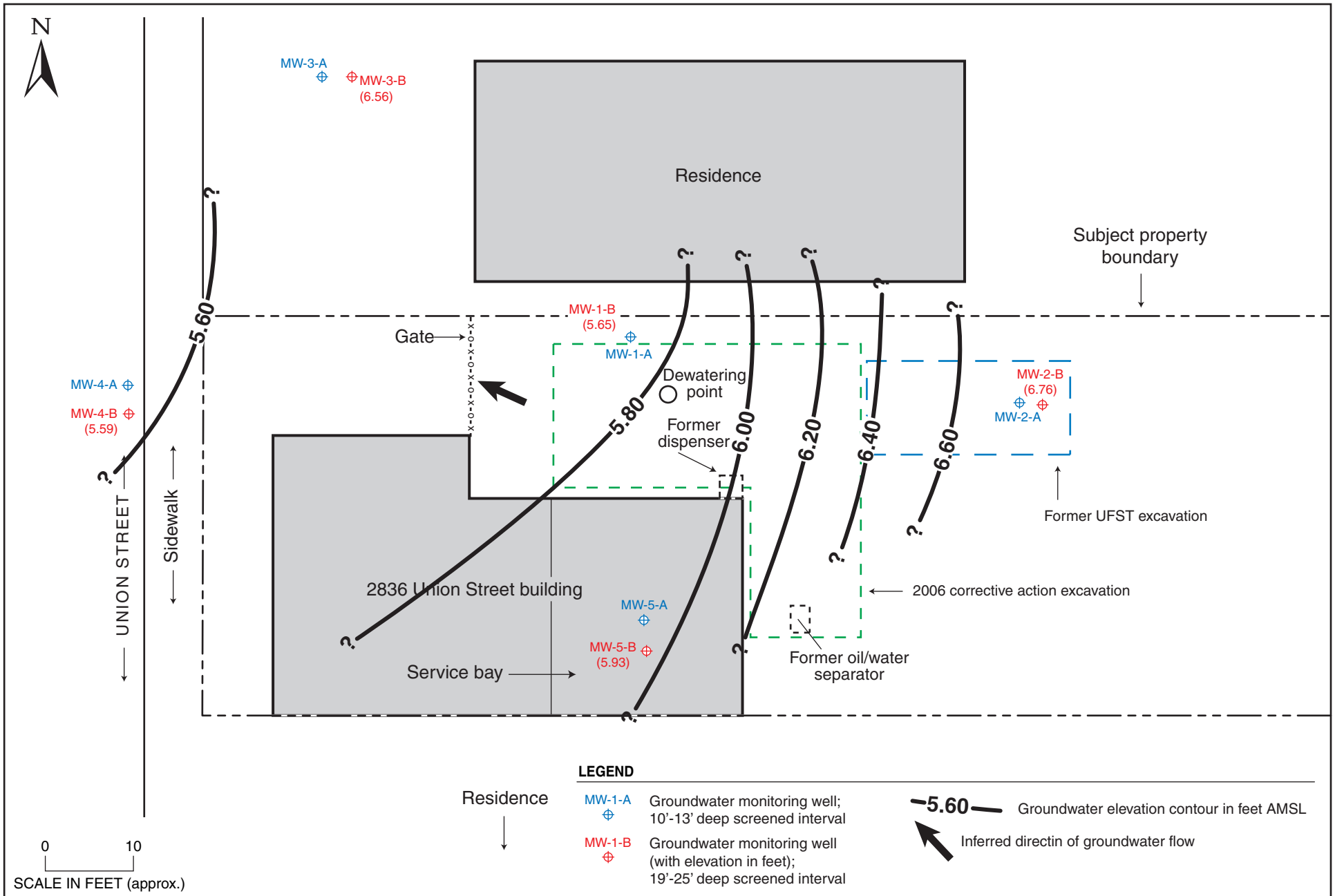
LITHOLOGY AND HYDROGEOLOGY

The predominant soil type in all site boreholes was silty clay, generally firm and plastic. Several of the boreholes had no obvious sand or gravel units, although minor amounts of sand and gravel were occasionally present in the overall clay matrix with the occurrence of groundwater coincident in units with higher sandy-gravel than clay content. Local heterogeneities in shallow lithology and groundwater levels are typical of the alluvial deposits in this area.

Local groundwater flow direction is generally to the west (toward San Francisco Bay and following local topography) in this area of west Oakland. Groundwater in the immediate vicinity of the former UFST occurs at a depth of less than 10 feet, and appears under at least semi-confining conditions, rising from approximately 20 feet below ground surface to as high as 6 feet below grade, such that groundwater is in contact with residual contaminated soil. The groundwater contaminant plume has not been fully delineated, but appears to have an elliptical configuration with the long axis trending east to west-northwest.

GROUNDWATER FLOW DIRECTION

Figure 3 is a groundwater elevation map, based on the April 6, 2007 groundwater elevation measurements. The flow direction is indicated to be to toward the west-northwest (toward San Francisco Bay), generally parallel to the long dimension of the groundwater contaminant plume.



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GROUNDWATER ELEVATION MAP (B-WELLS)

2836 Union Street, Oakland, CA

Figure 3

by: MJC | APRIL 2007

2005-65-54

3.0 SECOND QUARTER 2007 GROUNDWATER MONITORING AND SAMPLING

This section presents the groundwater sampling and analytical methods for the most recent event (Second Quarter 2007), conducted on April 6, 2007.

GROUNDWATER MONITORING

Groundwater monitoring well water level measurements, sampling, and field analyses were conducted by Blaine Tech Services (San Jose, California) on April 6, 2007, under the direct supervision of SES personnel. To minimize the potential for cross-contamination, wells were purged and sampled in order of anticipated increasing contamination (based on analytical results from the previous quarter).

As the first monitoring task, static water levels were measured in the ten site wells using an electric water level indicator. The wells were then sampled with a peristaltic pump, during which the groundwater quality parameters of temperature, pH, conductivity, and turbidity were field-measured using daily-calibrated instruments. Approximately 6.9 gallons of sampling purge water was generated and containerized onsite. The purge water will be disposed of at later date after subsequent monitoring events and additional purge water has accumulated. The samples were placed in an ice chest with ice at approximately 4°C and transported to the analytical laboratory under chain-of-custody the same day. Laboratory analysis was conducted by Curtis and Tompkins, Ltd. (Berkeley, California), an analytical laboratory certified by the State of California Environmental Laboratory Accreditation Program (ELAP).

The locations of all site monitoring wells are shown on Figure 2. Well construction information and groundwater elevation data are summarized in Table 1. Appendix A contains the groundwater monitoring field records for the current event. Appendix B outlines SES's standard sampling protocol for groundwater. Groundwater analytical results are presented and discussed in Section 4.0. The certified analytical results are contained in Appendix C

Table 1
Monitoring Well Groundwater Elevation Data – April 6, 2007
2836 Union Street, Oakland, California

Well	Well Depth Below TOC	Rim Elevation	TOC Elevation	Groundwater Elevation (1/9/06)
MW-1A	12.59	12.52	12.25	4.76
MW-1B	22.52	12.48	12.05	5.63
MW-2A	12.69	13.06	12.82	6.30
MW-2B	24.59	13.16	12.96	6.76
MW-3A	13.06	11.76	11.59	5.84
MW-3B	25.06	12.10	11.95	5.56
MW-4A	12.28	11.25	11.02	5.68
MW-4B	24.32	11.25	11.04	5.59
MW-5A	12.58	12.56	12.42	6.68
MW-5B	25.39	12.57	12.38	5.93

Notes:

TOC = top of casing

Wells are 1-inch diameter.

All elevations are in feet above mean sea level.

4.0 REGULATORY CONSIDERATIONS, ANALYTICAL RESULTS, AND DISCUSSION OF FINDINGS

REGULATORY CONSIDERATIONS AND SCREENING LEVELS

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

investigation may be warranted. Exceedance of ESLs suggests that additional investigation and/or remediation is warranted.

Different ESLs are published for commercial/industrial vs. residential land use, for sites where groundwater is a potential drinking water resource vs. is not a drinking water resource, and the type of receiving water body. A Water Board-published map of the East Bay shows areas where groundwater is, and is not, a potential drinking water resource.

In our professional opinion, the appropriate ESLs for the subject site are based on the following:

- Residential land use (due to the residence adjoining the property) and commercial/ industrial use (for the subject property itself). Note that, for both soil and groundwater contaminants, all ESLs for site contaminants are the same for both residential and commercial/industrial land use.
- Groundwater is a potential drinking water resource. In our professional opinion, the appropriate ESLs for the subject site are *commercial/industrial land use* and *groundwater is a potential drinking water resource.* This is based on both the property zoning status (commercial/industrial) and the designation of this area of Oakland as "Zone A – Significant Drinking Water Resource (Water Board, 1999).
- The receiving body for groundwater discharge is an estuary (San Francisco Bay).

The State of California has also promulgated drinking water standards (Maximum Contaminant Levels [MCLs]) for some of the site contaminants. Drinking water standards may also be utilized by regulatory agencies to evaluate the potential risk associated with groundwater contamination. For the site contaminants, MCLs are generally the same as the ESLs (except that there is no MCL for gasoline).

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

- The contaminant source has been removed, including reasonably accessible contaminated soils that pose a long-term impact to groundwater.
- The extent of residual contamination has been fully characterized, to obtain sufficient lithologic and hydrogeologic understanding (generally referred to as a Site Conceptual Model).
- Groundwater wells have been installed and are monitored periodically to evaluate groundwater contaminant concentrations and hydrochemical trends.

- The stability of the contaminant plume has been evaluated to determine whether it is moving or increasing in concentration.
- A determination has been made as to whether the residual contamination poses an unacceptable risk to sensitive receptors.

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

ANALYTICAL METHODS

The initial site characterization documented contamination by the following LUFT-related constituents: gasoline; BTEX; and methyl *tertiary*-butyl ether (MTBE). In addition, several other contaminants were analyzed (as required by Alameda County Environmental Health)—ethanol; fuel oxygenates (*tertiary*-butyl alcohol [TBA], di-isopropyl ether [DIPE], ethyl *tertiary*-butyl ether [ETBE], and *tertiary*-amyl methyl ether [TAME]); and lead scavengers (1,2-dichloroethane [EDC] and 1,2-dibromoethane [EDB]). Fuel oxygenates and lead scavengers were analyzed in monitoring wells for which there were no data or in those that showed previous laboratory detectable concentrations for these constituents.

Groundwater samples were analyzed using the following methods for:

- Total volatile hydrocarbons (TVH) – gasoline range, by EPA Method 8015M
- BTEX and MTBE, by EPA Method 8260
- TBA, DIPE, ETBE, and TAME, by EPA Method 8260B (in accordance with Alameda County Environmental Health requirement)
- EDC and EDB, by EPA Method 8260B (in accordance with Alameda County Environmental Health requirement)

All groundwater samples were analyzed by Curtis & Tompkins, Ltd. (Berkeley, California) which maintains current ELAP certifications for all the analytical methods utilized in this investigation.

QUALITY CONTROL SAMPLE ANALYTICAL RESULTS

Laboratory quality control (QC) samples (e.g., method blanks, matrix spikes, surrogate spikes) were analyzed by the laboratory in accordance with requirements of each analytical method. All laboratory QC sample results and sample holding times were within the acceptance limits of the methods (see Appendix C).

ANALYTICAL RESULTS AND DISTRIBUTION OF CONTAMINANTS

Table 2 summarizes the groundwater monitoring analytical results for TVHg, associated hydrocarbons, and MTBE. Table 3 presents the analytic results of the fuel oxygenates and lead scavengers. The certified laboratory reports are contained in Appendix C.

Groundwater Analytical Results

TVHg was detected above its ESLs in all monitoring wells in which it was detected except upgradient wells MW-2A and MW-2B. MTBE was detected above its ESL in wells MW-1A, MW-2B, MW-4A, and MW-5B, the wells with the highest contaminant concentration closest to the source area. Benzene was detected in three wells, two of which were above the ESL; wells MW-1A and MW-5A. Ethylbenzene was detected below its ESL in wells MW-1A, MW-5A, and MW-5B. Toluene was detected in well MW-4A. Total xylenes were detected in wells MW-4A and MW-5A. The lead scavenger 1,2-dichloroethane (EDC) was detected above its ESL in three of the four wells analyzed: wells MW-1B, MW-2B and MW-3A.

Figure 4 shows an isoconcentration contour map of TVHg concentration in groundwater based on the April 2007 monitoring well analytical results. The plume geometry indicates a west-by-northwest migrational pattern, which is in line with general groundwater flow direction in this area. Contamination dropped significantly in upgradient wells MW-2A and MW-2B which may indicate the plume is beginning to stabilize after the October 2006 corrective action activities. The source area well MW-5B showed a significant decrease from 6,600 to 3,300 µg/L in TVHg concentration. Concentrations in the peripheral wells; MW-1A, MW-1B, MW-3A, MW-3B, MW-4A and MW-4B remained consistent with the previous two sampling events. There was a significant decrease in contamination in upgradient wells MW-2A and MW-2B.

