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FIRST SEMIANNUAL 2010 GROUNDWATER MONITORING AND PRODUCT EXTRACTION REPORT

EMERYBAY CONDO PHASE I PARKING GARAGE 6400 CHRISTIE AVENUE EMERYVILLE, CALIFORNIA

Prepared for:

EMERYBAY COMMERCIAL ASSOCIATION EMERYVILLE, CA 94608

April 2010



GEOSCIENCE & ENGINEERING CONSULTING

Environmental Solutions, Inc.

FIRST SEMI-ANNUAL 2010 GROUNDWATER MONITORING AND PRODUCT EXTRACTION REPORT

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Prepared for:

EMERYBAY COMMERCIAL ASSOCIATION 6475 CHRISTIE AVENUE, SUITE 550 EMERYVILLE, CA 94608

Prepared by:

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

April 21, 2010

Project No. 2007-65



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GEOSCIENCE & ENGINEERING CONSULTING

April 21, 2010

Ms. Barbara Jakub Hazardous Materials Specialist Alameda County Department of Environmental Health Local Oversight Program 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Subject: First Semiannual 2010 Groundwater Monitoring & Product Extraction Report EmeryBay Phase I Condo Parking Garage 6400 Christie Avenue, Emeryville, California

Dear Ms. Jakub:

Enclosed is the Stellar Environmental Solutions, Inc. report summarizing the site activities conducted between January 2010 and March 2010 at the referenced site. This report is being submitted on behalf of the owner and Responsible Party, Emerybay Commercial Association. The subject site activities included a product extraction event, the first semiannual 2010 groundwater monitoring event, and an indoor air survey. Results from the indoor air survey were submitted in a separate report to the ACEH on April 5, 2010.

This report summarizes the 15th sampling event conducted at the site since 1988. In addition, the analytical laboratory reported an error in their instrument calibration resulting in errors in the October 2009 laboratory report that was included with the Second Semiannual 2009 Groundwater Monitoring Report. There were small discrepancies between the data sets; however, they did not effect the report conclusions. The historical data tables have been corrected and the laboratory reports and an explanatory letter are included in Appendix C. In accordance with regulatory requirements, an electronic copy of this report has been uploaded to ACEH and to the State Water Resources Control Board's GeoTracker system.

We 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 our knowledge. If you have any questions regarding this report, please contact us at (510) 644-3123.

Sincerely,

Juni S. Mikdin

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

Tool Sliss

Teal Glass, R.E.A. Project Manager



cc: Ms. Kathryn Collins, Emerybay Commercial Association

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1.0 INTRODUCTION

PROJECT BACKGROUND

The subject property, located at 6400 Christie Avenue in Emeryville, California, is owned by the Emerybay Commercial Association, for which Stellar Environmental Solutions, Inc. (SES) provides environmental consulting services. The site has undergone fuel tank-related investigations and remediation since 1988 (by SES since 2007). All known environmental documents for the subject property are listed in the References and Bibliography section (Section 7.0) of this report. Previous remediation and investigation activities are outlined in the final subsection of this chapter.

SITE AND VICINITY DESCRIPTION

The project site is located at 6400 Christie Avenue in Emeryville, California (see Figure 1). The project site, which slopes to the south, is wholly developed with an open ground-floor parking area and apartment complex known as the Emery Bay Phase I Condos and parking garage. The area of monitoring and product extraction is primarily located in the northeastern portion of the parking garage. Figure 2 is a site plan. The site is bordered to the east by the Emery Bay Phase II Condos and parking garage, to the north by 65th Avenue, beyond Christie Avenue and to the west by the Bay Center Offices, and to the south by 64th Avenue. The surrounding area is developed with apartment complexes, offices, and commercial stores.

PREVIOUS INVESTIGATIONS

Historical groundwater well analytical results are presented in Appendix A, and are discussed in detail in Section 5.0 of this report.

The subject property parcel was developed as early as 1958 with the Garrett Motor Freight Station, associated with Delta Lines, Inc. The Delta Lines complex contained an "Oil and Gas" building, located at the site of the present-day Emery Bay Phase I Condo complex and parking garage. The building remained on the property until 1986, when it was demolished to build the present-day structures. Twelve underground fuel storage tanks (UFSTs) containing diesel and gasoline were removed from the Emery Bay Phase I and Phase II Condo complex parcels in 1987, at which time soil and groundwater contamination was discovered.



Figure 1

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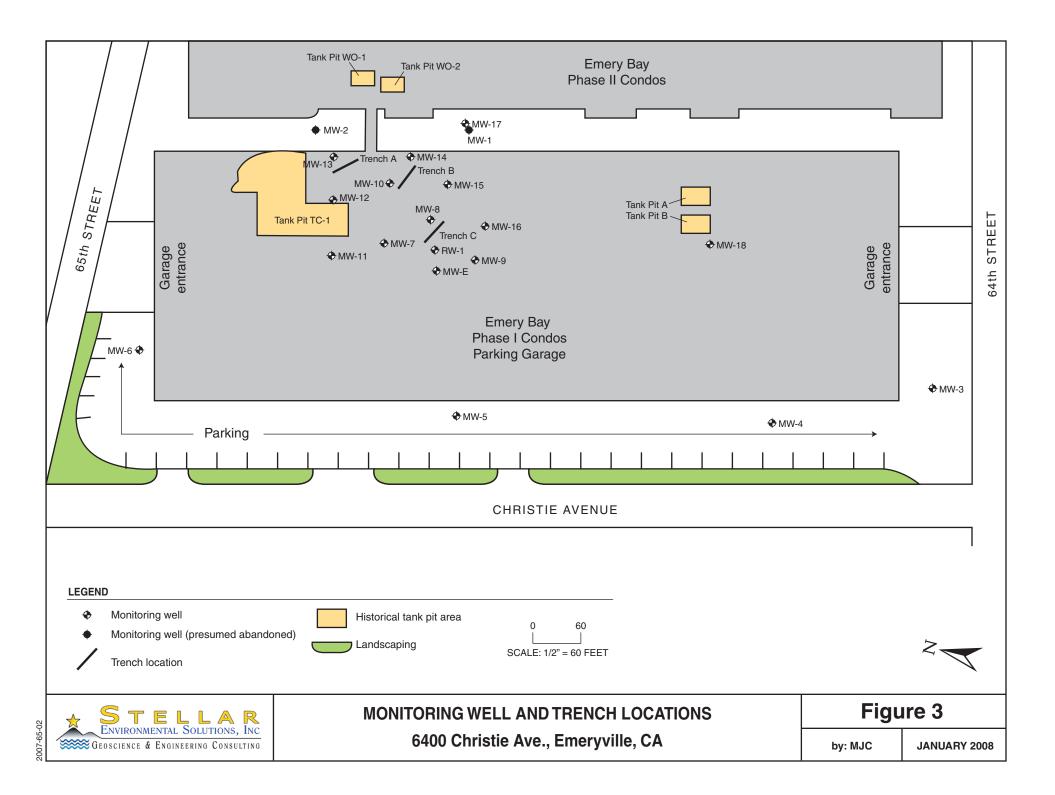
Emeryville, CA



The subsurface contamination originated from the trucking terminal that was operated by the Garrett Freight Line and Delta Lines, and existed at the site of the Bay Center Apartments before its development in the late 1980s. Site investigations identified a total of 12 UFSTs in three areas of the trucking terminal. These UFST areas were referred to as: 1) Tank Pits A and B (each containing one 10,000-gallon diesel tank); 2) Tank Pit TC-1 (four 12,000-gallon diesel tanks, two 10,000-gallon diesel tanks, and one 6,000-gallon gasoline tank); and 3) Tank Pit WO-1 and WO-2 (one 6,000-gallon tank, one 4,000-gallon tank, and one 1,000-gallon tank). Nine UFSTs were located beneath the current footprint of the Emery Bay Phase I Condo complex, while three were beneath the Emery Bay Phase II Condo complex. Figure 2 shows the historical locations where the tanks were removed.

To remediate the hydrocarbon contamination beneath the garage area of the Emery Bay Phase I Condo complex, a light non-aqueous phase liquid (LNAPL) groundwater pump-and-treat system was installed by Groundwater Technology, Inc. (GTI) in 1989. The system extracted approximately one million gallons of groundwater, yielding approximately 100 gallons of LNAPL from recovery well RW-1 from July 1990 to March 1991. Three monitoring wells had previously been installed in 1985. GTI installed (and repaired) several more monitoring wells between 1987 and 1990, for a total of seven monitoring wells and one extraction well by 1990. The system and groundwater monitoring wells were designed and monitored as a condition of discharge permits granted by the East Bay Municipal Utility District (EBMUD) and the Bay Area Air Quality Management District (BAAQMD). The first groundwater monitoring event for MW-1 through MW-6 occurred in December 1988. The second monitoring event, which also included MW-E and RW-1, was conducted in March 1989. Subsequently, the groundwater extraction system operated by GTI was closed in late 1990 when corrosion and other mechanical problems caused the system to fail. Recovery of LNAPL continued manually on RW-1 until 1991, and a third groundwater sampling event occurred in February 1991. In 1994, the GTI recovery system was abandoned. Appendix A contains the historical analytical results. Figure 3 shows the locations of the monitoring wells and trenches.

No groundwater monitoring events had occurred at the site between 1991 and 2004, when PES Environmental, Inc. (PES) was retained to evaluate and implement remediation of the residual contamination at the TC-1 (former location of seven UFSTs) Emery Bay Phase I Condo complex area. (Note: Harding Lawson Associates conducted soil and groundwater sampling on the Phase II Apartment complex area during this time, but not for the purpose of product extraction or remediation.) In 2004, PES installed an additional 10 groundwater monitoring wells (monitoring wells MW-1 and MW-2 were either abandoned or paved over with asphalt during construction), bringing the current total to 17 monitoring wells and 1 extraction well in the Phase I parking garage



area. The first groundwater monitoring event for the current wells was conducted in March 2004, and the second event was conducted in December 2006. A previous SES report (SES, 2007) fully discusses previous site remediation and investigations, site geology and hydrogeology, and residual site contamination. Tabular summaries of historical groundwater well water elevations and analytical results are included in Appendix A.

OBJECTIVES AND SCOPE OF WORK

This report discusses the following activities conducted/coordinated by SES in the current annual monitoring period:

- LNAPL passive product extraction from Trenches A and C, and active product extraction on select groundwater monitoring wells, trench sump wells, and recovery well RW-1
- Collection of water levels in site wells to determine groundwater flow direction
- Sampling of site wells for contaminant analysis
- Evaluation of hydrochemical and groundwater elevation trends in the context of plume stability and case closure assessment

REGULATORY OVERSIGHT

ACEH is the lead regulatory agency for the case, acting as a Local Oversight Program for the Regional Water Quality Control Board (Water Board). There are currently no ACEH or Water Board cleanup orders for the site; however, all site work has been conducted under the oversight of ACEH. ACEH assigned the site to its fuel leak case system (RO #2799), and the case officer is Ms. Barbara Jakub. In a November 2008 meeting with the Responsible Party (represented by Ms. Sarah Irving), SES (represented by Ms. Teal Glass and Mr. Richard Makdisi), and ACEH (represented by Ms. Jakub and Ms. Donna Drogas), it was agreed that quarterly sampling could be reduced to a semiannual schedule with the stipulation that an indoor air and preferential pathway study be completed. SES submitted a letter on November 24, 2008 to ACEH documenting the change in sampling frequency. The Indoor Air Survey and Preferential Pathway Report (SES, 2009b) was submitted to ACEH on April 6, 2009. SES conducted an additional indoor air survey in the ground floor office area on March 22, 2010. The results were presented in a separate report, which was submitted to ACEH on April 6, 2010 (SES, 2010).

The case has been assigned No. SLT2O05561 in the Water Board's GeoTracker system. Electronic uploads of required data/reports are submitted to both agencies.

2.0 PHYSICAL SETTING

The following evaluation of the physical setting of the site—including topography, drainage, and geologic and hydrogeologic conditions—is based on previous (1986 through 2006) site investigations conducted by others, and site inspections and subsurface data collection by SES in 2007 and 2008.

TOPOGRAPHY AND DRAINAGE

The mean elevation of the property is about 13 feet above mean sea level, and the general topographic gradient in the vicinity of the property is to the southwest, although the regional gradient is to the west-southwest.

The nearest receiving water body is San Francisco Bay, located approximately 700 feet to the west of the subject property. East of the site lies the Oakland Hills, which rise to an elevation of approximately 1,000 feet and are situated 2.5 miles east of the subject property. The subject property is not listed within a 100- or 500-year flood zone.

Storm drains from the roof collect storm runoff for discharge onto the asphalt-paved parking lots. Drainage collected in storm sewers from the parking lot and from Christie, 64th, and 65th Streets discharges into San Francisco Bay. SES noted several storm drains, in the parking lot area and on the surrounding streets.

GEOLOGY

The subject property area is underlain with material mapped "Qhbm," designated early pleistocene alluvium, that is moderately consolidated, deeply weathered, poorly sorted, irregularly interbedded clay, silt, sand, and gravel. A geotechnical survey conducted in 1985 revealed that the upper 15 to 20 feet of soil consists of a combination of fill and soft bay sediment. The upper 1 to 2½ feet of soil is generally pavement and imported fill. This is underlain by approximately 20 feet of firm soil consisting of primarily dense silty sand with intermittent layers of silty and sandy clay. Stiff to very stiff clay lies a depth of approximately 40 feet and extends to the depth of the borings, approximately 101.5 feet (Geomatrix, 1988).

The closest major fault, the Hayward Fault, is located about 3 miles east of the property. While the site is located in a seismically active area, it is not within an Alquist-Priolo Special Studies active

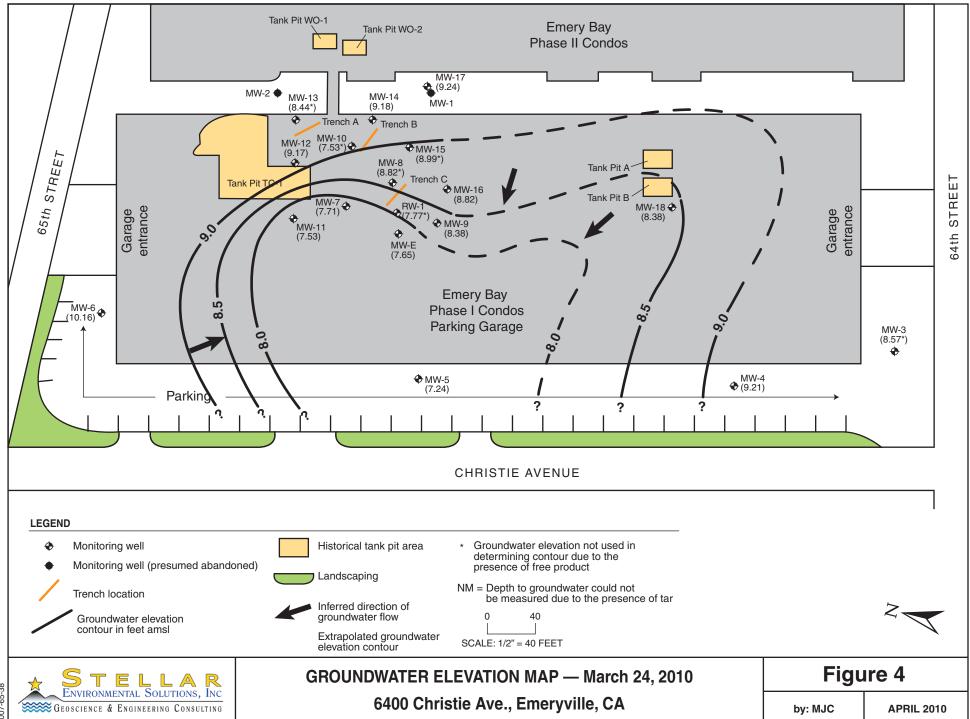
fault zone, the legislatively defined zone of restricted land use 200 feet around an active fault due to the high probability of ground rupture.

GROUNDWATER HYDROLOGY

Regulatory agency records indicate that the direction of shallow groundwater flow in the site vicinity is to the west-northwest, toward San Francisco Bay. However, water levels and flow direction in this area are influenced by tidal patterns, natural topography modifications and the historical LNAPL, resulting in a relatively slow moving and stable plume pattern.

The groundwater gradient measured during the March 2010 monitoring event ranged from the southwest (on the northern portion of the site) to the west (on the central portion of the site) to the northwest (on the southern portion of the site). According to current and historical water level data obtained from onsite monitoring wells, depth to groundwater ranges from approximately 6 to 11 feet below ground surface (bgs). Groundwater elevations during the March 2010 event ranged from 7.24 to 10.16 feet above mean sea level. The average groundwater gradient was 0.001 foot/foot.

Figure 4 is a groundwater elevation map from the recent groundwater-monitoring event (activities discussed in Section 4.0).



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3.0 MARCH 2010 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

This section presents the groundwater sampling and analytical methods for the most recent event. Table 1 summarizes monitoring well construction and groundwater monitoring data. Groundwater analytical results are summarized in Section 4.0.

SAMPLING METHODS AND ACTIVITIES

Activities for this event include:

- Measuring static water levels in all 18 wells
- Collecting post-purge groundwater samples from the 18 wells for laboratory analysis of the following contaminants:
 - benzene, toluene, ethyl benzene, and xylenes (BTEX)
 - methyl tertiary-butyl ether (MTBE)
 - total petroleum hydrocarbons as gasoline (TPHg)
 - total petroleum hydrocarbons as diesel (TPHd)

The site monitoring well sampling locations are shown on Figure 3. Well construction information and water level data are summarized in Table 1. Appendix B contains the groundwater monitoring field records.

CURRENT MONITORING EVENT

Blaine Tech Services conducted groundwater monitoring well water level measurements, purging, sampling, and field analyses on March 24, 25, and 26 under the supervision of SES personnel. Groundwater sampling was conducted in accordance with State of California guidelines for sampling dissolved analytes in groundwater associated with leaking UFSTs. As the first task of the monitoring event, static water levels and free product levels were measured in the 18 wells using an electric water level indicator. The depth of free product was recorded, and the water level was adjusted to reflect the groundwater elevation.

Table 1

Well	Well Depth (feet bgs)	Screened Interval	Top of Well Casing Elevation ^(a)	Depth to Free Product (TOC)	Thickness of Free Product (feet)	Groundwater Elevation (March 24, 2010)
MW-3	25	5 to 20	16.65	NM	NM	8.57
MW-4	25	5 to 20	16.29	NA	NA	9.21
MW-5	25	5 to 20	16.72	NA	NA	7.24
MW-6	25	5 to 20	16.82	NA	NA	10.16
MW-7	20	5 to 20	17.73	NA	NA	7.71
MW-8	16	5 to 16	17.84	NM	NM	8.82
MW-9	20	5 to 20	17.84	NA	NA	8.38
MW-10	20	5 to 20	17.83	8.58	1.72	7.53
MW-11	20	5 to 20	17.76	NA	NA	7.53
MW-12	20	5 to 20	17.83	NA	NA	9.17
MW-13	20	5 to 20	17.66	NM	NM	8.44
MW-14	20	5 to 20	17.60	NA	NA	9.18
MW-15	20	5 to 20	17.80	NM	NM	8.99
MW-16	20	5 to 20	17.74	NA	NA	8.82
MW-17	20	5 to 20	18.17	NA	NA	9.24
MW-18	20	5 to 20	16.35	NA	NA	8.38
MW-E	47	7 to 40	17.47	NA	NA	7.65
RW-1	30	unknown	16.70	NM	NM	7.77
TA-E	11-13	6-8 to 11-13	17.20	NM	NM	NM
TA-M	11-13	6-8 to 11-13	17.21	NM	NM	NM
TA-W	11-13	6-8 to 11-13	17.28	NM	NM	NM
TB-E	11-13	6-8 to 11-13	17.24	NM	NM	NM
TB-M	11-13	6-8 to 11-13	17.30	NM	NM	NM
TB-W	11-13	6-8 to 11-13	17.33	NM	NM	NM
TC-E	11-13	6-8 to 11-13	17.07	NM	NM	NM
TC-M	11-13	6-8 to 11-13	17.37	NM	NM	NM
TC-W	11-13	6-8 to 11-13	17.32	NM	NM	NM

Groundwater Monitoring Well Construction and Groundwater Elevation Data 6400 Christie Avenue, Emeryville, California

Notes:

^(a) Relative to mean sea level.

^(b) Depth to groundwater and/or of free product could not be determined because free product density would not allow a clear delineation.

bgs = below ground surface

TOC = below top of casing

NA = not applicable (no free product in well)

NM = depth to groundwater and/or free product could not be determined due to the presence of tar

MW-3 through MW-6 and MW-E are 2-inch PVC. MW-7 through MW-18 are 34-inch PVC. RW-1 is 10-inch PVC.

Approximately 49 gallons of purge water and equipment decontamination rinse water from the current groundwater sampling event was containerized onsite in a labeled 55-gallon drum. In addition, 937.5 gallons of water and 18.73 gallons of product were removed/purged from select wells during the active product removal; 0.3 gallon was removed by passive product removal.

All purged groundwater and free product were containerized in a 1,100-gallon aboveground storage tank (AST) located in a locked fenced area on the northeast corner of the property. On April 8, 2010, Evergreen Oil, Inc. vacuumed and transported the water to its recycling facility under manifest number 005765369 (EPA ID No. CAD982413282). Appendix F contains copies of the manifest and recycling certificate.

4.0 REGULATORY CONSIDERATIONS, ANALYTICAL RESULTS, AND DISCUSSION OF FINDINGS

This section presents the analytical results of the most recent monitoring event and summarizes the relevant regulatory considerations. Appendix C contains the certified analytical laboratory report and chain-of-custody record.

REGULATORY CONSIDERATIONS

As specified in the East Bay Plain Groundwater beneficial Use Evaluation Report by the San Francisco Bay Region Water Board (Water Board, 1999), all groundwater is considered a potential source of drinking water unless otherwise indicated by the Water Board, and is assumed to ultimately discharge to a surface water body and potentially impact aquatic organisms. The subject property is listed as occurring within Zone B, designated as groundwater that is unlikely to be used as a drinking water resource. The basin is shallow in this area, with depths of less than 300 feet. Groundwater in this area is used for backyard irrigation, industrial supply, and commercial irrigation. There is a low likelihood that this water will be used as a public water supply in the near future.

The Water Board publishes Environmental Screening Levels (ESLs) for residential and commercial/industrial properties where groundwater <u>is/is not</u> a likely drinking water resource. As stipulated in the ESL document (Water Board, 2008), ESLs are not cleanup criteria; rather, they are conservative screening-level criteria designed to be protective of both drinking water resources and aquatic environments. The groundwater ESLs are composed of one or more components—including ceiling value, human toxicity, indoor air impacts, and aquatic life protection. Exceedance of ESLs suggests that additional remediation and/or investigation (e.g., monitoring plume stability to demonstrate no risk to sensitive receptors where drinking water is not threatened) may be warranted. Because the subject property is a residential property where groundwater is not a likely drinking water resource, the contaminant levels at the site will be compared to the ESLs for these criteria.

Contaminants detected above the ESLs during this sampling event include gasoline, diesel, benzene, toluene, ethylbenzene, and total xylenes. In general, concentrations of gasoline and diesel have decreased as compared to both the previous quarter and the same quarter last year.

GROUNDWATER SAMPLE RESULTS

Table 2 and Figure 5 summarize the contaminant analytical results of the current monitoring event samples.

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	Analytical Results							
Well ID	TPHg	TPHd	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	
MW-3	230	4,500	1.7	<0.5	0.97	<0.5	2.7	
MW-4	<50	680	<0.5	<0.5	<0.5	<0.5	<2.0	
MW-5	<50	4,300	4.9	<0.5	<0.5	<0.5	<2.0	
MW-6	<50	910	1.9	<0.5	<0.5	<0.5	<2.0	
MW-7	330	8,700	68	2.2	10	31.6	<2.0	
MW-8	19,000	11,000	6,200	120	830	149	<2.0	
MW-9	140	6,500	5.2	<0.5	<0.5	<0.5	<2.0	
MW-10	7,800	3,900	1,200	46	34	56	54	
MW-11	1,600	6,500	150	<0.5	3.9	12.8	2.9	
MW-12	15,000	4,000	6,200	110	73	101	<2.0	
MW-13	43,000	15,000	12,000	310	1,600	1,140	<2,500	
MW-14	6,700	3,900	2,400	400	140	185	<20	
MW-15	14,000	3,700	5,900	74	170	69	<2.0	
MW-16	70	12,000	12	2.1	0.56	1.35	<2.0	
MW-17	5,000	3,400	910	66	73	93	<2.0	
MW-18	<50	9,400	<0.5	<0.5	<0.5	< 0.5	<2.0	
MW-E	2,400	3,800	1,000	20	37	26.9	4.9	
RW-1	200	810	<0.5	<0.5	<0.5	<0.5	<2.0	
ESLs ^(a)	100 / 210	100 / 210	1.0 / 46	40 / 130	30 / 43	20 / 100	5.0 / 1,800	

Table 2Groundwater Sample Analytical Results – March 24, 25, and 26, 20096400 Christie Avenue, Emeryville, California

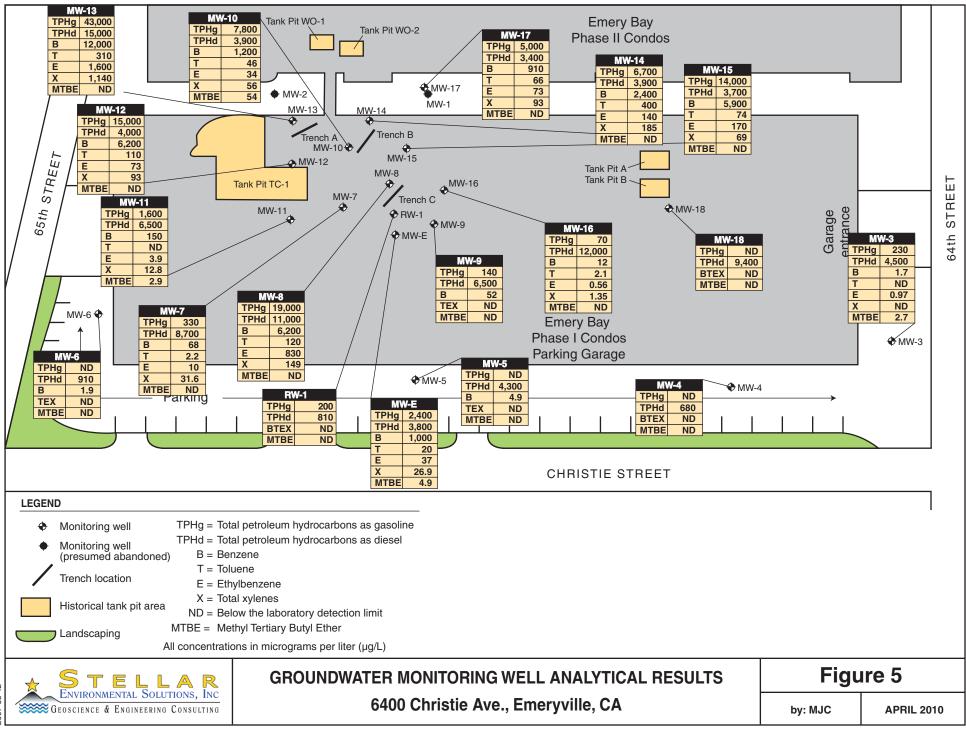
Notes:

^(a) Water Board Environmental Screening Levels for residential sites where groundwater <u>is/is not</u> a drinking water resource (Water Board, 2008).

MTBE = methyl tertiary-butyl ether

TPHd = total petroleum hydrocarbons – diesel range (equivalent to total extractable hydrocarbons – diesel range) TPHg = total petroleum hydrocarbons – gasoline range (equivalent to total volatile hydrocarbons – gasoline range)

All concentrations are expressed in micrograms per liter ($\mu g/L$), equivalent to parts per billion (ppb). Results listed in **bold-face type** are at or above the ESLs where groundwater is not a drinking water resource.



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Hydrocarbon Contaminants

During the March 2010 sampling event, several wells had reported hydrocarbon concentrations greatly in excess of the Water Board ESLs. However, hydrocarbon concentrations in wells can be significantly affected by the purging of accumulated hydrocarbons product, so large swings in concentration (both reductions and increases) could be seen due to this occurrence.

Gasoline was detected in MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, and MW-E above the ESL where groundwater is not a likely drinking water resource (210 micrograms per liter [μ g/L]). Gasoline was also detected in MW-9, MW-16, and RW-1 but at concentrations below the ESL. The highest concentration (43,000 μ g/L) was observed in MW-13; however, this is the lowest concentration of gasoline observed in this well since its installation in 2006.

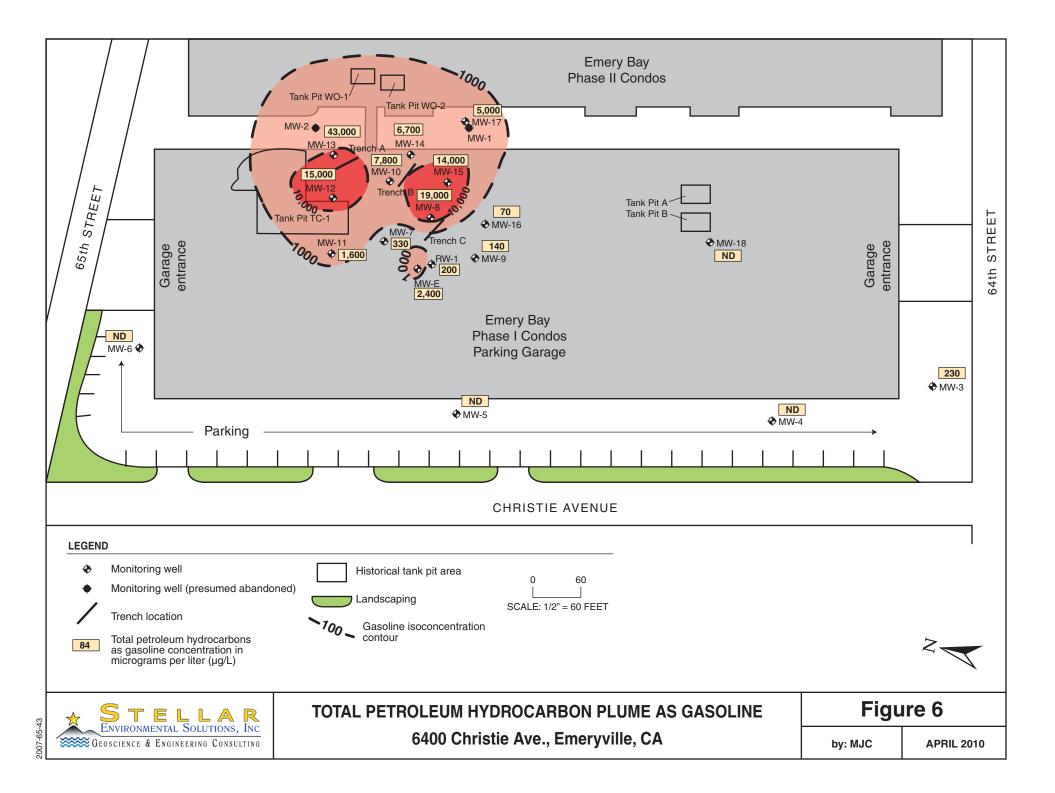
Figure 6 shows an isoconcentration contour map of TPHg concentrations in groundwater based on the March 2010 monitoring well analytical results. Increases compared to the March 2009 monitoring event were observed in wells MW-9, MW-11, MW-12, and MW-E. The remaining wells either remained below laboratory detection limits (in the perimeter wells MW-4, MW-5, MW-6, and MW-18) or exhibited a decrease. Decreases were also observed in 10 of the 18 monitoring wells as compared to last quarter (September 2009).

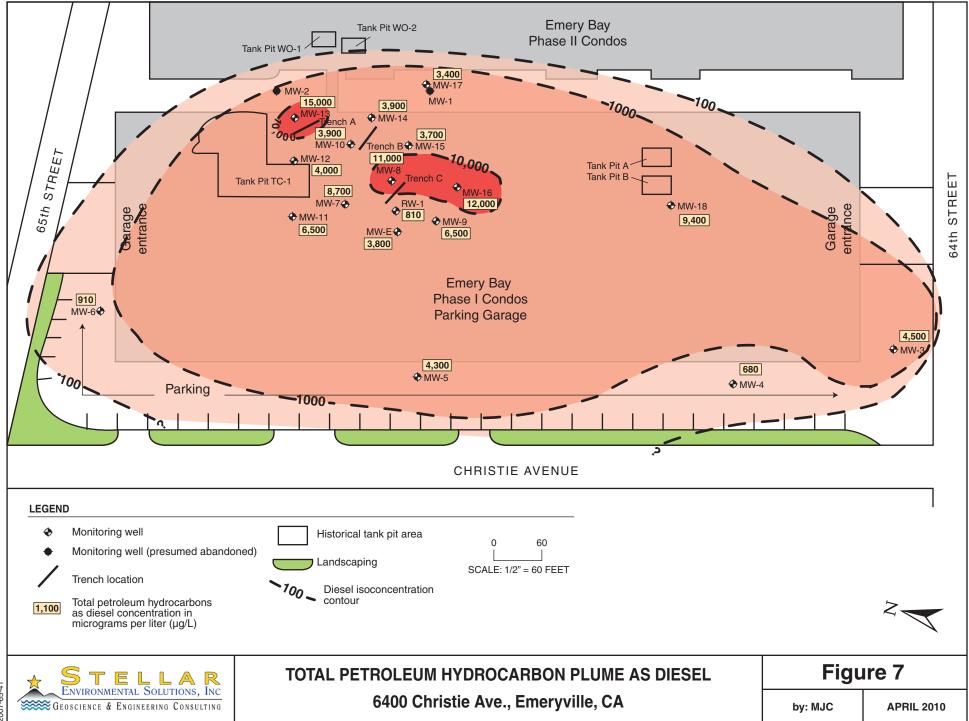
Diesel was detected in all site wells above the ESL of $210 \,\mu g/L$ (where groundwater is not a likely drinking water resource).

The highest concentration (15,000 μ g/L) was observed in MW-13. The concentration of hydrocarbons in well MW-13 decreased significantly below the historic high concentration of 2,000,000 μ g/L diesel observed during the same seasonal sampling last year, in March 2009. This represents a reduction of over 1000 % or nearly three orders of magnitude change. The decrease is attributed to the effective LNAPL recovery in 2009 and 2010.

While not nearly as significant in percent reduction as observed in MW-13, all of the monitoring wells, with the exception of MW-3, MW-14, and MW-17 showed decreased hydrocarbon concentrations in March 2010 as compared to March 2009. The concentrations in MW-3, MW-14, and MW-17, while above the March 2009 values, were below their historic maxima.

Figure 7 is an isoconcentration contour map of TPHd concentrations in groundwater based on the March 2010 monitoring well analytical results.





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In monitoring wells MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, and MW-E concentrations of benzene exceeded the ESL of 46 μ g/L where groundwater is not a drinking water resource. Benzene was also found in MW-3, MW-5, MW-6, MW-9, and MW-16, but at concentrations below the ESL.