Table 2
April 2007 Groundwater Analytical Results
2836 Union Street, Oakland, California

Sample	TVHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
Monitoring Wells						
MW-1A	**760**	**63**	*<0.5*	1.9	*<0.5*	**150**
MW-1B	**320**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	4.2
MW-2A	83	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
MW-2B	84	*<0.5*	*<0.5*	*<0.5*	*<0.5*	**18**
MW-3A	*<50*	*<0.5*	*<0.5*	*<0.5*	*<0.5*	**75**
MW-3B	**1,900**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
MW-4A	*<50*	*<0.5*	0.6	*<0.5*	0.6	**77**
MW-4B	**1,300**	*<0.5*	*<0.5*	*<0.5*	*<0.5*	*<0.5*
MW-5A	**1000**	**6.6**	*<0.5*	29	7.6	**79**
MW-5B	**3,300**	0.7	*<0.5*	2.7	*<0.5*	*<0.5*
Groundwater ESLs	100	1.0	40	30	13	5.0
MCLs	100	1.0	40	30	20	5.0

Notes:

ESLs = Water Board Environmental Screening Levels for residential or commercial/industrial sites where groundwater is a potential drinking water resource (Water Board 2005). California MCLs = Maximum Contaminant Levels

MTBE = methyl tertiary-butyl ether
TVHg = total volatile hydrocarbons as gasoline

NA = not analyzed for this constituent; NS = not sampled

All concentrations are in micrograms per liter (µg/L). Samples in **boldface** type exceed the ESL criterion.

Table 3
April 2007 Groundwater Sample Analytical Results
Lead Scavengers and Fuel Oxygenates
2836 Union Street, Oakland, California

Sample I.D.	EDC	EDB	ETBE	DIPE	TAME	TBA
Groundwater Analyses (µg/L)						
MW-1A	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-1B	**4.8**	*< 0.5*	*< 0.5*	*< 0.5*	*< 0.5*	*<10*
MW-2A	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-2B	**6.9**	*< 0.5*	*< 0.5*	*< 0.5*	*<0.5*	*<10*
MW-3A	**0.9**	*< 0.5*	*< 0.5*	*< 0.5*	*<0.5*	14
MW-3B	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-4A	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-4B	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
MW-5A	*<0.5*	*<0.5*	*<0.5*	*<0.5*	4.3	*<10*
MW-5B	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Water Board Environmental Screening Levels						
Groundwater ESLs	0.5	0.05	NLP	NLP	NLP	NLP

Notes:

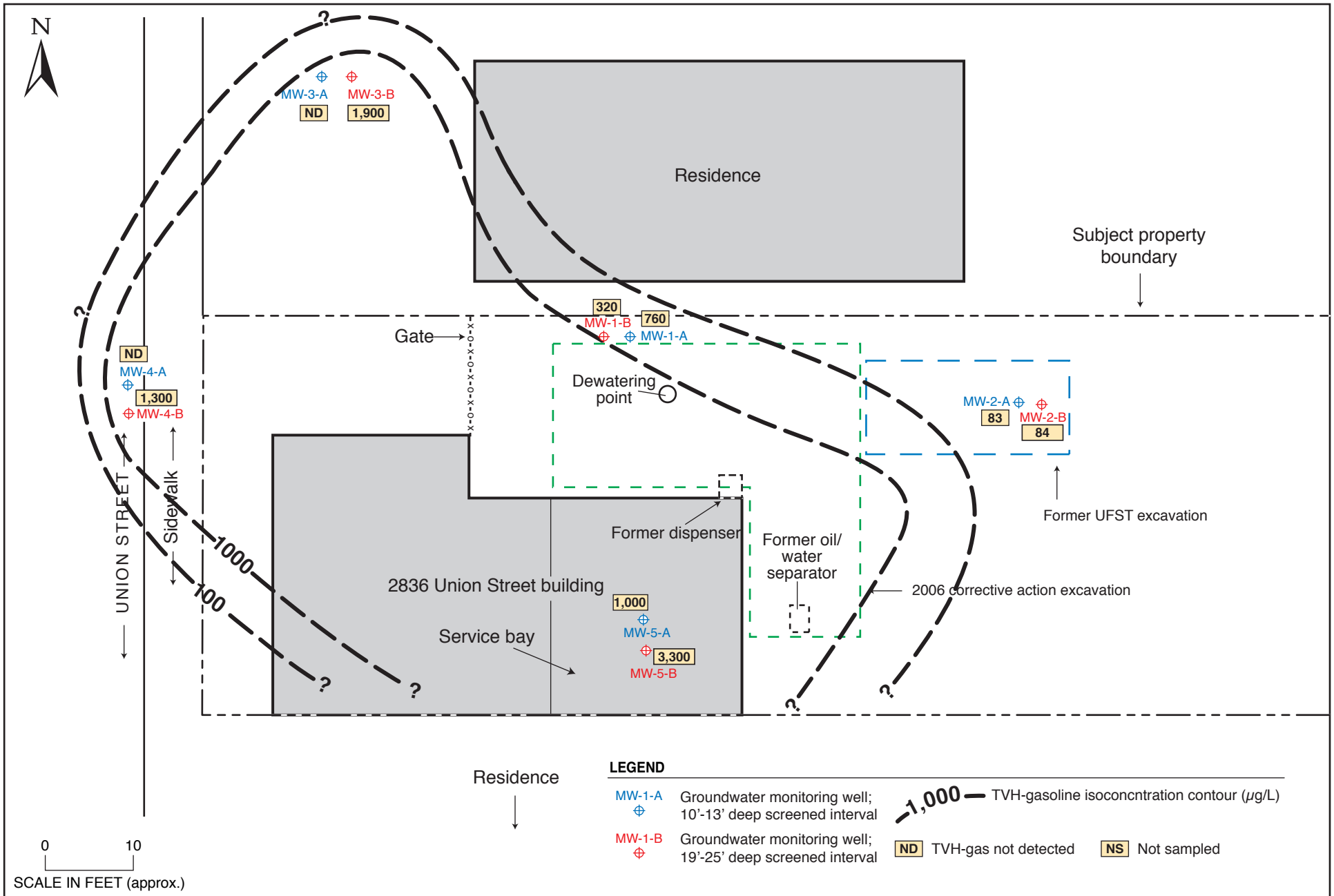
ESLs = Water Board Environmental Screening Levels for residential or commercial/industrial sites where groundwater is a potential drinking water resource.

NLP = no level published

EDB = ethylene dibromide (1,2-dibromoethane)
EDC = ethylene dichloride (1,2-dichloroethane).
ETBE = ethyl tertiary-butyl ether
DIPE = isopropyl ether
TAME = tertiary-amyl methyl ether
TBA = tertiary-butyl alcohol

NA = not analyzed for this constituent; NS = not sampled

All concentrations are in micrograms per liter (µg/L). Samples in **boldface** type exceed the ESL criterion.



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TVH-GASOLINE PLUME — APRIL 6, 2007
2836 Union Street, Oakland, CA

Figure 4

by: MJC | APRIL 2007

2005-65-53

5.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

- One 10,000-gallon gasoline UFST was installed in the late 1970s. The UFST operated under Alameda County Environmental Health permit until its removal in 1998.
- A preliminary investigation was conducted in August 2005, additional site characterization investigations in October 2005 and April 2006 and a corrective action entailing contaminated soil excavation and the installation of ten monitoring wells was conducted in September to October 2006.
- Second Quarter 2007 groundwater analytical results show a significant reduction in TVHg (a decrease from 6,600 to 3,300 µg/L) in the source area; stability of contaminants in the peripheral wells and a significant decrease in contamination in upgradient wells MW-2A and MW-2B.
- The primary source (UFST) and secondary source (contaminated soil) have been remediated by excavation to the extent practical, without removing the garage building. It is estimated that between 30 and 40 cubic yards of contaminated material containing TVHg at present concentrations (estimated at 1,200 mg/kg) is located beneath the garage portion of the building and cannot be directly accessed without structurally compromising the building. Remediating the residual soil would require the application of an in-situ method, such as vapor extraction.
- Shallow groundwater will likely continue to be impacted by the remaining residual soil contamination by desorption from soil into groundwater. Groundwater contamination will continue to migrate downgradient from the source area, primarily by advection.
- The groundwater contaminate plume has not been fully delineated, but appears to be in elliptical configuration with its long axis trending east by west-northwest.
- Excavation dewatering resulted in the capture of contaminant mass but has not resulted in the plume being drawn back on-site.
- The property owner has no plans to utilize site groundwater for any purpose, and assuming approval for site development is achieved, the former source area would remain paved to prevent any infiltrating precipitation from providing a migrational mechanism for the hydrocarbons still entrained in the soil. Groundwater in the immediate vicinity of

the site is not likely to be a potential drinking water source, given its shallow depth and turbidity.

RECOMMENDATIONS

- We recommend following up with Alameda County Environmental Health following its receipt of this report, to discuss the requirements to move the site toward regulatory closure. We further recommend that the Alameda County Environmental Health-requested work be implemented, and that all future technical reports be provided to the appropriate regulatory agencies, including electronic uploads to Alameda County Environmental Health's ftp system and the State Water Board's GeoTracker system.
- Quarterly groundwater monitoring should be continued to delineate seasonal trends and changes in flow direction and hydrochemistry.
- Analysis for lead scavengers and fuel oxygenates should be limited to the wells with a historical detection—namely, MW-1B, MW-2B and MW-3A.
- Additional excavation dewatering should be completed, followed by collection of post-pumping groundwater samples to evaluate the effectiveness of the pumping on controlling the plume migration.
- Depending on the outcome of future quarterly monitoring, additional remediation such as soil vapor extraction could be considered should natural attenuation fail to demonstrate a stable or reducing plume.

6.0 REFERENCES

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Stellar Environmental Solutions, Inc. (SES), 2006c. Underground Fuel Storage Tank-Related Corrective Action Report – 2836 Union Street, Oakland, California, Alameda County Environmental Health Case No. RO0002901. May 3.

Stellar Environmental Solutions, Inc. (SES), 2006d. Underground Fuel Storage Tank-Related Corrective Action Report – 2836 Union Street, Oakland, California, Alameda County Environmental Health Case No. RO0002901. December 3.

Stellar Environmental Solutions, Inc. (SES), 2007. First Quarter 2007 Groundwater Monitoring Report – 2836 Union Street, Oakland, California. February 6.

7.0 LIMITATIONS

This report has been prepared for the exclusive use of by the Estate of Mr. Lawrence Wadler (subject property owner), the regulatory agencies, and their authorized assigns and/or representatives. 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 solely on the findings of the investigations discussed herein. This report has been prepared in accordance with generally accepted methodologies and standards of practice of the area. The personnel performing this assessment are qualified to perform such investigations and have accurately reported the information available, but cannot attest to the validity of that information. No warranty, expressed or implied, is made as to the findings, conclusions, and recommendations included in the report.

APPENDIX A

GROUNDWATER MONITORING AND SAMPLING FIELD REPORT

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Stellar @ Union St, Oak				PROJECT NUMBER 070406 : WC-1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myron L Ultrameter	605785	4/6/07 @0900	4.0/7.0/10.0 pH	3.97/7.13/9.96 pH	4.0/7.0/10.0 pH	60°F	WC
↓	↓	4/6/07 @0900	3900 µS	3938 µS	3900 µS	60°F	WC
Hach 2100P Turbidimeter	041000 037749	4/6/07 @0905	5/60/1470 NTU	4.9/61/1473 NTU	V ok	—	WC

WELL GAUGING DATA

Project # 070406-we-1 Date 4/6/07 Client Stellar

Site 2836 Union St., Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1A	0821	3/4					7.49	12.55		
MW-1B	0816	3/4					6.42	22.45		
MW-2A	0812	3/4					6.52	12.60		
MW-2B	0835	3/4					6.20	24.58		
MW-3A	0845	3/4					5.75	12.95		
MW-3B	0830	3/4					6.39	25.00		
MW-4A	0826	3/4					5.34	12.16		
MW-4B	0826	3/4					5.45	24.30		
MW-5A	0850	3/4					5.74	12.48		
MW-5B	0840	3/4					6.45	25.32	V	
EDW-1	0855	4					6.90	12.59	TOC above grade	

WELLHEAD INSPECTION CHECKLIST

Date 4/6/07 Client Stellar

Site Address 2836 Union St, Oakland

Job Number 070406-WE-1 Technician Will

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
all	wells		in	excellent			condition	
EDW-1	Top of casing is above grade							

NOTES:

WELL MONITORING DATA SHEET

Project #: 070406-WE1	Client: Stellar
Sampler: WE	Date: 4/6/07
Well I.D.: MW-1A	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 12.55	Depth to Water (DTW): 7.49
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer (P&A); Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other

Sampling Method: Bailer; Disposable Bailer (P&A); Extraction Port; Dedicated Tubing (new); Other

383 (Gals.) X	3	= 1149 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

.02

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1031	60.0	7.4	1240	130	383	clear
→ Switched to P&A bailer / DTW=9.66				(unable to remove any more H_2O w/ peristaltic pump		
1034	60.3	7.3	1288	>1000	766	dark grey
1036	60.6	7.2	1292	306	1149	cloudy