Toluene was detected above the ESL of $130 \mu g/L$ in monitoring wells MW-13 and MW-14. Toluene was also detected in wells MW-7, MW-8, MW-10, MW-12, MW-15, MW-16, MW-17, and MW-E but at levels below the ESL.

Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a likely drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, and MW-17. Ethylbenzene was also detected in MW-3, MW-7, MW-10, MW-11, MW-16, and MW-E but at levels below the ESL.

Total xylene concentrations in monitoring wells MW-8, MW-12, MW-13, and MW-14 were above the 100- μ g/L ESL where groundwater is not a likely drinking water resource. Total xylenes were also detected in MW-7, MW-10, MW-11, MW-15, MW-16, MW-17, and MW-E but below the ESL. MTBE was not detected above the ESL of 1,800 μ g/L in any of the monitoring wells. MTBE was detected in MW-3, MW-10, and MW-11 but below the ESL.

Quality Control Sample Analytical Results

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

5.0 FREE-PHASE HYDROCARBON PRODUCT REMEDIATION SYSTEM

This section describes the extraction of the historical free product in the Emery Bay Phase I Condo parking garage, the construction details of the current LNAPL remediation system located on the northeastern portion of the garage, and the most recent product removal activities conducted on March 22 and 23, 2009 (immediately prior to the sampling event). Table 3 summarizes the product removed from the skimmers during these events. Appendix E summarizes historical product removal.

LNAPL REMEDIATION SYSTEM CONSTRUCTION

In an attempt to maximize free product removal, PES constructed three trenches, each containing three sump wells, in the northeastern area of the Emery Bay Phase I Condo parking garage. Historically, this area has had the highest concentrations of contamination and accumulation of free product. The trenches (TA, TB, and TC) extend to depths of approximately 12.5 to 13 feet bgs, while the collection sumps (TA-W, TA-M, TA-E, TB-W, TB-M, TB-E, TC-W, TC-M, and TC-E) extend to approximately 11 to 13 feet bgs. The sumps were constructed using 10-inch-diameter schedule 40 polyvinyl chloride (PVC) casing. Blank casing was used from approximately 0.5 feet bgs to between 6 and 8 feet bgs. Slotted 0.06-inch PVC was used from between 6 and 8 feet bgs to 6 inches from the total depth of the trench. The trenches were then backfilled with high-porosity, high-permeability gravel designed to promote LNAPL migration (PES, 2007). Passive skimmers, manufactured by QED Environmental Systems (of Oakland, California) were then placed in each of the sumps in Trench A and in one of the sumps (TC-E) in Trench C.

The skimmers operate by floating on the surface of the water. Water and free product collect in a filtration reservoir, which allows water to pass through. A tube connected to the reservoir then filters the collected free product into a collection reservoir located below the water surface. The reservoir can be emptied by opening a valve located on the bottom of the cylindrical shaped reservoir. Each of these skimmers is attached to the sump lid by a rope, and can be removed and transferred to another sump as needed.

Trench ID	Number of Skimmers in Well	Total Product Removed (gallons)
TA-E	2	0.3
TA-M	2	0.0
TA-W	2	0.0
TB-E	0	NM
TB-M	0	NM
TB-W	0	NM
TC-E	1	0.0
TC-M	0	NM
TC-W	0	NM
Total Product Remove	ed	0.3

Table 3Passive Trench Product Extraction – March 22, 2010

Note:

NM = Not measured. No skimmer was located in the well.

HISTORICAL FREE PRODUCT EXTRACTION

As mentioned under the "Previous Investigations" subsection in Section 1.0, in approximately 1986, contaminated soil and groundwater were discovered during the removal of 12 UFSTs from the Emery Bay Phase I and Phase II parcels. To dewater the excavation during the Phase I and Phase II Condo construction, a groundwater extraction and remediation system was installed by GTI in 1988. Approximately 1 million gallons of water yielding 100 gallons of hydrocarbon product was removed from RW-1 during its operation (PES, 2007). However, corrosion and other mechanical problems caused the system to fail in 1991, and it was decommissioned in 1994. In February 2008, SES removed all of the old parts of the system from the well vault.

In 2004, PES began manual extraction on RW-1, and was reported to have removed approximately 48 gallons of LNAPL (PES, 2004a)—although it is unclear whether the removed material was pure product or product mixed with water. To accelerate free product removal, PES constructed a new LNAPL hydrocarbon remediation system (described below) between April and May 2004 (PES, 2007). Several extraction events were conducted by PES from May 2004 through March 2007; the extraction events yielded a total of approximately 51 gallons of LNAPL. No extraction events were conducted by PES in 2005; approximately 50 gallons of hydrocarbons was removed in 2006; and approximately 0.6 gallon of hydrocarbons was removed by PES between January and November

2007. In November and December 2007, after SES was retained for the project, the skimmer system only yielded 2.82 gallons. Figure 11 graphs the comparison of free product extraction on a yearly basis.

It should be noted that no historical product extraction reports were provided to SES by the previous owner or by PES. Therefore, there is little to no information on how active product extraction occurred during 2004 and 2006. The amount of free product removed during 2004 and 2006 appears to have been high, as only 100 gallons of free product was obtained from actively pumping over 1 million gallons of water continuously between 1989 and 1991.

MARCH 2010 PRODUCT REMOVAL EVENT

Historical yield from the trench recovery system has been unproductive, with the 1-liter passive skimmer collection reservoirs not filling up completely, or filling up with water rather than product. The highest hydrocarbon product yield has occurred from active pumping on recovery well RW-1 or at various other wells.

To determine the recharge rate of free product in wells, SES conducted both passive and active product removal events during the 2 days prior (March 22 and 23) to the groundwater sampling event (March 24, 25, and 26). A total of approximately 937.5 gallons of groundwater and 18.73 gallons of free product were removed during the March 2010 active product removal event, in addition to 0.3 gallon removed passively from the skimmers. A sample taken from the AST on April 8, 2010 contained a TVHg concentration of 4,000 μ g/L and TEHd concentration of 350,000 μ g/L. Based on the total amount of groundwater removed, 937.5 gallons, SES calculated that approximately 0.03 pound of gasoline and 2.8 pounds of diesel were removed with the purged groundwater.

Table 3 shows the allocation of free product removed from the collection skimmers in Trenches A and C. Table 4 shows the total amount of product actively removed by pumping based on the total amount of groundwater/product removed for the March 2010 extraction event.

The removal activities occurred as follows:

On March 22, 2010 SES removed 50 gallons of groundwater and product from TA-W and TA-M. Product was evident in these wells; however, the skimmers were filled with water (no product). The skimmers on TA-E contained 0.25 gallon of product and an additional 50 gallons of groundwater and product were removed actively. SES removed 50 gallons from TB-M. SES removed 25 gallons each from TB-E and TB-W. On trench well TC-E, 50 gallons were removed actively. Only water was present in the skimmer in this well. SES removed 50 gallons each from TC-M and TC-W. On recovery well RW-1, 200 gallons were removed actively. SES then removed 8 gallons from MW-3 before it dewatered.

Well	Total Gallons of Product Removed	Well	Total Gallons of Product Removed				
MW-3	0.14	MW-17	0.30				
MW-4	NP	MW-18	0.02				
MW-5	NP	MW-E	NP				
MW-6	NP	RW-1	8.00				
MW-7	0.01	TA-E	1.00				
MW-8	0.18	TA-M	1.00				
MW-9	0.02	TA-W	1.00				
MW-10	0.60	TB-E	0.50				
MW-11	NP	TB-M	1.0				
MW-12	0.60	TB-W	0.50				
MW-13	0.03	TC-E	1.00				
MW-14	0.10	TC-M	1.00				
MW-15	0.69	TC-W	1.00				
MW-16	0.04						
		Total	18.73				

Table 4Active Product Extraction – March 2010

Notes:

NP = not purged

Product removal estimates are based on the total amount of free product measured in the purge tank (19 gallons) per total amount of groundwater purged (937.5 gallons), which yields 0.02 gallon of product per 1 gallon of purge water.

- On March 23, 2010, a total of 1.5 gallons was removed from MW-13, 30 gallons from MW-12, 30 gallons from MW-10, 5 gallons from MW-14, 34.5 gallons from MW-15, 9 gallons from MW-8, 2 gallons from MW-16, 1 gallon from MW-9, 0.5 gallons from MW-7, 1 gallon from MW-18, 15 gallons from MW-17, and 200 gallons from RW-1.
- All of the purge water and free product extracted during these events was containerized onsite in the 1,100-gallon AST located in the northeastern gated area of the garage. On April 8, 2010, Evergreen Oil vacuumed and transported the water to its recycling facility in Newark, California. The waste manifest and recycling certificate are included in Appendix F.

DISCUSSION

As mentioned under the "Historical Free Product Extraction" subsection of this chapter, no product extraction was conducted by PES in 2005. "Product" removal in 2006 was reported at a significant

52 gallons by PES; however, it was not achieved through collection from the trench hydrocarbon skimmers, but rather through active pumping; in addition, the "product" referred to by PES appears to actually have been a mixture of petroleum product and water. The PES report provides no documentation (e.g., manifests) of the removal of actual recovered petroleum product. The recovery by PES from the start of 2007 through October 2007 (when SES assumed environmental consulting activities) was limited to 0.6 gallon collected from the skimmers. In addition, there had been no removal of free product from well RW-1 since 2004, at which time approximately 50 gallons of free-floating product was apparently removed by active pumping. The majority of this petroleum product apparently was removed by active pumping and removal activities rather than from the trench well skimmers. Much of this may also have been a mixture of water and hydrocarbons. Thus, we conclude that the trench recovery system on its own has never been particularly effective. In 2007, passive extraction of free product through trench well skimmers removed only 3.41 gallons. SES removed approximately 5.65 gallons of free product from these passive skimmers during the 2008 removal events. Approximately 10.34 gallons were removed by active pumping on wells during 2008.

As demonstrated by the analytical data, active pumping on certain wells has generally reduced gasoline concentrations; however, wells not included in the pumping schedule showed a lesser or no decrease. Diesel concentrations seem to be less affected by active pumping, even in wells that were included in the pumping schedule, such as RW-1. More active remediation will likely be required on this site to reduce the concentrations to levels acceptable to the regulatory community and to achieve eventual regulatory closure. However, with the exception of the current program of LNAPL removal from the skimmers and wells, no additional active remedies are proposed until a more cost-effective and productive method of removal is found.

6.0 SUMMARY, CONCLUSIONS, AND PROPOSED ACTIONS

FINDINGS AND CONCLUSIONS

- The most salient finding in this first semiannual groundwater monitoring at the site is the overall reductions in hydrocarbon concentration in March 2010 compared to March 2009. This is attributed to better LNAPL recover in 2009 and 2010 and may also be influenced by weather changes. The highest concentration (15,000 µg/L), observed in MW-13 w showed the most significant decrease compared to its historic high concentration of 2,000,000 µg/L diesel observed in March 2009.
- The subject property parcel was developed as early as 1958 with the Motor Freight Station, associated with Delta Lines, Inc. The Delta Lines complex contained an "Oil and Gas" building, located at the site of the present-day Emery Bay Phase I Condo complex and parking garage. In 1986, the building was demolished, and 12 UFSTs containing diesel and gasoline were removed from the Emery Bay Phase I and Phase II Condo complex parcels. Soil and groundwater contamination was discovered.
- In response to the contamination, a LNAPL groundwater pump-and-treat system was installed in 1989, but failed in 1991. Active pumping of free product began again in 2004, and a product extraction system consisting of passive product removal was installed in 2006. Groundwater monitoring events have been sporadically conducted since 1988; quarterly groundwater monitoring events were conducted for the first time in 2008. The quarterly sampling was reduced to semiannual frequency in 2009.
- The site currently contains 17 monitoring wells, 1 recovery well, and 9 product extraction trench wells. This is the 13th sampling event conducted since 1988.
- Site geological conditions consist of a combination of fill and soft bay sediment to between 15 and 20 feet bgs, covered by approximately 1 to 2½ feet of pavement and imported fill. This is underlain by approximately 20 feet of firm soil consisting of primarily dense silty sand with intermittent layers of silty and sandy clay. Stiff to very stiff clay extends from a depth of approximately 40 feet to approximately 102 feet.
- The groundwater direction during this monitoring event was found to range from the southwest (on the northern portion of the site) to the west (on the central portion of the site) to the northwest (on the southern portion of the site).

- Groundwater elevations during the March 2010 event ranged from 7.24 to 10.16 feet above mean sea level. The average groundwater gradient was 0.001 foot/foot.
- Current contaminants of concern include TPHg, TPHd, and BTEX. Current groundwater concentrations exceeded the ESLs for these contaminants. MTBE was only detected in MW-3, MW-10, and MW-11 during this event, and the concentrations were well below the ESL.
- Gasoline was detected in MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW 14, MW 15, MW-17, and MW-E above the ESL where groundwater is not a drinking water resource (210 micrograms per liter [µg/L]). Gasoline was also detected in MW-9, MW-16, and RW-1 but at concentrations below the ESL. The highest concentration (43,000 µg/L) was observed in MW-13; however, this is the lowest concentration of gasoline observed in this well since its installation in 2006.
- Increases compared to the March 2009 monitoring event were observed in wells MW-9, MW-11, MW-12, and MW-E. The remaining wells either remained below laboratory detection limits (in the perimeter wells MW-4, MW-5, MW-6, and MW-18) or exhibited a decrease. Decreases were also observed in 10 of the 18 monitoring wells as compared to last quarter (September 2009).
- Diesel was detected in all site wells above the ESL of 210 µg/L (where groundwater is not a drinking water resource). The highest concentration (15,000 µg/L) was observed in MW 13. This is well below the historic high concentration of 2,000,000 µg/L diesel observed during March 2009. The MW-13 data represents a reduction of over 1000 % or nearly three orders of magnitude change. The diesel concentration in all of the monitoring wells, with the exception of MW-3, MW-14, and MW-17, decreased as compared to March 2009. The concentrations in MW-3, MW-14, and MW-17, while higher than in March 2009, were below their historic maxima.
- In MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, and MW-E concentrations of benzene exceeded the ESL of 46 µg/L where groundwater is not a drinking water resource. Benzene was also found in MW-3, MW-5, MW-6, MW-9, and MW-16, but at concentrations below the ESL.
- Toluene was detected above the ESL of 130 µg/L in monitoring wells MW-13 and MW-14. Toluene was also detected in wells MW-7, MW-8, MW-10, MW-12, MW-15, MW-16, MW-17, and MW-E but at levels below the ESL.
- Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, and MW-17. Ethylbenzene was also detected in MW-3, MW-7, MW-10, MW-11, MW-16, and MW-E but at levels below the ESL.

- Total xylene concentrations in monitoring wells MW 8, MW-12, MW-13, and MW-14 were above the 100-µg/L ESL where groundwater is not a drinking water resource. Total xylenes were also detected in MW-7, MW-10, MW-11, MW-15, MW-16, MW-17, and MW-E but below the ESL.
- MTBE was not detected above the ESL of 1,800 µg/L in any of the monitoring wells. MTBE was detected in MW-3, MW-10, and MW-11 but below the ESL.
- SES conducted passive skimmer product removal on the trench wells during the March 2010 removal event. A total of approximately 0.3 gallon was removed from trench well TA-E. The skimmers in trench wells TA-M, TA-W, and TC-E were all filled with water.
- SES also conducted active product removal on the trench wells, source area wells, recovery well, and select monitoring wells during the March 2010 event. A total of approximately 937.5 gallons of groundwater and 18.73 gallons of free product were removed during the March 2010 active product removal event. A sample taken from the AST on April 8, 2010 contained a TVHg concentration of 4,000 µg/L and TEHd concentration of 350,000 µg/L. Based on the total amount of groundwater removed, 937.5 gallons, SES calculated that approximately 0.03 pound of gasoline and 2.8 pounds of diesel were removed with the purged groundwater.
- The trench recovery system, where free product is designed to collect in 1-liter skimmers, is effective in removing small amounts of free product, but is not effective in decreasing the size of the plume overall. Active pumping at various wells appears to have some effect in lowering gasoline concentrations; however, it does not appear to be affecting the concentrations of diesel (which appear to be steadily increasing).

RECOMMENDATIONS

Groundwater monitoring should be continued on a semiannual basis to document contaminant concentrations over time.

- Both active and passive free product removal events should be continued to ascertain their effectiveness in reducing the plume size over time. Active product removal is being conducted on a semiannual basis immediately prior to the sampling event. Passive product removal from the skimmers is being conducted on a quarterly basis.
- Emergent best available technologies should continue to be evaluated, as a new technology might cost-effectively remediate the site to move it toward full regulatory closure.
- Electronic uploads to ACEH's ftp system and the State Water Board's GeoTracker system should be continued as required.

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8.0 LIMITATIONS

This report has been prepared for the exclusive use of Emerybay Commercial Association, their authorized representatives and assigns, and the regulatory agencies. No reliance on this report shall be made by anyone other than those for whom it was prepared.

The findings and conclusions presented in this report are based on a review of previous investigators' findings at the site, as well as site investigations conducted by SES in 2007, 2008, and 2009. This report has been prepared in accordance with generally accepted methodologies and standards of practice. The SES personnel who performed this limited remedial investigation are qualified to perform such investigations and have accurately reported the information available, but cannot attest to the validity of that information. No warranty, expressed or implied, is made as to the findings, conclusions, and recommendations included in the report.

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

APPENDIX A

Historical Groundwater Well Analytical Results

TABLE A Historical Groundwater Monitoring Well Groundwater Analytical Results Petroleum and Aromatic Hydrocarbons (µg/L) 6400 Christie Avenue, Emeryville, California

	MW-1												
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE				
1	Dec-88	380	17,000	NA	8,600	940	250	570	NA				
2	May-89	130	24,000	NA	16,000	2,100	300	1,200	NA				
3	Feb-91	<10	22,000	NA	6,800	3,500	410	2,000	NA				
	Monitoring well abandoned - date unclear												

	MW-2											
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
1	Dec-88	72	22	NA	< 0.5	<0.5	<0.5	< 0.5	NA			
2	May-89	40	18	NA	<0.5	< 0.5	<0.5	< 0.5	NA			
3	Feb-91	83	<10	NA	<0.3	< 0.3	<0.3	<0.6	NA			
	Monitoring well abandoned - date unclear											

				MW	-3				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	4,200	NA	77	1,400	140	560	NA
2	May-89	110	1,800	NA	64	250	61	110	NA
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS
4	Mar-04	3,400	440	3,900	<0.5	< 0.5	1.5	<1.0	9.7
5	Dec-06	350	280	230	< 0.5	< 0.5	<0.5	< 0.5	2.0
6	Dec-07	960	150	NA	0.54	0.54	<0.5	< 0.5	<2.0
7	Mar-08	6,600	450	NA	< 0.5	<0.5	1.8	2.0	4.3
8	Jun-08	4,500	440	NA	<0.5	<0.5	4.0	2.0	9.5
9	Sep-08	1,700	280	NA	< 0.5	<0.5	1.0	< 0.5	<2.0
10	Dec-08	2,300	240	NA	<0.5	<0.5	1.1	<0.5	<2.0
11	Mar-09	4,300	260	NA	1.3	<0.5	1.8	0.5	2.9
12	Sep-09	5,000	300	NA	2.5	<0.5	<0.5	< 0.5	<2.0
13	Mar-10	4,500	230	670	1.7	<0.5	1.0	< 0.5	2.7

				MW	-4				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	100	NA	2.0	1.0	<0.5	2.0	NA
2	May-89	60	18	NA	1.0	< 0.5	<0.5	< 0.5	NA
3	Feb-91	<10	<10	NA	< 0.3	< 0.3	<0.3	<0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	<50	50	<200	<0.5	<0.5	<0.5	<0.5	<1.0
6	Dec-07	710	<50	NA	< 0.5	< 0.5	<0.5	< 0.5	<2.0
7	Mar-08	680	57	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
8	Jun-08	620	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
9	Sep-08	440	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
10	Dec-08	730	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
11	Mar-09	940	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
12	Sep-09	660	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
13	Mar-10	680	<50	380	< 0.5	<0.5	<0.5	< 0.5	<2.0

				MW	/-5				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	530	890	NA	<1.0	<1.0	1.0	3.0	NA
2	May-89	90	5.0	NA	1.0	< 0.5	<0.5	< 0.5	NA
3	Feb-91	58	<10	NA	0.6	< 0.3	<0.3	< 0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	330	<25	<200	0.6	< 0.5	<0.5	< 0.5	<1.0
6	Dec-07	5,100	1.3	NA	1.3	< 0.5	<0.5	1.23	<2.0
7	Mar-08	4,500	<50	NA	0.53	<0.5	<0.5	< 0.5	<2.0
8	Jun-08	3,300	<50	NA	0.64	< 0.5	<0.5	< 0.5	<2.0
9	Sep-08	4,200	<50	NA	<0.5	<0.5	<0.5	< 0.5	<2.0
10	Dec-08	5,200	<50	NA	0.61	< 0.5	<0.5	< 0.5	<2.0
11	Mar-09	5,800	<50	NA	< 0.5	< 0.5	<0.5	< 0.5	<2.0
12	Sep-09	5,600	<50	NA	< 0.5	< 0.5	<0.5	< 0.5	<2.0
13	Mar-10	4,300	<50	5,400	4.9	<0.5	<0.5	<0.5	<2.0

				MW	-6				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	52	NA	1.0	<0.5	<0.5	< 0.5	NA
2	May-89	140	31	NA	1.0	< 0.5	<0.5	< 0.5	NA
3	Feb-91	130	40	NA	0.8	< 0.3	<0.3	< 0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	200	43	<200	1.1	< 0.5	<0.5	< 0.5	<1.0
6	Dec-07	1,000	<50	NA	0.98	0.81	<0.5	0.5	<2.0
7	Mar-08	940	<50	NA	0.87	1.0	<0.5	< 0.5	<2.0
8	Jun-08	1,100	56	NA	0.92	<0.5	<0.5	< 0.5	2.9
9	Sep-08	1,000	<50	NA	0.91	<0.5	<0.5	< 0.5	<2.0
10	Dec-08	1,400	<50	NA	1	<0.5	<0.5	< 0.5	<2.0
11	Mar-09	1,200	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0
12	Sep-09	1,500	<50	NA	0.79	<0.5	<0.5	< 0.5	<2.0
13	Mar-10	910	<50	1,500	1.9	<0.5	<0.5	< 0.5	<2.0

				MW	-7				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	Aarch 2004				
1	Mar-04	1,600	490	1,900	240	100	14	56	<2.5
2	Dec-06	420	<25	470	< 0.5	< 0.5	<0.5	< 0.5	<1.0
3	Dec-07	6,300	3,100	NA	640	28	48	231	<10
4	Mar-08	7,000	360	NA	140	5.8	11	58	<2.0
5	Jun-08	5,400	1,700	NA	480	15	28	139	<2.0
6	Sep-08	9,400	1,200	NA	330	12	21	88	<2.0
7	Dec-08	8,700	2,200	NA	640	100	43	185	<4.0
8	Mar-09	8,700	1,700	NA	510	33	47	220	<10
9	Sep-09	6,800	620	NA	310	9.5	27	117	<10
10	Mar-10	8,700	330	6,800	68	2.2	10	31.6	<2.0

				MW	-8				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	March 2004				
1	Mar-04	140,000	51,000	56,000	19,000	720	2,400	3,300	<50
2	Dec-06	2,400	29,000	<380	13,000	<100	640	500	<200
3	Dec-07	5,900	30,000	NA	11,000	180	650	561	<100
4	Mar-08	21,000	47,000	NA	10,000	260	1,200	458	<2.0
5	Jun-08	7,300	27,000	NA	9,300	140	790	290	<2.0
6	Sep-08	13,000	35,000	NA	11,000	190	900	402	<100
7	Dec-08	7,600	19,000	NA	6,800	110	380	236	<50
8	Mar-09	10,000	22,000	NA	9,400	200	640	358	<50
9	Sep-09	9,200	26,000	NA	8,600	100	630	230	170
10	Mar-10	11,000	19,000	1,900	6,200	120	830	149	<2.0

				MW	-9				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	Aarch 2004				
1	Mar-04	1,300	95	1,500	4.7	0.68	<0.5	<1.0	< 0.5
2	Dec-06	<50	92	<200	2.8	<0.5	<0.5	< 0.5	<1.0
3	Dec-07	8,400	84	NA	4.7	1.1	<0.5	1.9	<2.0
4	Mar-08	8,600	100	NA	4.1	1.1	<0.5	< 0.5	2.0
5	Jun-08	5,900	98	NA	4.9	<0.5	<0.5	< 0.5	2.3
6	Sep-08	9,300	130	NA	4.6	< 0.5	<0.5	< 0.5	<50
7	Dec-08	7,800	95	NA	4.0	0.54	<0.5	< 0.5	<2.0
8	Mar-09	9,400	130	NA	4.6	< 0.5	<0.5	< 0.5	<2.0
9	Sep-09	8,200	98	NA	4.0	<0.5	<0.5	< 0.5	<2.0
10	Mar-10	6,500	140	4,000	5.2	< 0.5	<0.5	< 0.5	<2.0

				MW	-10				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in N	Aarch 2004				
1	Mar-04	840,000	14,000	<100,000	4,000	77	200	120	<50
2	Dec-06	19,000	12,000	<4,000	4,600	42	90	52	<50
3	Dec-07	4,700	13,000	NA	5,300	96	42	86	<50
4	Mar-08	280,000	10,000	NA	2,600	50	37	58.7	22
5	Jun-08	4,800	10,000	NA	3,800	62	24	61	<2.0
6	Sep-08	4,700	1,200	NA	350	11	3.4	11	<2.0
7	Dec-08	3,200	2,900	NA	550	45	15	56	<20
8	Mar-09	6,200	8,200	NA	890	46	78	130	<20
9	Sep-09	6,100	1,400	NA	1,200	35	19	31	<20
10	Mar-10	3,900	7,800	960	1,200	46	34	56	54

				MW	-11				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	May 2004				
1	Dec-06	<50	920	<200	26	4.5	1.8	5.4	<1.0
2	Dec-07	6,900	1,500	NA	320	44	53	140	<2.0
3	Mar-08	7,500	1,200	NA	120	7.6	10	24.9	3.0
4	Jun-08	5,100	2,000	NA	190	11	7.7	16.3	<2.0
5	Sep-08	5,600	2,200	NA	260	20	34	60	<2.0
6	Dec-08	7,800	2,100	NA	270	14	7.6	15.6	<2.0
7	Mar-09	7,100	1,400	NA	200	6.4	7.3	10.4	<2.0
8	Sep-09	6,400	1,900	NA	320	13	9.8	15.2	2.0
9	Mar-10	6,500	1,600	6,900	150	< 0.5	3.9	12.8	2.9

				MW	-12				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	May 2004				
1	Dec-06	<50	19,000	<200	9,100	51	<50	110	<100
2	Dec-07	2,700	17,000	NA	8,000	110	25	115	<40
3	Mar-08	3,300	33,000	NA	9,200	140	85	116	<2.0
4	Jun-08	3,000	17,000	NA	6,600	95	50	110	<2.0
5	Sep-08	3,100	14,000	NA	6,200	79	18	83	<10
6	Dec-08	3,600	19,000	NA	7,900	140	72	124	<50
7	Mar-09	4,100	14,000	NA	6,100	150	130	111	<40
8	Sep-09	3,000	1,900	NA	4,500	80	14	51	<40
9	Mar-10	4,000	15,000	1,900	6,200	110	73	101	<2.0

	MW-13											
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
	Installed in April 2004											
1	Dec-06	12,000	87,000	2,100	18,000	470	2,400	3,500	<400			
2	Dec-07	NA	68,000	NA	19,000	650	1,700	2,440	<100			
3	Mar-08	1,100,000	98,000	NA	19,000	820	2,300	3,190	<100			
4	Jun-08	71,000	44,000	NA	12,000	510	1,600	1,950	<2.0			
5	Sep-08	440,000	52,000	NA	<100	500	1,600	1,500	<100			
6	Dec-08	1,100,000	2,700,000	NA	23,000	<250	40,000	45,000	<1,000			
7	Mar-09	2,000,000	330,000	NA	25,000	1,300	6,400	8,500	<1,000			
8	Sep-09	38,000	1,400,000	NA	19,000	2,500	19,000	21,300	<1,000			
9	Mar-10	15,000	43,000	670	12,000	310	1,600	1,140	<2,500			

	MW-14												
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE				
				Installed in	April 2004								
1	Dec-06	<50	8,300	<200	3,700	240	230	260	<50				
2	Dec-07	2,600	6,800	NA	3,100	150	220	168	<20				
3	Mar-08	4,400	18,000	NA	4,400	330	340	245	<2.0				
4	Jun-08	2,600	7,700	NA	2,600	180	200	141	<2.0				
5	Sep-08	2,500	4,100	NA	1,300	50	80	61	<10				
6	Dec-08	2,800	2,300	NA	830	27	45	30.7	<10				
7	Mar-09	3,200	13,000	NA	4,300	870	260	283	<50				
8	Sep-09	2,100	550	NA	630	14	28	17	<20				
9	Mar-10	3,900	6,700	3.100	2,400	400	140	185	<20				

				MW	-15							
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
Installed in April 2004												
1	Dec-06	<50	9,200	<200	3,700	<25	60	57	<50			
2	Dec-07	3,300	8,100	NA	3,000	48	28	44.5	<20			
3	Mar-08	3,000	13,000	NA	3,600	66	210	59.5	<64			
4	Jun-08	2,900	15,000	NA	5,800	61	230	56.4	<2.0			
5	Sep-08	3,400	18,000	NA	7,800	73	270	59.9	<10			
6	Dec-08	3,000	20,000	NA	7,600	95	300	84.2	<50			
7	Mar-09	3,400	17,000	NA	7,200	91	170	60	<50			
8	Sep-09	2,700	2,300	NA	6,200	71	68	42	<50			
9	Mar-10	3,700	14,000	910	5,900	74	170	69	<2.0			

				MW	-16								
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE				
	Installed in April 2004												
1	Dec-06	<50	190	<200	11.0	1.4	<0.5	< 0.5	<1.0				
2	Dec-07	8,500	71	NA	13	2.6	<0.5	1.46	<2.0				
3	Mar-08	12,000	60	NA	11	0.73	<0.5	< 0.5	<2.0				
4	Jun-08	10,000	120	NA	13	2.2	<0.5	<0.5	2				
5	Sep-08	8,200	64	NA	9.9	1.9	<0.5	< 0.5	<2.0				
6	Dec-08	8,800	60	NA	11	2.8	<0.5	0.53	<2.0				
7	Mar-09	14,000	78	NA	12	2.3	<0.5	< 0.5	<2.0				
8	Sep-09	10,000	51	NA	9.3	1.6	<0.5	<0.5	2.2				
9	Mar-10	12,000	70	4,700	12	2.1	0.56	1.35	<2.0				

				MW	-17						
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE		
Installed in April 2004											
1	Dec-06	<50	14,000	<200	3,400	1,100	480	< 0.5	<1.0		
2	Dec-07	2,900	5,000	NA	1,100	260	110	206	<10		
3	Mar-08	3,100	6,800	NA	1,200	110	91	94	21		
4	Jun-08	2,900	7,200	NA	1,100	45	75	66	<2.0		
5	Sep-08	3,300	5,500	NA	900	63	69	69	<10		
6	Dec-08	3,200	7,100	NA	1,100	530	190	390	<10		
7	Mar-09	3,000	5,400	NA	770	150	87	161	<2.0		
8	Sep-09	3,000	2,200	NA	120	3.1	11	1.6	<2.0		
9	Mar-10	3,400	5,000	1,900	910	66	73	93	<2.0		

				MW	-18							
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
	Installed in May 2004											
1	Dec-06	<50	120	<200	22	6.2	3.2	6.2	<2.0			
2	Dec-07	8,600	<50	NA	0.98	< 0.5	<0.5	< 0.5	<2.0			
3	Mar-08	9,800	<50	NA	0.52	< 0.5	<0.5	< 0.5	2.0			
4	Jun-08	8,800	<50	NA	< 0.5	< 0.5	<0.5	<0.5	3.1			
5	Sep-08	8,600	<50	NA	< 0.5	< 0.5	<0.5	< 0.5	<2.0			
6	Dec-08	9,300	<50	NA	< 0.5	< 0.5	<0.5	<0.5	<2.0			
7	Mar-09	10,000	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0			
8	Sep-09	11,000	<50	NA	< 0.5	<0.5	<0.5	< 0.5	<2.0			
9	Mar-10	9,400	<50	2,700	< 0.5	<0.5	<0.5	< 0.5	<2.0			

				MW	-Е				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	100	5,400	NA	3,200	690	97	330	NA
2	May-89	NS	NS	NS	NS	NS	NS	NS	NS
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS
4	Mar-04	470	810	<500	340	6.1	2.2	7.7	<1.0
5	Dec-06	280	1,900	<200	910	<10	10	<10	<20
6	Dec-07	6,900	7,000	NA	3,300	50	51	80	<20
7	Mar-08	6,300	2,700	NA	780	17	20	20.9	12
8	Jun-08	5,200	7,400	NA	2,900	43	85	50	<2.0
9	Sep-08	7,800	11,000	NA	3,800	170	130	257	<50
10	Dec-08	9,400	9,100	NA	3,400	110	180	182	<50
11	Mar-09	5,600	850	NA	270	7.5	13	17.5	<2.0
12	Sep-09	6,200	540	NA	1,200	22	37	37.2	<2.0
13	Mar-10	3,800	2,400	5,100	1,000	20	37	26.9	4.9

	RW-1											
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
1	Dec-88	NS	NS	NS	NS	NS	NS	NS	NS			
2	May-89	NS	NS	NS	NS	NS	NS	NS	NS			
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS			
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS			
5	Dec-06	<50	640	<200	100	1.3	2	1.6	<1.0			
6	Dec-07	2,100	770	NA	110	< 0.5	3.8	1.96	<2.0			
7	Mar-08	11,000	890	NA	100	4.2	4.4	2.0	<2.0			
8	Jun-08	1,500	1,200	NA	290	4.8	10	4.8	<2.0			
9	Sep-08	1,900	1,400	NA	280	9.8	10	6.7	<2.0			
10	Dec-08	54,000	1,100,000	NA	500	<250	3,200	530	<1,000			
11	Mar-09	2,800	950	NA	180	3.6	13	3	<2.0			
12	Sep-09	770	350	NA	120	3.1	11	2	<2.0			
13	Mar-10	810	200	<300	< 0.5	< 0.5	<0.5	<0.5	<2.0			

<u>Notes:</u> The 1988, 1989, and 1991 sampling events were conducted by Groundwater Technology, Inc. The 2004 and 2006 sampling events were conducted by PES Environmental.