Did well dewater? Yes (No) Gallons actually evacuated: 1149 ml

Sampling Date: 4/6/07 Sampling Time: 1043 Depth to Water: 11.26

Sample I.D.: MW-1A Laboratory: Kiff CalScience Other CTY

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

W[illegible] L MONITORING DATA SHEET

Project #: 370406-WC-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-1B	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 22.45	Depth to Water (DTW): 6.42
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; New Dedicated Tubing; Other:_____

1213 (Gals.) X	3	= 3,639 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

.02

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1054	61.3	7.0	1187	345	1213	cloudy Brown
1057	61.6	7.0	1148	161	2426	clear
1100	61.9	6.9	1126	21	3639	"

Did well dewater? Yes No Gallons actually evacuated: 3639-1

Sampling Date: 4/6/07 Sampling Time: 1105 Depth to Water: 10.82

Sample I.D.: MW-1B Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: OXYs, EDB&EDC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406 wc-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-2A	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 12.60	Depth to Water (DTW): 6.52
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.74	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; ~~Dedicated~~ Tubing; Other:

460 (Gals.) X 3 = 1380 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

0.02

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1003	61.0	7.4	805	710000	460	dark grey
1006	61.7	7.3	823	568	920	cloudy
1009	61.8	7.3	827	454	1380	"

Did well dewater? Yes No Gallons actually evacuated: 1380

Sampling Date: 4/6/07 Sampling Time: 1015 Depth to Water: 6.65

Sample I.D.: MW-2A Laboratory: Kiff CalScience Other CAT

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406-WC-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-2B	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 24.58	Depth to Water (DTW): 6.20
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.88	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; (Peristaltic); Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; (new) Dedicated Tubing; Other:_____

1391 ml (Gals.) X 3 (Specified Volumes) = 4173 Gals. (Calculated Volume)

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

.02

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	ml Gals. Removed	Observations
0936	60.9	7.6	730	83	1391	clear
0939	62.9	7.5	1374	>1000	2782	dark
0942	63.0	7.4	1505	>1000	4173	"

Did well dewater? Yes (No) Gallons actually evacuated: 4173

Sampling Date: 4/6/07 Sampling Time: 0947 Depth to Water: 21.46

Sample I.D.: MW-2B Laboratory: Kiff CalScience Other CAT

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Oxygenates (5) Other: Oxy's EDB & EDC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV	

WELL MONITORING DATA SHEET

Project #: 070406-WC-Y	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-3A	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 12.95	Depth to Water (DTW): 5.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; (Peristaltic); Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; (new) Dedicated Tubing; Other:

1 Case Volume	Specified Volumes	Calculated Volume
545 mL (Gals.)	X 3	= 1635 mL Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	mL Gals. Removed	Observations
1301	59.7	6.9	1354	24	545	clear
1301	well dewatered @ 600 ml					
1339	59.5	6.8	1364	662	—	

Did well dewater? (Yes) No Gallons actually evacuated: 600 mL

Sampling Date: 4/6/07 Sampling Time: 1340 Depth to Water: 10.43

Sample I.D.: MW-3A Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G (BTEX) MTBE TPH-D Oxygenates (5) Other: Oxy's, EDB & EDC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406-cc-1	Client: Stellar
Sampler: WE	Date: 4/6/07
Well I.D.: MW-3B	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 25.00	Depth to Water (DTW): 6.59
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other:

1410 ml (Gals.) X 3 (Specified Volumes) = 4230 ml Gals. (Calculated Volume)

1 Case Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

.02

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	ml Gals. Removed	Observations
1310	61.4	7.2	933	328	1410	cloudy Brown
1313	61.3	7.1	925	80	2820	clear
1316	61.7	7.0	920	7	4230	"

Did well dewater? Yes (No) Gallons ml actually evacuated: 4230

Sampling Date: 4/6/07 Sampling Time: 1320 Depth to Water: 6.45

Sample I.D.: MW-3B Laboratory: Kiff CalScience Other CAT

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406-WC-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-4A	Well Diameter: 2 3 4 6 8 3/4"
Total Well Depth (TD): 12.16	Depth to Water (DTW): 5.34
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other:

1 Case Volume	(Gals.) X	Specified Volumes	=	Calculated Volume Gals.
		3		mL

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	mL Gals. Removed	Observations
1216	61.0	7.2	1270	19	515	clear
1218	61.2	7.1	1259	32	1030	"
1219	well dewatered @				1100 ml	
	only able to fill two				VOAs, insufficient	
	recharge for parameters					

Did well dewater? Yes No Gallons actually evacuated: 1100

Sampling Date: 4/6/07 Sampling Time: 1358 Depth to Water: —

Sample I.D.: MW-4A Laboratory: Kiff CalScience Other CAT

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406-we-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-4B	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 24.30	Depth to Water (DTW): 5.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other

Sampling Method: Bailer; Disposable Bailer; Extraction Port; New Dedicated Tubing; Other

1427 mL (Gals.) X	3	= 4281 mL Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	mL Gals. Removed	Observations
1235	63.0	7.3	907	1	1427	clear
1238	62.9	7.2	892	1	2854	"
1241	62.7	7.1	891	1	4281	"

Did well dewater? Yes No Gallons mL actually evacuated: 4281 mL

Sampling Date: 4/6/07 Sampling Time: 1246 Depth to Water: 5.54

Sample I.D.: MW-4B Laboratory: Kiff CalScience Other C&T

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 070406-WC-1	Client: Stellar
Sampler: WC	Date: 4/6/07
Well I.D.: MW-5A	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 12.48	Depth to Water (DTW): 5.74
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other:

510 ml (Gals.) X 3 Specified Volumes = 1530 ml Gals. Calculated Volume

1 Case Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	ml Gals. Removed	Observations
1122	59.3	7.0	1229	4	510	slight odor
1124	59.7	6.9	2238	394	1020	"
1125	well dewatered @ 1,400 ml, only able to fill one voa until well dewatered again during sampling. Insufficient H_2O for parameter					

Did well dewater? Yes No Gallons actually evacuated: 1,400 ml

Sampling Date: 4/6/07 Sampling Time: 1415 Depth to Water: —

Sample I.D.: MW-5A Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Oxy's, EDB & EDC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 020406-wx-1	Client: Stellar
Sampler: we	Date: 4/6/07
Well I.D.: MW-5B	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 25.32	Depth to Water (DTW): 6.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; Disposable Bailer; Extraction Port; New Dedicated Tubing; Other:_____

1428 mL (Gals.) X 3 (Specified Volumes) = 4284 mL Gals. (Calculated Volume) — 1 Case Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	mL Gals. Removed	Observations
1144	61.0	7.5	1035	71000	1428	cloudy grey/slight odor
1147	62.0	7.2	1040	741	2856	cloudy/slight odor
1150	62.1	7.1	1021	539	4284	cloudy/slight odor

Did well dewater? Yes (No) Gallons mL actually evacuated: 4284 mL

Sampling Date: 4/6/07 Sampling Time: 1155 Depth to Water: 12.64

Sample I.D.: MW-5B Laboratory: Kiff CalScience Other CET

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

SPH or Purge Water Drum Log

Client: Stellar

Site Address: 2836 Union St. Oakland CA

STATUS OF DRUM(S) UPON ARRIVAL

Date	10/5/06	1/9/07	4/6/07			
Number of drum(s) empty:	3	3 (Non BTS)				
Number of drum(s) 1/4 full:			1 (~5 gal)			
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:	0					
Total drum(s) on site: Baker Tanks 2	3		1 BTS			
Are the drum(s) properly labeled?			Yes			
Drum ID & Contents:			purge H_2O			
If any drum(s) are partially or totally filled, what is the first use date:			—			

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.

-If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	10/5/06	1/9/07	4/6/07			
Number of drums empty:	0					
Number of drum(s) 1/4 full:		1 (~10 gal)	1 (~15 gal)			
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:	0					
Total drum(s) on site:	0	1 (BTS) 3 (Non BTS)	1 BTS			
Are the drum(s) properly labeled?		BTS Yes	yes			
Drum ID & Contents:		→ Purge H2O	Purge H_2O			

LOCATION OF DRUM(S)

Describe location of drum(s): ~~2 Baker Tanks along the fence line~~ we 4/6/07
55 gal. drums inside garage.

FINAL STATUS

Number of new drum(s) left on site this event	0	1	0			
Date of inspection:	10/5/06	1/9/07	4/6/07			
Drum(s) labelled properly:	—	Y	Y			
Logged by BTS Field Tech:	DR	DR	MC			
Office reviewed by:						

APPENDIX B

SES GROUNDWATER STANDARD SAMPLING PROTOCOLS

APPENDIX B:
SES GROUNDWATER STANDARD SAMPLING PROTOCOLS

SAMPLING AND ANALYSIS PERSONNEL

Sampling and analysis is conducted by Blaine Tech Services, a subcontractor to SES, which uses appropriately trained personnel to perform the water level measurements, sampling, and analyses of key natural attenuation indicators.

SUMMARY OF SAMPLING PROCEDURES

Activities that will occur during groundwater sampling are summarized as follows:

- Pre-arrangement with testing laboratory
- Assembly and preparation of equipment and supplies
- Groundwater sampling
  - water-level measurements
  - immiscible material measurements (with an interface probe, if applicable)
  - visual inspection of borehole water
  - well bore evacuation
  - sampling
- Sample preservation and shipment
  - sample preparation
  - onsite measurement of parameters using direct read instruments
  - sample labeling
- Completion of sample records
- Completion of chain-of-custody records
- Samples placed in chilled cooler
- Sample shipment

Detailed sampling and analysis procedures are presented in the following sections.

ARRANGEMENTS WITH ANALYTICAL LABORATORY

Prior to sampling, arrangements will be made with an analytical laboratory to conduct the sample analyses. Samples will be analyzed by Curtis and Tompkins, Ltd. (C&T), an analytical laboratory in Berkeley, California. C&T has the required Department of Toxic Substances Control (DTSC) certification to perform the analyses, and will provide a sufficient number of sample containers for the wells to be sampled and the blanks to be included. C&T will determine the proper type and size for the containers based on the analyses requested. For samples requiring chemical preservation, preservatives will be added to containers by the C&T prior to shipping containers to the facility. Shipping containers (ice chests with adequate container padding) will be sent to the facility with the sample containers.

PREPARATION FOR SAMPLING

Prior to the sampling episode, equipment to be used will be assembled and its operating condition verified, calibrated (if required), and properly cleaned (if required). In addition, all record-keeping materials will be prepared.

Equipment Calibration

Where appropriate, equipment will be calibrated according to the manufacturer's specifications prior to field use. This applies to the equipment for making onsite chemical measurements of pH, conductivity, water temperature, and photoionization detector (PID).

Equipment Cleaning

Portions of sampling and test equipment that will come into contact with the sample will be thoroughly cleaned before use. Such equipment includes water-level probe, bailers, lifting line, and other equipment or portions thereof that may be immersed. The procedure for cleaning non-dedicated equipment is as follows:

- Clean with potable water and phosphate-free detergent;
- Rinse with potable water;
- Rinse with distilled or deionized water; and
- Air dry the equipment prior to use.

Any deviations from these procedures will be documented in the permanent record of the sampling event.

Laboratory-supplied sample containers will be cleaned and sealed by the laboratory before shipping. The type of container provided and the method of container cleaning should be in the laboratory's permanent record of the sampling event.

Sampling equipment to be disposed of after use will be cleaned with potable water and phosphate-free detergent before disposal as solid waste. Rinse water will be stored in properly labeled 55-gallon drums for proper disposal, pending receipt of laboratory results of groundwater and soil sample analyses with assistance from SES.

SAMPLING PROCEDURES

Special care will be exercised to prevent contamination of the groundwater and extracted samples during the sampling activities. Contamination of a sample can occur through contact with improperly cleaned equipment. Cross-contamination of the groundwater can occur through insufficient cleaning of equipment between wells. Pre-cleaned disposable sampling equipment will be rinsed with distilled water prior to use. Sampling equipment and sample containers will be thoroughly cleaned before and after field use and between uses at different sampling locations according to the procedures discussed above. In addition to the use of properly cleaned equipment, two further precautions will be taken:

- A new pair of clean, disposable latex (or similar) gloves will be worn each time a different well is sampled.
- Sample collection activities will progress from the least affected (upgradient) area to the most affected (downgradient) area. Wells described as "background" or "upgradient" wells will be sampled first.

The following paragraphs present procedures for the several activities that comprise groundwater sample acquisition. These activities will be performed in the same order as presented below. Exceptions to this procedure will be noted in the permanent sampling record.

Preparation of Location

Prior to starting the sampling procedure, the area around the well will be cleared of foreign materials, such as brush, rocks, debris, etc. A clean (new) disposable plastic sheet will be placed around the well casing so that the sheet is flat on the ground. The sheet will be placed such that the flush-mount well projects through the center of the sheet. This preparation will prevent sampling equipment from inadvertently contacting the ground or exterior parts of the well.

Water-Level Measurement

The first sampling operation will be water-level measurement. An electrical probe or a weighted tape will be used to measure the depth to groundwater below the datum to the nearest 0.01 foot.

The datum, usually the top of the inner casing (inside and below the protective steel cover), will be described in the monitoring well records. A permanent mark or scribe will be marked on the inner casing.

If the wells to be sampled are closely spaced, the water levels at all of the closely-spaced wells will be measured before any of the wells are evacuated. The water-level probe or weighted tape will be cleaned with phosphate-free detergent in distilled water and with a distilled water rinse between usage at different wells.

Total Depth Measurement

Once the water level and immiscible material thickness is measured and recorded, the water-level probe or weighted tape will be slowly lowered to the bottom of the well. The depth to the bottom will be measured and recorded. The probe or tape will then be slowly withdrawn from the well. The bottom of the probe or tape will be observed after withdrawal to determine any evidence of viscous, heavy contaminants. Descriptions (and measurements, if possible) of such materials will be made from observation of the probe or tape.

Visual Inspection of Well Water

Prior to well evacuation, a small quantity of water will be removed with a bailer that is not completely immersed. The recovered sample is representative of the top of the water column in the well casing. If immiscible materials are present as measured by the interface probe at the top of the water column, this technique can allow their detection. The water will be observed for the presence of any floating films or other indications of immiscible materials. Any sample odors will be noted. Observations regarding odor or visual evidence of immiscible materials will be recorded in the sampling record.

The well water sample will be discarded unless the site-specific protocol calls for retention of this sample. The sample will be placed in a labeled container for proper disposal.

Well Bore Evacuation

Water contained within and adjacent to the well casing can potentially reflect chemical interaction with the atmosphere (by diffusion of gases down the casing) or the well construction materials (through prolonged residence adjacent to the casing).

Observations of this water will be recorded during removal and prior to it being discarded. Onsite parameter measurements of the purged water, as described in this section, will indicate when water-quality parameters have stabilized, and also will be recorded.

The volume of water contained within the well bore at the time of sampling will be calculated, and 4 times the calculated water volume will be removed from the well and discarded. A bailer will be used for well evacuation. The volume of water to be evacuated will be calculated as follows:

Number of Bailers:

$$\text{Number of bailers} = 4 \times \frac{\text{Volume of water in well (Vw)}}{\text{Volume of bailer (Vb)}}$$

Volume of Water in Well:

$$Vw = \frac{3.142 \times dw^2 \times Lw}{4}$$

where: Vw = water volume in well (ft^3)
dw = inside diameter of well (ft)
Lw = length of water column in well (ft)

Volume of Water in Full Bailer:

$$Vb = \frac{3.142 \times db2 \times Lb}{4}$$

where: Vb = water volume in bailer (ft^3)
db = inside diameter of bailer (ft)
Lb = length of bailer (ft)

Wells that can be evacuated to a dry state will be evacuated completely; samples will be taken as soon as sufficient water for sampling is present. Sample compositing—sampling over a lengthy

period by accumulating small volumes of water at different times to eventually obtain a sample of sufficient volume—will not be conducted.

Water produced during well evacuation will be contained in a suitable container and temporarily stored onsite pending proper disposal.

Some chemical and physical parameters in water can change significantly within a short time of sample acquisition. The following parameters cannot be accurately measured in a laboratory located more than a few hours from the facility, and will be measured onsite with portable equipment:

- pH
- Specific conductance
- Temperature
- Turbidity units

These parameters will be measured in unfiltered, unpreserved, "fresh" water, using the same sampling technique as for laboratory analyses. The measurements will be made in a clean glass container separate from those intended for laboratory analyses. The tested sample will be discarded after use. The measured values will be recorded in the sampling record.

Natural Attenuation Field Measurements

In addition to the meter reading above, following the indicators that groundwater has been purged sufficiently to represent water within the water bearing materials, natural attenuation parameters were measured by the Blaine Tech sampling personnel. These include meter readings for:

- Oxidation reduction potential;
- Dissolved oxygen; and
- Dissolved ferrous iron.

Sample Extraction

Natural attenuation parameters are measured before the water is purged and sampled. Care will be taken during insertion of sampling equipment to prevent undue disturbance of water in the well.

The pump or bailer will be lowered into the water gently to prevent splashing, and extracted gently to prevent creation of an excessive vacuum in the well. The sample will be transferred directly into the appropriate container. While pouring water from a bailer, the water will be

carefully poured down the inside of the sample bottle to prevent significant aeration of the sample. Unless other instructions are given by the analytical laboratory, the sample containers will be completely filled so that no air space remains in the container. Excess water taken during sampling will be placed in a container for proper disposal.

SAMPLE HANDLING

Sample Preservation

Water samples will be properly prepared for transportation to the laboratory by refrigeration and chemical preservation, as necessary. The laboratory providing sample containers will add any necessary chemical preservatives to the sealed containers provided prior to shipment.

Container and Labels

Glass containers and appropriate container lids will be provided by the laboratory. The containers will be filled and container lids tightly closed. Sample container lids will be sealed so as to make obvious any seal tampered with or broken. The label will be firmly attached to the container side (rather than the lid). The following information will be written with permanent marker on the label:

- Facility name;
- Sample identification;
- Sample type (groundwater, surface water, etc.);
- Sampling date;
- Sampling time; and
- Preservatives added, and sample collector's initials.

Sample Shipment

In most instances, the concentration and type of compounds present in the groundwater are considered by the U.S. Department of Transportation to be non-hazardous. Thus, the following packaging and labeling requirements for the sample materials are appropriate for shipping the sample to the testing laboratory:

- Package sample so that is does not leak, spill, or vaporize from its packaging
- Label package with:
  - sample collector's name, address, and telephone number
  - laboratory's name, address, and telephone number

- description of sample
- quantity of sample
- date of shipment

To comply with packaging regulations and prevent damage to expensive groundwater samples, SES will follow packaging and shipping instructions supplied by the certified testing laboratory.

Chain-of-Custody Control

After samples are obtained, chain-of-custody procedures will be followed to establish a written record concerning sample movement between the sampling site and the testing laboratory. Each shipping container will contain a chain-of-custody form to be completed by the sampling personnel packing the samples. The chain-of-custody form for each container will be completed in triplicate. One copy of this form will be maintained at the site; the other two copies will remain at the laboratory. One of the laboratory copies will become a part of the permanent record for the sample and will be returned with the sample analyses.

The record will contain the following minimum information:

- Collector's sample number
- Signature of collector
- Date and time of collection
- Place and address of collection
- Material type
- Preservatives added
- Analyses requested
- Signatures involved in the chain of possession
- Inclusive dates of possession

The shipping container will be sealed so as to make obvious any seal tampered with or broken. The chain-of-custody documentation will be placed inside the container so that it is immediately apparent to the laboratory personnel receiving the container, but could not be damaged or lost during shipping.

SAMPLING RECORDS

To provide complete documentation of sampling, detailed records containing the following information will be maintained during sampling:

- Sample location (facility name)
- Sample identification (name and sample number)
- Sample location map or detailed sketch
- Date and time of sampling
- Sampling method
- Field observations of sample appearance and odor
- Weather conditions
- Samples identification
- Any other significant information

APPENDIX C

CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Volatile Hydrocarbons

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	124147
Units:	ug/L	Sampled:	04/06/07
Diln Fac:	1.000	Received:	04/12/07

Field ID: MW-1A
Type: SAMPLE
Lab ID: 194113-001
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	760 H	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	72-136
Bromofluorobenzene (FID)	108	78-131

Field ID: MW-2A
Type: SAMPLE
Lab ID: 194113-002
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	83 H	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	72-136
Bromofluorobenzene (FID)	107	78-131

Field ID: MW-1B
Type: SAMPLE
Lab ID: 194113-003
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	320 Y Z	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	72-136
Bromofluorobenzene (FID)	105	78-131

Field ID: MW-2B
Type: SAMPLE
Lab ID: 194113-004
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	84 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	72-136
Bromofluorobenzene (FID)	108	78-131

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Volatile Hydrocarbons

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	124147
Units:	ug/L	Sampled:	04/06/07
Diln Fac:	1.000	Received:	04/12/07

Field ID: MW-3A
Type: SAMPLE
Lab ID: 194113-005
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	72-136
Bromofluorobenzene (FID)	107	78-131

Field ID: MW-3B
Type: SAMPLE
Lab ID: 194113-006
Analyzed: 04/13/07

Analyte	Result	RL
Gasoline C7-C12	1,900 Y Z	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	72-136
Bromofluorobenzene (FID)	104	78-131

Field ID: MW-4A
Type: SAMPLE
Lab ID: 194113-007
Analyzed: 04/14/07

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	72-136
Bromofluorobenzene (FID)	109	78-131

Field ID: MW-4B
Type: SAMPLE
Lab ID: 194113-008
Analyzed: 04/14/07

Analyte	Result	RL
Gasoline C7-C12	1,300 Y Z	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	72-136
Bromofluorobenzene (FID)	104	78-131

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Total Volatile Hydrocarbons

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	124147
Units:	ug/L	Sampled:	04/06/07
Diln Fac:	1.000	Received:	04/12/07

Field ID:	MW-5B	Lab ID:	194113-010
Type:	SAMPLE	Analyzed:	04/13/07

Analyte	Result	RL
Gasoline C7-C12	3,300 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	72-136
Bromofluorobenzene (FID)	120	78-131

Type:	BLANK	Analyzed:	04/13/07
Lab ID:	QC383555		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	72-136
Bromofluorobenzene (FID)	105	78-131

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC383557	Batch#:	124147
Matrix:	Water	Analyzed:	04/13/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,020	101	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	72-136
Bromofluorobenzene (FID)	105	78-131

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	124147
MSS Lab ID:	194034-003	Sampled:	04/10/07
Matrix:	Water	Received:	04/10/07
Units:	ug/L	Analyzed:	04/13/07
Diln Fac:	1.000		

Type: MS Lab ID: QC383598

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	24.25	2,000	2,214	109	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	72-136
Bromofluorobenzene (FID)	108	78-131

Type: MSD Lab ID: QC383599

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,156	107	79-120	3	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	72-136
Bromofluorobenzene (FID)	109	78-131

RPD= Relative Percent Difference

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Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe079.met

Software Version 3.1.7
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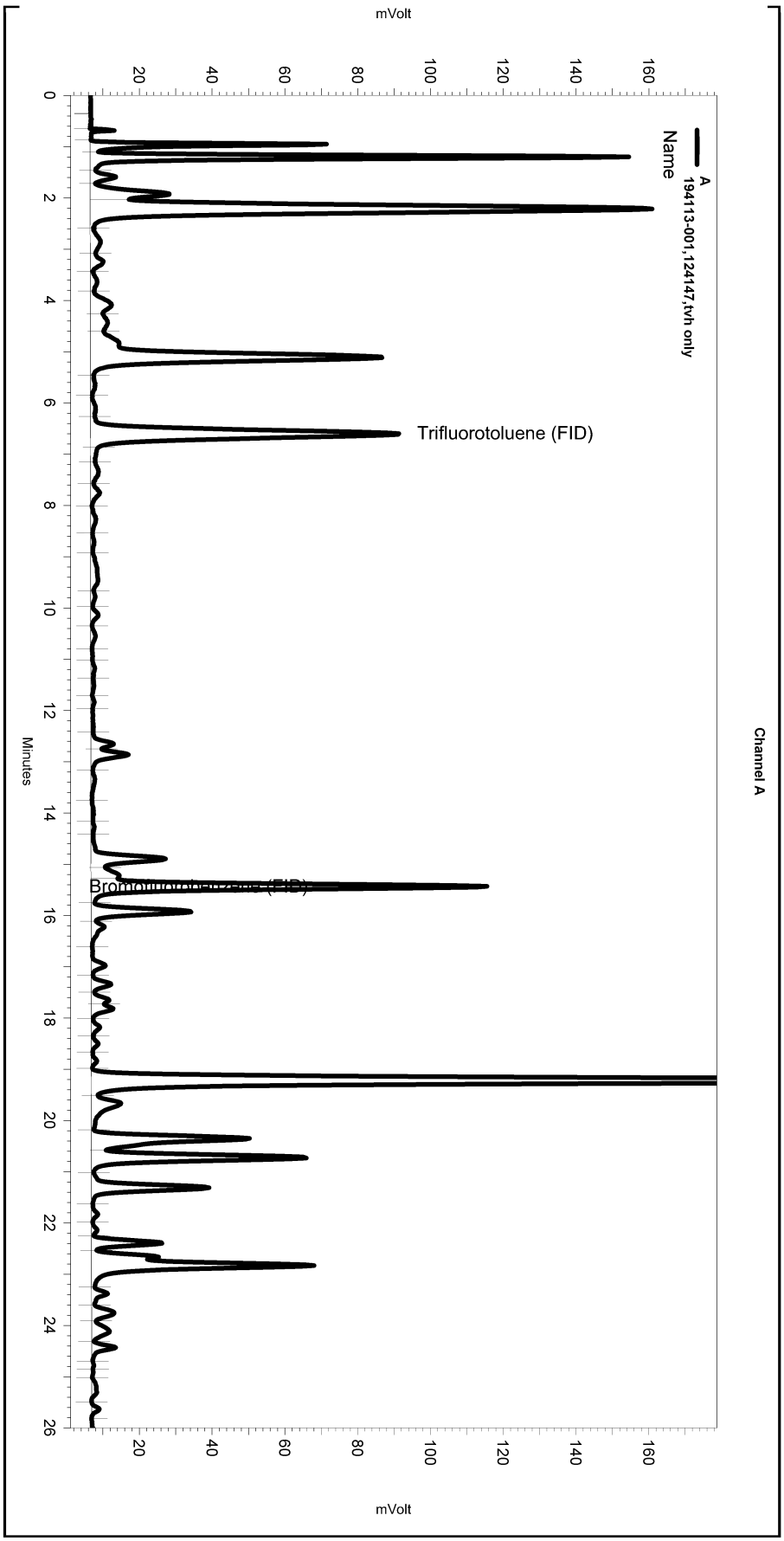