NS = Not sampled NA = Not analyzed for this constituent

All concentrations shown in µg/L

APPENDIX B

Groundwater Monitoring Field Data Sheets

S	or Purge	Water	Drum Lo		
Client: Stellar					
Site Address: SA CENTER	APTS . Es	MERIN	UE		
STATUS OF DRUM(S) UPON	ARRIVAL				
Date	3/24/10				
Number of drum(s) empty:	4				
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	4				
Are the drum(s) properly labeled?					
Drum ID & Contents:					
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	DEPARTUR	RE				
Date	3/24/10					
Number of drums empty:	3					
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:						
Total drum(s) on site:	4					
Are the drum(s) properly labeled?	M					
Drum ID & Contents:	RURINE MOD					
LOCATION OF DRUM(S)						an a
Describe location of drum(s):	comer near	lever blee	n baker he	nr underg	ound parking	٢
FINAL STATUS						
		1302 h (w) a w (130 h (1 m - 16 k) (1 m	in the control of the process of the second state of the state of the second state of		Control Property of the second states of the second	
Number of new drum(s) left on site this event	0					
this event	3124160					
this event Date of inspection:						
this event	3/24/10					

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	NE Buy Cer	nter Apt	Emery ville	PROJECT NUM	MBER 1003	24-2	MI
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:		INITIALS
Myron C Ultrameter II	6222712	3/24/16 945	ph 7.00 10.00 4.00	7.00 9.98 3.19	yes.	15.8°C	BP
			45 3900	3893	zes	15.9°C	вр
			- -				
		· · · · · · · · · · · · · · · · · · ·					

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	NE BayCente	w Apts., Eu	neryville	PROJECT NUN	/BER 10ひとzy・	RMI	
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Myront	6215688	3/24/10	3900M5 4/7/10	3961, ns 4.00/7.0/9.70	Y	18.8	R

WELLHEAD INSPECTION CHECKLIST

Page	١	of	2
Faye		01	

Date <u>3</u> 24	61	_ Client	STELL	4R				
Site Address	BAY CENTER	AA-s,	EMERYI	ILLE				
Job Number	100324-RM1			Teo	chnician	R.M./	pe/gp	
Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	l Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	/ Olher Action Taken (explain below)	Well Not Inspected (explain below)
Mw-3	×							
MW-4	×	GARI	STY BOX	~				
MW-5	×							
Mw-6	×							
Mw-7		1/21	polls m	rsson				
Mw-8	¥			6				
MW-9		2/2	Sits M	ssurg		_		
MWD-10		1/2	bolts M	MASSILY				
Mw-11	K		·					
MW-12	×							
MW-13	×							
MW-14	K	r						
MW-15	X							
MW-16	×							
MW-17		1/2 4	sthe mis	sur				
MW-18	×							

NOTES:

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WELLHEAD INSPECTION CHECKLIST

Date <u>324</u> 10	Date 3/24/10 Client STELLAR Site Address BAY CENTER APTS. EMERYVILLE									
Site Address	SAY CENTER	- APITS. EMDER	YVILLE			*****				
	100324 - RN		_ Teo	chnician	R.M/i	PC/BP	·			
Well ID	Well Inspected - No Corrective Action Required	Water Bailed Wellbox From Components Wellbox Cleaned	Can	Debris Removed From Wellbox	Lock Replaced	l Other Action Taken (explain below)	Well Not Inspected (explain below)			
MW-E		2/2 5015 mrs	5m							
RW-1	×	VAULT	ñ.							
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NOTES										

NOTES:

BLAINE TECH SERVICES, INC.

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WELL GAUGING DATA

Project # 100324-Emi

Date 324/10

Client STELLAR

1/2

Site BAY CENTER APTS, EMERYVILLE

			Well	Sheen /	Depth to Immiscible	Thickness of Immiscible	Volume of Immiscibles Removed		Depth to well	Survey Point: TOB or	ίg
	Well ID	Time	(in.)	Odor	Liquid (ft.)	Liquid (ft.)	(ml)	(ft.)	bottom (ft.)	TOT	Notes
	MW-3	Oazo	2		8.08			DB.H	24.55		
	Mw-4	Ogzz	2		NO SPH	Derecred	>	7.08	24.8g		
	MW-5	09260	2					9.48	24.82		
	Mw-6	0918	2					6.66	23.31	Υ.	
	MW-7	0856	3/4					10:02	19.89		
	MW-8	0853	3/4		9.02			WASLE TO GALUGE			
	Mw-9	0850	3/4					9.40	19.68		
	Nw-10	905	34		8.58			10,30			
	Mw-11	0900	3/4					10.23	19.68		
	MW-12	0910	3/4					8.66	18.96		
	MW-13	CPCB	3/4	-	9.22			UNASLE TO GAMMUS	19.50		
1	MW-14	0900	3/4					8.42	19.50		
	MW-15	ପ୍ଟିଽୢ	3/4		8.81			UNASU ^S TO CAAUCAE			
1	100-10	0846	3/4					8.92	19.55		
	1	0925	3/4					8.93	19.50		
		0850	3/4					7.97	19.55		
	NW-E	0848	2					9.92	44.90	V	

WELL GAUGING DATA

Project # <u>100324-em</u> Da	te 3/24/10	Client STEUAR
	•	

2/2

Site	BAY	CENTER	APTS.	EMERY	VILLE
	- ,			1	

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)		Immiscibles Removed	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or	Notes
RW-1	0943	10		8.93			UNABLE TO GANGE	- and you and a second	K	
		Peo	oucr r	OD THU	k to (sufficient f	12			
······	N - 1997					1	an gaan taa shi sagaa shabad	a ang taon taon taon taon taon taon taon taon		
				· · · · · · · · · · · ·					lini ti ti ti ti ti ti ti	ana an
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W	iL	MON	ITORIN	IG DAI	'A SHE
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Project #:	100324-	RM		Client	: Sra	LAR	· · · · · · · · · · · · · · · · · · ·	
Sampler:				Date:	3/24/			
Well I.D.:	MW-3			Well Diameter; 2) 3 4 6 8				
Total Well	Depth (TE)): 24	1.55	Depth	to Wate	r (DTW):		
Depth to Fr	ee Product	t: 8.0	B	Thick	ness of F	ree Product (fe	et):	
Referenced	to:	PVC	Grade		Meter (if		YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20) + DTW]:		
Purge Method: Bailer Waterra Sampling Method: Bailer Disposable Bailer Disposable Bailer Disposable Bailer Disposable Bailer Positive Air Displacement Extraction Pump Extraction Port Electric Submersible Other M Dedicated Tubing Other: Notw Tubinocs (Gals.) X								
Time 1320	Temp (°F or °C)			(N	bidity TUs)	Gals. Removed	Observations	
1326	END .	PURCRE	1.2 L PE	nover	·			
							:	
Did well de	water?	Yes (No	 Gallon	s actuall		1-2-	
Sampling D	•		Sampling Time			Depth to Wate	·	
Sample I.D.	: MW-3	· · · · · ·		Labora	- <u></u>	Kiff CalScience	e Other C+F	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: SEE	loc	
EB I.D. (if a	pplicable)	:	@ Time	Duplic	ate I.D. ((if applicable):		
Analyzed fo		BTEX	MTBE TPH-D	Oxygen		Other:	4	
D.O. (if req'	d): Pr	e-purge:		^{mg} /L	Po	ost-purge:	^{mg} / _L	
O.R.P. (if re	q'd): Pr	e-purge:		mV	Po	ost-purge:	mV	

r		N	LL MONIT	'ORIN(G DAT A	SHE. 7		
Project #:	100324-	RMI		Client	stell	a	2 Z	
Sampler: 🖗	c			Date: 34410				
Well I.D.:	MU-H		: : :		Diameter	:: 2 3 4	6 8	
Total Well	Depth (TI)): 245	र्हव	Depth	to Wate	r (DTW): 7-0	8	
Depth to Fi	ee Produc	t:		Thickr	ness of F	Free Product (fe	et):	
Referenced	to:	PVC	Grade		leter (if		YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20) + DTW]: 10	.64	
	Bailer Disposable B Positive Air I Electric Subr	Displaceme	Other	Waterra Peristaltic xtion Pump		Sampling Method Other <u>r Multiplier Well</u> 0.04 4"	Disposable Bailer Extraction Port Dedicated Tubing	
2-E (1 Case Volume	Gals.) XSpeci	<u>3</u> ified Volum	$\underline{=} \frac{\& U}{Calculated Vc}$	_ Gals. olume	2" [.] 3"	0.16 6" 0.37 Other	1.47 radius ² * 0.163	
Time	Temp (°F or °C)	pH	Cond. (mS or as)		oidity ΓUs)	Gals. Removed	Observations	
1335	14.6	7.00	1194	107		2.8		
1342	14.9	7.10	1054	110	>	5.6		
1350	14.9	7-04	1041	45		8.4		
Did well de	water?	Yes	KB	Gallon	s actuall	y evacuated:	8.4	
Sampling D	ate: 2/24	10	Sampling Time	e: 1407	2	Depth to Wate	r: 7.11	
Sample I.D.	: MW-4			Labora	tory:	Kiff CalScience	Other <u>CE</u> T	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other:		
EB I.D. (if a	applicable)	•	@ Time	Duplica	ate I.D. ((if applicable):		
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	Oxygena		Other:	Υ	
D.O. (if req	d): Pr	e-purge:		^{mg} /L	P	ost-purge:	mg/L	
O.R.P. (if re	eq'd): Pr	e-purge:		mV	P	ost-purge:	mV	

		W	L MONIT	ORING DATA	SHE'	<u> </u>				
Project #:	1003Z	4-RM	1	Client: Stellay	, Bay G	ater Apts				
Sampler:	BP				124/10					
Well I.D.:	MW-5		, , , ,, ,, , , , , , , , , , , , , ,	Well Diameter	: 2 3 4	68				
Total Well	Depth (TE)): Z	4.82	Depth to Wate	r (DTW): 9 .	48				
Depth to Fr	ee Product	t:	4, σ, σ, σ, <u>, , , , , , , , , , , , , , </u>	Thickness of F	ree Product (fe					
Referenced	to:	PVC	Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20)) + DTW]: 🛛	12.55				
Purge Method:	Purge Method: Bailer Waterra Sampling Method: Bailer Disposable Bailer Disposable Bailer Disposable Bailer Disposable Bailer Positive Air Displacement Extraction Pump Extraction Port Electric Submersible Other N Dedicated Tubing VCther: New Yubing Ul: 15. 34 Well Diameter Multiplier									
$\frac{2.5}{1 \text{ Case Volume}} (\text{Gals.}) \text{ X} \xrightarrow{3}_{\text{Specified Volumes}} = \frac{7.5}{\text{Calculated Volume}} \text{ Gals.}$ $\frac{2.5}{1 \text{ Case Volume}} (\text{Gals.}) \text{ X} \xrightarrow{3}_{\text{Specified Volumes}} = \frac{7.5}{\text{Calculated Volume}} \text{ Gals.}$										
Time	Temp (°F or (C))	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations				
1337	[7.]	8.30	2855	58	2.5	PTW: 13.07				
1347	16.7	8.37	2917	14	5.0	DTW: 141.21				
1359	168	8.38	3031	09	7.5	DTW: 14.37				
Did well de	water?	Yes (No	Gallons actuall	v evacuated:	7.5				
Sampling D			Sampling Time		Depth to Wate					
Sample I.D.		<u>- 7/10</u>			Kiff CalScience					
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: $\langle FF \rangle C Q'$										
EB I.D. (if a	pplicable)	:	@ Time	Duplicate I.D. ((if applicable):					
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D		Other:	د ۳۰ مر ۲۰ ۲۰ ۲۰				
D.O. (if req'	D.O. (if req'd): Pre-purge: mg/L Post-purge: mg/L									
O.R.P. (if re	q'd): Pr	e-purge:		mV Po	ost-purge:	mV				

V LL MONITORING DATA SHE 2

Project #:	1003	74-12	MI	Client: 540	lar Bay	Confer A.n.L.				
Sampler:	BP				24/10	min offs				
Well I.D.:	MW-	6		Well Diameter		6 8				
Total Well	Depth (TD): Zj	3.31	Depth to Water (DTW): 6,66						
Depth to Fr	ee Product			Thickness of F	ree Product (fe					
Referenced	to:	PVC	Grade	D.O. Meter (if	'req'd):	YSI HACH				
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20) + DTW]:	9.99				
Purge Method: 2.7 (C 1 Case Volume	Disposable Bailer Positive Air Displacement Electric Submersible X Peristaltic Extraction PumpDisposable Bailer Extraction Port Dedicated Tubing $\%$ Other: $WL:16.65$ Well Diameter 									
Time	Temp (°F or °C	pН	Cond (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations				
1425	14.4	11.20	1883	40	2.7	DTW: 6.94				
1432	14.1	11.36	1870	46	5.4	0JW: 7.07				
1438	14.0	11.39	1918	39	8.1	PTW: 7.15				
Did well dev	water?	Yes (No	Gallons actuall	y evacuated:	8.1				
Sampling D	ate: 3/24/	10	Sampling Time	e: 14.95	Depth to Wate	r: 6,80				
Sample I.D.	: MW-	6		Laboratory:	Kiff CalScience	Other CYT				
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: SE	ECOL				
EB I.D. (if a	pplicable)	•	@ Time	Duplicate I.D.						
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	*** *** ***				
D.O. (if req'	d): Pr	e-purge:		^{mg} / _L P	ost-purge:	""g/L				
O.R.P. (if re	q'd): Pr	e-purge:		mV P	ost-purge:	mV				

		V	LL MONIT	'ORING DA'	TA SHEL I				
Project #:	00324-	RMI		Client: Sfe	ellar				
Sampler:		•		Date: $\exists zy 0$					
Well I.D.: p	NW-7			Well Diame	ter: 2 3 4	6 8 3/4			
Total Well	Depth (TE)):19.8	8	Depth to Wa	ater (DTW): 10.	2.2			
Depth to Fr	ee Produc	t:		Thickness of	f Free Product (f	eet):			
Referenced	to:	PVQ	Grade	D.O. Meter	(if req'd):	YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.2	20) + DTW]:				
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displacem		Waterra Peristaltic tion Pump 	Sampling Metho Othe meter Multiplier We	Disposable Bailer Extraction Port Dedicated Tubing or: <u>Peri Pumpu Neur</u> Tub			
0 - 2 (1 1 Case Volume	Gals.) X Speci	3 fied Volun	$= \underbrace{\mathcal{O}} \underbrace{\mathcal{O}}_{\text{closed}}$	Gals.	0.04 4" 0.16 6" 0.37 Oth	0.65			
Time	Temp (°F or C	pH	Cond. (m͡s or μS)	Turbidity (NTUs)	Gals. Removed	Si Observations			
(050)	13.8	7.65	11.38	55	0.2	12.68 dark brown			
1054	14.1	7.61	11.40	79	0.4	1272 Joder			
1058	14.7	7.41	10.76	35	0-6	12.78 Loderd			
Did well dev	water?	Yes (N9	Gallons actua	ally evacuated:	D-C			
Sampling Da	ate: $ z _{r}$	2	Sampling Time	:1104	Depth to Wate	er: 17.78			
Sample I.D.:	: M4-7			Laboratory:	Kiff CalScience				
Analyzed fo		BTEX	MTBE TPH-D	Oxygenates (5)	Other:				
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D	. (if applicable):				
Analyzed for	r: TPH-G	BTEX		Oxygenates (5)					
D.O. (if req'o	d): Pr	e-purge:		^{mg} /L	Post-purge:	mg/L			
D.R.P. (if re	q'd): Pre	e-purge:	· · · · · · · · · · · · · · · · · · ·	mV .	Post-purge:	mV			

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Project #:	100324-6	em		Client:	STER	.LAR			
Sampler:	R.M			Date: 3/24/10					
Well I.D.:	Mw-8			Well Diameter: 2 3 4 6 8 $(3/4)$					
Total Well	Depth (TI	D): -	· · · · · · ·	Depth to	o Wat	er (DTW): -			
Depth to Fi	ee Produc	t: 9	.02	Thickne	ss of]	Free Product (fe	et):		
Referenced	to:	PVC	Grade	D.O. M	eter (i	f req'd):	YSI HACH		
DTW with	80% Rech	arge [(H	Ieight of Water	Column	x 0.20	0) + DTW]:			
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme nersible	ent Extrac Other	Waterra Peristaltic ction Pump ir		Sampling Method	Disposable Bailer Extraction Port Dedicated Tubing		
Gulin 6	War C	200 m	ulmen		ell Diame 1"	eter Multiplier Well 0.04 4"	Diameter Multiplier 0.65		
1 Case Volume	Gals.) X Spec	ified Volun	= nes Calculated Vo	_ Gals.	2" · 3"	0.16 6" 0.37 Other	1.47 radius ² * 0.163		
Time N36	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbi (NTU	-	Gals. Removed	Observations		
1130	END	Phece Phece		REMOVE	2				
Did well dev	water?	Yes (No	Gallons :	īctual	ly evacuated:	2 L		
Sampling D	ate: 3/24	lio	Sampling Time			Depth to Wate			
Sample I.D.	: Mus-	8		Laborato	ry:	Kiff CalScience	Other Ct		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenate	s (5)	Other: SEE	Coe		
EB I.D. (if a	pplicable)	•	@ Time	Duplicate	e I.D.	(if applicable):			
Analyzed fo	r: TPH-G	BTEX	· · · · · · · · · · · · · · · · · · ·	Oxygenate		Other:			
D.O. (if req'	d): Pr	e-purge:		^{mg} /L	P	Post-purge:	mg/L		
O.R.P. (if re	q'd): Pr	e-purge:		mV	P	Post-purge:	mV		

			LL MONIT	ORING DAT	ASHLET				
Project #:	100324.	-RMI		Client: stell	er (
Sampler: 👔	Per anna an		and the second secon	Date: 5/24/10					
Well I.D.:				Well Diameter: 2 3 4 6 $8 \frac{1}{4}$					
Total Well	Depth (TI)): 19.6	5	Depth to Wat	er (DTW):9.40				
Depth to F	ree Produc	t:			Free Product (fe				
Referenced	l to:	RVC	Grade	D.O. Meter (i		YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20)) + DTW]:				
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displacem		Well Diam	eter Multiplier Well	Disposable Bailer Extraction Port Dedicated Tubing : Perifumpulness Tub Diameter Multiplier			
0.2 I Case Volume	(Gals.) X Speci	کے ified Volur	$\frac{1}{1} = \frac{O \cdot \psi}{Calculated V c}$		0.04 4" 0.16 6" 0.37 Othe	0.65 1.47 r radius ² * 0.163			
Time	Temp (°F or C)	pН	Cond. (mS or cs)	Turbidity (NTUs)	Gals. Removed	(FL) DTWObservations			
1142	14.3	9.13	2120	રેવ	0-2	11.01 eder			
1146	14.7	9.03	2182	59	0.4	12.02			
1150	14.8	9.04	2198	67	0-6	2.42			
Did well de	water?	Yes	R0	Gallons actual	ly evacuated: O	Ç.			
Sampling D	ate: 3/24/1	0	Sampling Time	:1200	Depth to Wate	r:12.42			
Sample I.D.	: Mu -9			Laboratory:	Kiff CalScience	e Other CAT			
Analyzed fo	or: (TPH-G	BTEX	MTBE TPH-D>	Oxygenates (5)	Other:				
EB I.D. (if a	applicable)	•	@ Time	Duplicate I.D.	(if applicable):				
Analyzed fo	or: TPH-G	BTEX		Oxygenates (5)	Other:				
D.O. (if req'	d): Pr	e-purge:		^{mg} / _L I	Post-purge:	mg/L			
).R.P. (if re	eq'd): Pr	e-purge:		mV . F	Post-purge:	mV			

		V	L MONIT	ORINO	G DATA	SHE.	i A		
Project #:	00324-lm			Client:	STEU	AR		N.	
Sampler:	ZM.		· · · · · · · · · · · · · · · · · · ·	Date: 3/24/10					
Well I.D.:	MW-10			Well Diameter: 2 3 4 6 8 3/4					
Total Well):		Depth	to Wate	r (DTW)): 1772	D	
Depth to Fr	ee Product	0000	F 8.58	Thickness of Free Product (feet):					
Referenced		PVO	Grade		leter (if		,	YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20) + DTW	7]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme nersible	ent Extrac Other	Waterra deristaltic tion Pump		Sampling	g Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing NEW TUBINZ	
6 Min	PURCHE	2 200	wilfmon		Well Diamete 1"	er Multiplier 0.04	Well Di 4"	ameter Multiplier 0.65	
(C 1 Case Volume	Gals.) X Speci	fied Volun	_ = nes Calculated Vo	_Gals. lume	2" ⁻ 3"	0.16 0.37	6" Other	1.47 radius ² * 0.163	
Time	Temp (°F or °C)	рН	Cond. (mS or µS)	1	oidity TUs)	Gals. Re	moved	Observations	
1054	BEORIN END PI	PUCUE		NONED					
Did well dev	water?	Yes (No .	Gallons	actuall	y evacua	ted:	1.21	
Sampling D	ate: 3/24	Ŵ	Sampling Time	e: 1105		Depth to	Water		
Sample I.D.	: MW-10)		Labora	cory:	Kiff Ca	lScience	Other C++	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygena	tes (5)	Other:	See C	De l	
EB I.D. (if a	pplicable)	•	@ Time	Duplica	te I.D. ((if applic	able):		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygena	tes (5)	Other:		ана 1915 1917 1917	
D.O. (if req'	d): Pr	e-purge:		^{mg} /L	Po	ost-purge:		mg/L	
O.R.P. (if re	q'd): Pr	e-purge:		mV	Po	ost-purge:		mV	

		V.	LL MONIT	ORING DAT	A SHE. 7	·
Project #:	1003 Z	4-RM	11	Client: 5te	llar	
Sampler:	BP			Date: $3/2$	4/10	
Well I.D.:	MW-11	,		Well Diamete	er: 2 3 4	6 8 (3/4)
Total Well	Depth (TI	D): 19	.68	Depth to Wat	er (DTW):	0, 23
Depth to Fr	ee Produc	t:	,	Thickness of	Free Product (fe	et):
Referenced	to:	PVC	Grade	D.O. Meter (i	freq'd):	YSI HACH
DTW with	80% Rech	arge [(H	leight of Water	· Column x 0.2	0) + DTW]:	12.12
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme	nt Extrac	Waterra Peristaltic ction Pump <u> r</u> <u> Well Diam</u>	Sampling Method	: Bailer Disposable Bailer Extraction Port Dedicated Tubing
0.19 ((1 Case Volume	Gals.) X Spec	3 ified Volum	= 0.57	Gals. 1"	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.65
Time	Temp (°F or °C)	рн	Cond. (mS or (µS),	Turbidity (NTUs)	Gals. Removed	Observations
1010	14.8	7.11	2853	57	0.19	
1013	14.8	7.88	2866	19	0.38	
1016	14.9	7.85	2802	9	0.57	
Did well de	water?	Yes 🤇	No	Gallons actua	lly evacuated:	0.60
Sampling D	ate: 3/20	10	Sampling Time	e: 1025	Depth to Wate	
Sample I.D.	: MW-,	//		Laboratory:	Kiff CalScience	Other C4T
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: 5	EE COL
EB I.D. (if a	pplicable)	:	@ Time	Duplicate I.D.	(if applicable):	
Analyzed fo	r: TPH-G	BŢĖX	MTBE TPH-D	Oxygenates (5)	Other:	α - Δ Δ
D.O. (if req'	d): Pr	e-purge:		^{mg} /L	Post-purge:	^{mg} /L
O.R.P. (if re	q'd): Pr	e-purge:		mV	Post-purge:	mV

1.).

Project #: 100324-KM)	Client: Stella	<u> </u>					
Sampler	Date: 3/24/1						
Well I.D.: Mu -12-		Well Diameter: 2 3 4 6 8 $\frac{3}{4}$					
Total Well Depth (TD): しを、てい	Depth to Wate	Depth to Water (DTW). S. 66					
Depth to Free Product:		Free Product (fe					
Referenced to: Grade	D.O. Meter (if	req'd):	YSI HACH				
DTW with 80% Recharge [(Height of Wat	er Column x 0.20)) + DTW]:					
Positive Air Displacement Ext Electric Submersible Other	Waterra Peristaltic traction Pump Well Diameter		: Bailer Disposable Bailer Extraction Port Dedicated Tubing : Rec <u>pumpu(New</u> Tub <u>Diameter Multiplier</u> 0.65				
$\frac{\mathcal{O} \cdot \mathcal{Q}}{1 \text{ Case Volume}} (\text{Gals.}) \times \frac{3}{\text{Specified Volumes}} = \frac{\mathcal{O} \cdot \mathcal{G}}{\text{Calculated}}$	Gals.	0.16 6" 0.37 Other	1.47				
Temp Cond. Time (°F or D pH (mS or B)	Turbidity (NTUs)	Gals. Removed	(SL) つい: Observations				
030 14.0 6.83 1492	3	0.2	8.72 odor, sheen				
034 14.1 6.80 1469	3	0-4	8.73				
038 14.1 6.74 1443	ý	0-¢	8.73				
Did well dewater? Yes 🔞	Gallons actually	y evacuated:	.(
Sampling Date: 34410 Sampling Tin	*****	Depth to Wate					
Sample I.D.: MU-12		Kiff CalScience					
Analyzed for: <u>(TPH-G BTEX MTBE TPH-D</u>	Oxygenates (5)	Other:					
EB I.D. (if applicable):	Duplicate I.D. (if applicable):					
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:					
D.O. (if req'd): Pre-purge:	^{mg} / _L Po	ost-purge:	mg/L				
D.R.P. (if req'd): Pre-purge:	mV Po	ost-purge:	mV				

WLLL MONITORING DATA SHELF

• .		W	LL MONIT	ORING I)ATA	SHE	•	
Project #: 1	00324-6	Zm		Client:	STEU	UAR	х. 	
	R.M			Date: 3 24/10				
Well I.D.:			n	Well Diameter: 2 3 4 6 8 3 4				
Total Well	 Depth (TD): IC	7.50	Depth to Water (DTW):				
Depth to Fr	ee Product	2		Thicknes	s of F	ree Product (fe	eet):	
Referenced		PVC	Grade	D.O. Met			YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Column x	(0.20)) + DTW]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme nersible	ent Extrac Other		11 Diamete	Sampling Metho Othe r Multiplier Wel	Disposable Bailer Extraction Port Dedicated Tubing	
1	Gals.) X			_ Gals.	1" 2" · 3"	0.04 4" 0.16 6" 0.37 Oth	0.65	
Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbid (NTU	-	Gals. Removed	l Observations	
1028	BEGIN	Puec	nE					
4034	Woll Di	SWATE	LED ; STARTE	Purun	u Di	J SPH , 1,	2 L REMOVED	
1400			WELL TO					
Did well de	water? (Yes)_		Gallons a	ctuall	y evacuated:	1.2 L REMOVED	
Sampling D	ate: 324	10	Sampling Time	e. Qarty	00	Depth to Wat	er:	
Sample I.D.				Laborator	y:	Kiff CalSciend		
Analyzed for		BTEX	MTBE TPH-D	Oxygenates	s (5)	Other: See	lie	
EB I.D. (if a	applicable)	•	@ Time			(if applicable)		
Analyzed for		BTEX	MTBE TPH-D	Oxygenates		Other:		
D.O. (if req	d): Pr	e-purge:		^{mg} /L	Pe	ost-purge:	mg/L	
O.R.P. (if re	eq'd): Pr	e-purge:		mV	Pe	ost-purge:	mV	

		¥								
Project #:	100324-R	M		Client:	Stel	ar				
1	PC			Date:		0				
Well I.D.:			····	Well Diameter: 2 3 4 6 8 $\frac{3}{4}$						
Total Wel	l Depth (TE)):19.5	<u>`</u> ^	Depth to Water (DTW): 8 42						
	Free Product		<u> </u>	Thickness of Free Product (feet):						
Reference		Ê	Grade		Aeter (if			YSI	HACH	
DTW with	1 80% Rech	arge [(F	leight of Water	Colum	n x 0.20)) + DTW]	:			
Purge Method:	: Bailer Disposable E Positive Air Electric Subr (Gals.) X	Displaceme mersible	ent Extrac Other	Waterra Peristaltic tion Pump Gals.	Well Diamete	Sampling I er <u>Multiplier</u> 0.04 0.16	Other:	Dispo Extra Dedic <u>Pesti fu</u> Diameter <u>Mu</u> 0.63 1.4	7	JTU
1 Case Volume		ified Volun			3"	0.37	Other	rad	ius ² * 0.163	
Time	Temp (°F or 🖒	pH	Cond. (mS or 🔊)		bidity TUs)	Gals. Ren	noved	(It) DTU: Obs	ervations	
1002	14.3	7.56	1560	17		0.4		8.70	oder sh	ecn
1006	14.3	7.52	1542		<u>gan</u>	0.8		8.78	Common and Annuary	
1010	14.5	7.51	1540	6		1-2		880	dimension of the second	,
· ·										
Did well de		Yes ((No)			y evacuate		.2		
Sampling I	Date: 3 hull	<u>į</u> 8	Sampling Time	e:1018		Depth to	Water	68.8		
Sample I.D).: Mu-14			Labora	tory:	Kiff Cal	Science	e Other_	CAT	
Analyzed f	for: (TPH-G	BTEX		Oxygena	ates (5)	Other:				
EB I.D. (if	`applicable)	•	@ Time	Duplica	ate I.D. ((if applica	ble):			
Analyzed f	for: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other:				autolation
D.O. (if red	q'd): Pr	re-purge:		^{mg} /L	Р	ost-purge:]	^{mg} /[
O.R.P. (if r	req'd): Pr	e-purge:		mV	. P	ost-purge:			ľ	nV

W_LL MONITORING DATA SHEE I

		M	LL MONIT	OKING	T DALA	SHE		
Project #:	100324-0	m			STEL		х.	
Sampler:	R.M.		· · · · · · · · · · · · · · · · · · ·	Date:	31241	61		
Well I.D.:	MADZ-15				liameter		6 8 (3/4")	
Total Well	Depth (TD):		Depth	to Wate	r (DTW): -		
Depth to Fr	ee Product	: 8.8	51	Thickness of Free Product (feet):D.O. Meter (if req'd):YSIHACH				
Referenced	to:	(PVC)	Grade					
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20) + DTW]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme nersible	nt Extrac Other	Waterra Peristaltic tion Pump		Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing	
	Gals.) X			_Gals. olume	Well Diamete 1" 2" · 3"	er Multiplier Well 0.04 4" 0.16 6" 0.37 Othe	Diameter Multiplier 0.65 1.47 r radius ² * 0.163	
Time	Temp (°F or °C)	pH	Cond. (mS or µS)	1	oidity ΓUs)	Gals. Removed	Observations	
1110	END) <i>buk</i> Duecr		Rem	oven			
Did well de	water?	Yes (No			y evacuated:	1.2 -	
Sampling D)ate: 3 2-1	ιο	Sampling Time	e: 1124	5	Depth to Wate	er:	
Sample I.D	.: Mw-1	S		Labora	tory:	Kiff CalScienc	e Other C+T	
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: SEE	Coe	
EB I.D. (if	applicable)		@ Time	Duplic	ate I.D.	(if applicable):		
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	• •	Other:	5	
D.O. (if req	'd): Pr	e-purge:		^{mg} /L	Р	ost-purge:	mg/I	
O.R.P. (if re	eq'd): Pr	e-purge:		mV	P	ost-purge:	mV	

		W	LL MONIT	ORIN	J DATA	SHELſ			
Project #: 1	00324-961			Client	stell	er			
Sampler: 5			- 	Date: $3\left(\frac{1}{24}\right)$					
Well I.D.:				Well Diameter: 2 3 4 6 8 $\frac{3}{4}$					
Total Well):19.5	5	Depth to Water (DTW): 8-92					
Depth to Fr						ree Product (fee			
Referenced		PVO	Grade		Aeter (if		YSI HACH		
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20)	+ DTW]:			
Purge Method:	Bailer Disposable B Positive Air I Electric Subr	Displaceme		Waterra Peristaltic tion Pump	;	Sampling Method: Other: <u>r Multiplier Well</u> 0.04 4"	Disposable Bailer Extraction Port Dedicated Tubing		
$\frac{\mathcal{O} \cdot \mathcal{V}}{1 \text{ Case Volume}}$	Jais. J A	کے fied Volun	$\underline{} = \underbrace{\begin{subarray}{c} $0 \cdot 0 \\ \hline \\ Calculated Vc \\ \hline \\ \end{array}$	_Gals. lume	2" 3"	0.04 4 0.16 6" 0.37 Other	1.47		
Time	Temp (°F or 🔊	pН	Cond. (mS or áS)	1	bidity TUs)	Gals. Removed	(FL) DTLiObservations		
1118	14.2	9.62	3733	7	0	0.2	9.33 ober sheen		
112	14.3	9.49	3735	J	0	0.4	8-48		
1126	14.[9.43	3848	6		6.6	1.52		
Did well dev	water?	Yes	Ň	Gallon	s actuall	y evacuated:	0.6		
Sampling D	ate: 3/24	110	Sampling Time	: 113.	2	Depth to Wate	r:8.52		
Sample I.D.	:MW-16			Labora	tory:	Kiff CalScience	e Other CET		
Analyzed fo	r: TPH-G	BTEX	MTBE_TPH-D	Oxygen	ates (5)	Other:			
EB I.D. (if a	pplicable)	•	@ Time	Duplic	ate I.D. (if applicable):			
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other:			
D.O. (if req'	d): Pr	e-purge:		^{mg} /L	Pe	ost-purge:	^{mg} /L		
O.R.P. (if re	q'd): Pr	e-purge:		mV	, Po	ost-purge:	mV		

		V	LL MONIT	ORING DAT	A SHEL	ſ			
Project #: t	00324-P	M)		Client: 34el	lav				
Sampler				Date: $3 24 0$					
Well I.D.:				Well Diameter: 2 3 4 6 8 $\frac{3}{4}$					
Total Well)):19.50	3	Depth to Water (DTW): 8 93					
Depth to Fr			40	Thickness of	Free Prod	luct (fee	et):		
Referenced	to:	evo	Grade	D.O. Meter (if req'd):		YSI H	HACH	
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.2	0) + DTW	7]:	<u></u>		
Purge Method:	Bailer Disposable E Positive Air Electric Subi	Displaceme		Waterra -Peristaltic etion Pump 		g Method: Other:	Disposa Extract Dedicate	ailer ble Bailer tion Port ed Tubing Star (Bec Tube -	
0.4 (1 1 Case Volume	Gals.) X Speci	3 ified Volun	$\frac{1}{1} = \frac{1}{2}$	Gals. 3"	0.04 0.16 0.37	4" 6" Other	0.65 1.47	s ² * 0.163	
Time	Temp (°F or Ô	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Re	emoved	DTW Obser	vations	
938	14.7	6.97	1365		0.4		896	sleen dor	
१५५	14.9	7.80	1368	6	0.8		898		
952	14.8	7.16	1396	3	1.2		8.97		
Did well de	water?	Yes	(N)	Gallons actua		nted:	2		
Sampling D	04 1	1	Sampling Time			<i>{</i> (,	: 8-98		
Sample I.D.	م و کمرم	110	1 0	Laboratory:		alScience		:ØT	
Analyzed fo	Concernance of the second	BTEX	MTBE TPH-D	Oxygenates (5)	Other:				
EB I.D. (if a			@ Time	Duplicate I.D		able):			
Analyzed fo	<u> </u>	BTEX	MTBE TPH-D	Oxygenates (5)	Other:				
D.O. (if req'	d): Pi	e-purge:		mg/L	Post-purge		Cuchana and an and a second concernant	mg/L	
O.R.P. (if re	q'd): Pi	e-purge:		mV .	Post-purge	:	<u></u>	mV	