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Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe079.met

Software Version 3.1.7
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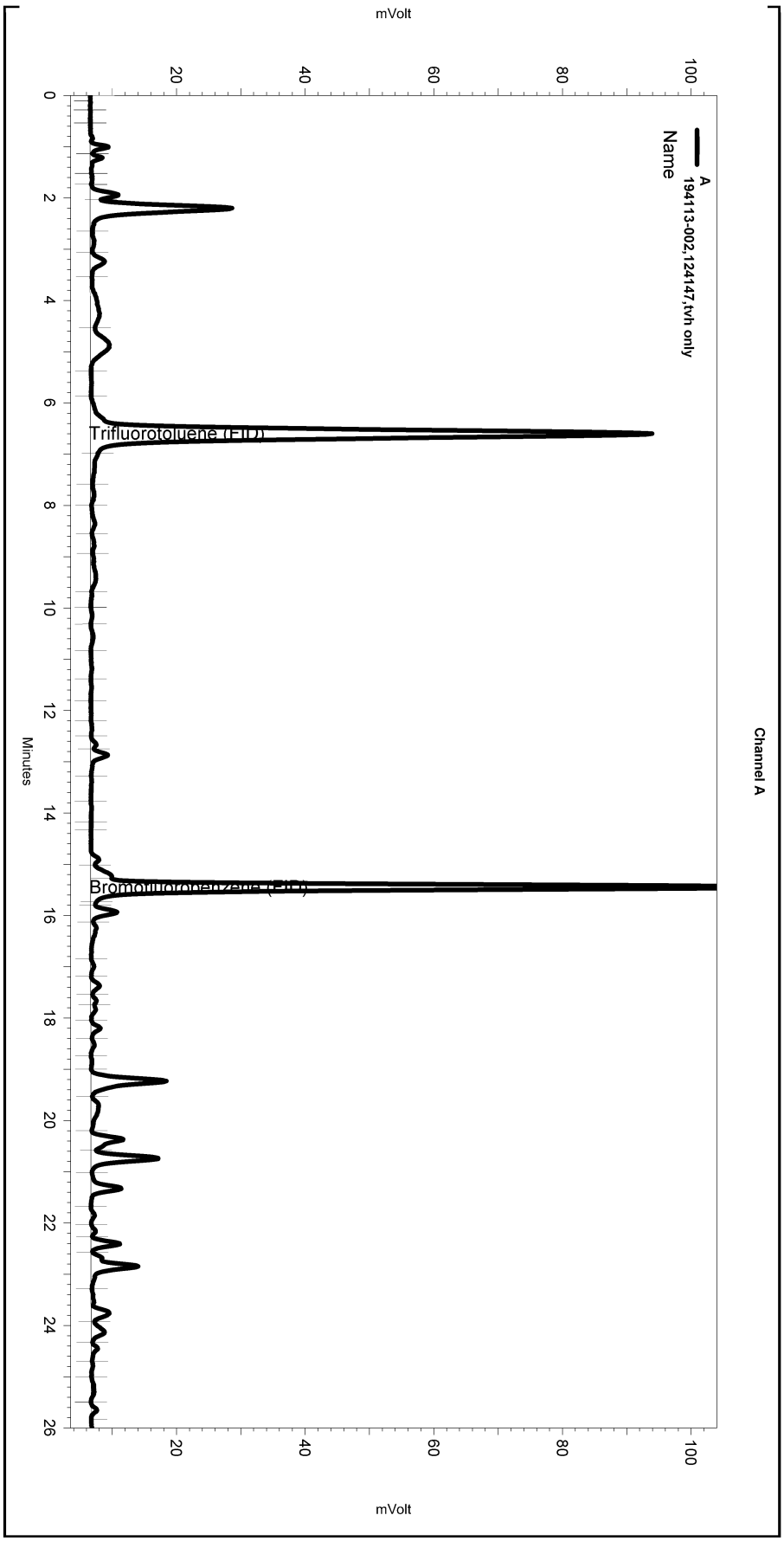
Vial & pH or Core ID: B1.3



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Software Version 3.1.7
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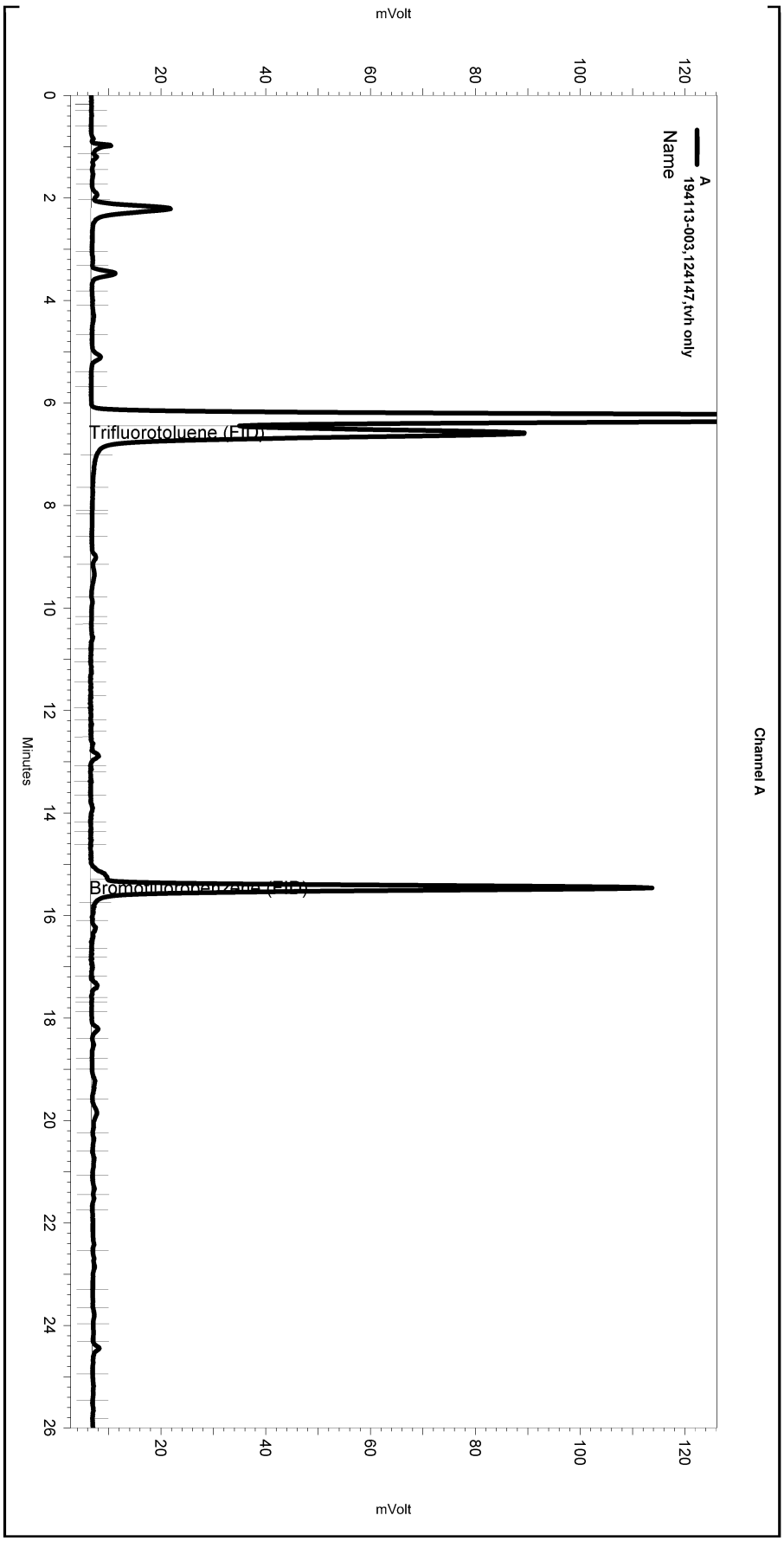
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B1.3



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Yes	Split Peak	15.752	0	0

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Software Version 3.1.7
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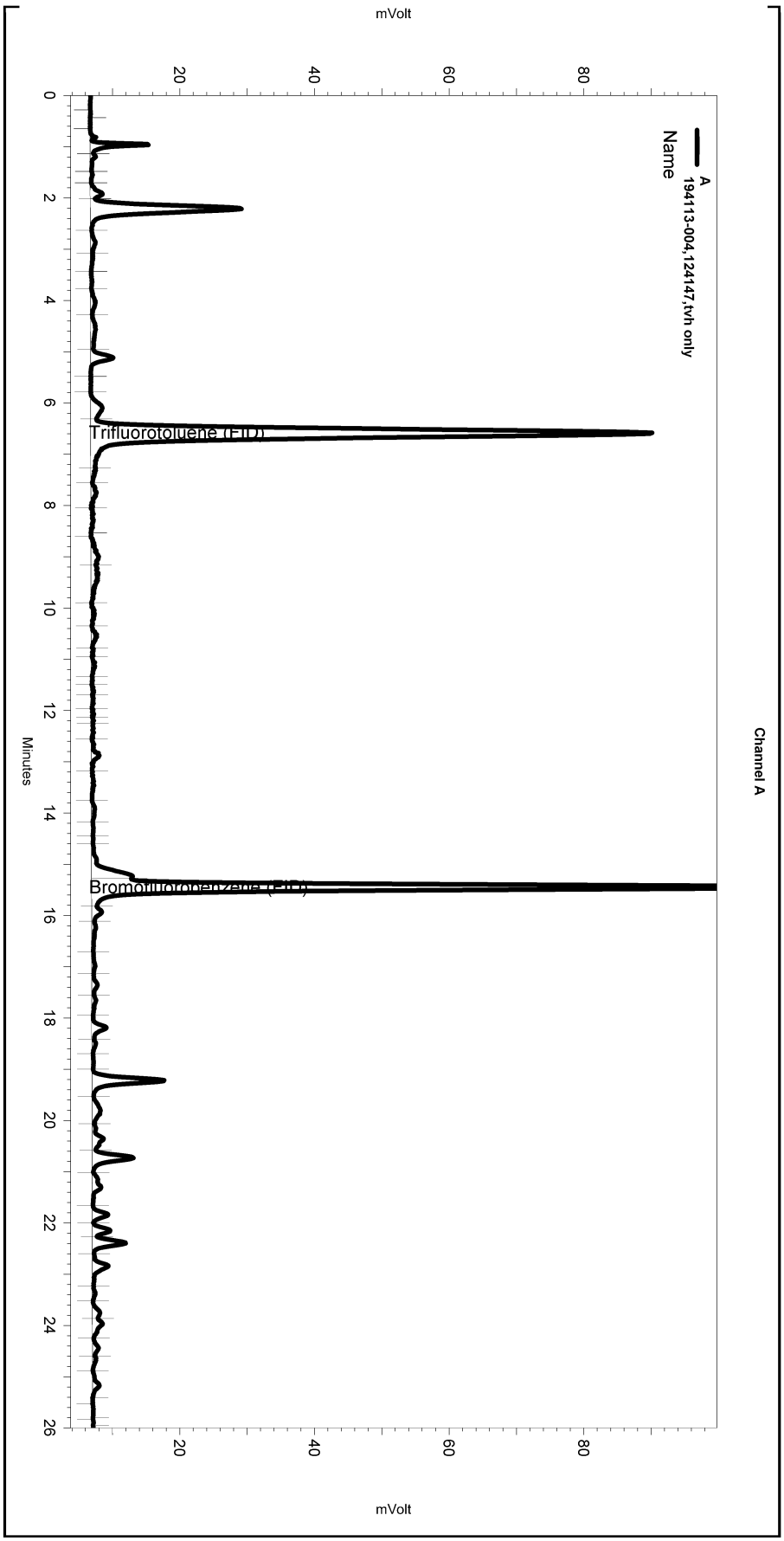
Vial & pH or Core ID: B1.3



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Yes	Threshold	0	0	50

Manual Integration Fixes

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Yes	Split Peak	15.29	0	0

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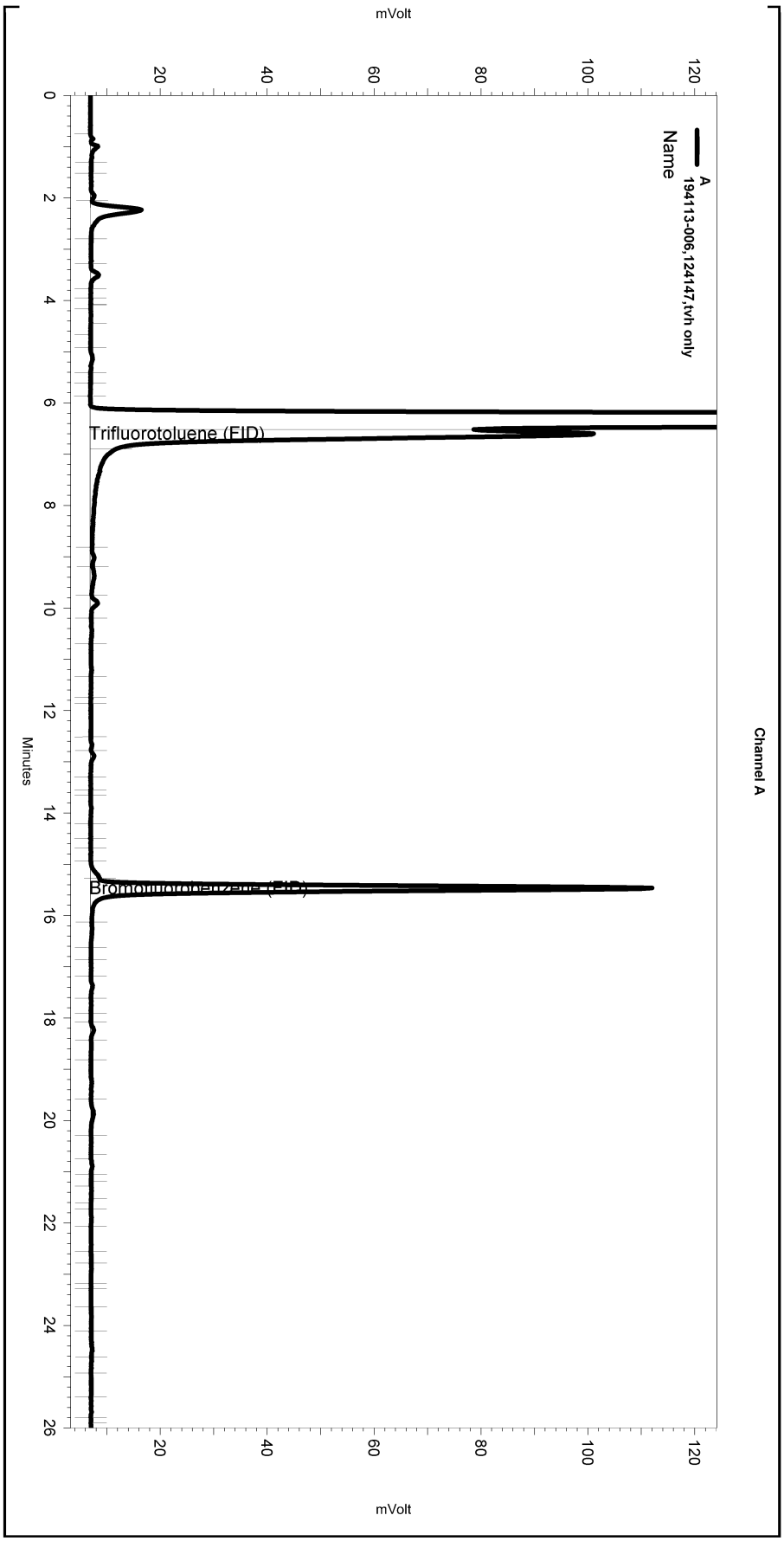
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B1.3



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Yes	Threshold	0	0	50

Manual Integration Fixes

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Yes	Split Peak	6.893	0	0
Yes	Split Peak	15.279	0	0

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Software Version 3.1.7
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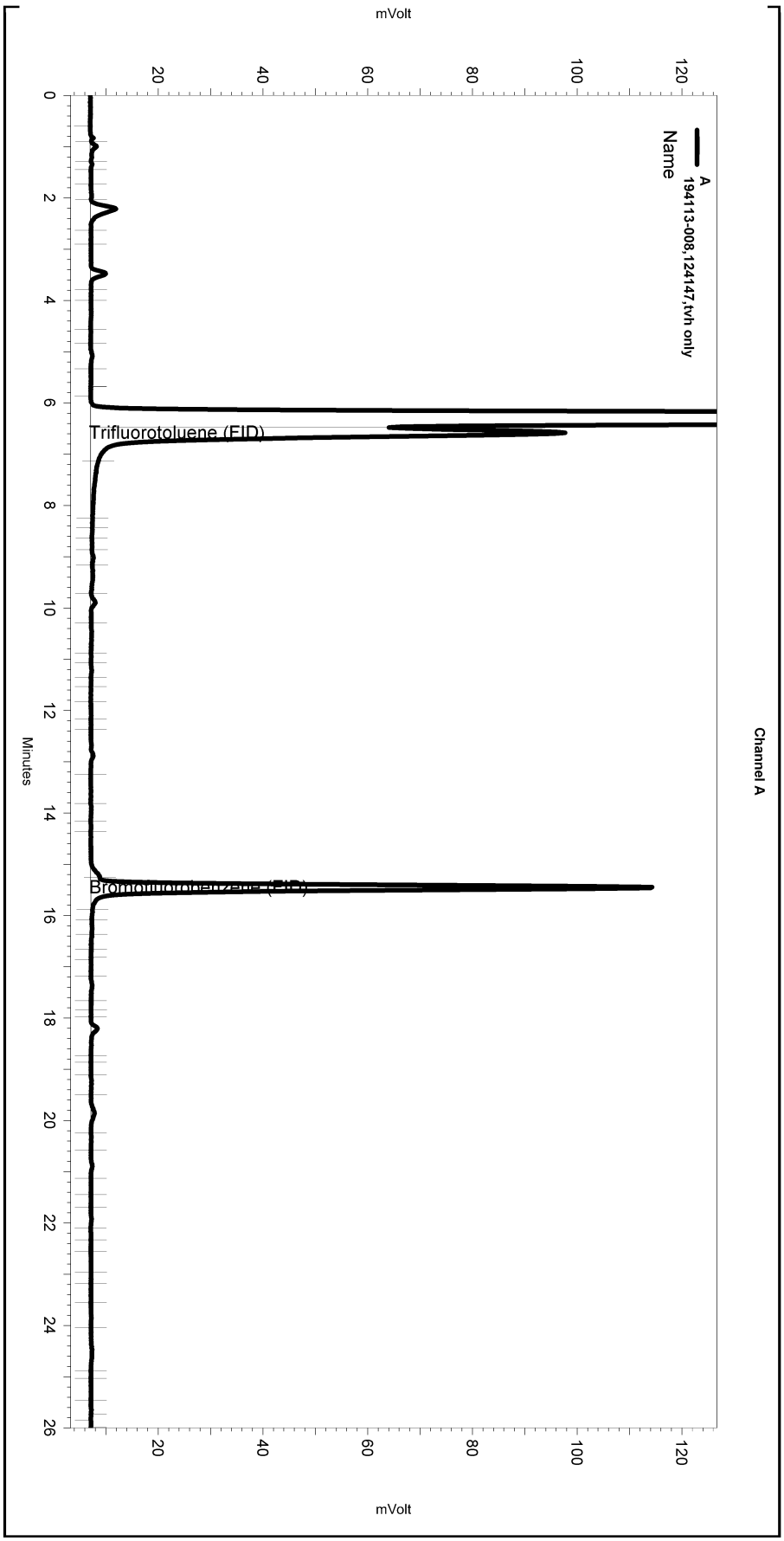
Analysis Date: 4/16/2007 9:28:16 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B1.3



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Yes	Threshold	0	0	50

Manual Integration Fixes

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Yes	Split Peak	7.134	0	0
Yes	Split Peak	15.274	0	0
Yes	Split Peak	15.883	0	0

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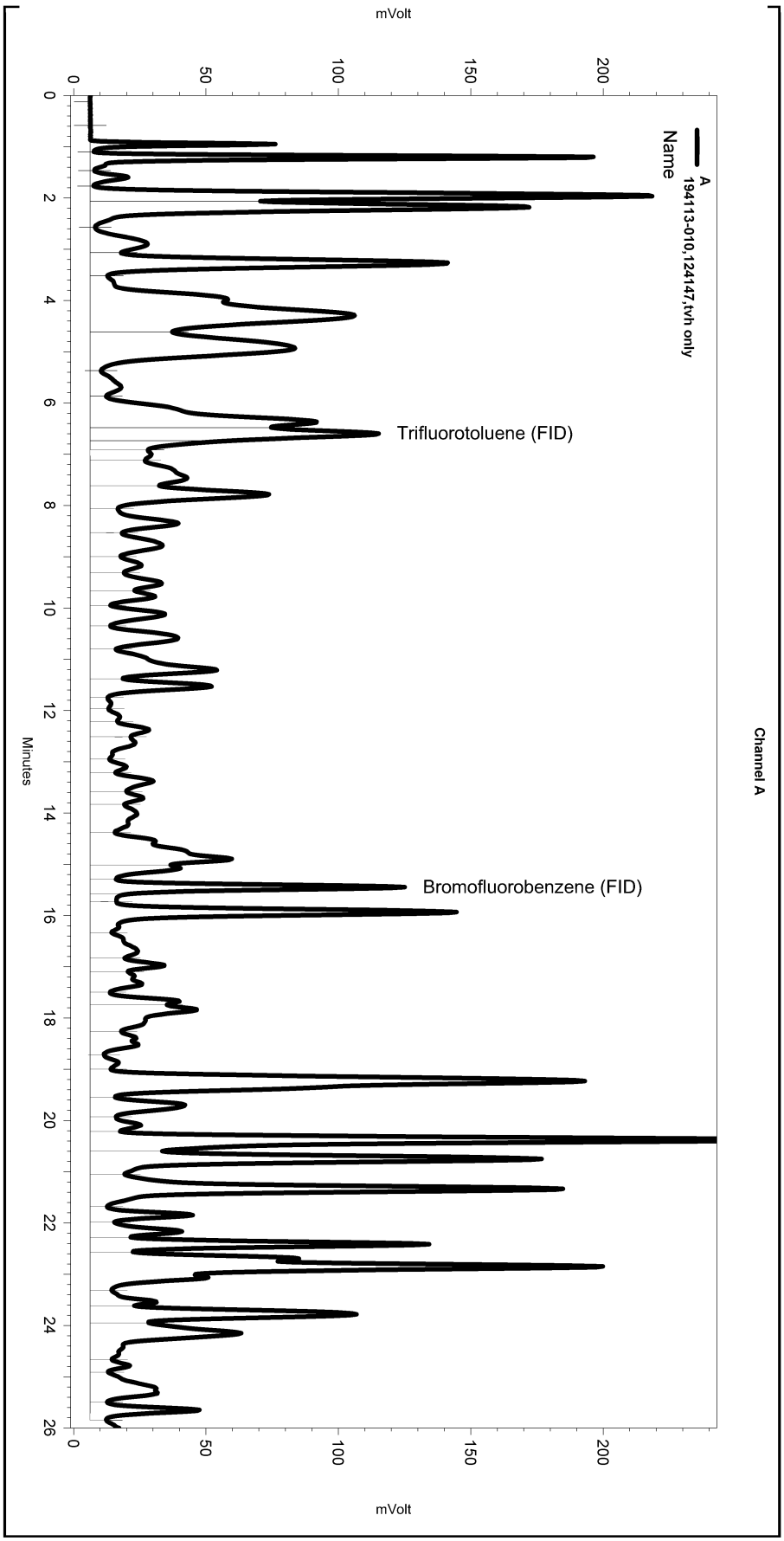
Sample Name: **194113-010,124147,tvh only**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\103_007**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe079.met

Software Version 3.1.7
Run Date: 4/13/2007 4:31:23 PM
Analysis Date: 4/16/2007 9:27:24 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