-		N	L MONIT	ORING	DATA	SHE 7	• .	
Project #:	10032	24-R	MI	Client:	S. tellar	, Bay Cente	er Apts	
Sampler:	BP (PC)		Date:	,	124/10		
Well I.D.:	MW-19	8	······	Well D	iameter:	: 2 3 4	6 8 <u> 3/4</u>	
Total Well			53	Depth t	o Water	·(DTW): 7	.97	
Depth to Fr	ee Product		, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	Thickn	ess of Fi	ree Product (fee	et):	
Referenced	to:	Evc	Grade	D.O. M	leter (if	req'd):	YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Column	ı x 0.20)) + DTW]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme	nt Extrac	Waterra Peristaltic tion Pump	Well Diamete	r Multiplier Well I	Disposable Baile: Extraction Port Dedicated Tubing K <u>lest Pumpu (No</u> Diameter <u>Multiplier</u>	5
0-2 1 Case Volume	Gals.) X Speci	<u>ک</u> fied Volun	$\frac{1}{1} = \frac{0.6}{\text{Calculated Vc}}$	_Gals. olume	1" 2" · ³ " <u>3/4 '</u>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.65 1.47 radius ² * 0.163	
Time	Temp (°F or Č	pH	Cond. (mS or A S)	1	oidity TUs)	Gals. Removed	(FL)	
1305	141	6.55	7520	52	Line and the second	0.2	tous	
1310	14.2	6.66	7024	183	>	0.4	0.53	
13/4	14.5	6.62	7793	150)	0 E	10-65	
Did well de	ewater?	Yes	No	Gallons	s actuall	y evacuated: Ø	.6	
Sampling D	Date: 3/24	10	Sampling Tim	e: 137	20	Depth to Wate		
Sample I.D	.: MW-18			Labora	tory:	Kiff CalScience	e Other CET	
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	. Oxygena	ates (5)	Other:		
EB I.D. (if	applicable):	@ Time	Duplic	ate I.D.	(if applicable):		
Analyzed for	or: TPH-G	BŢEX	MTBE TPH-D	Oxygena	ates (5)	Other:		
D.O. (if req	l'd): P	re-purge:		^{mg} /L	Р	ost-purge:		^{mg} /L
O.R.P. (if r	eq'd): P	re-purge:		mV	Р	ost-purge:		mV

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سط استد ۱۱					

Project #: 1003 Z4 - RM1				Client: Ste	Client: Stellar			
Sampler: BP				Date: 3/24/10				
Well I.D.:Mu-E				Well Diameter	Well Diameter: 2 3 4 6 8			
Total Well Depth (TD): 44.90				Depth to Water (DTW): 9.82				
Depth to Free Product:				Thickness of Free Product (feet):				
Referenced to: PVO Grade				D.O. Meter (if req'd): YSI HACH				
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.84								
Purge Method:	l l l l l l l l l l l l l l l l l l l							
$\frac{\int (Gals.) \times \sqrt{3}}{1 \text{ Case Volume}} = \frac{\int (G.2) Gals.}{Calculated Volume}$ $\frac{1^{"}}{1^{"}} = \frac{1}{0.04} + \frac{1}{0.04} + \frac{1}{0.06} + \frac{1}{0.16} + \frac{1}{0.16}$								
Time	Temp (°F or C)	pН	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations		
1112	15.7	7.64	4618	21	5.6	OTW: 14.21		
1132	15.3	7.92	4085	78	11.2	DTW: 15.62		
1155	15.1	7,89	4074	78	16.8	PTW: 18.71		
				A. 44 M		A		
Did well dewater? Yes No Gallons actually evacuated: 17.0								
Sampling Date: $3/24/10$ Sampling Time: 1210 Depth to Water: 27.60								
Sample I.D.: $MW-E$ Laboratory: Kiff CalScience Other CFT								
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC								
EB I.D. (if applicable): [@] Duplicate I.D. (if applicable):								
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:								
D.O. (if req'	d): Pr	e-purge:		^{mg} / _L P	^{mg} /L Post-purge:			
O.R.P. (if req'd): Pre-purge: mV Post-purge: mV						mV		
					極いたい。			

•	· .	M	LL MONIT	ORING DA	ATA S	SHE.		•
Project #: 100324 - PM1				Client: ST	EUA	HR		χ.
Sampler: R.M.				Date: 31-	enlic	S		· · · · · · · · · · · · · · · · · · ·
Well I.D.: W-1				Well Diameter: 2 3 4 6 8 3				
Total Well Depth (TD):				Depth to Water (DTW):				
Depth to Free Product: 8.93				Thickness of Free Product (feet):				
Referenced to: (PVC) Grade				D.O. Meter (if req'd): YSI HACH				
DTW with	80% Rech	arge [(H	eight of Water	Column x ().20) [.]	+ DTW]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displacemen nersible	nt Extrac Other			Sampling N	Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing New Tubuy
16 min	Burger O	400 m/m	ura.	1'		Multiplier 0.04	4"	Diameter Multiplier 0.65
(1 Case Volume	(Gals.) X Speci	fied Volum	es Calculated Ve	Gals. 2' olume 3'		0.16 0.37	6" Other	1.47 radius ² * 0.163
Time 1003 1009	Temp (°F or °C) Boyn END	pH Weze in PURCAE	Cond. (mS or µS) S/ PSE1 Phin 2.5 L	Turbidit <u>(</u> NTUs)		Gals. Rem	oved	Observations
Did well de	ewater?	Yes (No)	G allons ac	tually	evacuate	ed:	
Sampling I	Date: 7/74		Sampling Tim	le: Int	 I	Depth to-	Water	
Sample I.D	a			Laboratory	· · ·	·····	cience	1.5
Analyzed f	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates	(5) (Other: Se	E C)e
EB I.D. (if	applicable):	@ Time	Duplicate				
Analyzed f	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates	(5) (Other:		Х
D.O. (if red	q'd): Pi	re-purge:		^{mg} /L	Ро	st-purge:		^{mg} /I
O.R.P. (if r	req'd): Pr	re-purge:		mV	Ро	st-purge:		mV

APPENDIX C

Analytical Laboratory Report and Chain-of-Custody Record



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Laboratory Job Number 219028 ANALYTICAL REPORT

Stellar Environmental Solutions 2198 6th Street Berkeley, CA 94710

Project : 2007-65 Location : Bay Center Apts Level : II

Sample ID MW-14 MW-17 MW-12 MW-7 MW-16 MW-9 MW-18 MW-18 MW-4 RW-1 MW-10 MW-15 MW-15 MW-8 MW-3 MW-13 MW-11 MW-5	Lab ID 219028-001 219028-002 219028-003 219028-004 219028-005 219028-006 219028-007 219028-008 219028-009 219028-010 219028-011 219028-012 219028-013 219028-014 219028-015 219028-016
MW-5 MW-E MW-6	219028-016 219028-017 219028-018

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

The Barn

Signature:

Project Manager

Date: <u>04/06/2010</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: Client: Project: Location: Request Date: Samples Received: 219028 Stellar Environmental Solutions 2007-65 Bay Center Apts 03/25/10 03/25/10

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 03/25/10. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

High responses were observed for a number of analytes in the CCV analyzed 04/02/10 21:57; affected data was qualified with "b". High response was observed for MTBE in the CCV analyzed 04/02/10 12:00; affected data was qualified with "b". High surrogate recovery was observed for bromofluorobenzene (FID) in MW-10 (lab # 219028-010); the corresponding trifluorotoluene (FID) surrogate recovery was within limits. High surrogate recovery was observed for trifluorotoluene (FID) in MW-11 (lab # 219028-015); the corresponding bromofluorobenzene (FID) surrogate recovery was within limits. MW-17 (lab # 219028-002) and MW-7 (lab # 219028-004) had pH greater than 2. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

MW-13 (lab # 219028-014) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

	Chain of Cust	ody Record 21902	~ ? }	Lab job no
Laboratory <u>C. YT</u> Address <u>2323 F.F. ST</u> BRUCELEY, CA	Method of Shipment C	on Run		Page of
Project Owner	Airbill No		Analysis Required	
Site Address 6400 CHRISTIE AVE BERKELEY, CA Project Name BAY CENTER A BARTMEN	Project Manager TEAL 4 Telephone No. (510) 644-3123 T ax No. (510) 644-3859		× / / / / /	Remarks
	Samplers: (Signature)	rvation Chemical	*	///
Field Sample Number Location/ Date Time Si	Type Type/Size of Container Cooler	Chemical / / / / /		
		Hel NSXXX		
2 <u>mw17</u> 956				
3 MW-12 1044				
$4 - \frac{104}{104}$ 5 MW-16 1132				
5 M W - 16 (132) 5 M W - 16 (132)	J J	XXX		
7 MW-18 1320		XXX		
8 MW-4 1402		1 JAAA		
Relinquished by: Signature to Signature	101 dough They	Relinquished by: Signature	Date Received by: Signature	Date
Printed P-COMUSY Time Printed . Company BTB (500 Company	CHT Time	Printed	Time Printed	Time
Turnaround Time: STANDARD Comments: EDF RETOURED		Relinquished by: Signature	Date Received by: Signature	Date
GUOZALID # SLT2005	5561	Printed	Time Printed	Time

 \star Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

Laboratory C YT Method of Shipment LB CONRECT Project Project Project Project Address Sigmant No. Address 23223 F.F.H. ST Sigmant No. Address Sigmant No. Address Project Owner Project Owner Coder No. Project Owner P					Chain of	Cus	stody R	ecc	ord		2	190	>28) 2				Lab job no	
BERLEVERY, CA Telephone No. (510) 644-3123 Project Name. RANCE Call Control Project Number Learner Ded Sample Number Learner Ded Sample Number Learner Ded Sample Number Learner Ded Sample Number Learner Mub-10 Huos Mub-15 Huzs Mub-13 Head Mub-13 Hoo Mub-14 Liston Mub-15 Huzs Mub-14 Hoo Mub-15 Huzs Mub-16 Hoo Mub-17 Hoo Mub-18 Hoo Mub-19 Hoo Mub-10 Hoo Mub-15 Huzs Mub-16 Hoo Mub-17 Hoo Mub-18 Hoo Mub-19 Hoo Mub-14 Hoo Mub-15 Huzs Mub-16 Hoo Mub-17 Hoo Mub-18 Hoo Mub-19 Hoo Mub-14 Hoo Mub-15 Huzs Mub-16 Hoo Mub-17 Intra- Mub-18 Hoo	Address 2323 61	= 111 st , CA		Sł	nipment No			e r 		/		7,7	5		nalysis	Requir	red		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Site Address <u>6400 CHKI.</u> BELLEL Project Name <u>BAY CEUTE</u>	r, CA R ABH	(TM	Pr Te Te	oject Manager 769 elephone No. (510) 644-3 ax No. (510) 644-3	3123 3859	·····	 		No. or C	Ž /	\sim				/	/		Remarks
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Time	Sample	1 1	E A	servation]/	/	$\langle h \rangle$	74	N			/ /		' /		
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B MW-3 ISS K <td< td=""><td></td><td></td><td></td><td></td><td></td><td>×</td><td></td><td>\prod</td><td></td><td>κ</td><td>K :</td><td>x</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td></td<>						×		\prod		κ	K :	x					_		
Alw-13 Hoo x<	- MW-8		1150			×				×	×	×							
MW-II Ozá X X X MW-II Ozá X X X MW-S IMAR X X MW-E IMAR Signature IMAR Signature Imar Printed Imar Imar Imar Imar Imar Imar Imar Imar Imar Imar Imar Imar Imar <	MW-3		1330			ĸ				X	×	×							
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7 Mu-E I I20 II IIIIIIIIIIIIIIIIIIIIIIIIIIIIII	MU-11		1025			×				×	K.	ĸ							
7 Mu-E I I20 II IIIIIIIIIIIIIIIIIIIIIIIIIIIIII	SMW-S		1406			ĸ				x	5	r							
Reinquished by: Date Received by: Date Received by: Signature Date Time Printed Time Printed Company Signature Signature <td< td=""><td>7 MW-E</td><td></td><td>1210</td><td>12</td><td>1</td><td>ĸ</td><td>4</td><td>1</td><td>h.</td><td></td><td>n</td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	7 MW-E		1210	12	1	ĸ	4	1	h.		n	×							
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Company ESTS 500 Company CdT 3/b Company Compan	Relinguished by: Signature PHTU	•		12	A Mongly	3kg		by:					Date						Date
Turnaround Time:					5				Time						Time				
- GLAZA IN # SIT 2006561 Printed Time Printed			Ð					-					Date						Date
8 Company Company				'55	61								Time						Tim

* Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

A. Carlos M.

	COOLER RECEIPT CHECKLIST
	Login # 219028 Date Received 3/24/10 Number of coolers Z Client 3TEUAR Project BAY CENTER APARTMENT
	Date Opened <u>1/24/10</u> By (print) M. VILLEW (sign) Min July Date Logged in 3-25 By (print) Elms Tradice (sign) Glue Tradice
	1. Did cooler come with a shipping slip (airbill, etc)YES
	2A. Were custody seals present? □ YES (circle) on cooler on samples
	☐Bubble Wrap ☐Foam blocks ☐Bags ☐None ☐Cloth material ☐Cardboard ☐Styrofoam ☐Paper towels 7. Temperature documentation:
	Type of ice used: Wet Blue/Gel None Temp(°C) Samples Received on ice & cold without a temperature blank Samples received on ice directly from the field. Cooling process had begun
·.	8. Were Method 5035 sampling containers present? YES NO If YES, what time were they transferred to freezer? 9. Did all bottles arrive unbroken/unopened? 9. Did all bottles arrive unbroken/unopened? ET 10. Are samples in the appropriate containers for indicated tests? NO 11. Are sample labels present, in good condition and complete? NO 12. Do the sample labels agree with custody papers? YES NO 13. Was sufficient amount of sample sent for tests requested? YES NO 14. Are the samples appropriately preserved? YES NO 15. Are bubbles > 6mm absent in VOA samples? YES NO 16. Was the client contacted concerning this sample delivery? YES NO If YES, Who was called? By Date: Date:
	COMMENTS Sample # 7 "MW-18" 1/4 Vots received broken.
•	
	SOP Volume: Client Services Rev. 6 Number 1 of 3 Section: 1.1.2 Effective: 23 July 2008 Page: 1 of 1 Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc

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Curtis & Tompkins Laboratories Analytical Report							
Lab #: 219028 Client: Stellar Environmen Project#: 2007-65	tal Solutions	Location: Prep:	Bay Center Apts EPA 5030B				
Matrix: Water		Sampled:	03/24/10				
Units: ug/L		Received:	03/25/10				
Field ID: MW-14		Lab ID:	219028-001				
Type: SAMPLE		Diln Fac:	10.00				
Analyte	Result	RL	Batch# Analyzed Analysis				
Gasoline C7-C12	6,700	500	161600 04/02/10 EPA 8015B				
MTBE	ND	20	161615 04/04/10 EPA 8021B				
Benzene	2,400	5.0	161615 04/04/10 EPA 8021B				
Toluene	400	5.0	161615 04/04/10 EPA 8021B				
Ethylbenzene	140	5.0	161615 04/04/10 EPA 8021B				
m,p-Xylenes	130	5.0	161615 04/04/10 EPA 8021B				
o-Xylene	55	5.0	161615 04/04/10 EPA 8021B				
Surrogate	%REC Limits	Batch# Analyz	ed Analysis				
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	112 48-162 107 52-158 104 21-180 102 26-167	161600 04/02/ 161600 04/02/ 161615 04/04/ 161615 04/04/	/10 EPA 80158 /10 EPA 80158 /10 EPA 80218				

Field ID: Type:

MW-17 SAMPLE

Lab ID: 219028-002

Analyte	Result	RL	Diln Fac	Batch# Analyzed	Analysis
Gasoline C7-C12	5,000	50	1.000	161372 03/28/10	EPA 8015B
MTBE	ND	2.0	1.000	161615 04/04/10	EPA 8021B
Benzene	910	2.5	5.000	161600 04/02/10	EPA 8021B
Toluene	66	0.50	1.000	161615 04/04/10	EPA 8021B
Ethylbenzene	73	0.50	1.000	161615 04/04/10	EPA 8021B
m,p-Xylenes	70	0.50	1.000	161615 04/04/10	EPA 8021B
o-Xylene	23	0.50	1.000	161615 04/04/10	EPA 8021B
Common and a	0.550	Timita Dila	Ten Dete		
Surrogate	%REC			h# Analyzed	Analysis
Trifluorotoluene (FID)	138	48-162 1.000	1613	372 03/28/10 EPA	8015B
Bromofluorobenzene (FID)	145	52-158 1.000	1613	372 03/28/10 EPA	8015B
Trifluorotoluene (PID)	117	21-180 1.000	1616	515 04/04/10 EPA	8021B
Bromofluorobenzene (PID)	105	26-167 1.000	1616	515 04/04/10 EPA	8021B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 1 of 10



Curtis & Tompkins Laboratories Analytical Report						
Lab #: 219028 Client: Stellar Environ Project#: 2007-65	nmental Solut		tion: :	Bay Center Ap EPA 5030B	ots	
Matrix: Water Units: ug/L		Samp Rece	led: ived:	03/24/10 03/25/10		
Field ID: MW-12 Type: SAMPLE		Lab	ID:	219028-003		
Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	Result 15,000 ND 6,200 110 73 86 15	RL 2,500 25 0.50 0.50 0.50 0.50 0.50	Diln Fac 50.00 1.000 50.00 1.000 1.000 1.000 1.000	Batch# Analyzed 161600 04/02/10 161615 04/04/10 161600 04/02/10 161615 04/04/10 161615 04/04/10 161615 04/04/10 161615 04/04/10 161615 04/04/10 161615 04/04/10 161615 04/04/10	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC	Limits Diln		h# Analyzed	Analysis	
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	106 107 130 104	48-16250.0052-15850.0021-1801.00026-1671.000	1616 1616	00 04/02/10 EPA 15 04/04/10 EPA	A 8015B A 8015B A 8021B A 8021B	
Field ID: MW-7 Type: SAMPLE		Lab	ID:	219028-004		
Analyte	Result	RL	Diln Fac	Batch# Analyzed		
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	330 ND 68 2.2 10 25 6.6	50 2.0 0.50 0.50 2.5 0.50 0.50	1.000 1.000 1.000 5.000 1.000 1.000 1.000	161372 03/28/10 161372 03/28/10 161372 03/28/10 161372 03/28/10 161615 04/04/10 161372 03/28/10 161372 03/28/10	EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC	Limits Diln	Fac Bate	h# Analyzed	Analysis	
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	112 115 107 106	48-162 1.000 52-158 1.000 21-180 1.000 26-167 1.000	1613 1613 1613	72 03/28/10 EPA 72 03/28/10 EPA 72 03/28/10 EPA	A 8015B A 8015B A 8021B A 8021B	

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 2 of 10



Curtis & Tompkins Laboratories Analytical Report							
Lab #: Client: Project#:		Environmental	Solutions	Location: Prep:	Bay Center Apts EPA 5030B		
Matrix: Units:		Nater 1g/L		Sampled: Received:	03/24/10 03/25/10		

Field ID: Type:	MW-16 SAMPLE		Lab ID: Diln Fac:	219028-005 1.000	
Analy	rte	Result	RL	Batch# Analyzed	Analysis
Gasoline C7-C1	.2	70	50	161372 03/28/10	EPA 8015B
MTBE		ND	2.0	161615 04/04/10	EPA 8021B
Benzene		12	0.50	161372 03/28/10	EPA 8021B
Toluene		2.1	0.50	161372 03/28/10	EPA 8021B
Ethylbenzene		0.56 C	0.50	161615 04/04/10	EPA 8021B
m,p-Xylenes		0.67	0.50	161372 03/28/10	EPA 8021B
o-Xylene		0.68	0.50	161372 03/28/10	EPA 8021B
			Detek# 3mel		4

Surrogate	%REC			
Trifluorotoluene (FID)	123	48-162	161372 03/28/10	EPA 8015B
Bromofluorobenzene (FID)	130	52-158	161372 03/28/10	EPA 8015B
Trifluorotoluene (PID)	117	21-180	161372 03/28/10	EPA 8021B
Bromofluorobenzene (PID)	119	26-167	161372 03/28/10	EPA 8021B

Field ID:	MW-9	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	161372
Lab ID:	219028-006	Analyzed:	03/28/10

Analyte	Result	RL	Analysis
Gasoline C7-C12	140	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	5.2	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	124	48-162	EPA 8015B
Bromofluorobenzene (FID)	120	52-158	EPA 8015B
Trifluorotoluene (PID)	113	21-180	EPA 8021B
Bromofluorobenzene (PID)	116	26-167	EPA 8021B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 3 of 10



Curtis	& Tompkins Labo	oratories Ar	alytical	Report	
Lab #: 219028 Client: Stellar Environ Project#: 2007-65	mental Solutions	Location: Prep:	Bay C EPA 5	Center Apts 5030B	
Matrix: Water Units: ug/L		Sampled: Received:	03/24 03/25		
Field ID: MW-18 Type: SAMPLE Lab ID: 219028-00	7	Diln Fac: Batch#: Analyzed:	1.000 16137 03/28	2	
Analyte	Result		RL	Analysis	
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	ND ND ND ND ND ND ND		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	sis		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	118 48-162 123 52-158 107 21-180 112 26-167	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			
Field ID: MW-4 Type: SAMPLE Lab ID: 219028-00	8	Diln Fac: Batch#: Analyzed:	1.000 16137 03/28	2	
Analyte	Result		RL	Analysis	
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	ND ND ND ND ND ND ND		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	sis		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	126 48-162 134 52-158 114 21-180 123 26-167	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 4 of 10



Curtis	& Tompkins	s Labor	atorie	s Anal	ytical	Report	
Lab #: 219028			Locati	.on:	Bay (Center Ap	ts
Client: Stellar Environm Project#: 2007-65	ental Soluti	ons	Prep:		EPÂ 5		
Matrix: Water Units: ug/L			Sample Receiv		03/24 03/25		
Field ID: RW-1			Diln F		1.000		
Type: SAMPLE Lab ID: 219028-009			Batch# Analyz		16137 03/28		
Analyte	R	esult		R	2L		Analysis
Gasoline C7-C12	ND	200			50	EPA 80	15B
MTBE Benzene	ND ND				2.0 0.50	EPA 80 EPA 80	
Toluene	ND				0.50	EPA 80	21B
Ethylbenzene	ND				0.50	EPA 80 EPA 80	
m,p-Xylenes o-Xylene	ND ND				0.50 0.50	EPA 80 EPA 80	
Surrogate		<u>Limits</u> 48-162		nalysis	5		
Trifluorotoluene (FID) Bromofluorobenzene (FID)	143 134	48-162 52-158	EPA 801 EPA 801				
Trifluorotoluene (PID)	121	21-180	EPA 802				
Bromofluorobenzene (PID)	121	26-167	EPA 802	21B			
Field ID: MW-10			Lab II	、 .	21000	28-010	
Field ID: MW-10 Type: SAMPLE			LaD IL)•	21902	20-010	
	_						
Analyte Gasoline C7-C12	Result 7,800	<u>RL</u> 50		iln Fac		Analyzed 03/28/10	Analysis EPA 8015B
MTBE	54 C	20		0.00		04/04/10	EPA 8021B
Benzene	1,200	5	.0 1	0.00	161615	04/04/10	EPA 8021B
Toluene	46			.000		03/28/10	EPA 8021B
Ethylbenzene	34			.0.00		04/04/10	EPA 8021B
m,p-Xylenes o-Xylene	41 15			.000		03/28/10 03/28/10	EPA 8021B EPA 8021B
Surrogate		Limits	Diln F		ch# Analy		Analysis
Trifluorotoluene (FID) Bromofluorobenzene (FID)	142 198 *	48-162 52-158	1.000 1.000		.372 03/28 .372 03/28		8015B 8015B
Trifluorotoluene (PID)		21-180	1.000		.372 03/28		8015B 8021B
Bromofluorobenzene (PID)	126	26-167	1.000		372 03/28		8021B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 5 of 10



Curti	s & Tompkin	s Laborator	ies Analy	ytical Report	
Lab #: 219028 Client: Stellar Enviro Project#: 2007-65	nmental Soluti	lons Prep	-	Bay Center Ap EPA 5030B	ts
Matrix: Water Units: ug/L			pled: eived:	03/24/10 03/25/10	
Field ID: MW-15 Type: SAMPLE		Lab	ID:	219028-011	
Analyte	Result	RL	Diln Fac	Batch# Analyzed	
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surrogate Trifluorotoluene (FID)	14,000 ND 5,900 74 170 57 12 C %REC 108	1,000 2.0 10 0.50 13 0.50 0.50 Limits Diln 48-162 20.00			EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B Analysis 8015B
Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	105 153 128	52-158 20.00 21-180 1.000 26-167 1.000) 1613	372 03/28/10 EPA	8015B 8021B 8021B
Field ID: MW-8 Type: SAMPLE		Lab	ID:	219028-012	
Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	Result 19,000 ND 6,200 120 C 830	RL 1,000 2.0 10 0.50	Diln Fac 20.00 1.000 20.00 1.000 25.00	Batch# Analyzed 161600 04/03/10 161372 03/28/10 161600 04/03/10 161372 03/28/10 161615 04/04/10	EPA 8015B EPA 8021B EPA 8021B EPA 8021B

MTBE	ND	2	.0 1	1.000	161372	03/28/10	EPA 80)21B
Benzene	6,200	10	-	20.00	161600	04/03/10	EPA 80)21B
Toluene	120 C	0	.50 1	1.000	161372	03/28/10	EPA 80)21B
Ethylbenzene	830	13	4	25.00	161615	04/04/10	EPA 80)21B
m,p-Xylenes	120	0	.50	1.000	161372	03/28/10	EPA 80)21B
o-Xylene	29	0	.50 1	1.000	161372	03/28/10	EPA 80)21B
Surrogate	%REC	Limits	Diln H	Fac Bate	h# Anal	yzed	Analy	vsis
Surrogate Trifluorotoluene (FID)	% REC 115		<u>Diln B</u> 20.00		h# Anal; 00 04/0		Analy 8015B	vsis
		48-162		1616		3/10 EPA		vsis
Trifluorotoluene (FID)	115	48-162 52-158	20.00	1616 1616	00 04/0	3/10 EPA 3/10 EPA	8015B	vsis
Trifluorotoluene (FID) Bromofluorobenzene (FID)	115 104	48-162 52-158	20.00 20.00 1.000	1616 1616 1613	00 04/0 00 04/0	3/10 EPA 3/10 EPA 8/10 EPA	8015B 8015B	vsis

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	Curtis & To	mpkins Labora	tories Analyti	cal Report
Lab #: Client: Project#:	Environmental	Solutions	Location: Prep:	Bay Center Apts EPA 5030B
Matrix: Units:	Nater 1g/L		Sampled: Received:	03/24/10 03/25/10

Field ID: Type:	MW-3 SAMPLE		Lab ID: Diln Fac:	219028-013 1.000	
Analy	te	Result	RL	Batch# Analyzed	Analysis
Gasoline C7-C1	2	230	50	161372 03/28/10	EPA 8015B
MTBE		2.7	2.0	161372 03/28/10	EPA 8021B
Benzene		1.7 C	0.50	161372 03/28/10	EPA 8021B
Toluene		ND	0.50	161372 03/28/10	EPA 8021B
Ethylbenzene		0.97	0.50	161615 04/04/10	EPA 8021B
m,p-Xylenes		ND	0.50	161372 03/28/10	EPA 8021B
o-Xylene		ND	0.50	161372 03/28/10	EPA 8021B

Surrogate	%REC	Limits	Batch# A	Analyzed	Analysis
Trifluorotoluene (FID)	139	48-162	161372 0)3/28/10	EPA 8015B
Bromofluorobenzene (FID)	141	52-158	161372 0	03/28/10	EPA 8015B
Trifluorotoluene (PID)	114	21-180	161372 0	03/28/10	EPA 8021B
Bromofluorobenzene (PID)	120	26-167	161372 0	03/28/10	EPA 8021B

Field ID: Type:

MW-13 SAMPLE

Lab ID: 219028-014

Analyte	Result	RL	Diln Fac	Batch# Analyzed	Analysis
Gasoline C7-C12	43,000	2,500	50.00	161600 04/03/10	EPA 8015B
MTBE	ND	2.0	1.000	161372 03/28/10	EPA 8021B
Benzene	12,000	25	50.00	161600 04/03/10	EPA 8021B
Toluene	310	2.5	5.000	161615 04/04/10	EPA 8021B
Ethylbenzene	1,600	2.5	5.000	161615 04/04/10	EPA 8021B
m,p-Xylenes	1,000	2.5	5.000	161615 04/04/10	EPA 8021B
o-Xylene	140	0.50	1.000	161372 03/28/10	EPA 8021B
Surrogate	%REC			h# Analyzed	Analysis
Trifluorotoluene (FID)	115	48-162 50.00	1616		8015B
Bromofluorobenzene (FID)	107	52-158 50.00	1616	00 04/03/10 EPA	8015B
Trifluorotoluene (PID)	128	21-180 1.000	1613	72 03/28/10 EPA	8021B
Bromofluorobenzene (PID)	128	26-167 1.000	1613	72 03/28/10 EPA	8021B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 7 of 10



c	Curtis & Tompk	ins Labo	ratories An	alytical R	leport	
Lab #: 219028 Client: Stellar E Project#: 2007-65	nvironmental Sol	utions	Location: Prep:	Bay Ce EPA 50	enter Apts)30B	
Matrix: Wa	ter /L		Sampled: Received:	03/24/ 03/25/		
Z L -	11 IPLE 028-015		Diln Fac: Batch#: Analyzed:	1.000 161372 03/28,		
Analyte		Result		RL		lysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		1,600 2.9 150 ND 3.9 8.6 4.2	С	50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	e %RE		Analys	sis		
Trifluorotoluene (F Bromofluorobenzene Trifluorotoluene (P Bromofluorobenzene	(FID) 136 PID) 151	* 48-162 52-158 21-180 26-167	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			
	5 IPLE 028-016		Diln Fac: Batch#: Analyzed:	1.000 161372 03/28,		
Analyte		Result		RL		lysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		ND ND 4.9 ND ND ND ND		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	e %RE	C Limits	Analys	sis		
Trifluorotoluene (F Bromofluorobenzene Trifluorotoluene (P Bromofluorobenzene	(FID) 122 PID) 113	48-162 52-158 21-180 26-167	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 8 of 10



Curcis	& Tompkins	s Labor	atories A	nalytical	Report	
Lab #: 219028 Client: Stellar Environm Project#: 2007-65	ental Soluti	ons	Location: Prep:	Bay (EPA 5	Center Apt 5030B	S
Matrix: Water Units: ug/L			Sampled: Received:	03/24 03/25		
Field ID: MW-E			Lab ID:		28-017	
Type: SAMPLE						
Analyte	Result	RI			Analyzed	Analysis
Gasoline C7-C12 MTBE	2,400 4.9 C	50	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		03/28/10 03/28/10	EPA 8015B EPA 8021B
Benzene	1,000		2.5 5.00	0 161600	04/03/10	EPA 8021B
Toluene	20 C		0.50 1.00		03/28/10	EPA 8021B
Ethylbenzene m,p-Xylenes	37 19		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	161615	04/04/10 03/28/10	EPA 8021B EPA 8021B
o-Xylene	7.9 C		0.50 1.00		03/28/10	EPA 8021B
Surrogate	%REC	Limits	Diln Fac	Batch# Analy	zed	Analysis
Trifluorotoluene (FID)	141	48-162	1.000	161372 03/28	3/10 EPA	8015B
Bromofluorobenzene (FID)		52-158	1.000	161372 03/28		8015B
Trifluorotoluene (PID) Bromofluorobenzene (PID)		21-180	1.000	161372 03/28		8021B 8021B
Bromofluorobenzene (PID)			1.000 1.000	161372 03/28 161372 03/28		8021B 8021B
Bromofluorobenzene (PID)			1.000	161372 03/28	3/10 EPA	
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE	117		1.000 Diln Fac: Batch#:	161372 03/28 1.000 16135	3/10 EPA) 72	
Bromofluorobenzene (PID) Field ID: MW-6	117		1.000 Diln Fac:	161372 03/28	3/10 EPA) 72	
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte	117 3		1.000 Diln Fac: Batch#:	161372 03/28 1.000 16137 03/28 RL	3/10 EPA) 72 3/10 A	8021B nalysis
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12	117 3 R ND	26-167	1.000 Diln Fac: Batch#:	161372 03/28 1.000 1613 03/28 RL 50	3/10 EPA 72 3/10 <u>A</u> EPA 801	8021B nalysis 5B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte	117 3	26-167 esult	1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 16137 03/28 RL 50 2.0	3/10 EPA) 72 3/10 A	8021B nalysis 58 18
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 MTBE Benzene Toluene	117 B ND ND ND	26-167	1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	117 B ND ND ND ND ND ND	26-167 esult	1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 1613 03/28 RL 50 2.0 0.50 0.50 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes	117 B ND ND ND	26-167 esult	1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B 1B 1B 1B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	117 R ND ND ND ND ND ND ND ND	<u>esult</u> 1.9 (1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B 1B 1B 1B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	117 ND ND ND ND ND ND ND ND	<u>esult</u> 1.9 (Limits	1.000 Diln Fac: Batch#: Analyzed:	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B 1B 1B 1B
Bromofluorobenzene (PID)Field ID:MW-6Type:SAMPLELab ID:219028-018 Analyte Gasoline C7-C12MTBEBenzeneTolueneEthylbenzenem,p-Xyleneso-XyleneSurrogateTrifluorotoluene (FID)Bromofluorobenzene (FID)	117 ND ND ND ND ND ND ND ND ND ND	<u>26-167</u> esult 1.9 (<u>Limits</u> 48-162 52-158	1.000 Diln Fac: Batch#: Analyzed: C C EPA 8015B EPA 8015B	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B 1B 1B 1B
Bromofluorobenzene (PID) Field ID: MW-6 Type: SAMPLE Lab ID: 219028-018 Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surrogate Trifluorotoluene (FID)	117 117 ND ND ND ND ND ND ND ND 125 132 118	<u>esult</u> 1.9 (<u>Limits</u> 48-162	1.000 Diln Fac: Batch#: Analyzed: C C Analy EPA 8015B	161372 03/28 1.000 16137 03/28 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	3/10 EPA 72 3/10 EPA 801 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802 EPA 802	8021B nalysis 5B 1B 1B 1B 1B 1B 1B 1B 1B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% ND= Not Detected RL= Reporting Limit Page 9 of 10