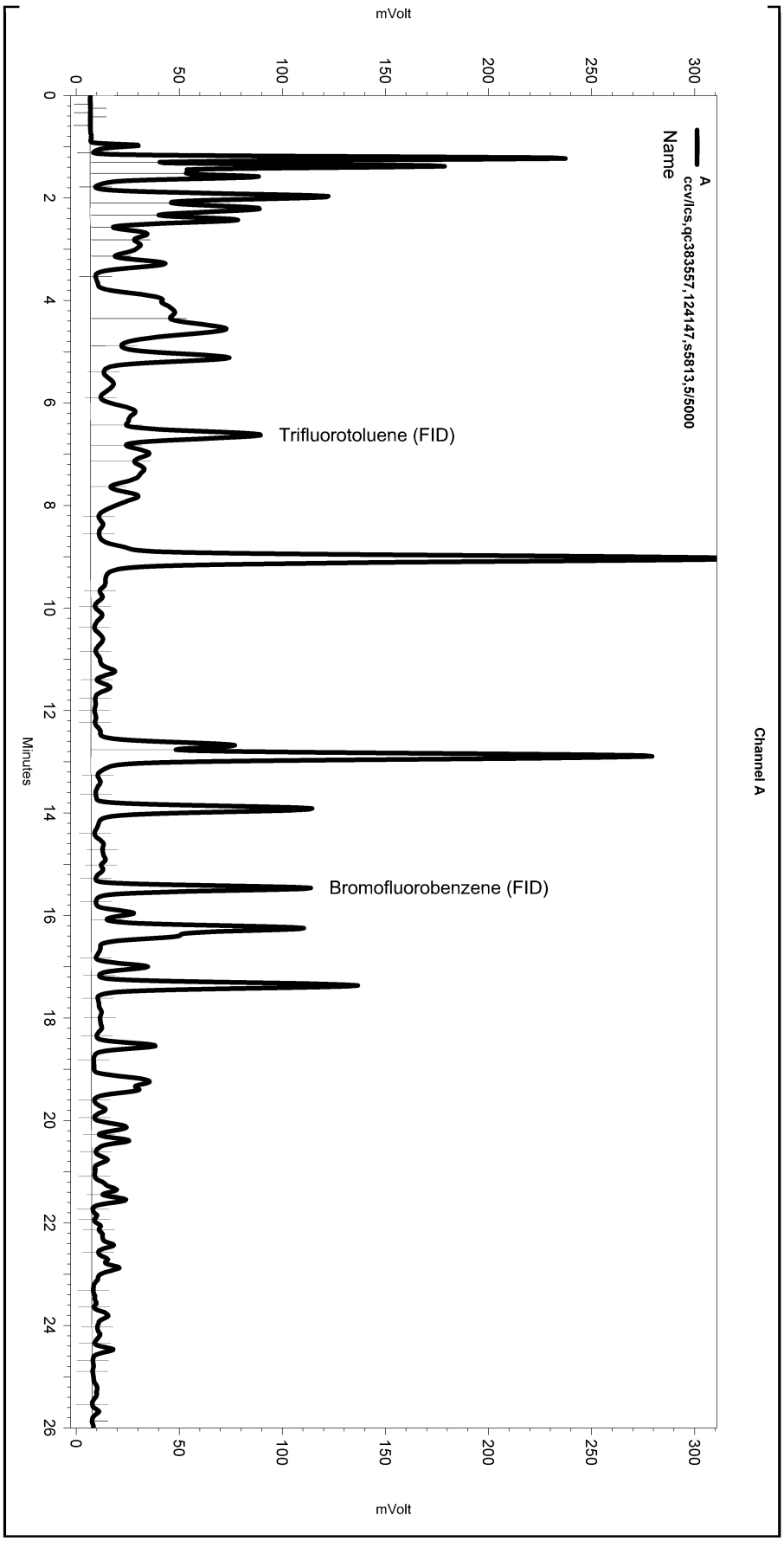
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\103_007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	6.737	0	0
Yes	Split Peak	15.59	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\103.seq**
Sample Name: **ccv/lcs,qc383557,124147,s5813,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\103_002**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe079.met

Software Version 3.1.7
Run Date: 4/13/2007 10:35:41 AM
Analysis Date: 4/16/2007 9:27:04 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\103_002

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-1A	Units:	ug/L
Lab ID:	194113-001	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
MTBE	150	1.3	2.500	124237	04/17/07
Benzene	63	0.5	1.000	124188	04/16/07
Toluene	ND	0.5	1.000	124188	04/16/07
Ethylbenzene	1.9	0.5	1.000	124188	04/16/07
m,p-Xylenes	ND	0.5	1.000	124188	04/16/07
o-Xylene	ND	0.5	1.000	124188	04/16/07

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	122	79-134	1.000	124188	04/16/07
Toluene-d8	99	80-120	1.000	124188	04/16/07
Bromofluorobenzene	102	80-122	1.000	124188	04/16/07

ND= Not Detected
RL= Reporting Limit

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Analytical Laboratories, Since 1878

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-2A	Batch#:	124188
Lab ID:	194113-002	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	122	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
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Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-3B	Batch#:	124188
Lab ID:	194113-006	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	128	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
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Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4A	Batch#:	124198
Lab ID:	194113-007	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	77	0.5
Benzene	ND	0.5
Toluene	0.6	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	0.6	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	89	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
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Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4B	Batch#:	124198
Lab ID:	194113-008	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	86	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

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Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-5B	Batch#:	124198
Lab ID:	194113-010	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	43	0.5
Benzene	0.7	0.5
Toluene	ND	0.5
Ethylbenzene	2.7	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	92	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
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Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383719	Batch#:	124188
Matrix:	Water	Analyzed:	04/16/07
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	125	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	124188
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Type: BS Lab ID: QC383720

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.44	94	71-120
Benzene	25.00	25.28	101	80-120
Toluene	25.00	26.15	105	80-120
Ethylbenzene	25.00	28.33	113	80-124
m,p-Xylenes	50.00	55.51	111	80-127
o-Xylene	25.00	27.70	111	80-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	104	80-122

Type: BSD Lab ID: QC383721

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.51	94	71-120	0	20
Benzene	25.00	24.92	100	80-120	1	20
Toluene	25.00	26.07	104	80-120	0	20
Ethylbenzene	25.00	27.17	109	80-124	4	20
m,p-Xylenes	50.00	53.73	107	80-127	3	20
o-Xylene	25.00	26.71	107	80-124	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	120	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	124198
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Type: BS Lab ID: QC383755

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	20.97	84	71-120
Benzene	25.00	23.82	95	80-120
Toluene	25.00	27.22	109	80-120
Ethylbenzene	25.00	27.16	109	80-124
m,p-Xylenes	50.00	58.41	117	80-127
o-Xylene	25.00	28.18	113	80-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	87	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC383756

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	20.29	81	71-120	3	20
Benzene	25.00	24.20	97	80-120	2	20
Toluene	25.00	28.25	113	80-120	4	20
Ethylbenzene	25.00	26.82	107	80-124	1	20
m,p-Xylenes	50.00	59.20	118	80-127	1	20
o-Xylene	25.00	29.02	116	80-124	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	79-134
Toluene-d8	107	80-120
Bromofluorobenzene	94	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383757	Batch#:	124198
Matrix:	Water	Analyzed:	04/16/07
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	87	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383932	Batch#:	124237
Matrix:	Water	Analyzed:	04/17/07
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC383933	Batch#:	124237
Matrix:	Water	Analyzed:	04/17/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	25.09	100	71-120
Benzene	25.00	26.97	108	80-120
Toluene	25.00	26.92	108	80-120
Ethylbenzene	25.00	28.67	115	80-124
m,p-Xylenes	50.00	59.28	119	80-127
o-Xylene	25.00	28.07	112	80-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-122

Curtis & Tompkins, Ltd.
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Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	124237
MSS Lab ID:	194097-003	Sampled:	04/11/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/17/07
Diln Fac:	1.000		

Type: MS Lab ID: QC383934

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	0.06970	25.00	24.05	96	73-120
Benzene	<0.2500	25.00	26.45	106	80-123
Toluene	<0.1338	25.00	25.48	102	80-122
Ethylbenzene	<0.1383	25.00	26.37	105	80-126
m,p-Xylenes	<0.2963	50.00	54.23	108	80-125
o-Xylene	<0.1621	25.00	26.74	107	80-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

Type: MSD Lab ID: QC383935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	24.63	98	73-120	2	20
Benzene	25.00	25.77	103	80-123	3	20
Toluene	25.00	25.18	101	80-122	1	20
Ethylbenzene	25.00	26.21	105	80-126	1	20
m,p-Xylenes	50.00	52.91	106	80-125	2	20
o-Xylene	25.00	26.60	106	80-124	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

BTXE & Oxygenates

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-1B	Batch#:	124150
Lab ID:	194113-003	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/13/07
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	4.2	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	4.8	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-123
1,2-Dichloroethane-d4	126	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

BTXE & Oxygenates

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-2B	Batch#:	124150
Lab ID:	194113-004	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/13/07
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	18	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	6.9	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	131	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

BTXE & Oxygenates

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-3A	Batch#:	124150
Lab ID:	194113-005	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/13/07
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	14	10
MTBE	75	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	0.9	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-123
1,2-Dichloroethane-d4	129	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

BTXE & Oxygenates

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383566	Batch#:	124150
Matrix:	Water	Analyzed:	04/13/07
Units:	ug/L		

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
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	123	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

BTXE & Oxygenates

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	124150
Units:	ug/L	Analyzed:	04/13/07
Diln Fac:	1.000		

Type: BS Lab ID: QC383567

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	138.4	111	68-132
MTBE	25.00	25.21	101	71-120
Isopropyl Ether (DIPE)	25.00	23.33	93	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	25.81	103	75-124
1,2-Dichloroethane	25.00	30.36	121	79-121
Benzene	25.00	27.48	110	80-120
Methyl tert-Amyl Ether (TAME)	25.00	30.66	123 *	77-120
Toluene	25.00	27.72	111	80-120
1,2-Dibromoethane	25.00	27.96	112	80-120
Ethylbenzene	25.00	29.42	118	80-124
m,p-Xylenes	50.00	57.26	115	80-127
o-Xylene	25.00	28.36	113	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	124	79-134
Toluene-d8	105	80-120
Bromofluorobenzene	101	80-122

Type: BSD Lab ID: QC383568

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	126.9	102	68-132	9	20
MTBE	25.00	24.49	98	71-120	3	20
Isopropyl Ether (DIPE)	25.00	22.45	90	65-120	4	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.92	100	75-124	4	20
1,2-Dichloroethane	25.00	29.47	118	79-121	3	20
Benzene	25.00	26.48	106	80-120	4	20
Methyl tert-Amyl Ether (TAME)	25.00	29.97	120	77-120	2	20
Toluene	25.00	26.73	107	80-120	4	20
1,2-Dibromoethane	25.00	26.04	104	80-120	7	20
Ethylbenzene	25.00	28.67	115	80-124	3	20
m,p-Xylenes	50.00	55.58	111	80-127	3	20
o-Xylene	25.00	27.77	111	80-124	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	120	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

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

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-5A	Diln Fac:	1.000
Lab ID:	194113-009	Sampled:	04/06/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	1,000 Y	50	124189	04/16/07
tert-Butyl Alcohol (TBA)	ND	10	124189	04/16/07
Isopropyl Ether (DIPE)	ND	0.50	124189	04/16/07
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	124189	04/16/07
Methyl tert-Amyl Ether (TAME)	4.3	0.50	124237	04/17/07
MTBE	79	0.50	124189	04/16/07
1,2-Dichloroethane	ND	0.50	124189	04/16/07
Benzene	6.6	0.50	124189	04/16/07
Toluene	ND	0.50	124189	04/16/07
1,2-Dibromoethane	ND	0.50	124189	04/16/07
Ethylbenzene	29	0.50	124189	04/16/07
m,p-Xylenes	7.6	0.50	124189	04/16/07
o-Xylene	ND	0.50	124189	04/16/07

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	105	80-123	124189	04/16/07
1,2-Dichloroethane-d4	110	79-134	124189	04/16/07
Toluene-d8	101	80-120	124189	04/16/07
Bromofluorobenzene	93	80-122	124189	04/16/07

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383722	Batch#:	124189
Matrix:	Water	Analyzed:	04/16/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	107	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	124189
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Type: BS Lab ID: QC383723

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	129.4	103	68-132
Isopropyl Ether (DIPE)	25.00	22.43	90	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	19.23	77	75-124
Methyl tert-Amyl Ether (TAME)	25.00	18.58	74 *	77-120
MTBE	25.00	21.76	87	71-120
1,2-Dichloroethane	25.00	25.97	104	79-121
Benzene	25.00	25.80	103	80-120
Toluene	25.00	26.25	105	80-120
1,2-Dibromoethane	25.00	26.36	105	80-120
Ethylbenzene	25.00	27.00	108	80-124
m,p-Xylenes	50.00	56.07	112	80-127
o-Xylene	25.00	27.53	110	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	105	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC383724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	142.6	114	68-132	10	20
Isopropyl Ether (DIPE)	25.00	22.92	92	65-120	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	19.84	79	75-124	3	20
Methyl tert-Amyl Ether (TAME)	25.00	19.20	77	77-120	3	20
MTBE	25.00	22.29	89	71-120	2	20
1,2-Dichloroethane	25.00	25.85	103	79-121	0	20
Benzene	25.00	24.98	100	80-120	3	20
Toluene	25.00	25.45	102	80-120	3	20
1,2-Dibromoethane	25.00	26.25	105	80-120	0	20
Ethylbenzene	25.00	26.48	106	80-124	2	20
m,p-Xylenes	50.00	54.49	109	80-127	3	20
o-Xylene	25.00	26.33	105	80-124	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-122

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

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	124189
Units:	ug/L	Analyzed:	04/16/07
Diln Fac:	1.000		

Type: BS Lab ID: QC383725

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	925.0	92	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	108	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-122

Type: BSD Lab ID: QC383726

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	914.2	91	70-130	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC383932	Batch#:	124237
Matrix:	Water	Analyzed:	04/17/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	113	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-122

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

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC383933	Batch#:	124237
Matrix:	Water	Analyzed:	04/17/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	137.2	110	68-132
Isopropyl Ether (DIPE)	25.00	25.08	100	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	21.45	86	75-124
Methyl tert-Amyl Ether (TAME)	25.00	21.30	85	77-120
MTBE	25.00	25.09	100	71-120
1,2-Dichloroethane	25.00	27.93	112	79-121
Benzene	25.00	26.97	108	80-120
Toluene	25.00	26.92	108	80-120
1,2-Dibromoethane	25.00	26.34	105	80-120
Ethylbenzene	25.00	28.67	115	80-124
m,p-Xylenes	50.00	59.28	119	80-127
o-Xylene	25.00	28.07	112	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	107	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-122

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Batch QC Report

Gasoline by GC/MS

Lab #:	194113	Location:	070406-WC-1
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	124237
MSS Lab ID:	194097-003	Sampled:	04/11/07
Matrix:	Water	Received:	04/12/07
Units:	ug/L	Analyzed:	04/17/07
Diln Fac:	1.000		

Type: MS Lab ID: QC383934

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	29.54	125.0	174.6	116	69-137
Isopropyl Ether (DIPE)	<0.04032	25.00	25.34	101	69-120
Ethyl tert-Butyl Ether (ETBE)	<0.07412	25.00	20.92	84	78-127
Methyl tert-Amyl Ether (TAME)	<0.04870	25.00	19.93	80	79-120
MTBE	0.06970	25.00	24.05	96	73-120
1,2-Dichloroethane	<0.08593	25.00	29.43	118	80-128
Benzene	<0.2500	25.00	26.45	106	80-123
Toluene	<0.1338	25.00	25.48	102	80-122
1,2-Dibromoethane	<0.09889	25.00	27.04	108	80-120
Ethylbenzene	<0.1383	25.00	26.37	105	80-126
m,p-Xylenes	<0.2963	50.00	54.23	108	80-125
o-Xylene	<0.1621	25.00	26.74	107	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-123
1,2-Dichloroethane-d4	114	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

Type: MSD Lab ID: QC383935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	168.1	111	69-137	4	20
Isopropyl Ether (DIPE)	25.00	25.32	101	69-120	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.04	84	78-127	1	20
Methyl tert-Amyl Ether (TAME)	25.00	19.20	77 *	79-120	4	20
MTBE	25.00	24.63	98	73-120	2	20
1,2-Dichloroethane	25.00	29.22	117	80-128	1	20
Benzene	25.00	25.77	103	80-123	3	20
Toluene	25.00	25.18	101	80-122	1	20
1,2-Dibromoethane	25.00	25.52	102	80-120	6	20
Ethylbenzene	25.00	26.21	105	80-126	1	20
m,p-Xylenes	50.00	52.91	106	80-125	2	20
o-Xylene	25.00	26.60	106	80-124	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-123
1,2-Dichloroethane-d4	114	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

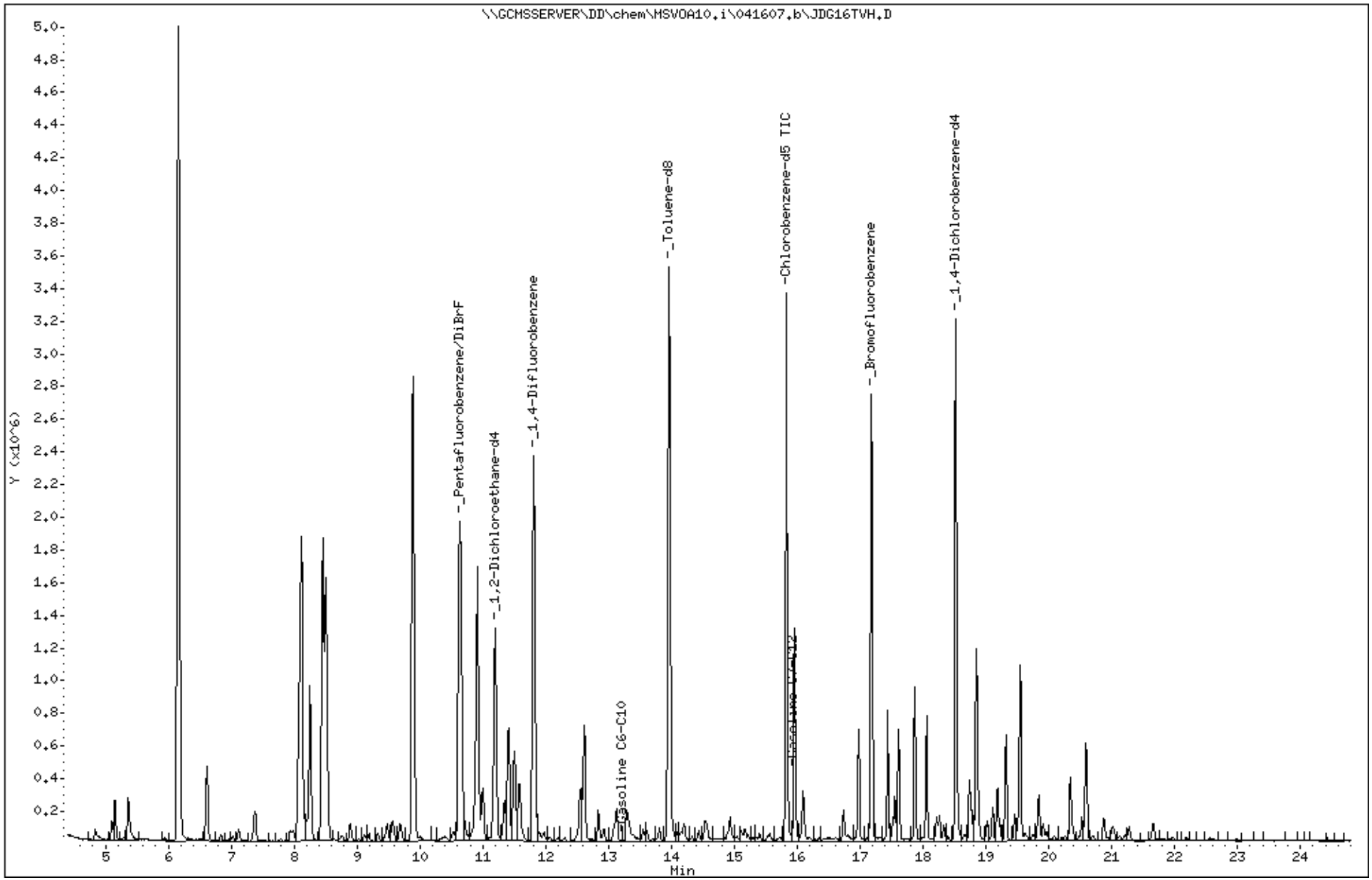
*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\041607.b\JDG16TVH.D
Date : 16-APR-2007 15:46
Client ID: DYNA P&T
Sample Info: S,194113-009

Instrument: MSVOA10.i

Operator: VOA
Column diameter: 2.00

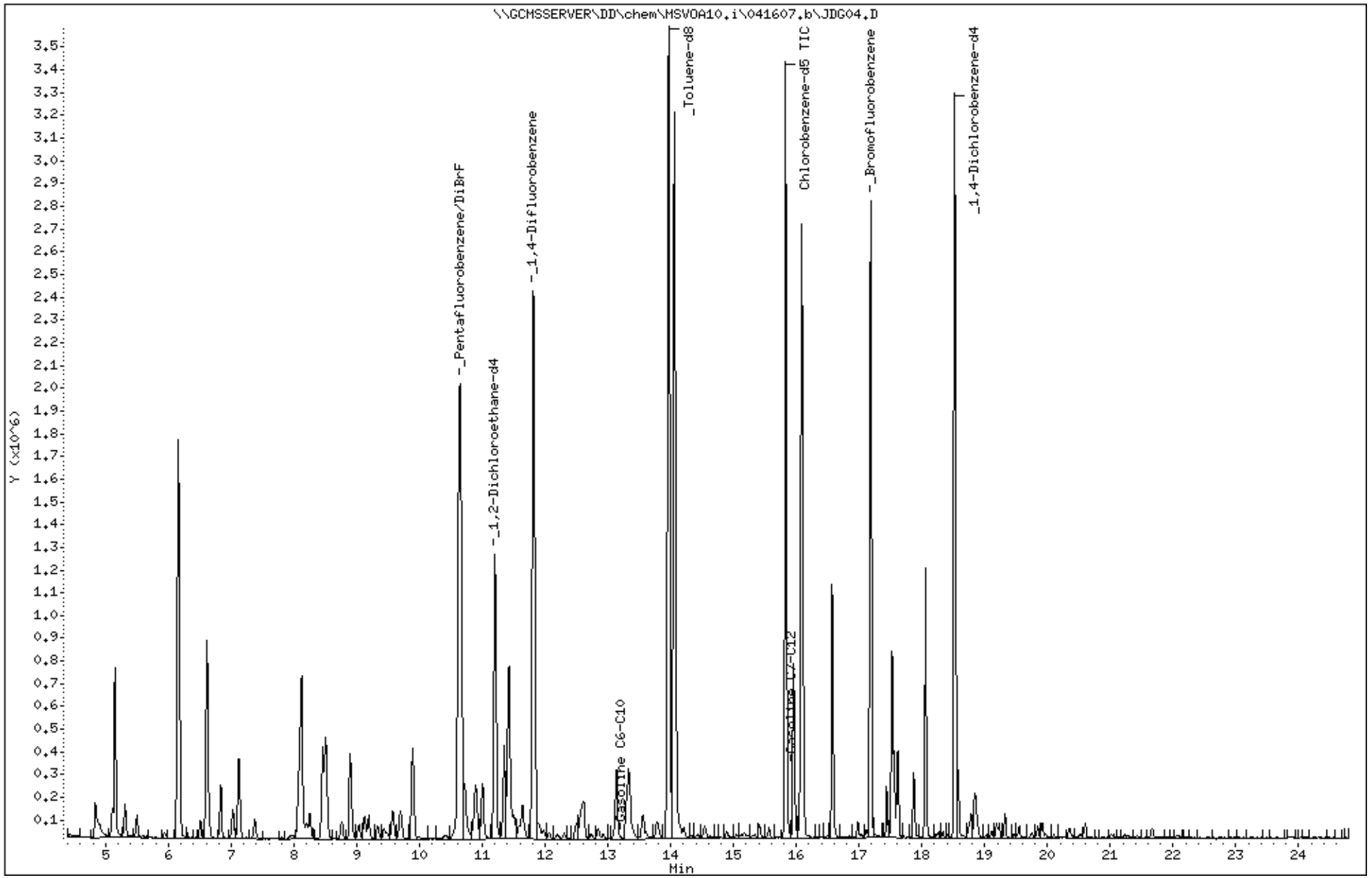
Column phase:



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\041607.b\JDG04.D
Date : 16-APR-2007 09:30
Client ID:
Sample Info: CCV,S5628,0.01/100

Instrument: MSVOA10.i
Operator: VOA
Column diameter: 2.00

Column phase:



194113

Chain of Custody Record

Lab job no. _____
Date 4/6/07
Page 1 of 1

Laboratory CAT
Address 2323 5TH ST
BERKELEY, CA

Project Owner _____
Site Address 2836 UNION ST.
OAKLAND, CA

Project Name _____
Project Number 070406-we-1

Method of Shipment LAB COURIER
Shipment No. _____
Airbill No. _____
Cooler No. _____
Project Manager R. MAKDISI
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: (Signature) [signature]

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	TPH-g (8015)	BTEX/MTBE (8260)	TBA, DIPE, ETBE, TAME (8260)	EDC & EDB (8260)	Remarks
-1	MW-1A		4/6/07	1043	GW	40ml VOA(amber)		HCl		6	X	X			
-2	MW-2A			1015						6					
-3	MW-1B			1105						6		X	X		
-4	MW-2B			0947						6		X	X		
-5	MW-3A			1340						6		X	X		
-6	MW-3B			1320						6					
-7	MW-4A			1358						2					(TVH & 8020MS)
-8	MW-4B			1246						6					
-9	MW-5A			1415						1		X	X		All analyses logged for 8260
-10	MW-5B			1155						6					(MSTVH)

Relinquished by:	Date	Received by:	Date	Relinquished by:	Date	Received by:	Date
Signature [signature]	4/6/07	Signature [signature] (Sample Custodian)	4/6/07	Signature [signature]	4/12/07	Signature [signature]	4/12/07
Printed Will Crow	Time	Printed Will Crow	Time	Printed KEN STILL	Time	Printed Rick Grams	Time
Company Blaine Tech	1615	Company Blaine Tech	1615	Company Blaine Tech	1515	Company CAT	1515

Turnaround Time: _____

Comments: GLOBAL ID # T0600105641
(MW-4A & MW-5A → limited volume)

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

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

2000-00-01

★ Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

intact cold RC