	Curtis & I	ompkins Labo	oratories Ar	nalytical Repor	rt
Lab #: 219028 Client: Stella Project#: 2007-6	ar Environmenta	l Solutions	Location: Prep:	Bay Center EPA 5030B	Apts
Matrix: Units:	Water ug/L		Sampled: Received:	03/24/10 03/25/10	
Type: Lab ID: Diln Fac:	BLANK QC537916 1.000		Batch#: Analyzed:	161372 03/27/10	
Analy	<i>y</i> te	Result		RL	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		ND ND ND ND ND ND ND		2.0 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surrog	gate	%REC Limits	Analy	sis	
Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze	ene (FID) e (PID)	11848-16211752-15811221-18011126-167	EPA 8015B EPA 8021B		
Type: Lab ID: Diln Fac:	BLANK QC538850 1.000		Batch#: Analyzed:	161600 04/02/10	
Analy	/te	Result		RL	Analysis
Gasoline C7-C12					
		ND ND		50 EPA	. 8015B
Benzene		ND ND		50 EPA 0.50 EPA	
	e (FID) ene (FID) e (PID)	ND	EPA 8015B EPA 8015B EPA 8021B	50 EPA 0.50 EPA	. 8015B
Benzene Surrog Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze Type: Lab ID:	e (FID) ene (FID) e (PID)	ND ND 93 48-162 89 52-158 83 21-180 83 26-167	EPA 8015B EPA 8015B EPA 8021B	50 EPA 0.50 EPA	. 8015B
Benzene Surrog Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze Type: Lab ID: Diln Fac: Analy	e (FID) ene (FID) e (PID) ene (PID) BLANK QC538909 1.000	ND ND *REC Limits 93 48-162 89 52-158 83 21-180 83 26-167 ************************************	EPA 8015B EPA 8015B EPA 8021B EPA 8021B Batch#:	50 EPA 0.50 EPA sis 161615 04/03/10 RL	Analysis
Benzene Surrog Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze Type: Lab ID: Diln Fac:	e (FID) ene (FID) e (PID) ene (PID) BLANK QC538909 1.000	ND ND 93 48-162 89 52-158 83 21-180 83 26-167	EPA 8015B EPA 8015B EPA 8021B EPA 8021B Batch#:	50 EPA 0.50 EPA sis 161615 04/03/10 RL 2.0 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA	8015B 8021B
Benzene Surrog Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze Type: Lab ID: Diln Fac: MTBE Benzene Toluene Ethylbenzene m,p-Xylenes	e (FID) ene (FID) e (PID) ene (PID) BLANK QC538909 1.000 7te	ND ND *REC Limits 93 48-162 89 52-158 83 21-180 83 26-167 *Result ND ND ND ND ND ND ND ND ND ND ND ND ND N	EPA 8015B EPA 8015B EPA 8021B EPA 8021B Batch#: Analyzed:	50 EPA 0.50 EPA sis 161615 04/03/10 RL 2.0 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA	Analysis 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Benzene Surrog Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze Type: Lab ID: Diln Fac: MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	e (FID) ene (FID) e (PID) ene (PID) BLANK QC538909 1.000 rte gate e (FID) ene (FID) ene (FID) e (PID)	ND ND *REC Limits 93 48-162 89 52-158 83 21-180 83 26-167 ************************************	EPA 8015B EPA 8015B EPA 8021B EPA 8021B Batch#: Analyzed: EPA 8015B EPA 8015B EPA 8015B EPA 8021B	50 EPA 0.50 EPA sis 161615 04/03/10 RL 2.0 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA	Analysis 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B

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Curtis & Tompkins Laboratories Analytical Report						
Lab #:	219028	Location:	Bay Center Apts			
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B			
Project#:	2007-65	Analysis:	EPA 8015B			
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC537917	Batch#:	161372			
Matrix:	Water	Analyzed:	03/27/10			
Units:	ug/L					

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,064	106	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	145	48-162
Bromofluorobenzene (FID)	129	52-158



Curtis & Tompkins Laboratories Analytical Report							
Lab #: 219028		Location:	Bay Center Apts				
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B				
Project#: 2007-6	5	Analysis:	EPA 8015B				
Field ID:	ZZZZZZZZZ	Batch#:	161372				
MSS Lab ID:	219085-007	Sampled:	03/26/10				
Matrix:	Water	Received:	03/26/10				
Units:	ug/L	Analyzed:	03/27/10				
Diln Fac:	1.000						

Type:	MS			Lab ID:		QC537918			
Analyt	ce MS	SS Re	sult	Spil	ed	Result	%REC	Lir	nits
Gasoline C7-C12		2	4.13	2,00	00	1,896	94	49-	-129
Surrog	jate %	REC	Limits						
Trifluorotoluene	e (FID) 15	50	48-162						
Bromofluorobenze	ene (FID) 13	32	52-158						
Туре:	MSD			Lab ID:		QC537919			
Analy	/te	i	Spiked		Result	%REC	Limits	RPD	Lim
Gasoline C7-C12			2,000		1,852	91	49-129	2	19
Surrog	jate %	REC	Limits						
Trifluorotoluene	e (FID) 16	50	48-162						

137

52-158

Bromofluorobenzene (FID)



Curtis & Tompkins Laboratories Analytical Report							
Lab #:	219028	Location:	Bay Center Apts				
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B				
Project#:	2007-65						
Matrix:	Water	Batch#:	161372				
Units:	ug/L	Analyzed:	03/27/10				
Diln Fac:	1.000						

Type:

m,p-Xylenes

o-Xylene

BS

Lab ID:

QC537920

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	10.20	102	36-168	EPA 8021B
Benzene	10.00	10.46	105	69-121	EPA 8021B
Toluene	10.00	10.51	105	64-132	EPA 8021B
Ethylbenzene	10.00	10.53	105	64-136	EPA 8021B
m,p-Xylenes	10.00	11.01	110	63-138	EPA 8021B
o-Xylene	10.00	10.77	108	64-135	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Trifluorotoluene (FID)	121	48-162	EPA 8015B	
Bromofluorobenzene (FID)	123	52-158	EPA 8015B	
Trifluorotoluene (PID)	116	21-180	EPA 8021B	
Bromofluorobenzene (PID)	117	26-167	EPA 8021B	

Туре:	BSD		Lab ID	Lab ID:		QC537921		
Ar	nalyte	Spiked	Result	%REC	Limits	RPD	Lim	L
MTBE		10.00	9.560	96	36-168	б	35	ΕP
Benzene		10.00	10.19	102	69-121	3	24	ΕP
Toluene		10.00	10.34	103	64-132	2	27	ΕP
Ethylbenze	ene	10.00	10.22	102	64-136	3	27	EP

10.00

10.00

Surrogate	%REC	Limits	Analysis	
Trifluorotoluene (FID)	123	48-162	EPA 8015B	
Bromofluorobenzene (FID)	124	52-158	EPA 8015B	
Trifluorotoluene (PID)	115	21-180	EPA 8021B	
Bromofluorobenzene (PID)	115	26-167	EPA 8021B	

10.69

10.52

107

105

63-138

64-135

3

2

9.0

Analysis

EPA 8021B

EPA 8021B

EPA 8021B

EPA 8021B

EPA 8021B

EPA 8021B

32

27



Curtis & Tompkins Laboratories Analytical Report						
Lab #:	219028	Location:	Bay Center Apts			
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B			
Project#:	2007-65	Analysis:	EPA 8015B			
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC538851	Batch#:	161600			
Matrix:	Water	Analyzed:	04/02/10			
Units:	ug/L					

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	960.1	96	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	48-162
Bromofluorobenzene (FID)	104	52-158



Curtis & Tompkins Laboratories Analytical Report							
Lab #: 219028		Location:	Bay Center Apts				
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B				
Project#: 2007-6	5	Analysis:	EPA 8015B				
Field ID:	ZZZZZZZZZ	Batch#:	161600				
MSS Lab ID:	219056-002	Sampled:	03/23/10				
Matrix:	Water	Received:	03/25/10				
Units:	ug/L	Analyzed:	04/02/10				
Diln Fac:	1.000						

Туре:	MS			Lab ID:		QC538852			
Analy	te	MSS Re	sult	Spike	ed	Result	%REC	Lir	nits
Gasoline C7-C12		Ę	58.34	2,000)	2,094	102	49-	-129
Surrog	gate	%REC	Limits						
Trifluorotoluene	e (FID)	128	48-162						
Bromofluorobenze	ene (FID)	111	52-158						
The second secon	MCD			Ich ID.		00520052			
Type:	MSD			Lab ID:		QC538853			
Analy	yte		Spiked		Result	%REC	Limits	RPD	Lim
Gasoline C7-C12			2,000		2,083	101	49-129	1	19
Surro		%REC	T.imite						

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	48-162
Bromofluorobenzene (FID)	111	52-158



	Curtis & Tompkins Labo	oratories Anal	ytical Report
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	161600
Units:	ug/L	Analyzed:	04/02/10
Diln Fac:	1.000		

Туре:	BS			Lab ID:	QC53	8854			
	Analyte		Spiked		Result	%REC	Limits		
Benzene			10.00		10.34	103	69-121		
	Surrogate	%REC	Limits						
Trifluor	otoluene (PID)	90	21-180						
Bromoflu	orobenzene (PID)	91	26-167						
Туре:	BSD			Lab ID:	QC53	8855			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Benzene			10.00		10.70	107	69-121	3	24
	Surrogate	%REC	Limits						
1	otoluene (PID)	92	21-180						

93

26-167

Bromofluorobenzene (PID)



Curtis & Tompkins Laboratories Analytical Report							
Lab #:	219028	Location:	Bay Center Apts				
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B				
Project#:	2007-65	Analysis:	EPA 8021B				
Matrix:	Water	Batch#:	161615				
Units:	ug/L	Analyzed:	04/03/10				
Diln Fac:	1.000						

Type:

BS

Lab ID:

QC538913

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	11.46	115	36-168
Benzene	10.00	10.42	104	69-121
Toluene	10.00	10.73	107	64-132
Ethylbenzene	10.00	10.36	104	64-136
m,p-Xylenes	10.00	11.04	110	63-138
o-Xylene	10.00	10.80	108	64-135

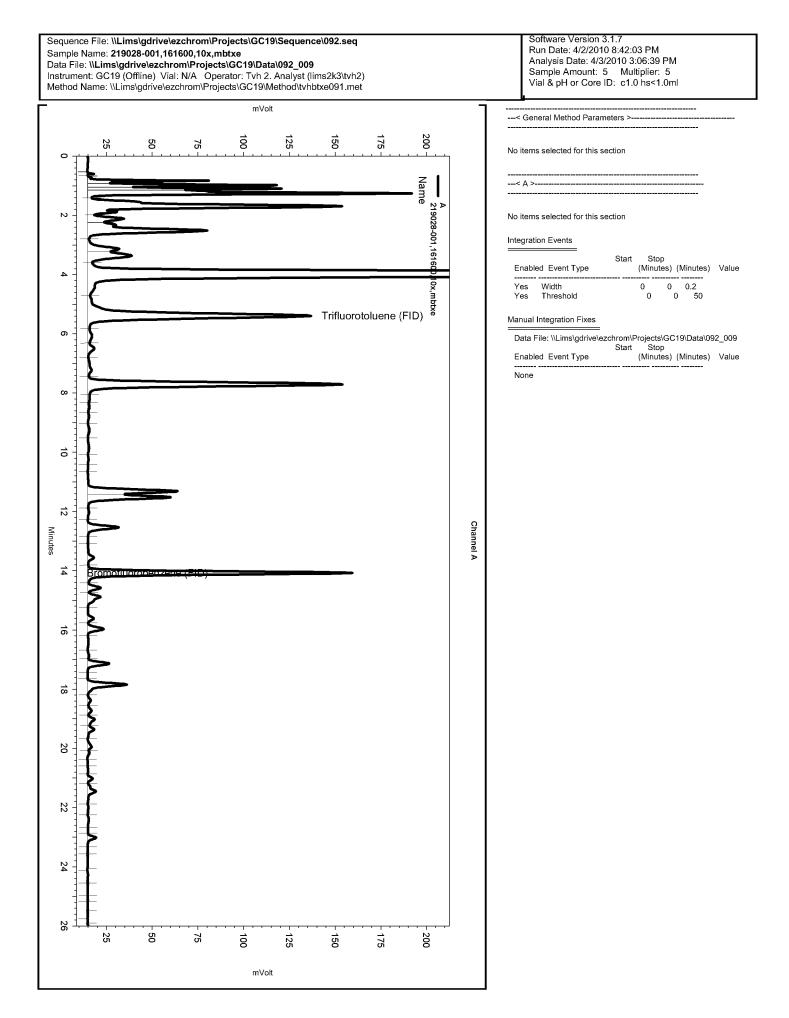
Surrogate	%REC	Limits
Trifluorotoluene (PID)	96	21-180
Bromofluorobenzene (PID)	99	26-167

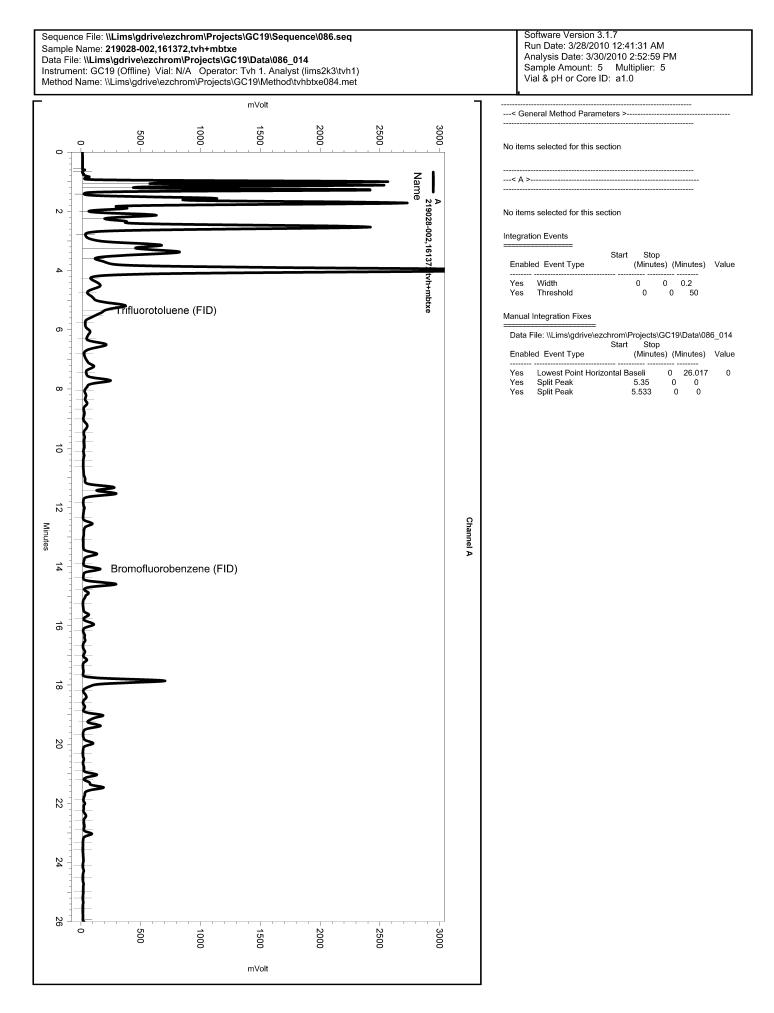
Type: BSD			Lab ID:	QC5	38914			
Analyte		Spiked		Result	%REC	Limits	RPD	Lim
MTBE		10.00		11.75	117	36-168	2	35
Benzene		10.00		10.59	106	69-121	2	24
Toluene		10.00		10.95	109	64-132	2	27
Ethylbenzene		10.00		10.48	105	64-136	1	27
m,p-Xylenes		10.00		11.47	115	63-138	4	32
o-Xylene		10.00		11.05	111	64-135	2	27
Surrogate	%REC	Limits						
Trifluorotoluene (PID)	97	21-180						

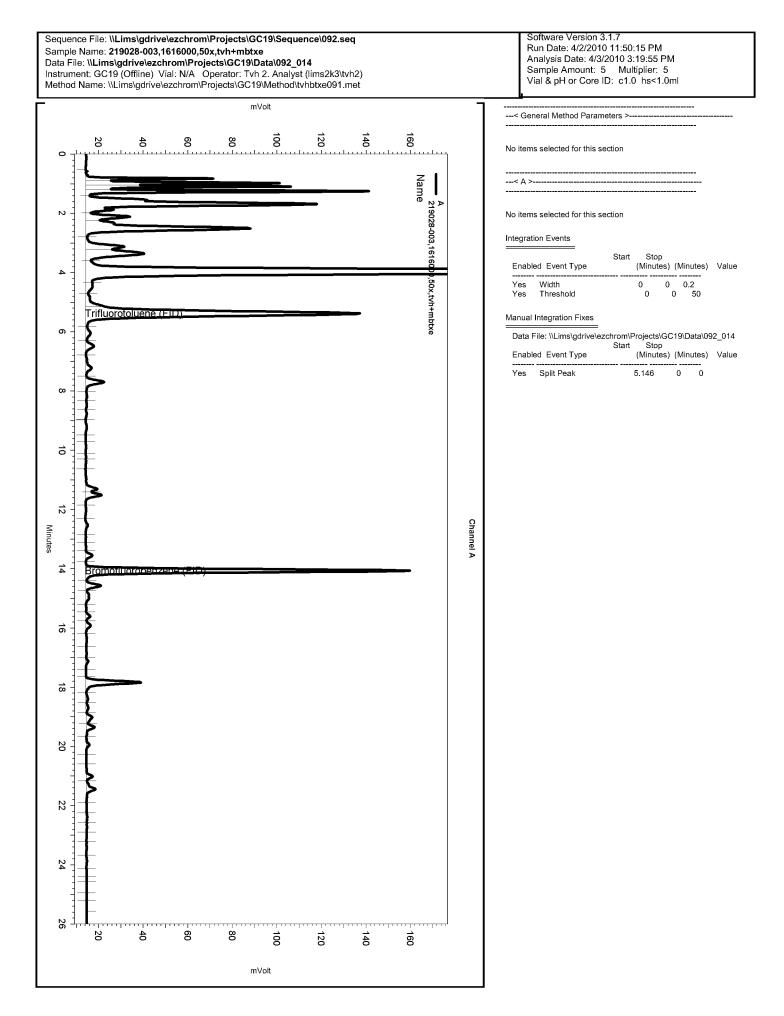
101

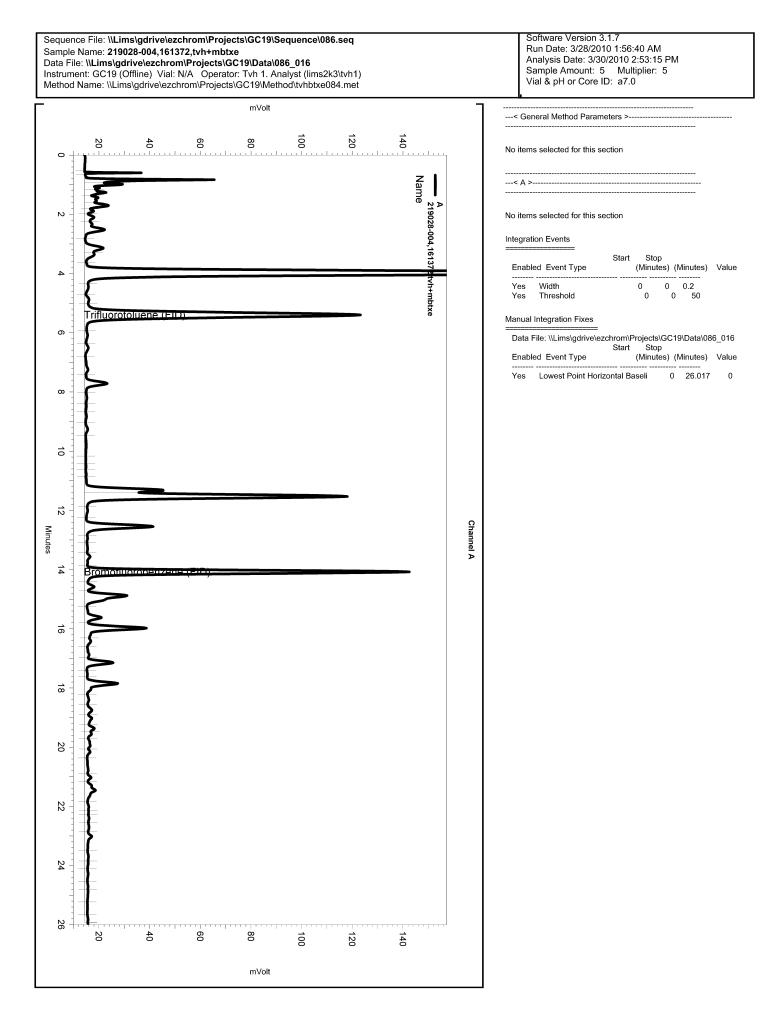
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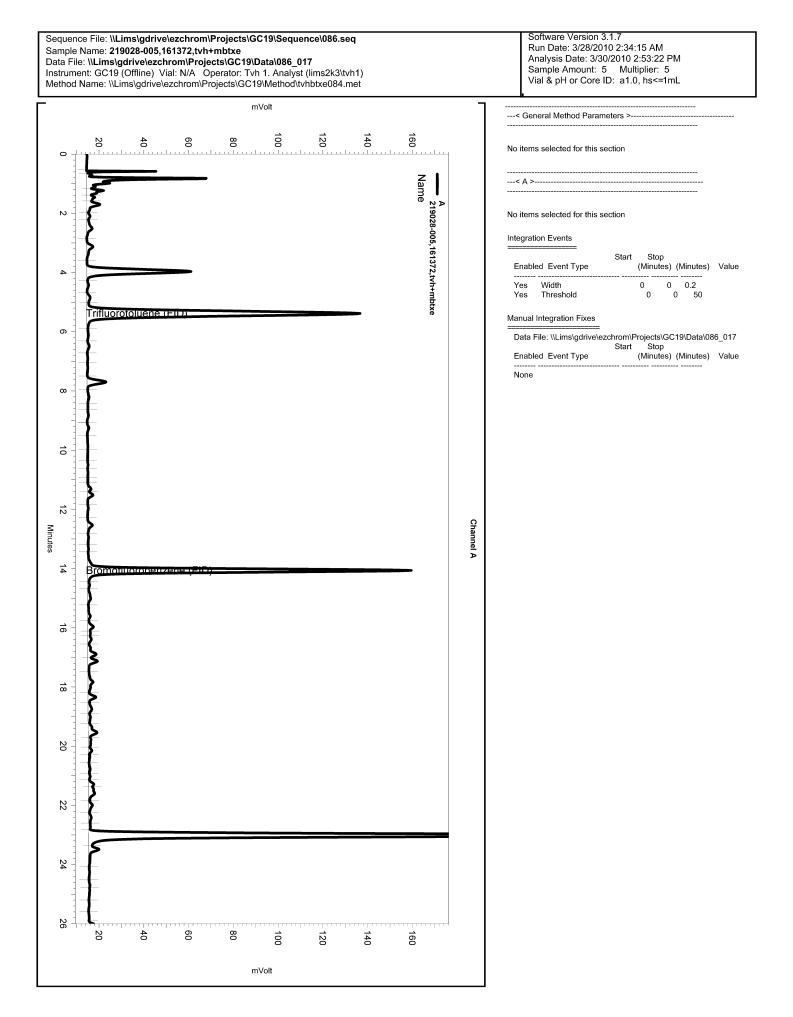
Bromofluorobenzene (PID)

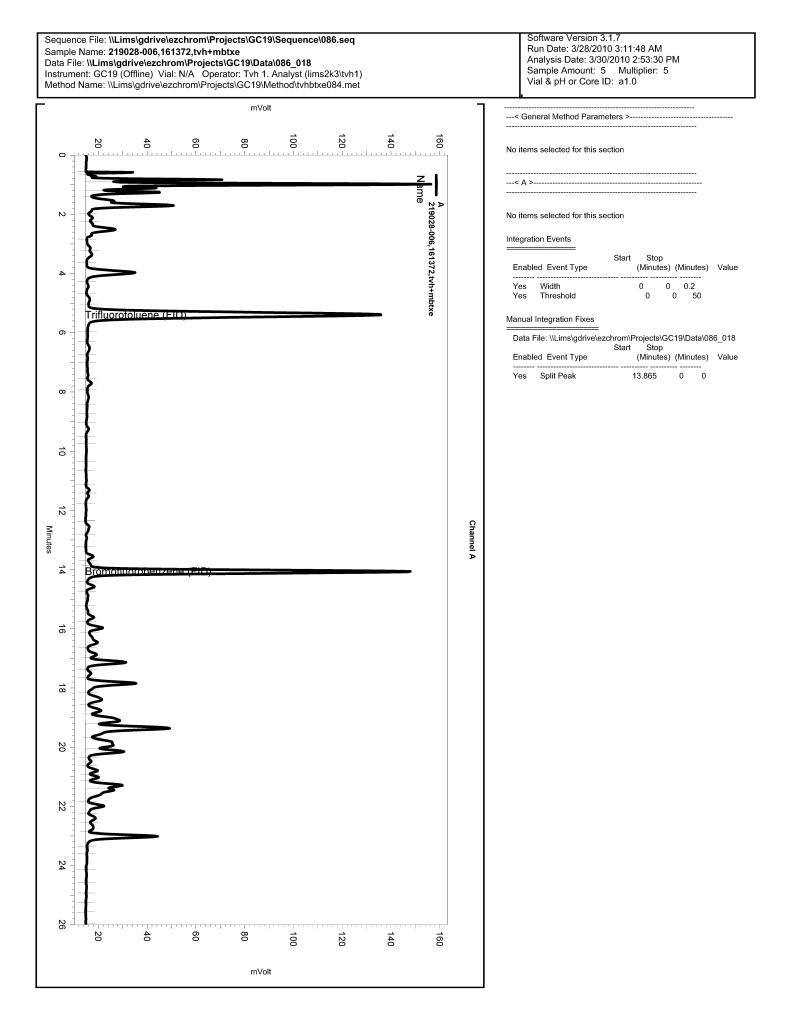


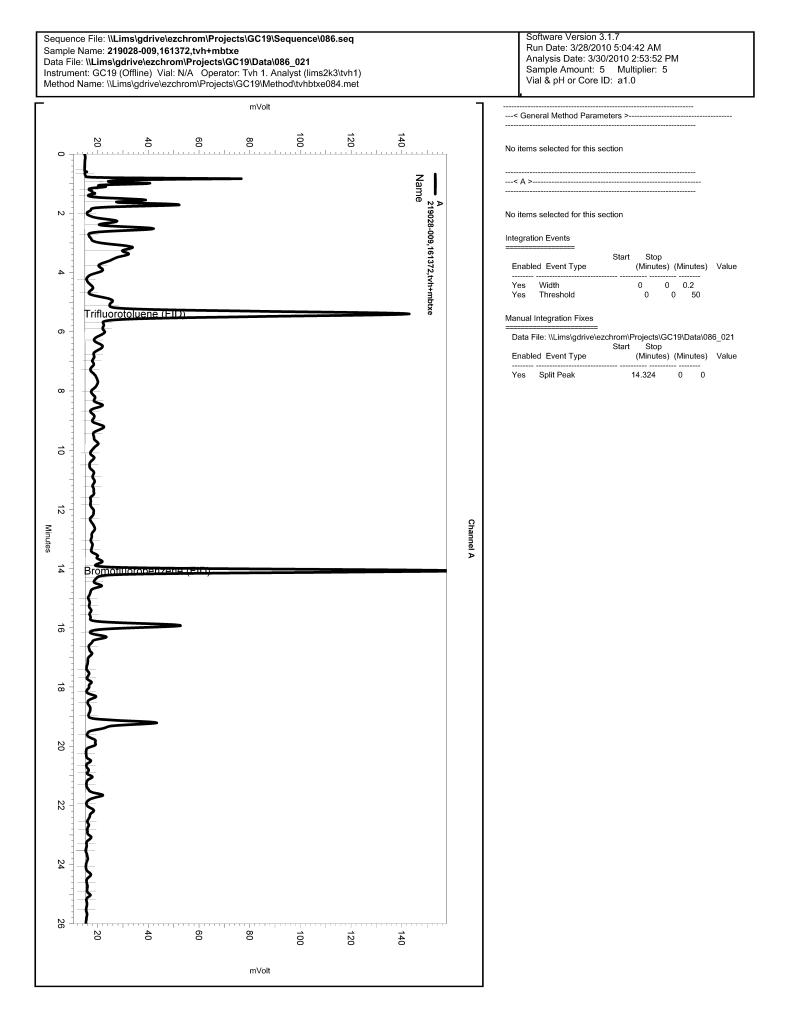


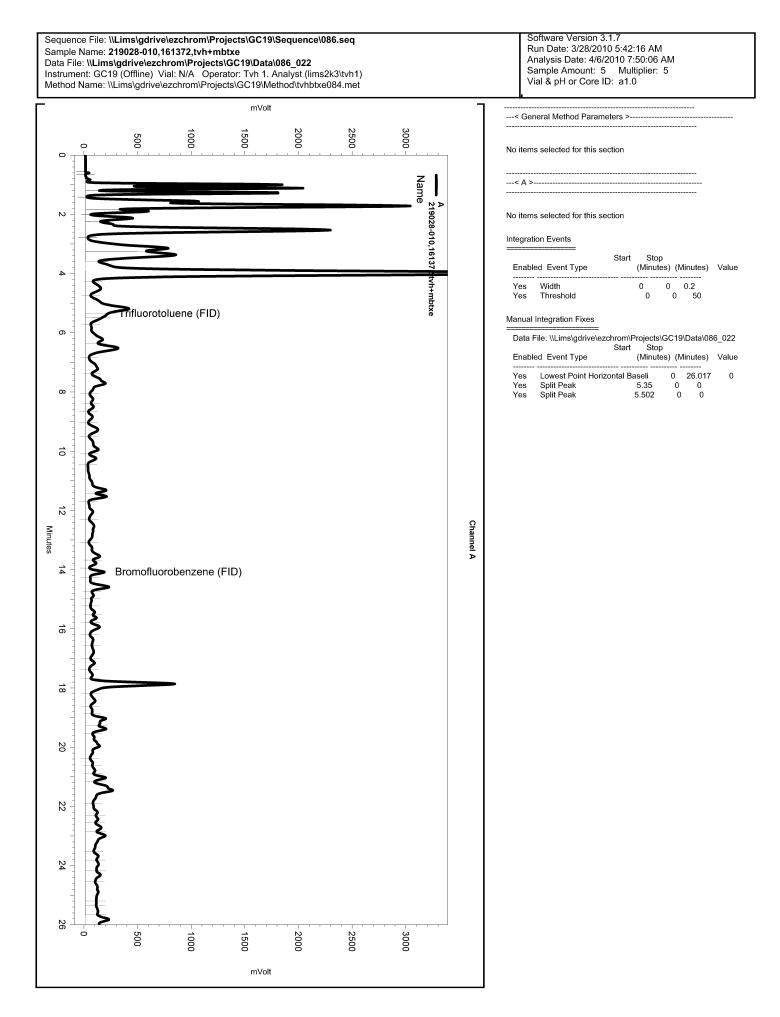


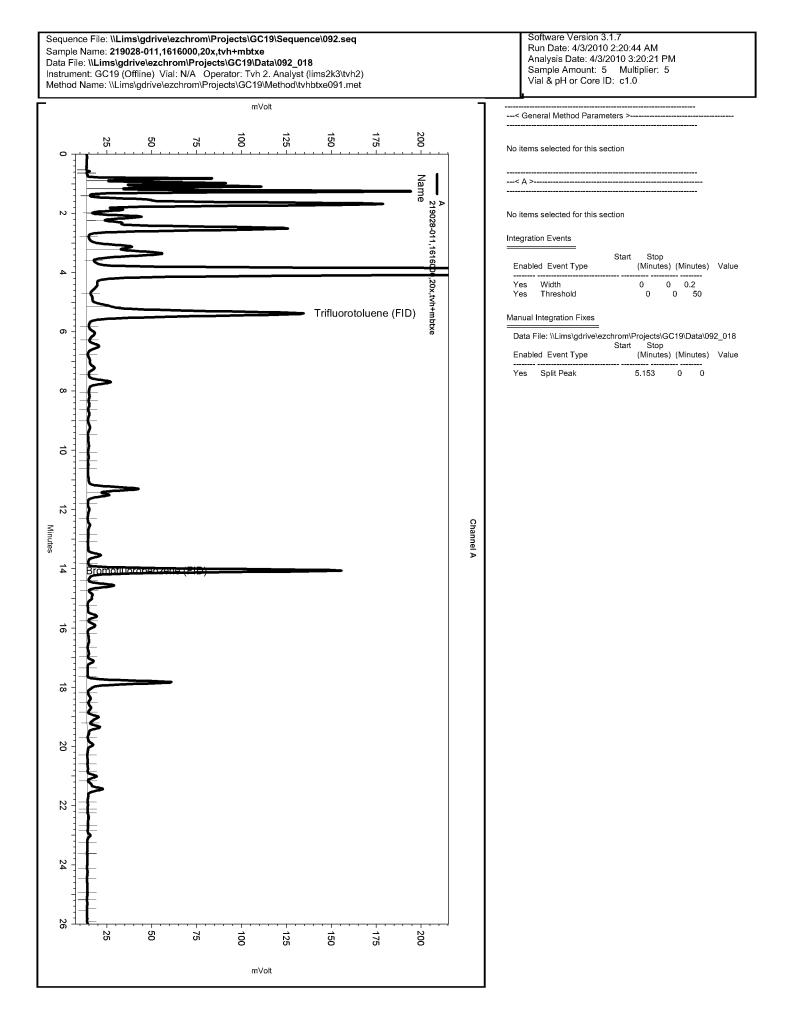


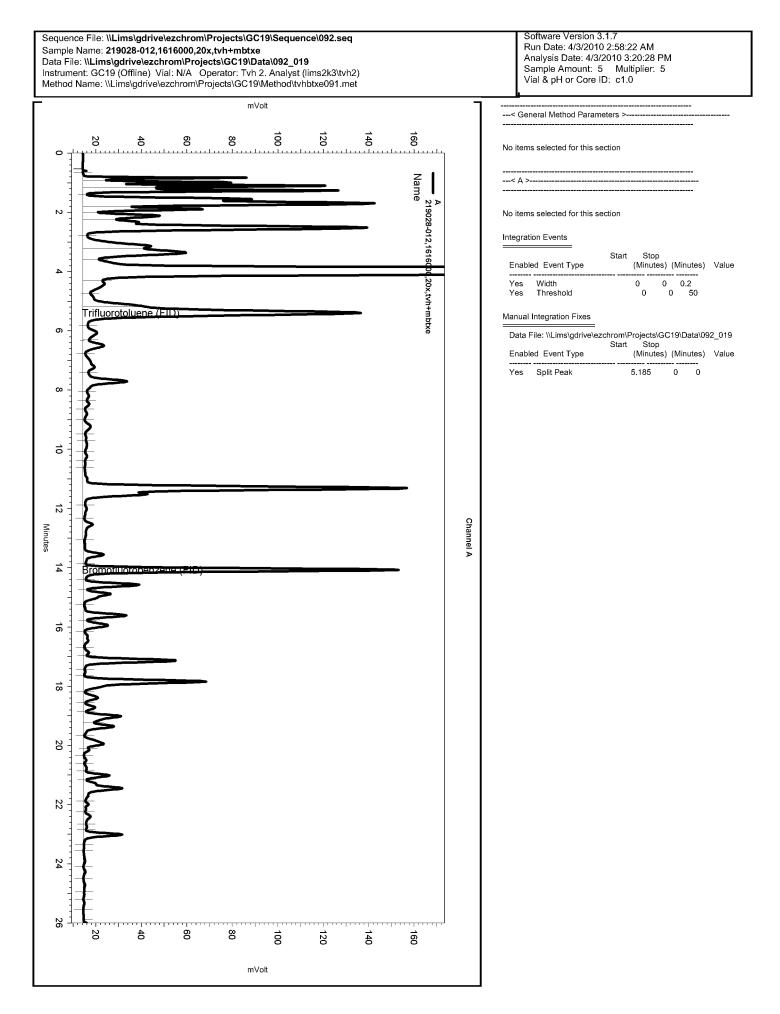


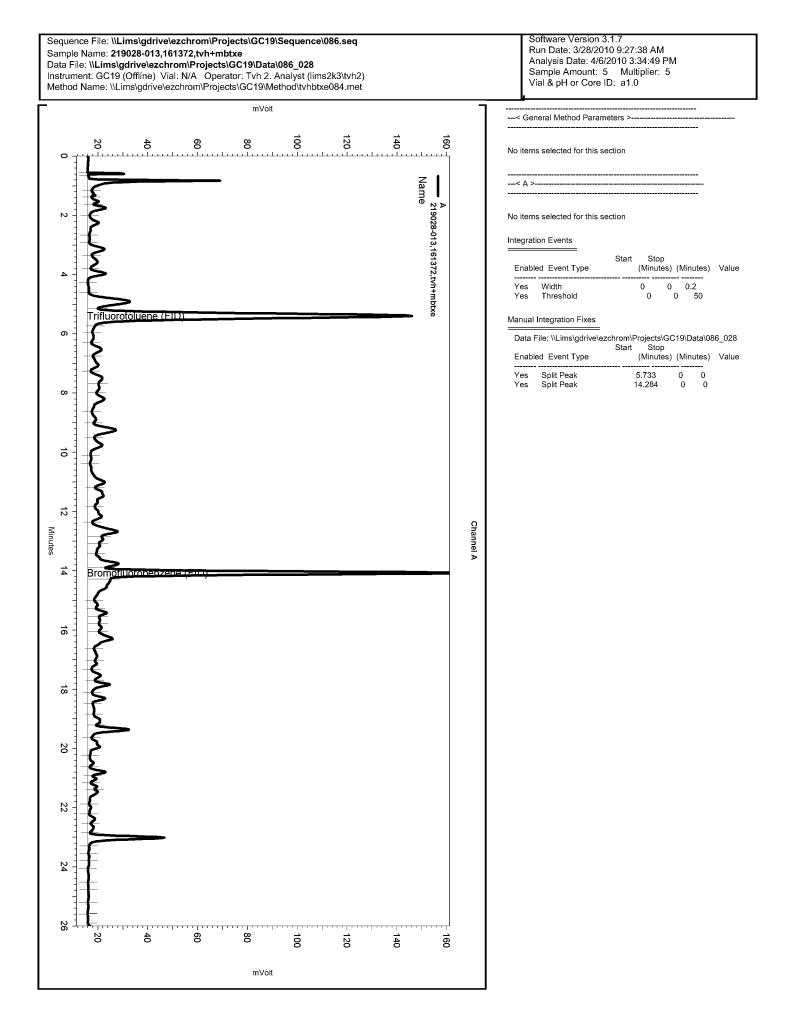


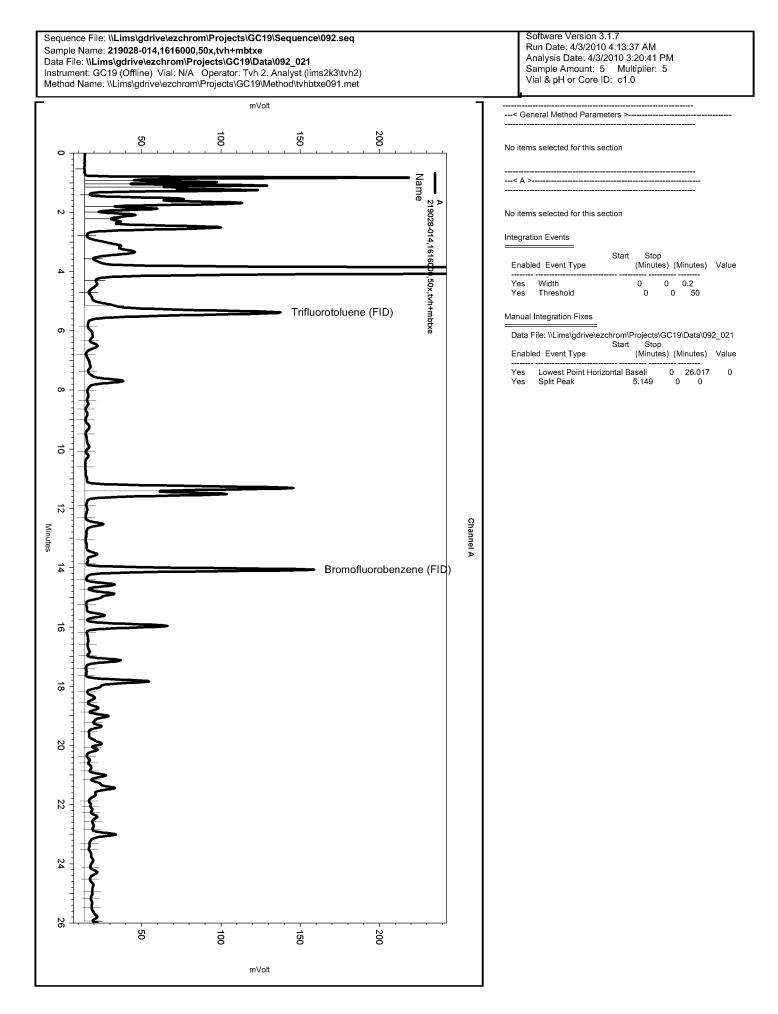


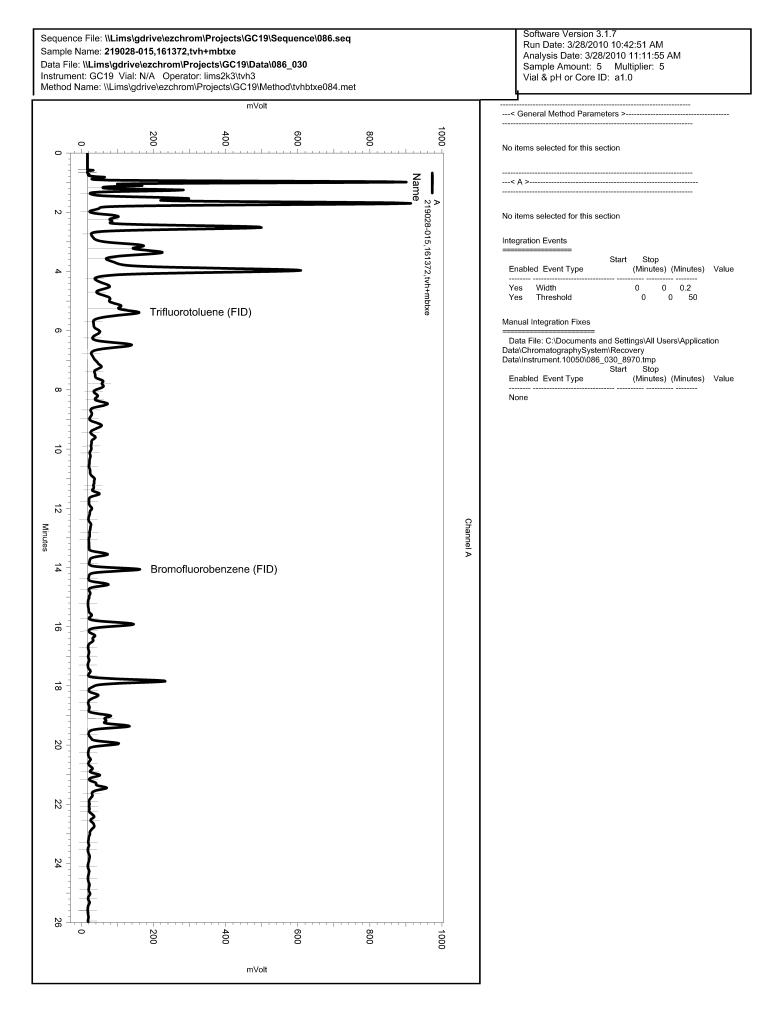


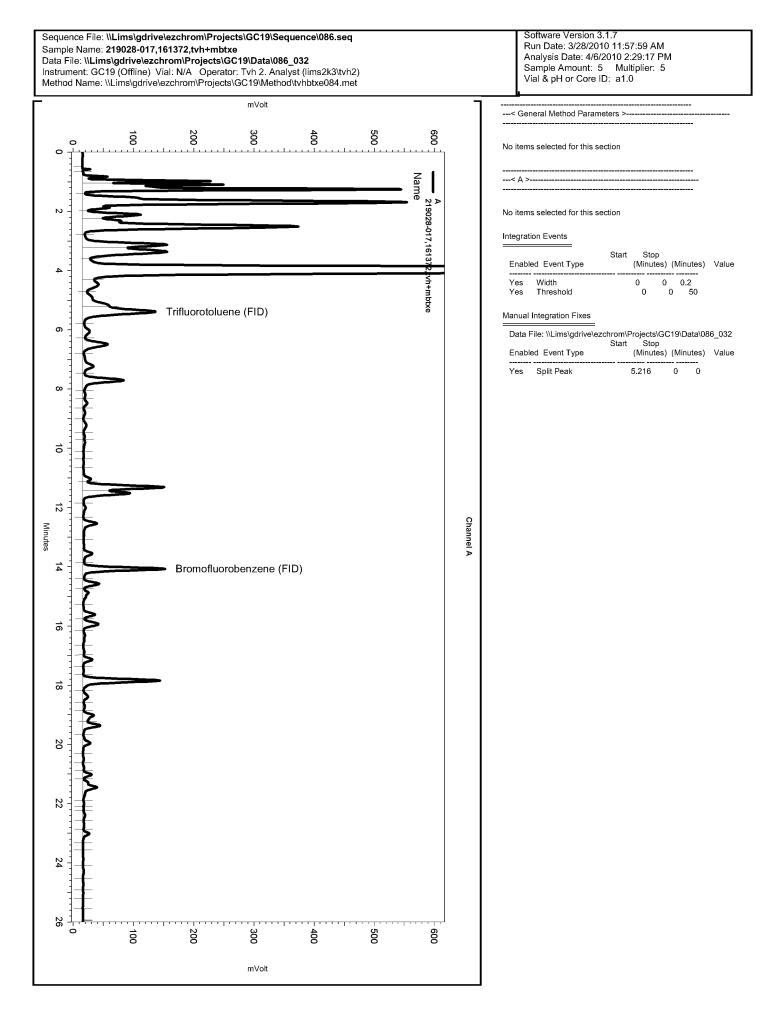


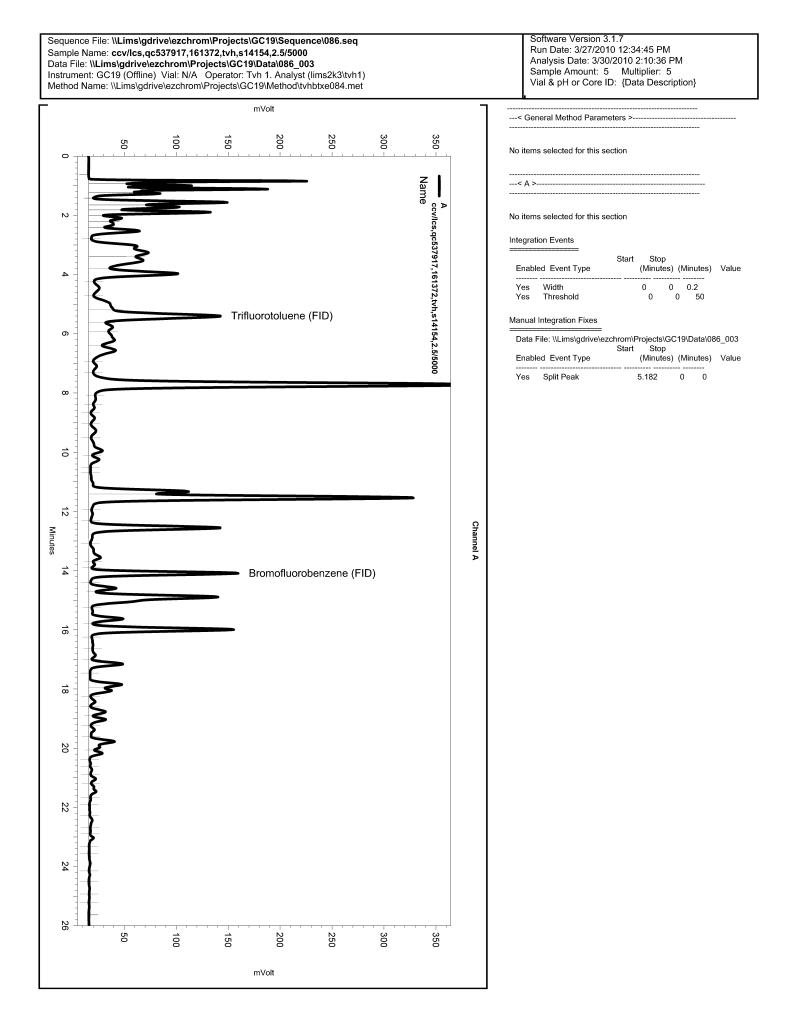














	Т	otal 1	Extracta	ble Hydroc	arbor	າຮ
Lab #: Client: Project#: Matrix:	219028 Stellar Environmenta 2007-65 Water	l Solut	ions	Location: Prep: Analysis: Sampled:		Bay Center Apts EPA 3520C EPA 8015B 03/24/10
Units: Batch#:	ug/L 161311			Received: Prepared:		03/25/10 03/25/10
Field ID: Type: Lab ID:	MW-14 SAMPLE 219028-001			Diln Fac: Analyzed:		1.000 03/27/10
	Analyte		Result		RL	
Diesel C10 Motor Oil			3,900 Y 3,100		50 300	
o-Terpheny	Surrogate	%REC 121	Limits 39-150			
Field ID:	 MW-17	101	55 150	Diln Fac:		1.000
Type: Lab ID:	SAMPLE 219028-002			Analyzed:		03/27/10
Diesel C10	Analyte		Result 3,400 Y		RL 50	
Motor Oil	C24-C36		1,900		300	
	Surrogate	%REC	Limits			
o-Terpheny	1	111	39-150			
Field ID: Type: Lab ID:	MW-12 SAMPLE 219028-003			Diln Fac: Analyzed:		1.000 03/27/10
	Analyte		Result		RL	
Diesel C10 Motor Oil			4,000 Y 1,800		50 300	
		A = =				
o-Terpheny	Surrogate	%REC 115	Limits 39-150			
Field ID: Type: Lab ID:	MW-7 SAMPLE 219028-004			Diln Fac: Analyzed:		1.000 03/27/10
Diesel C10	Analyte		Result 8,700 Y		RL 50	
Motor Oil			8,700 Y 6,800		300	
		& D 50				
o-Terpheny	Surrogate	%REC 97	Limits 39-150			

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

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		Total Extracta	ble Hydroca	rbons	
Lab #: Client: Project#: Matrix:	219028 Stellar Environment 2007-65 Water	al Solutions	Location: Prep: Analysis:	Bay Center Apts EPA 3520C EPA 8015B 03/24/10	
Matrix: Units: Batch#:	ug/L 161311		Sampled: Received: Prepared:	03/25/10 03/25/10 03/25/10	
Field ID: Type: Lab ID:	MW-16 SAMPLE 219028-005		Diln Fac: Analyzed:	1.000 03/27/10	
	Analyte	Result		RL	
Diesel C10	D-C24	12,000 Y		50	
Motor Oil	024-036	4,700		300	
	Surrogate	%REC Limits			
o-Terpheny	y1	109 39-150			
Field ID: Type: Lab ID:	MW-9 SAMPLE 219028-006		Diln Fac: Analyzed:	1.000 03/27/10	
	Analyte	Result		RL	
Diesel C10	J-C24	6,500 Y		50	
Motor Oil	C24-C36	4,000		300	
Motor Oil		4,000		300	
	Surrogate	%REC Limits		300	
Field ID: Type: Lab ID:	Surrogate		Diln Fac: Analyzed:	1.000 03/27/10	
o-Terpheny Field ID: Type: Lab ID:	Surrogate yl MW-18 SAMPLE 219028-007 Analyte	%REC Limits 68 39-150 Result	Diln Fac: Analyzed:	1.000 03/27/10 RL	
o-Terpheny Field ID: Type: Lab ID: Diesel C10	Surrogate yl MW-18 SAMPLE 219028-007 Analyte D-C24	%REC Limits 68 39-150 Result 9,400 Y	Diln Fac: Analyzed:	1.000 03/27/10 RL 50	
o-Terpheny Field ID: Type: Lab ID:	Surrogate yl MW-18 SAMPLE 219028-007 Analyte D-C24	%REC Limits 68 39-150 Result 9,400 Y 2,700 Y	Diln Fac: Analyzed:	1.000 03/27/10 RL	
o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil	Surrogate yl MW-18 SAMPLE 219028-007 Analyte 0-C24 C24-C36 Surrogate	%REC Limits 68 39-150 Result 9,400 Y 2,700 %REC Limits	Diln Fac: Analyzed:	1.000 03/27/10 RL 50	
o-Terpheny Field ID: Type: Lab ID: Diesel C10	Surrogate yl MW-18 SAMPLE 219028-007 Analyte 0-C24 C24-C36 Surrogate	%REC Limits 68 39-150 Result 9,400 Y 2,700 Y	Diln Fac: Analyzed:	1.000 03/27/10 RL 50	
o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil	Surrogate yl MW-18 SAMPLE 219028-007 Analyte 0-C24 C24-C36 Surrogate	%REC Limits 68 39-150 Result 9,400 Y 2,700 %REC Limits	Diln Fac: Analyzed:	1.000 03/27/10 RL 50	
o-Terpheny Field ID: Type: Lab ID: Diesel Cl0 Motor Oil o-Terpheny Field ID: Type: Lab ID:	Surrogate yl MW-18 SAMPLE 219028-007 Analyte D-C24 C24-C36 Surrogate yl MW-4 SAMPLE 219028-008 Analyte	%REC Limits 68 39-150 Result 9,400 Y 2,700 %REC Limits 112 39-150 Result Result	Diln Fac: Analyzed: Diln Fac: Analyzed:	1.000 03/27/10 RL 50 300 1.000 03/27/10 RL	
o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10	Surrogate yl MW-18 SAMPLE 219028-007 Analyte 0-C24 C24-C36 Surrogate yl MW-4 SAMPLE 219028-008 Analyte 0-C24	%REC Limits 68 39-150 68 39-150 Result 9,400 Y 2,700 %REC Limits 112 39-150 %REC Limits 112 39-150	Diln Fac: Analyzed: Diln Fac: Analyzed:	1.000 03/27/10 RL 50 300 1.000 03/27/10 RL 50	
o-Terpheny Field ID: Type: Lab ID: Diesel Cl(Motor Oil o-Terpheny Field ID: Type: Lab ID:	Surrogate yl MW-18 SAMPLE 219028-007 Analyte 0-C24 C24-C36 Surrogate yl MW-4 SAMPLE 219028-008 Analyte 0-C24	%REC Limits 68 39-150 Result 9,400 Y 2,700 %REC Limits 112 39-150 Result 680 Y 380	Diln Fac: Analyzed: Diln Fac: Analyzed:	1.000 03/27/10 RL 50 300 1.000 03/27/10 RL	
o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10	Surrogate yl MW-18 SAMPLE 219028-007 Analyte D-C24 C24-C36 Surrogate yl MW-4 SAMPLE 219028-008 Analyte D-C24 C24-C36 Surrogate	%REC Limits 68 39-150 68 39-150 Result 9,400 Y 2,700 %REC Limits 112 39-150 %REC Limits 112 39-150	Diln Fac: Analyzed: Diln Fac: Analyzed:	1.000 03/27/10 RL 50 300 1.000 03/27/10 RL 50	

Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit $_{Page\ 2\ of\ 5}$



	:	Iotal	Extracta	ble Hydroc	arbo	ns
		al Solu [.]	tions	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units: Batch#:	Water ug/L 161311			Sampled: Received: Prepared:		03/24/10 03/25/10 03/25/10
Field ID:	RW-1			Diln Fac:		1.000
Type: Lab ID:	SAMPLE 219028-009			Analyzed:		03/27/10
	Analyte		Result		RL	
Diesel C10-	-C24		810 Y		50	
Motor Oil (C24-C36	N	D		300	
· · · · · · · · · · · · · · · · · · ·	Gurragata	%REC	Limits			
o-Terpheny	Surrogate	123	<u>39–150</u>			
	±	123	<u> </u>			
Field ID: Type: Lab ID:	MW-10 SAMPLE 219028-010			Diln Fac: Analyzed:		1.000 03/27/10
Diesel C10-	Analyte		Result		RL	
Motor Oil (-024		3,900 Y 960		50 300	
MOCOL OIL C	221 030		200		500	
	Surrogate	%REC				
o-Terpheny	1	117	39-150			
Field ID: Type:	MW-15 SAMPLE			Diln Fac: Analyzed:		1.000 03/27/10
Lab ID:	219028-011			Analyzeu.		03/2//10
-						
Diagol 010	Analyte		Result		RL	
Diesel C10- Motor Oil (3,700 Y 910		50 300	
MOCOL OIL (21 030		210		500	
	Surrogate	%REC				
o-Terpheny	1	120	39-150			
Field ID:	MW-8			Diln Fac:		1.000
Type:	SAMPLE			Analyzed:		03/27/10
Lab ID:	219028-012					
	Analyte		Result		RL	
Diesel C10-	-C24		11,000 Y		50	
	774-036		1,900		300	
Motor Oil (24 030		1			
	Surrogate	%REC				



	-	Total Extrac	table Hydroca	arbons	
Lab #: Client:	219028 Stellar Environmenta	al Solutions	Location: Prep:	Bay Center Apt EPA 3520C	S
Project#:	2007-65	er borderomb	Analysis:	EPA 8015B	
Matrix: Units:	Water		Sampled: Received:	03/24/10 03/25/10	
Batch#:	ug/L 161311		Prepared:	03/25/10	
			*		
Field ID:	MW-3		Diln Fac:	1.000	
Type: Lab ID:	SAMPLE 219028-013		Analyzed:	03/27/10	
Diesel C10	Analyte	Result 4,500		RL 50	
Motor Oil	C24-C36	670	-	300	
	Surrogate	%REC Limit	s		
o-Terpheny		121 39-15			
Field ID: Type:	MW-13 SAMPLE		Diln Fac: Analyzed:	2.000 03/27/10	
Lab ID:	219028-014		Analyzeu	03/27/10	
	Analyte	Result		RL	
Diesel Cl(0-C24	15,000	Y	100	
Motor Oil	C24-C36	3,100		600	
	Surrogate	%REC Limit			
o-Terpheny	yl	109 39-15	0		
	NAL-1 1			1 000	
Field ID: Type:	MW-11 SAMPLE		Diln Fac: Analyzed:	1.000 03/26/10	
Lab ID:	219028-015				
	Analyte	Result		RL	
Diesel C10	0-C24	6,500		50	
Motor Oil	024-036	6,900		300	
	Surrogate	%REC Limit			
o-Terpheny	Ϋ́Τ	102 39-15	U		
Field ID:	MW-5		Diln Fac:	1.000	
Type:	SAMPLE		Analyzed:	03/26/10	
Lab ID:	219028-016				
	Analyte	Result		RL	
Diesel C10 Motor Oil		4,300 5,400	Y	50 300	
MOLOI OII	U27-U30	5,400		300	
o-Terpheny	Surrogate	%REC Limit 101 39-15			

Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit $_{\rm Page\ 4\ of\ 5}$

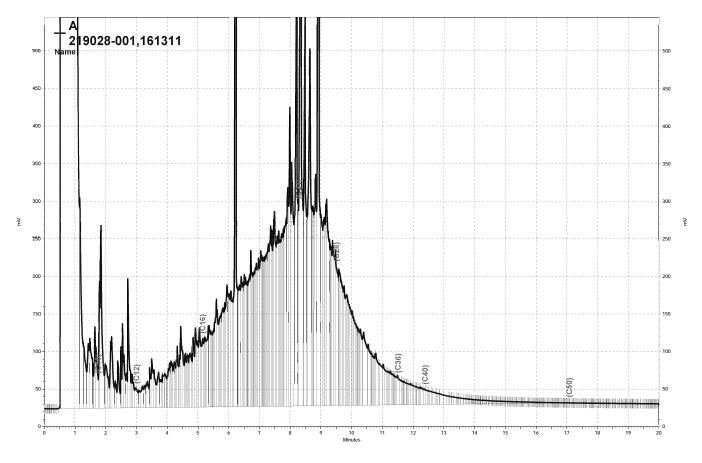


	Тс	tal Extracta	ble Hydroca	arbor	ıs
Lab #: Client: Project#:		Solutions	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units: Batch#:	Water ug/L 161311		Sampled: Received: Prepared:		03/24/10 03/25/10 03/25/10
Field ID: Type: Lab ID:	MW-E SAMPLE 219028-017		Diln Fac: Analyzed:		1.000 03/26/10
Diesel C1 Motor Oil		Result 3,800 Y 5,100		RL 50 300	
o-Terphen	Surrogate yl	%REC Limits 102 39-150			
Field ID: Type: Lab ID:	MW-6 SAMPLE 219028-018		Diln Fac: Analyzed:		1.000 03/27/10
Diesel C1 Motor Oil		Result 910 Y 1,500		RL 50 300	
o-Terphen	Surrogate yl	%REC Limits 96 39-150			
Type: Lab ID:	BLANK QC537673		Diln Fac: Analyzed:		1.000 03/26/10
Diesel C1 Motor Oil		Result ND ND		RL 50 300	
o-Terphen	Surrogate yl	%REC Limits 108 39-150			

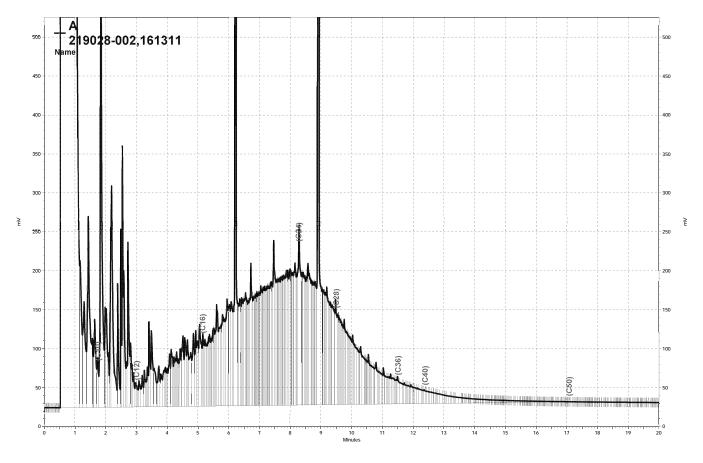


Batch QC Report

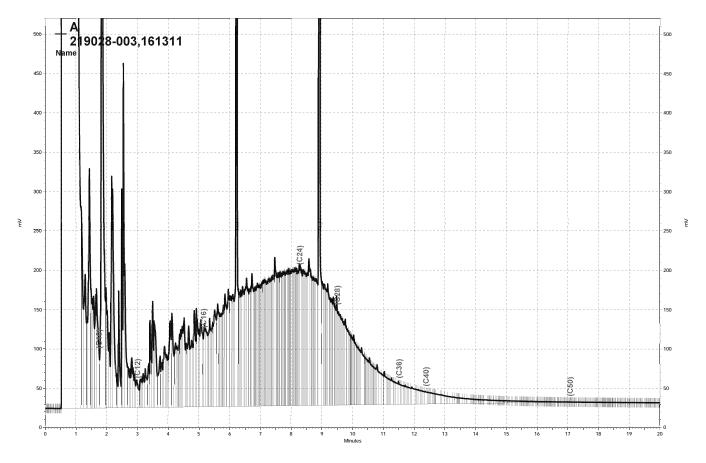
		Total 1	Extracta	ble Hydro	ocarbor	ns			
Lab #:	219028			Location:		Bay Center Ap	ts		
Client:	Stellar Environment	al Solut	cions	Prep:		EPA 3520C			
Project#:	2007-65			Analysis:		EPA 8015B			
Matrix:	Water			Batch#:		161311			
Units:	ug/L			Prepared:		03/25/10			
Diln Fac:	1.000			Analyzed:		03/26/10			
Туре:	BS			Lab ID:		QC537674			
	Analyte		Spiked		Result	%REC	Limits		
Diesel Cl	0-C24		2,500		2,791	112	34-144		
	Surrogate	%REC	Limits						
o-Terphen	yl	115	39-150						
Туре:	BSD			Lab ID:		QC537675			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Diesel Cl	0-C24		2,500		2,571	103	34-144	8	48
	Surrogate	%REC	Limits						
o-Terphen	yl	108	39-150						



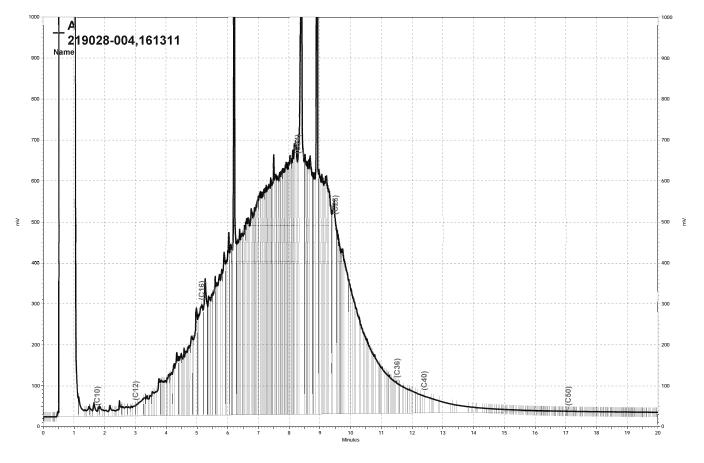
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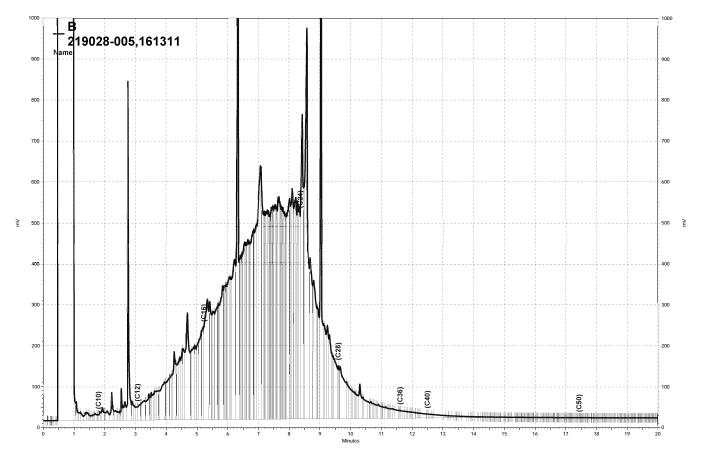
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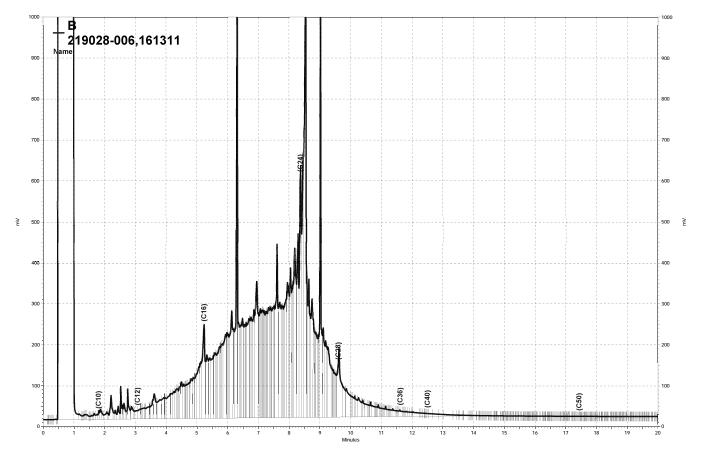
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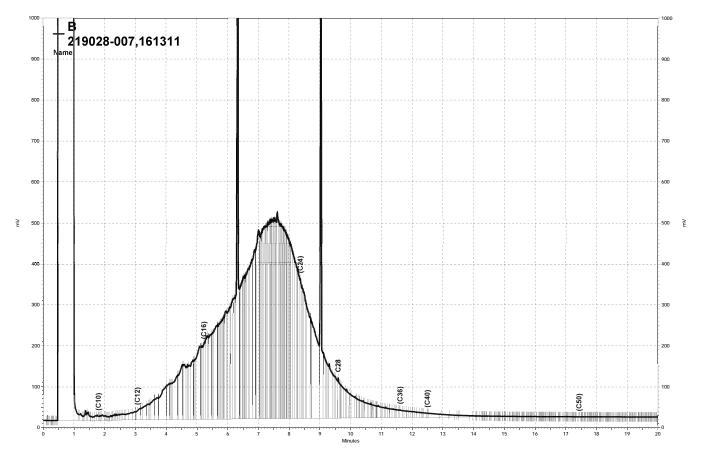
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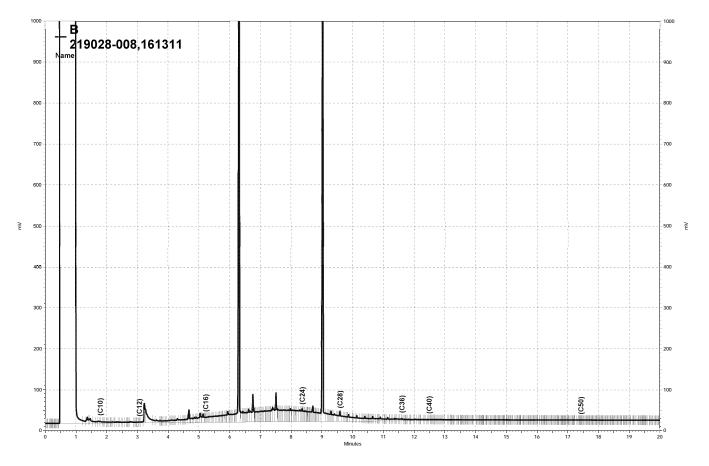
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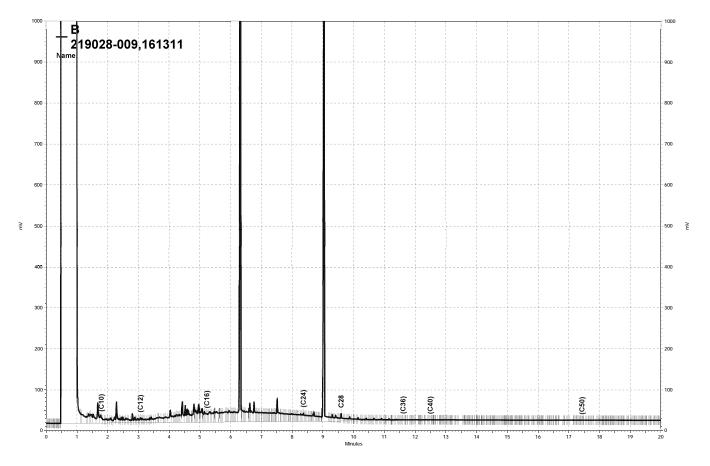
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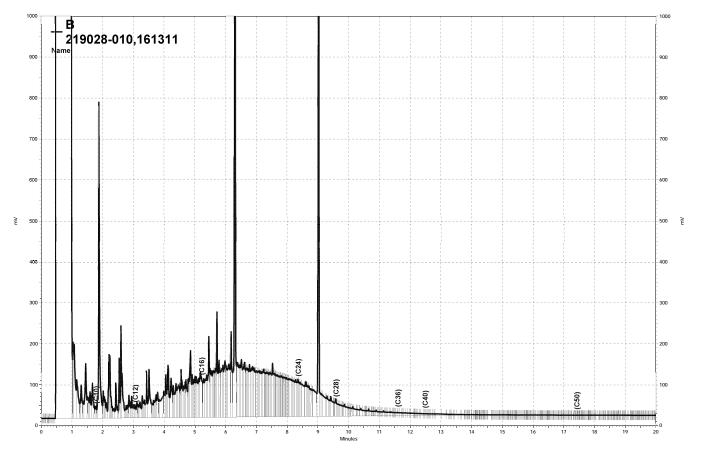
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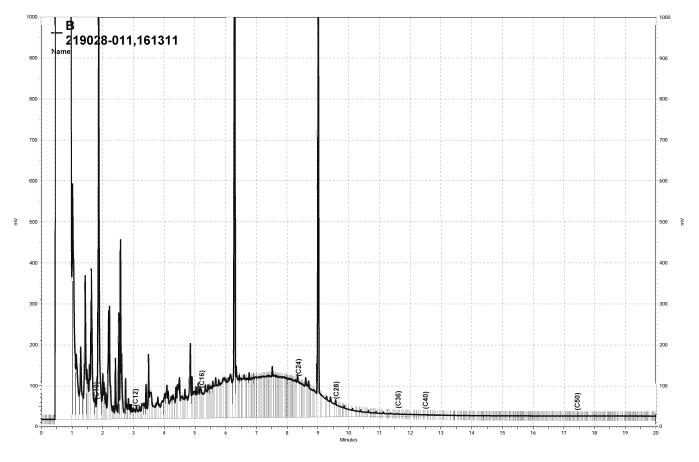
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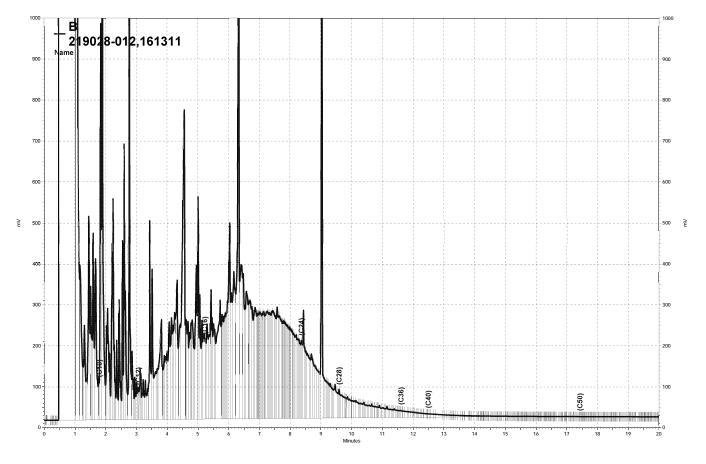
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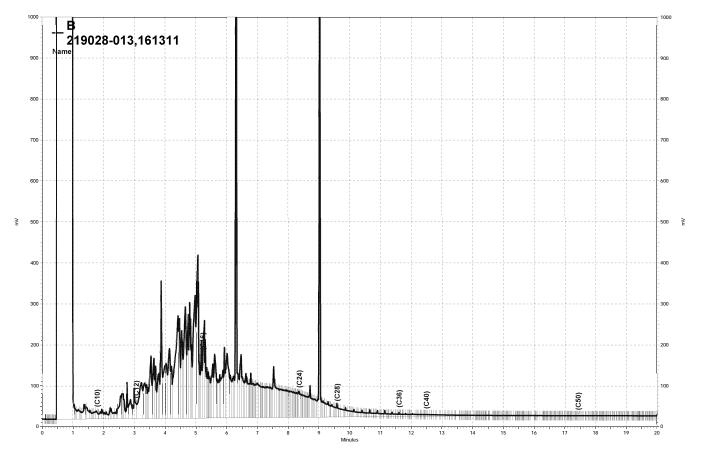
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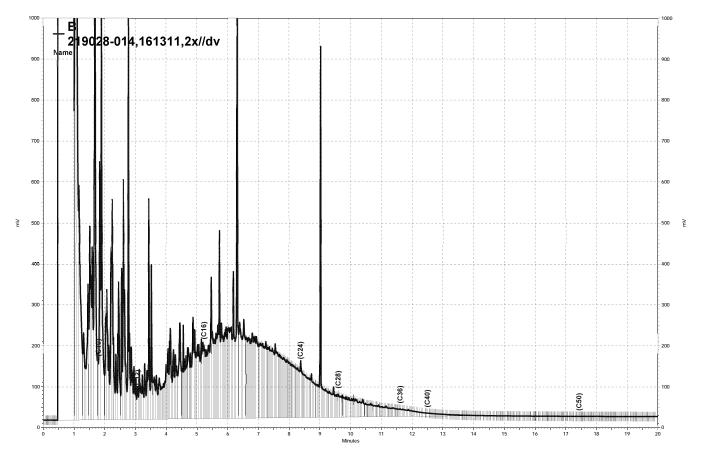
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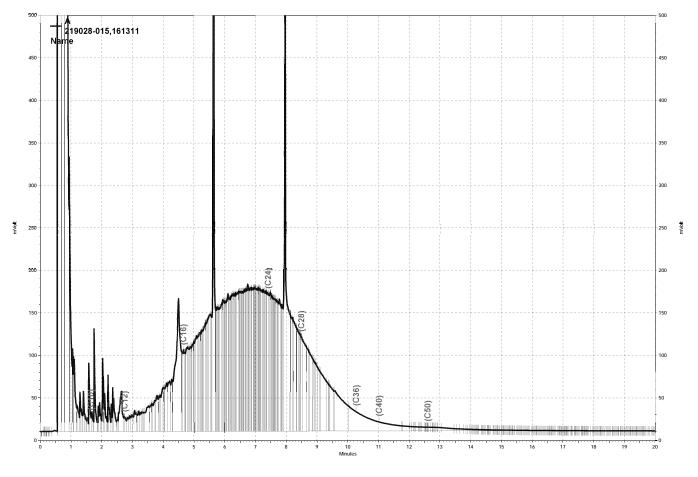
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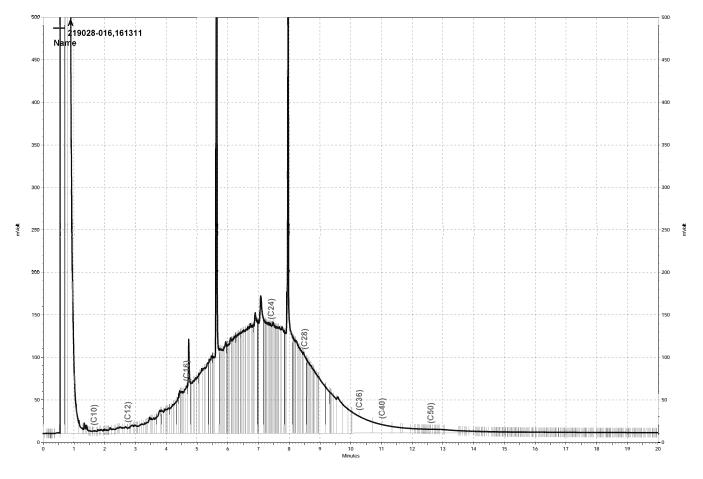
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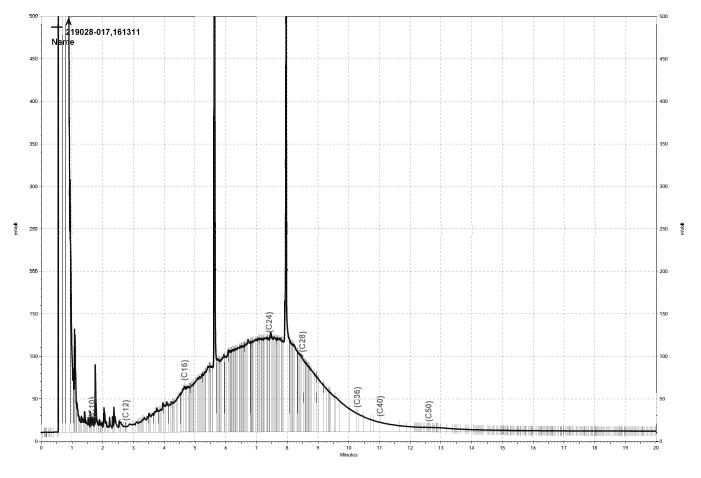


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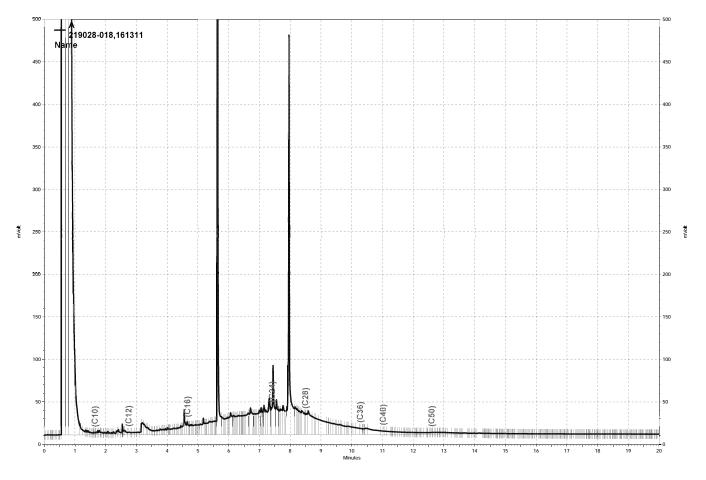


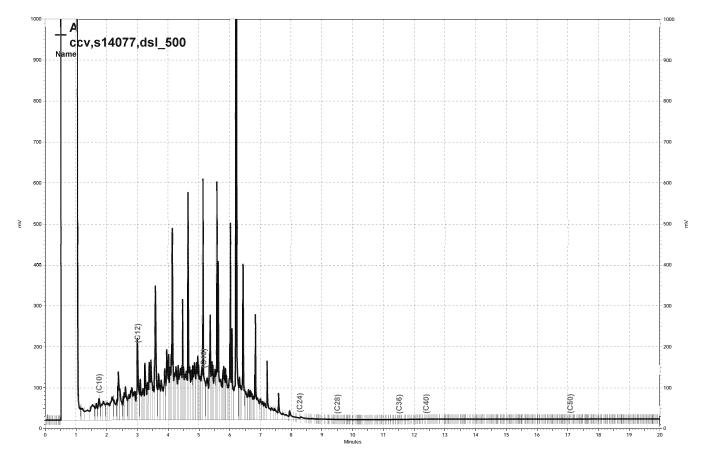
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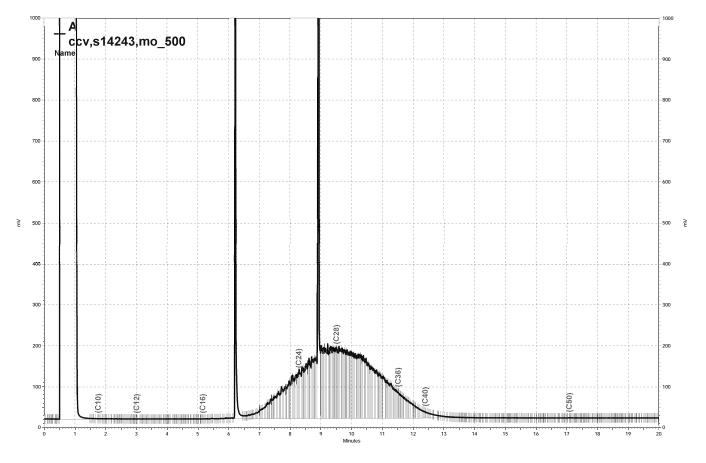


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Laboratory Job Number 219327 ANALYTICAL REPORT

Stellar Environmental Solutions 2198 6th Street Berkeley, CA 94710

Project : 2007-65 Location : Bay Center Apts Level : II

<u>Sample ID</u> TANK

<u>Lab ID</u> 219327-001

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

They Bar

Signature:

Project Manager

Date: <u>04/14/2010</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: Client: Project: Location: Request Date: Samples Received: 219327 Stellar Environmental Solutions 2007-65 Bay Center Apts 04/08/10 04/08/10

This data package contains sample and QC results for one water sample, requested for the above referenced project on 04/08/10. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

219327

Chain of Custody Record

Laboratory <u>Curtis and Tompkin</u> Address 2323 Fifth Street Berkeley, California 510-486-0900 Project Owner <u>Bay Center Inve</u> 6400 Christie Av Emeryville, Calif Project Name	a 94710 stor, LLC renue ornia		Sł Ai Co Pr Te	ethod of ShipmentA nipment No rbill No coler No roject ManagerTeal (lephone No(510) 644- (510) 644-	Glass 3123				No. or C.	-ontainers	F			Anal	ysis Re	equired		Date Page	of	1
Project Number 2007-65				amplers: (Signature)	-9 I .	fut	_ /	/ /		E E			/ /	/ /	/ /	/ /	/ /	/ /		
	Depth Date	Time	Sample Type	Type/Size of Container	Pre	eservation Chemical	\mathbf{V}	/	/F	7 /	/ /		/	/	/					
Tank As	ST 4.8	1130	W	500 mL amber, VOA	Y	(a)	N	5	X			1						[
								_				:				3				
												_								
												_								
										-										
Relinquished by: Signature	- U-Y- 10	Received Signatu	- `	RA	Date	Relinquished b Signature _	•					Date	1	ceived Signat		<u> </u>			D	Date
Printed leaf Glass	Time	Printed	\leq	F)= (2) or frag	Time	Printed						Time		Printeo	d t			·	Т	lime
Company) Compa	ny($\frac{1}{2}$		Company _								Compa	any					
Turnaround Time:	rdard			(Relinquished b Signature _	-					Date		ceived Signat	•				D	Date
						Printed						Time		Printeo	k	•			— T	Time
						Company _								Compa	any					



2198 Sixth Street #201, Berkeley, CA 94710

Lab job no. 💶

3 of 13

COOLER RECEIPT CHECKLIST	Curtis & Tompkins, Ltd.
Login # <u>71932</u> Date Received <u>9-870</u> Client <u>STELLAR ENV. SUC.</u> Project <u>Emercy</u>	Number of coolers /
Date Opened <u>1-B-w</u> By (print) <u>S-EvAnS</u> (sign) Date Logged in <u>By (print)</u> (sign)	faller
1. Did cooler come with a shipping slip (airbill, etc) Shipping info	YES
 2A. Were custody seals present? □ YES (circle) on cooler How many Name 2B. Were custody seals intact upon arrival? 	Date
 2B. were custody seals intact upon arrival? 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top 6. Indicate the packing in cooler: (if other, describe) 	NO NO
Bubble WrapFoam blocksBagsCloth materialCardboardStyrofoam7. Temperature documentation:Styrofoam	☐ None ☐ Paper towels
Type of ice used:	Temp(°C)
	olank
□ Samples received on ice directly from the field. Cooling	process had begun
If YES, what time were they transferred to freezer?	YES NO
9. Did all bottles arrive unbroken/unopened?	VES NO
11. Are sample labels present, in good condition and complete?	YES NO
12. Do the sample labels agree with custody papers?	NO
13. Was sufficient amount of sample sent for tests requested?14. Are the samples appropriately preserved?	<u> </u>
15. Are bubbles > 6mm absent in VOA samples?	YES NO N/A
16. Was the client contacted concerning this sample delivery?	YES NO
If YES, Who was called? By	Date:
COMMENTS 1/3 VOAS HAS BUBBLE	

SOP Volume:Client ServicesSection:1.1.2Page:1 of 1

Rev. 6 Number 1 of 3 Effective: 23 July 2008 Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc



		Total	Volatil	.e Hydrocar	bons	
		TOCUL	1014011		20110	
Lab #:	219327			Location:		Bay Center Apts
Client:	Stellar Environmenta	l Solut	cions	Prep:		EPA 5030B
Project#:				Analysis:		EPA 8015B
Field ID:	TANK			Batch#:		161863
Matrix:	Water			Sampled:		04/08/10
Units:	ug/L			Received:		04/08/10
Diln Fac:	1.000					
Туре:	SAMPLE			Analyzed:		04/10/10
Lab ID:	219327-001					
	Analyte		Result		RL	
Gasoline	=		4,000		50	
			-			
	Surrogate	%REC	Limits			
	toluene (FID)	129	48-162			
Bromofluo	robenzene (FID)	134	52-158			
Type:	BLANK			Analyzed:		04/09/10
Lab ID:	QC539902			-		
	Analyte		Result		RL	
Gasoline	=	NI			50	
	Surrogate	%REC	Limits			
Trifluoro	toluene (FID)	103	48-162			
	probenzene (FID)	103 99	48-162 52-158			
BLOWOTINO	TODELIZELLE (FID)	ンン	37-720			



Batch QC Report

	Total Volat:	ile Hydrocarbo	ons	
Lab #:	219327	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC539903	Batch#:	161863	
Matrix:	Water	Analyzed:	04/09/10	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	979.4	98	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	48-162
Bromofluorobenzene (FID)	102	52-158

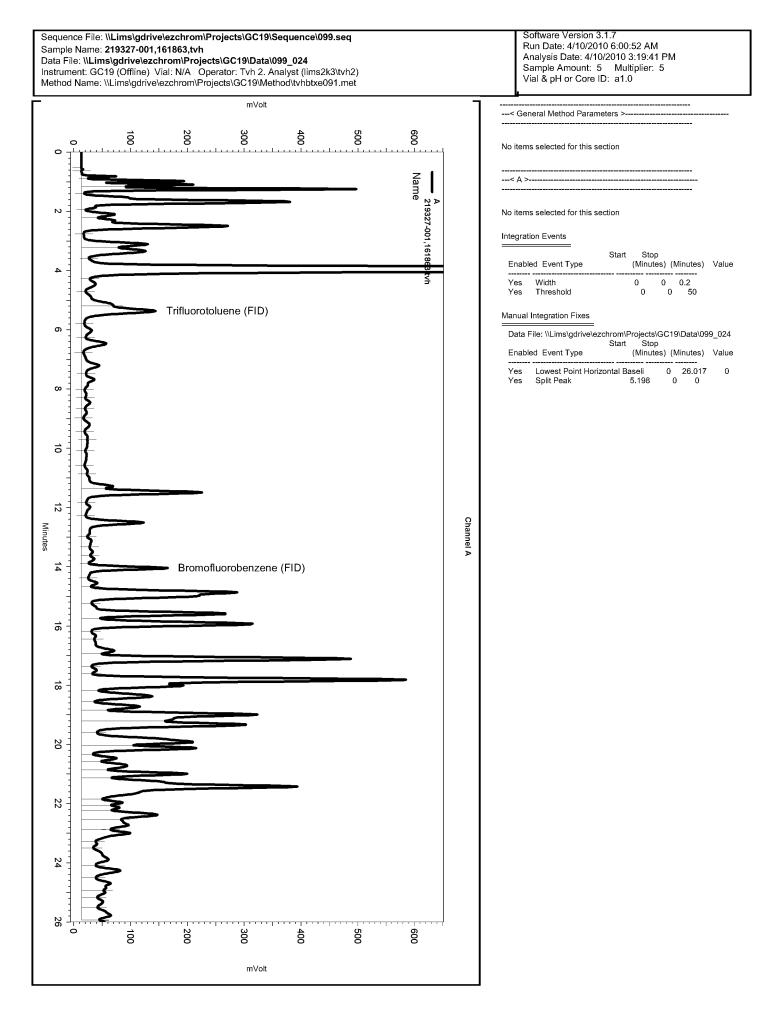


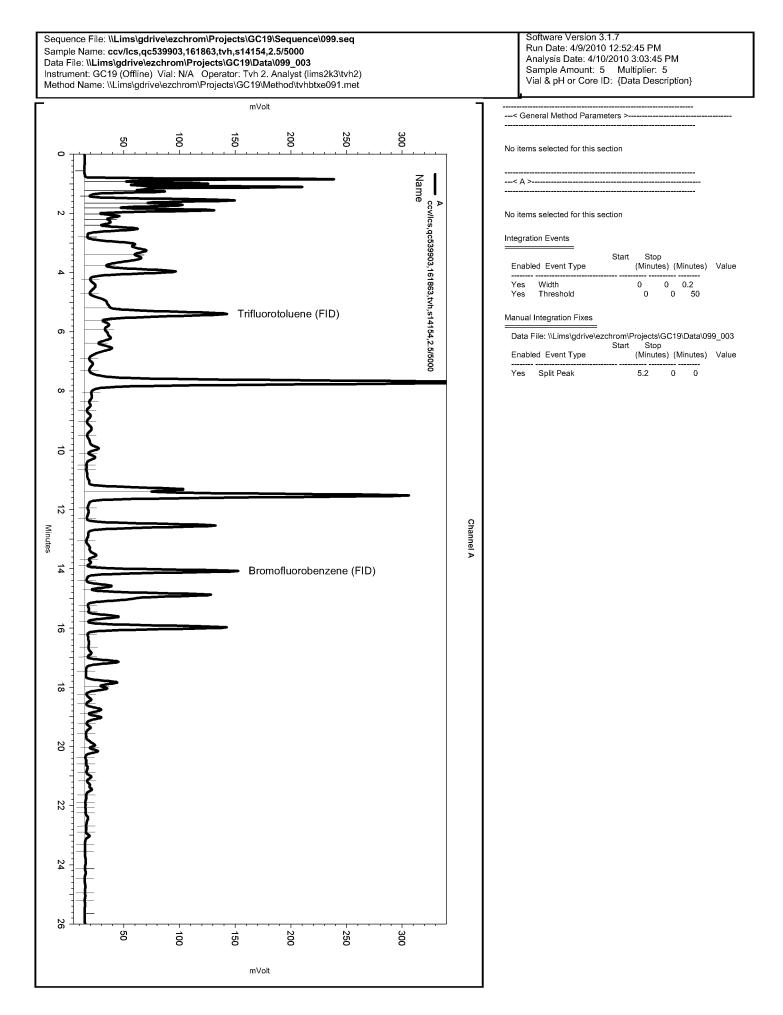
Batch QC Report

	Total Volati	le Hydrocarbons	
Lab #: 219327		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZ	Batch#:	161863
MSS Lab ID:	219291-001	Sampled:	04/07/10
Matrix:	Water	Received:	04/07/10
Units:	ug/L	Analyzed:	04/09/10
Diln Fac:	1.000		

Туре:	MS			Lab ID:		QC539904		
	Analyte	MSS Re	sult	Spike	ed	Result	%REC	Limits
Gasoline (C7-C12	<	6.172	2,000)	1,933	97	49-129
	Surrogate	%REC	Limits					
Trifluorot	toluene (FID)	129	48-162					
Bromofluor	robenzene (FID)	108	52-158					
Туре:	MSD			Lab ID:		QC539905		
	Analyte		Spiked		Result	%REC	Limits	RPD Lim
Gasoline (C7-C12		2,000		1,968	98	49-129	2 19

Surrogate	%REC	Limits
Trifluorotoluene (FID)	134	48-162
Bromofluorobenzene (FID)	112	52-158



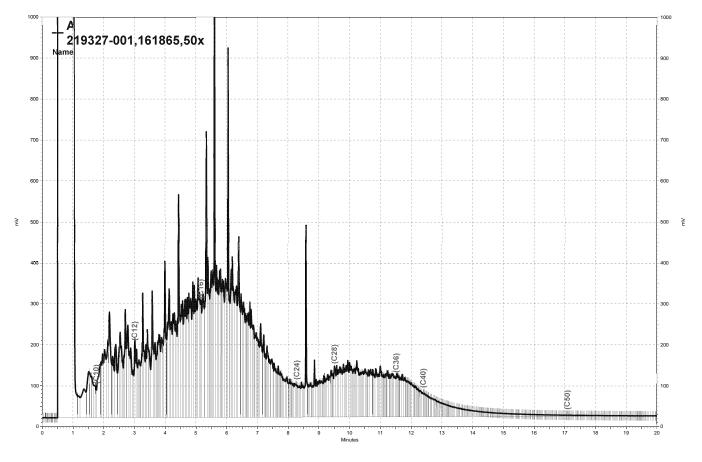




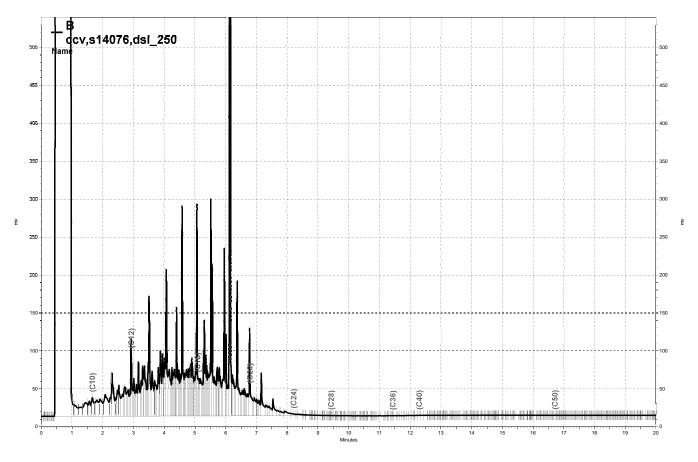
		_			
	2	otal Ex	tractable Hydro	ocarbons	
Lab #:	219327		Location:	Bay Cen	ter Apts
Client:	Stellar Environmenta	l Solutio	ons Prep:	EPA 352	0C
Project#:	2007-65		Analysis:	EPA 801	5B
Field ID:	TANK		Sampled:	04/08/1	0
Matrix:	Water		Received:	04/08/1	.0
Units:	ug/L		Prepared:	04/09/1	.0
Batch#:	161865		Analyzed:	04/13/1	0
Туре:	SAMPLE		Diln Fac:	50.00	
Lab ID:	219327-001			50.00	
	Analyte	Po	sult	RL	
	imary cc	Ke	BUIL	КЦ	
Diesel Cl(—	350,		2,500	
Diesel Cl(—	350,			
Diesel C10	0-C24 Surrogate	350, %REC L	000		
	0-C24 Surrogate	350, %REC L	000 .imits		
	0-C24 Surrogate	350, %REC L	000 .imits	2,500	
o-Terpheny	0-C24 Surrogate yl	350, %REC L	000 .imits 9-150	2,500	
o-Terpheny Type:	0-C24 Surrogate yl BLANK	350, %REC L DO 3	000 .imits 9-150	2,500	
o-Terpheny Type:	0-C24 Surrogate yl BLANK QC539911 Analyte	350, %REC L DO 3	000 .imits 9-150 Diln Fac:	2,500	
o-Terpheny Type: Lab ID:	0-C24 Surrogate yl BLANK QC539911 Analyte	350, %REC L DO 3 DO 3 ND	000 .imits 9-150 Diln Fac:	2,500 1.000 RL	



	Т	otal 1	Extracta	ble Hydrocarbo	ns			
Lab #:	219327			Location:	Bay Center A	pts		
Client:	Stellar Environmenta	l Solut	cions	Prep:	EPA 3520C			
Project#:	2007-65			Analysis:	EPA 8015B			
Matrix:	Water			Batch#:	161865			
Units:	ug/L			Prepared:	04/09/10			
Diln Fac:	1.000			Analyzed:	04/12/10			
Type: Lab ID:	BS QC539912			Cleanup Method:	EPA 3630C			
	Analyte		Spiked	Result	%REC	Limits		
Diesel C1	0-C24		2,500	2,427	97	34-144		
	Surrogate	%REC	Limits					
o-Terphen	yl	113	39-150					
Type: Lab ID:	BSD OC539913			Cleanup Method:	EPA 3630C			
	Analyte		Spiked	Result	%REC	Limits	RPD	Lim
Diesel Cl	=		2,500	2,534	101	34-144	4	48
	Surrogate	%REC	Limits					
o-Terphen	ΎТ	120	39-150					



-\\Lims\gdrive\ezchrom\Projects\GC17A\Data\102a030, A



-\\Lims\gdrive\ezchrom\Projects\GC15B\Data\102b008, B

September 2009 Corrected Analytical Laboratory Report and Letter



To: Richard MakdisiFrom: Dr. Bruce Godfrey, Lab DirectorSubject: Data Processing Error Affecting Reported TVH Results

You are receiving this letter because you or someone in your organization submitted samples to C&T recently for Total Volatile Hydrocarbon (TVH) analysis. An error in the calibration program used for processing TVH (or Gasoline Range Organics, GRO) data from a single gas chromatograph (GC) was discovered during a routine analyst review. Correcting this error requires C&T to reprocess and re-report values for determinations of a number of samples reported from this GC.

We have completed a thorough investigation along with a data and systems review, the results of which indicate the error was accidental and limited to a single GC. The affected data set has been identified, all samples have been reprocessed, and new reports have been generated for those samples with changes in the values for determined TVH residues. We have reviewed our procedures and implemented changes to prevent this and similar errors from occurring in the future.

We regret this error, and apologize to our clientele for reporting compromised values for TVH/GRO measurements and for the need to report revised results. We take pride in producing accurate results, and we have the integrity to admit we made a mistake and the courage to correct it transparently.

Please don't hesitate to call the laboratory if you have any questions regarding this issue.

Sincerely,

C. Bruce Godfrey, Ph.D. Lab Director

SDG: 215050, 215154, 215953





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Laboratory Job Number 215050 ANALYTICAL REPORT

Stellar Environmental Solutions	Project : 2007-65
2198 6th Street	Location : Bay Center Apts
Berkeley, CA 94710	Level : II

<u>Sample ID</u> MW-4 MW-17 MW-12 MW-13 MW-10	Lab ID 215050-001 215050-002 215050-003 215050-004 215050-005
MW-14	215050-006
MW-15	215050-007
RW-1	215050-008
MW-E	215050-009
MW-3	215050-010
MW-7	215050-011
MW-9	215050-012
MW-11	215050-013
MW-8	215050-014
MW-6	215050-015
MW-5	215050-016
MW-18	215050-017
MW-16	215050-018

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

The Barn

Signature:

Project Manager

Date: <u>10/02/2009</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: Client: Project: Location: Request Date: Samples Received: 215050 Stellar Environmental Solutions 2007-65 Bay Center Apts 09/18/09 09/18/09

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 09/18/09. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

High responses were observed for a number of analytes in the CCV analyzed 09/28/09 14:22; affected data was qualified with "b". High surrogate recovery was observed for bromofluorobenzene (FID) in MW-13 (lab # 215050-004), due to interference from coeluting hydrocarbon peaks. High surrogate recoveries were observed for trifluorotoluene (FID) in MW-13 (lab # 215050-004) and MW-11 (lab # 215050-013), due to interference from coeluting hydrocarbon peaks. MW-7 (lab # 215050-011) and MW-18 (lab # 215050-017) had pH greater than 2. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

MW-13 (lab # 215050-004) and MW-8 (lab # 215050-014) were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

	Chain of Cust	ody Record		ZI 505 C Lab job no Date
2222 661 -	Method of Shipment Carlo Carl	······································	Analysis Required	Date <u>-1////39</u> Page <u>2</u> of <u>3</u>
Project Owner Site Address <u>6400 CHKISTIE AME</u> BEXKELEY, CA Project Name BAY CENTER ABATMEN Project Number 2007 - 65	Cooler No Project Manager FEAL 6 Telephone No (510) 644-3123 Fax No (510) 644-3859 Samplers: (<i>Signature</i>)	vation Chemical	No N	Remarks
Field Sample Number Location/ Date Time Sam	ple Type/Size of Container Preser	vation		
0 MW-3 9-170950 in	H(10			
1 MW-7 1 1045		XXX		
Z Mw-9 1120		XXX		
3 MW-11 1140		XXX		
4 <u>MW-8</u> 1355				
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Turnaround Time:STANDARD		Relinquished by: Signature	Date Received by: Signature	Date
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* Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710 intact Lold RG

3 of 68

Laboratory C 17		Chain of C Method of Shipment	Istody Record	Lab job no Date/2/05
Address 2323 Fifth BRUCELEY, C	<u>5</u> 7	Shipment No.		Page of
Project Owner Site Address BELLELTY, C		Airbill No Cooler No Project Manager Telephone No (510) 644-3123		
Project Name BAY CARE	A BARTMEN	Fax No (510) 644-3859		Remarks
Field Sample Number Location/ Depth	Date Time Sam	nple Type/Size of Container	Preservation	
MW-4	1/17/09/1004 4	> youllion /12 Auder	Heine KAR	
MW-17	1 1020 1			
MW-12	1042		x x x	
m-13	1100		K X B	
MW-10	1130		K W K	
MW-14	1 1210		XXX	
MW-15	1230			
RW-1 MW-E	1350			
Relinquished by:				
Signature RHM	Date Received by: Signature Time Printed	afe carnen	Signature Signature	
Company BT3	600 Company _	BTS 16		- 1500
Turnaround Time: STANDARD Comments: EDF 2000	AIRED		Relinquished by: Date Received by: Signature	Date
GLOBALID # SLT	-20Ø5:	561	Printed Time Printed Company	Time

★ Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

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4 of 68

								Chain c	of Cu	sto	dy R	ecc	ord										Lab job r	2 9 [4a	1505	7
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	Project Owner Site Address _ Project Name . Project Numbe	6400 C BERKE BAY CE	nree	<u>са</u> Д В Ф	ume	Pr Te Te	oject Mar Ilephone I Ix No	nager No(510) 64. (510) 64. Signature)	A- 3123 4-3859	40	ککھ	 	Filler	No. of C.	EH . Nations	Ý	\sim	4						Remark	(3	
	Field Sam	ple Number	Location/ Depth	Date	Time	Sample Type		ze of Container	Cooler	eservatio Che	on emical	V	/ /	$/\kappa$	71	A	7		/ /				/			
5	MW-	6		alido	1153	W	40m/1	Jon/ILAm	S S	Нс	1/air			K	K											
Ģ	MW				1500		1	•)			*	٨	X										
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	Turnaround Time:	EDF	REO	ua	Ð						nquished l ignature						-	Date		red by: nature _					Date	
2000-00-01	(qL03)	12.10#	SL-	Γ2	oø	55	61				company						-	Time	Prin	npany _					Time	

* Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

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5 of 68

COOLER RECEIPT CHEC		Curtis & Tompkins, Ltd
$\frac{\text{Login } \# \text{Z(5050})}{\text{Client} \text{32.5}}$	_ Date Received <u>9/18/09</u> Project BAY CE	Number of coolers Z
Date Opened $\frac{9}{2}$ By (Date Logged in $\frac{2}{2}$ By ((print) M. JILLapule (sign (print) (sign	
1. Did cooler come with a shipp Shipping info	ping slip (airbill, etc)	YES
 2A. Were custody seals present How many 2B. Were custody seals intact u 	YES (circle) on cooler Name pon arrival?	on samples Date YES NO DAA
 Were custody papers dry and Were custody papers filled or 	l intact when received? ut properly (ink, signed, etc)? om custody papers? (If so fill out to	TES NO
Bubble Wrap	Foam blocks Bags Cardboard Styrofoam	None Paper towels
Type of ice used:	et 🗌 Blue/Gel 🗌 None	Temp(°C)
Samples Received on	ice & cold without a temperature	
	ice directly from the field. Cooling	
8. Were Method 5035 sampling If YES, what time were t	containers present?	VES
9. Did all bottles arrive unbroke	n/unopened?	YES NO
11. Are sample labels present, in	ate containers for indicated tests?	
12. Do the sample labels agree w	vith custody papers?	YES NO
13. Was sufficient amount of sar	nple sent for tests requested?	TES NO
14. Are the samples appropriatel	y preserved?	YES NO N/A
15. Are bubbles > 6mm absent in	n VOA samples?	YES N/A
16. Was the client contacted con- If YES, Who was called?		YES NO
IT TES, Who was called?	By	Date:
SCHAPUEH 9918 44 NOO	11916 4 NOR'S U/BUBBLE B'S W/BUBBLE IS W/BUBBLE W/BUBBLE	
SOMPLEHY OIL IN S	3041PW2.	
	•	

SOP Volume:Client ServicesSection:1.1.2Page:1 of 1

Rev. 6 Number 1 of 3 Effective: 23 July 2008 Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc



	Curtis & To	mpkins Labo	oratories Ar	nalytical Repor	t
Lab #: 215050 Client: Stellar Project#: 2007-65	Environmental	Solutions	Location: Prep:	Bay Center EPA 5030B	Apts
Matrix:	Water ug/L		Received:	09/18/09	
Type: S Lab ID: 2	IW-4 SAMPLE 15050-001 000		Batch#: Sampled: Analyzed:	155391 09/17/09 09/29/09	
Analyt Gasoline C7-C12	e	Result ND		RL 50 EPA	Analysis 8015B
MTBE		ND			8021B
Benzene Toluene		ND			8021B
Ethylbenzene		ND ND			8021B 8021B
m,p-Xylenes		ND			8021B
o-Xylene		ND		0.50 EPA	8021B
Surroga		%REC Limits		sis	
Trifluorotoluene Bromofluorobenzen		98 64-147 L04 71-138			
Trifluorotoluene	(PID) 9	95 45-151	EPA 8021B		
Bromofluorobenzen	ie (PID) S	94 54-134	EPA 8021B		
Field ID: M	IW-17		Batch#:	155391	
Type: S	SAMPLE		Sampled:	09/17/09	
Type: S Lab ID: 2					
Type: S Lab ID: 2	AMPLE 15050-002 .000	Result	Sampled:	09/17/09	Analysis
Type: S Lab ID: 2 Diln Fac: 5 Analyt Gasoline C7-C12	AMPLE 15050-002 .000	Result 2,200	Sampled:	09/17/09 09/29/09 RL 250 EPA	Analysis
Type: S Lab ID: 2 Diln Fac: 5 Analyt	AMPLE 15050-002 .000	Result 2,200 ND 800	Sampled:	09/17/09 09/29/09 RL 250 EPA 10 EPA	
Type: S Lab ID: 2 Diln Fac: 5 MTBE Benzene Toluene	AMPLE 15050-002 .000	2,200 ND 800 95	Sampled:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 Analyt Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	AMPLE 15050-002 .000	2,200 ND 800 95 82	Sampled:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 MTBE Benzene Toluene	AMPLE 15050-002 .000	2,200 ND 800 95	Sampled:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 Analyt Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	AMPLE 15050-002 .000	2,200 ND 95 82 85	Sampled: Analyzed:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surroga Trifluorotoluene	AMPLE 15050-002 .000 :e .te (FID)	2,200 ND 800 95 82 85 26 %REC Limits 130 64-147	Sampled: Analyzed:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surroga Trifluorotoluene Bromofluorobenzen	AMPLE 15050-002 .000 e :e (FID) te (FID)	2,200 ND 800 95 82 85 26 %REC Limits 130 64-147 110 71-138	Sampled: Analyzed:	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B
Type: S Lab ID: 2 Diln Fac: 5 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surroga Trifluorotoluene	AMPLE 15050-002 .000 e :e (FID) te (FID) (PID)	2,200 ND 800 95 82 85 26 %REC Limits 130 64-147	Sampled: Analyzed: EPA 8015B EPA 8015B EPA 8015B EPA 8021B	09/17/09 09/29/09 RL 250 EPA 10 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA 2.5 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B

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

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	Curtis & Tompkins Laboratories Analytical Report									
Lab #: 215 Client: Ste Project#: 200	llar Environmenta	al Solut	ions	Location: Prep:		Bay Center EPA 5030B	Apts			
Matrix: Units:	Water ug/L			Received:		09/18/09				
Field ID: Type: Lab ID: Diln Fac:	MW-12 SAMPLE 215050-003 20.00			Batch#: Sampled: Analyzed:		155391 09/17/09 09/29/09				
And Gasoline C7-C	<u>alyte</u> 12		Result 1,900		<u>RL</u> 1,000	ЕDД	Analysis 8015B			
MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	12	ND	4,500 80 14 51		40 40 10 10 10 10 10	EPA EPA EPA EPA EPA	8021B 8021B 8021B 8021B 8021B 8021B 8021B			
	rogate	%REC	Limits	Anal	ysis					
Trifluorotolu Bromofluorobe Trifluorotolu Bromofluorobe	nzene (FÍD) ene (PID)	105 103 107 102	64-147 71-138 45-151 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B						
Field ID: Type: Lab ID: Diln Fac:	MW-13 SAMPLE 215050-004 500.0			Batch#: Sampled: Analyzed:		155391 09/17/09 09/29/09				
	alyte		Result		RL		Analysis			
Gasoline C7-C MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	12	ND 1 1 1	0,000 9,000 2,500 9,000 8,000 4,300		25,000 1,000 250 250 250 250 250 250 250	EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B			
Sur: Trifluorotolu	rogate	%REC 157 *	Limits 64-147	Analy EPA 8015B	ysis					

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected

RL= Reporting Limit

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Cur	tis & Tompkins Labo	ratories An	alytical Report	rt
Lab #: 215050 Client: Stellar Env. Project#: 2007-65	ironmental Solutions	Location: Prep:	Bay Center EPA 5030B	Apts
Matrix: Wate: Units: ug/L	r	Received:	09/18/09	
Field ID:MW-10Type:SAMPLILab ID:21505Diln Fac:10.00	0-005	Batch#: Sampled: Analyzed:	155391 09/17/09 09/29/09	
Analyte	Result		RL	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	1,400 ND 1,200 35 19 31 ND		20 EPA 5.0 EPA 5.0 EPA 5.0 EPA 5.0 EPA 5.0 EPA 5.0 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surrogate	%REC Limits	Analys	sis	
Trifluorotoluene (FID Bromofluorobenzene (F Trifluorotoluene (PID Bromofluorobenzene (P	ID) 102 71-138) 107 45-151	EPA 8015B EPA 8015B EPA 8021B EPA 8021B		
Field ID: MW-14 Type: SAMPL Lab ID: 21505 Diln Fac: 10.00		Batch#: Sampled: Analyzed:	155452 09/17/09 09/29/09	
Analyte	Result		RL	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	550 ND 630 14 28 17 ND		20 EPA 5.0 EPA 5.0 EPA 5.0 EPA 5.0 EPA 5.0 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surrogate	%REC Limits	Analys	sis	
Trifluorotoluene (FID Bromofluorobenzene (FI Trifluorotoluene (PID Bromofluorobenzene (PI) 104 64-147 ID) 97 71-138) 81 45-151	EPA 8015B EPA 8015B EPA 8021B EPA 8021B		

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

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Curtis	& Tompkins Labo	ratories An	alytical	Report	
Lab #: 215050 Client: Stellar Environm Project#: 2007-65	mental Solutions	Location: Prep:	Bay C EPA 5	enter Apts 030B	
Matrix: Water Units: ug/L		Received:	09/18	/09	
Field ID: MW-15 Type: SAMPLE Lab ID: 215050-00 Diln Fac: 25.00		Batch#: Sampled: Analyzed:	15539 09/17 09/29	/09 /09	
Analyte	Result		RL	Analys	is
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	2,300 ND 6,200 71 68 42 ND		1,300 50 13 13 13 13 13 13 13	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	sis		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	102 64-147 104 71-138 105 45-151 101 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			
Field ID:RW-1Type:SAMPLELab ID:215050-008Diln Fac:1.000	3	Batch#: Sampled: Analyzed:	15539 09/17 09/29	/09	
Analyte	Result		RL	Analys	is
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	350 ND 120 3.1 11 1.6 ND	-	50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	aig		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	136 64-147 124 71-138 119 45-151 113 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

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

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155452 09/17/09

EPA 8021B

Curtis & Tompkins Laboratories Analytical Report								
Lab #: Client: Project#:		Environmental	Solutions	Location: Prep:	Bay Center Apts EPA 5030B			
Matrix: Units:	Į.	Nater 1g/L		Received:	09/18/09			

Batch#: Sampled:

Field ID:	MW-E
Type:	SAMPLE
Lab ID:	215050-009

Bromofluorobenzene (PID)

Analyte	Result	RL	Diln Fac	Analyzed	Analysis
Gasoline C7-C12	540	50	1.000	09/29/09	EPA 8015B
MTBE	ND	2.0	1.000	09/29/09	EPA 8021B
Benzene	1,200	5.0	10.00	09/30/09	EPA 8021B
Toluene	22	0.50	1.000	09/29/09	EPA 8021B
Ethylbenzene	37	0.50	1.000	09/29/09	EPA 8021B
m,p-Xylenes	29	0.50	1.000	09/29/09	EPA 8021B
o-Xylene	8.2	0.50	1.000	09/29/09	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Analyzed	Analysis
Trifluorotoluene (FID)	106	64-147	1.000	09/29/09	EPA 8015B
Bromofluorobenzene (FID)	102	71-138	1.000	09/29/09	EPA 8015B
Trifluorotoluene (PID)	87	45-151	1.000	09/29/09	EPA 8021B
Bromofluorobenzene (PID)	82	54-134	1.000	09/29/09	EPA 8021B

Field ID:	MW-3	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-010		

54-134

Analyte	Resul	.t	RL	Ba	tch#	Analyzed	Analysis
Gasoline C7-C12	300) Y	50	15	5452	09/30/09	EPA 8015B
MTBE	2	2.5	2.0	15	5536	10/01/09	EPA 8021B
Benzene	ND		0.5	0 15	5452	09/30/09	EPA 8021B
Toluene	ND		0.5	0 15	5452	09/30/09	EPA 8021B
Ethylbenzene	ND		0.5	0 15	5452	09/30/09	EPA 8021B
m,p-Xylenes	ND		0.5	0 15	5452	09/30/09	EPA 8021B
o-Xylene	ND		0.5	0 15	5452	09/30/09	EPA 8021B
Surrogate	%REC	Limits	Batch# A	nalyzed		Analys:	is
Trifluorotoluene (FID)	136	64-147	155452 0	9/30/09	EPA	8015B	
Bromofluorobenzene (FID)	118	71-138	155452 0	9/30/09	EPA	8015B	
Trifluorotoluene (PID)	92	45-151	155452 0	9/30/09	EPA	8021B	
Promofluorobongono (DID)	96	51-131	155452 0	0/20/00		00010	

155452 09/30/09

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 5 of 11

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Curtis	& Tompkins Labo	ratories An	alytical Report	
Lab #: 215050 Client: Stellar Environ Project#: 2007-65	mental Solutions	Location: Prep:	Bay Center A EPA 5030B	pts
Matrix: Water Units: ug/L		Received:	09/18/09	
Field ID: MW-7 Type: SAMPLE Lab ID: 215050-01		Diln Fac: Sampled:	5.000 09/17/09	
Analyte	Result	RL	Batch# Analyzed	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	620 ND 310 9.5 27 93 24	250 10 2.5 2.5 2.5 2.5 2.5 2.5	155452 09/30/09 155452 09/30/09 155452 09/30/09 155536 10/01/09 155536 10/01/09 155536 10/01/09 155536 10/01/09	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
Surrogate	%REC Limits	Batch# Analy	zed Analysi	g
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	94 64-147 96 71-138 91 45-151 93 54-134	155452 09/30 155452 09/30 155452 09/30 155452 09/30 155452 09/30	/09 EPA 8015B /09 EPA 8015B /09 EPA 8021B	
Field ID:MW-9Type:SAMPLELab ID:215050-01Diln Fac:1.000	2	Batch#: Sampled: Analyzed:	155452 09/17/09 09/30/09	
Analyte	Result		RL	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	98 Y ND 4.0 ND ND ND ND		50 EPA 8 2.0 EPA 8 0.50 EPA 8	021B 021B 021B 021B 021B
Surrogate	%REC Limits	Analys	ia	
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	94 64-147 97 71-138 87 45-151 88 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B	15	

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

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Curtis &	Tompkins Labo	ratories Ar	nalytical	Report	
Lab #: 215050 Client: Stellar Environment Project#: 2007-65	al Solutions	Location: Prep:	Bay C EPA 5	Center Apts 5030B	
Matrix: Water Units: ug/L		Received:	09/18	3/09	
Field ID:MW-11Type:SAMPLELab ID:215050-013Diln Fac:1.000		Batch#: Sampled: Analyzed:	15553 09/17 10/01	7/09	
Analyte	Result		RL	Analy	rsis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	1,900 2.0 320 13 9.8 12 3.2		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analy	sis		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	148 * 64-147 112 71-138 98 45-151 87 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			
Field ID:MW-8Type:SAMPLELab ID:215050-014Diln Fac:25.00		Batch#: Sampled: Analyzed:	15553 09/17 10/01	7/09	
Analyte	Result		RL	Analy	rsis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	26,000 170 8,600 100 630 200 30		1,300 50 13 13 13 13 13 13 13	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analy	sis		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	119 64-147 111 71-138 91 45-151 86 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

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ND= Not Detected RL= Reporting Limit

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	Curtis & I	'ompkin	s Labor	ratories An	alytical	Repor	t
Lab #: 215050 Client: Stella Project#: 2007-6	ar Environmenta	l Solut	ions	Location: Prep:		Center 5030B	Apts
Matrix: Units:	Water ug/L			Received:	09/1	8/09	
Field ID:	MW-6			Batch#:	1554	:52	
Type: Lab ID: Diln Fac:	SAMPLE 215050-015 1.000			Sampled: Analyzed:		.6/09 9/09	
Analy	rte		Result		RL		Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes		ND ND ND ND ND	0.79		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B
o-Xylene		ND			0.50		8021B
Surrog	rate	%REC	Limits	Analys	ais		
Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze	e (FID) ene (FID) e (PID)	100 102 81 84	64-147 71-138 45-151 54-134				
Field ID: Type: Lab ID: Diln Fac:	MW-5 SAMPLE 215050-016 1.000			Batch#: Sampled: Analyzed:		91 6/09 8/09	
Analy	rte		Result		RL		Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		ND ND ND ND ND ND			50 2.0 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surrog		%REC	Limits	Analys	sis		
Trifluorotoluene Bromofluorobenze Trifluorotoluene Bromofluorobenze	ene (FID) e (PID)	101 105 95 97	64-147 71-138 45-151 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

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ND= Not Detected

RL= Reporting Limit

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C	urtis & Tompkin	ns Labor	ratories An	alytical R	eport	E
Lab #: 215050 Client: Stellar E Project#: 2007-65	nvironmental Solut	ions	Location: Prep:	Bay Ce EPA 50		Apts
	ter /L		Received:	09/18/	09	
	1.0		Detekt	166301		
Field ID:MW-Type:SAMLab ID:215Diln Fac:1.0	PLE 050-017		Batch#: Sampled: Analyzed:	155391 09/16/ 09/28/	09	
Analyte		Result		RL		Analysis
Gasoline C7-C12	ND			50		8015B
MTBE Benzene	ND ND			2.0 0.50		8021B 8021B
Toluene	ND			0.50		8021B
Ethylbenzene	ND			0.50		8021B
m,p-Xylenes o-Xylene	ND ND			0.50 0.50		8021B 8021B
0-xylene	ND			0.50	LPA	8021B
Surrogate			Analys	is		
Trifluorotoluene (F Bromofluorobenzene		64-147 71-138	EPA 8015B EPA 8015B			
Trifluorotoluene (P		45-151	EPA 8015B EPA 8021B			
Bromofluorobenzene	-	54-134	EPA 8021B			
Field ID: MW- Type: SAM Lab ID: 215 Diln Fac: 1.0	PLE 050-018		Batch#: Sampled: Analyzed:	155452 09/16/ 09/29/	09	
Analyte		Result		RL		Analysis
Gasoline C7-C12 MTBE		51 2.2		50 2.0		8015B 8021B
Benzene		9.3		0.50		8021B
Toluene		1.6		0.50		8021B
Ethylbenzene	ND ND			0.50		8021B 8021B
m,p-Xylenes o-Xylene	ND ND			0.50 0.50		8021B 8021B
					_	
Surrogate Trifluorotoluene (F		Limits 64-147	Analys EPA 8015B	15		
Bromofluorobenzene		71-138	EPA 8015B EPA 8015B			
Trifluorotoluene (P	ID) 79	45-151	EPA 8021B			
Bromofluorobenzene	(PID) 79	54-134	EPA 8021B			

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ND= Not Detected

RL= Reporting Limit

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	Compkins Labor	ratories An	alytical R	Report	
Lab #: 215050 Client: Stellar Environmenta Project#: 2007-65	l Solutions	Location: Prep:	Bay Ce EPA 50	enter Apts 030B	
Matrix: Water Units: ug/L		Received:	09/18/	/09	
Type: BLANK Lab ID: QC514004		Batch#: Analyzed:	155391 09/28/		
Diln Fac: 1.000		iniary zea			
Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	Result ND ND ND ND ND ND ND ND		RL 50 2.0 0.50 0.50 0.50 0.50 0.50	Analysis EPA 8015B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	is		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	$\begin{array}{cccc} 113 & 64-147 \\ 109 & 71-138 \\ 101 & 45-151 \\ 103 & 54-134 \end{array}$	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			
Type: BLANK Lab ID: QC514248 Diln Fac: 1.000		Batch#: Analyzed:	155452 09/29/		
Analyte	Result		RL	Analysis	
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	ND ND ND ND ND ND ND		50 2.0 0.50 0.50 0.50 0.50 0.50	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B	
Surrogate	%REC Limits	Analys	is		
Trifluorotoluene (FID) Bromofluorobenzene (FID) Trifluorotoluene (PID) Bromofluorobenzene (PID)	96 64-147 94 71-138 81 45-151 79 54-134	EPA 8015B EPA 8015B EPA 8021B EPA 8021B			

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 10 of 11



Curtis & Tompkins Laboratories Analytical Report								
Lab #: Client: Project#:		Environmental	Solutions	Location: Prep:	Bay Center Apts EPA 5030B			
Matrix: Units:		Water ug/L		Received:	09/18/09			

Type: Lab ID: Diln Fac:	BLANK QC514596 1.000			5536 /01/09
A	nalyte	Result	RL	Analysis
Gasoline C7-0	C12	ND	50	EPA 8015B
MTBE		ND	2.0	EPA 8021B
Benzene		ND	0.50	EPA 8021B
Toluene		ND	0.50	EPA 8021B
Ethylbenzene		ND	0.50	EPA 8021B
m,p-Xylenes		ND	0.50	EPA 8021B
o-Xylene		ND	0.50	EPA 8021B
Su	rrogate	%REC Limits	Analysis	
Trifluorotolu	uene (FTD)	103 64-147	FDA 8015B	

Darrogaco	01010		imar/ Drb
Trifluorotoluene (FID)	103	64-147	EPA 8015B
Bromofluorobenzene (FID)	108	71-138	EPA 8015B
Trifluorotoluene (PID)	82	45-151	EPA 8021B
Bromofluorobenzene (PID)	86	54-134	EPA 8021B

*= Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 11 of 11



	Curtis & Tompkins Labo	oratories Anal	ytical Report
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	155391
Units:	ug/L	Analyzed:	09/28/09
Diln Fac:	1.000		

Type:

BS

Lab ID:

QC514005

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.00	100	58-143
Benzene	20.00	23.29 b	116	75-116
Toluene	20.00	23.85 b	119	72-124
Ethylbenzene	20.00	23.72 b	119	74-127
m,p-Xylenes	20.00	23.50 b	118	73-128
o-Xylene	20.00	23.69 b	118	73-126

Surrogate	%REC	Limits
Trifluorotoluene (PID)	109	45-151
Bromofluorobenzene (PID)	114	54-134

Type: BSD	Lab 1	ID: QC5140	006			
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	20.20	101	58-143	1	31
Benzene	20.00	20.66 b	103	75-116	12	22
Toluene	20.00	21.02 b	105	72-124	13	24
Ethylbenzene	20.00	20.92 b	105	74-127	13	25
m,p-Xylenes	20.00	20.56 b	103	73-128	13	27
o-Xylene	20.00	20.98 b	105	73-126	12	25
Surrogate	%REC Limits					
Trifluorotoluene (PID)	104 45-151					

110

54-134

b= See narrative
RPD= Relative Percent Difference
Page 1 of 1

Bromofluorobenzene (PID)



	Curtis & Tompkins Labo	oratories Anal	lytical Report	
Lab #:	215050	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC514007	Batch#:	155391	
Matrix:	Water	Analyzed:	09/28/09	
Units:	ug/L			
		indi y Zea.	07,20,07	

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,077	104	77-118

Surrogate	%REC	Limits
Trifluorotoluene (FID)	144	64-147
Bromofluorobenzene (FID)	135	71-138



	Curtis & Tompkins Labor	ratories Analyt	ical Report
Lab #: 215050		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5	Analysis:	EPA 8015B
Field ID:	MW-5	Batch#:	155391
MSS Lab ID:	215050-016	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Туре:	MS			Lab ID:		QC514008		
Ana	alyte	MSS Re	sult	Spike	ed	Result	%REC	Limits
Gasoline C7-0	C12	1	4.76	2,000)	1,841	91	66-110
Su	rrogate	%REC	Limits					
Trifluorotol	uene (FID)	118	64-147					
Bromofluorobe	enzene (FID)	111	71-138					
Туре:	MSD			Lab ID:		QC514009		
A	nalyte		Spiked		Result	%REC	Limits	RPD Lim
Gasoline C7-0	C12		2,000		1,665	82	66-110	10 11

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	64-147
Bromofluorobenzene (FID)	105	71-138



	Curtis & Tompkins Laboratories Analytical Report							
Lab #:	215050	Location:	Bay Center Apts					
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B					
Project#:	2007-65	Analysis:	EPA 8021B					
Matrix:	Water	Diln Fac:	1.000					
Units:	ug/L	Batch#:	155452					

Type: Lab ID:

QC514249

BS

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	9.008	90	58-143
Benzene	10.00	8.623	86	75-116
Toluene	10.00	9.568	96	72-124
Ethylbenzene	10.00	9.786	98	74-127
m,p-Xylenes	10.00	9.931	99	73-128
o-Xylene	10.00	9.579	96	73-126

Analyzed: 09/29/09

Surrogate	%REC	Limits
Trifluorotoluene (PID)	77	45-151
Bromofluorobenzene (PID)	79	54-134

Type:	BSD	Analyzed:	09/30/09
Lab ID:	OC514250		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	20.52	103	58-143	13	31
Benzene	20.00	19.43	97	75-116	12	22
Toluene	20.00	19.57	98	72-124	2	24
Ethylbenzene	20.00	19.93	100	74-127	2	25
m,p-Xylenes	20.00	19.60	98	73-128	1	27
o-Xylene	20.00	19.46	97	73-126	2	25

Surrogate	%REC	Limits
Trifluorotoluene (PID)	78	45-151
Bromofluorobenzene (PID)	81	54-134



Curtis & Tompkins Laboratories Analytical Report								
Lab #:	215050	Location:	Bay Center Apts					
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B					
Project#:	2007-65	Analysis:	EPA 8015B					
Type:	LCS	Diln Fac:	1.000					
Lab ID:	QC514251	Batch#:	155452					
Matrix:	Water	Analyzed:	09/29/09					
Units:	ug/L							

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,137	114	77-118

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	64-147
Bromofluorobenzene (FID)	105	71-138



	Curtis & Tompkins Labo	ratories Analyt	ical Report
Lab #: 215050		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5	Analysis:	EPA 8015B
Field ID:	MW-6	Batch#:	155452
MSS Lab ID:	215050-015	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: MS		Lab ID:	QC514252		
Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	37.88	2,000	2,035	100	66-110
Surrogate	%REC Limits				
Trifluorotoluene (FID)	128 64-147				
Bromofluorobenzene (FID)	116 71-138				
Type: MSD		Lab ID:	QC514253		
Analyte	Spiked	Result	%REC	Limits	RPD Lim
=					
Gasoline C7-C12	2,000	2,003	98	66-110	2 11
Surrogate	%REC Limits				

122

109

64-147

71-138

Trifluorotoluene (FID)

Bromofluorobenzene (FID)



Curtis & Tompkins Laboratories Analytical Report							
Lab #:	215050	Location:	Bay Center Apts				
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B				
Project#:	2007-65						
Matrix:	Water	Batch#:	155536				
Units:	ug/L	Analyzed:	10/01/09				
Diln Fac:	1.000						

Type:	BS	Lab ID:	QC514597

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	1,040	104	77-118	EPA 8015B

Surrogate	%REC	Limits	Analysis	
Trifluorotoluene (FID)	118	64-147	EPA 8015B	
Bromofluorobenzene (FID)	109	71-138	EPA 8015B	
Trifluorotoluene (PID)	95	45-151	EPA 8021B	
Bromofluorobenzene (PID)	84	54-134	EPA 8021B	

Type:	BSD			Lab I	D:	QC51	4598			
Ana	alyte	Spiked	R	esult	%REC	Limits	RPD	Lim		Analysis
Gasoline C	7-C12	1,000	1	,086	109	77-118	4	23	EPA	8015B
5	Surrogate	%REC	Limits		Analysis					
Trifluoroto	oluene (FID)	116	64-147	EPA 80	15B					
Bromofluor	obenzene (FID)	104	71-138	EPA 80	15B					
Trifluoroto	oluene (PID)	95	45-151	EPA 80	21B					
Bromofluor	obenzene (PID)	82	54-134	EPA 80	21B					



Curtis & Tompkins Laboratories Analytical Report									
Lab #:	215050	Location:	Bay Center Apts						
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B						
Project#:	2007-65								
Type:	LCS	Diln Fac:	1.000						
Lab ID:	QC514680	Batch#:	155536						
Matrix:	Water	Analyzed:	10/02/09						
Units:	ug/L								
	5								

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	2,000	2,275	114	77-118	EPA 8015B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	137	64-147	EPA 8015B
Bromofluorobenzene (FID)	114	71-138	EPA 8015B
Trifluorotoluene (PID)	107	45-151	EPA 8021B
Bromofluorobenzene (PID)	89	54-134	EPA 8021B



Curtis & Tompkins Laboratories Analytical Report									
Lab #: 215050		Location:	Bay Center Apts						
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B						
Project#: 2007-6	5								
Field ID:	ZZZZZZZZZ	Batch#:	155536						
MSS Lab ID:	215133-001	Sampled:	09/23/09						
Matrix:	Water	Received:	09/23/09						
Units:	ug/L	Analyzed:	10/01/09						
Diln Fac:	1.000								

Type:

MS

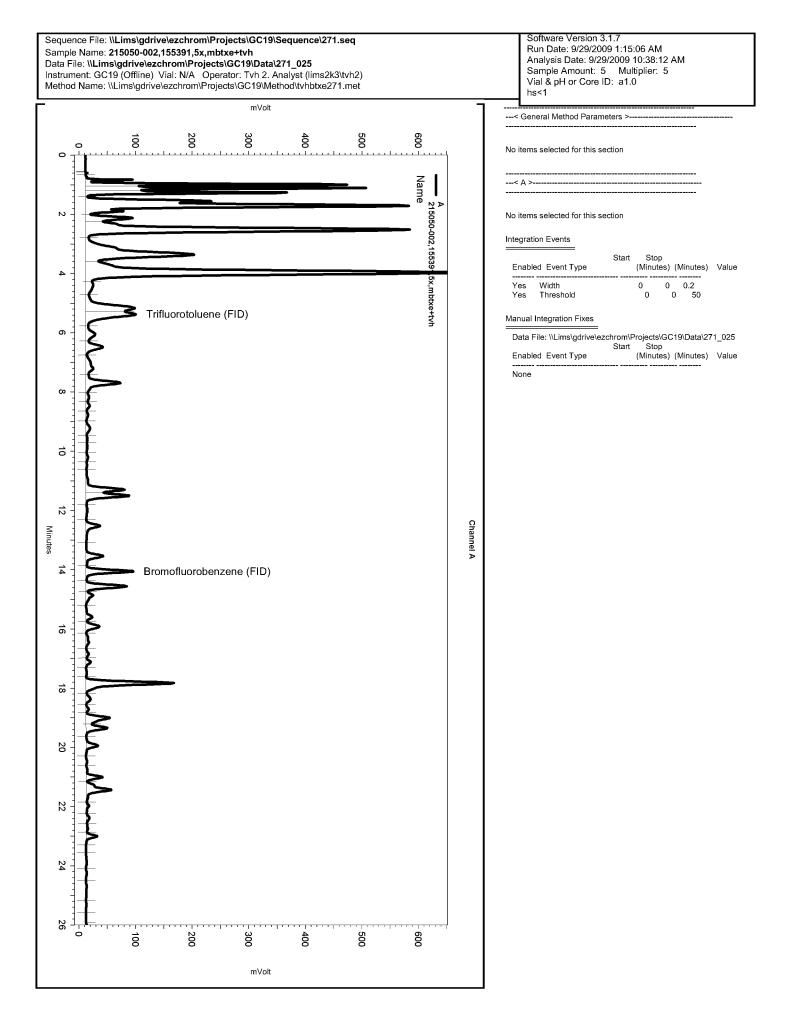
Lab ID: QC514681

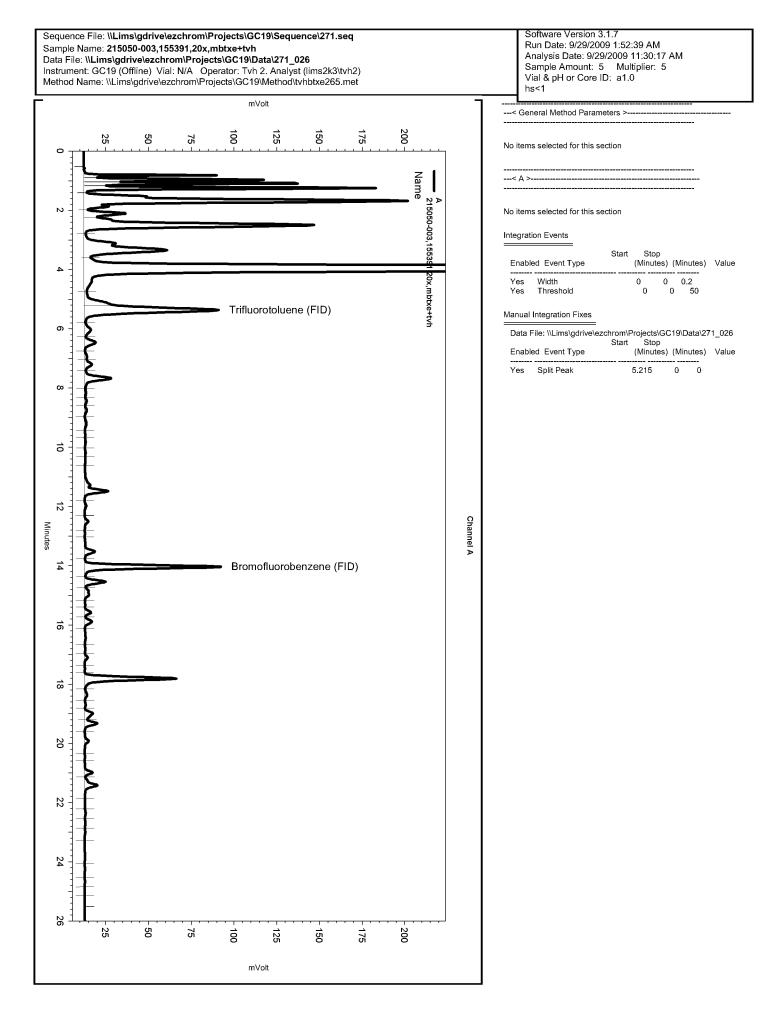
Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	17.31	2,000	2,222	110	66-110 E	PA 8015B

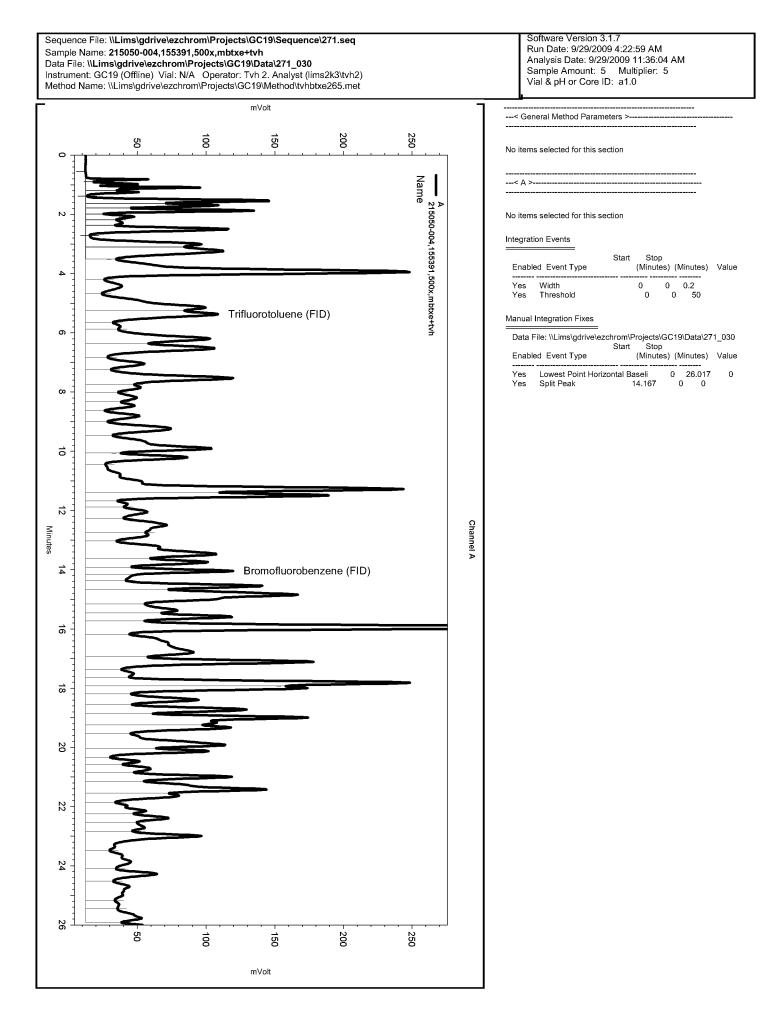
Surrogate	%REC	Limits	Analysis	
Trifluorotoluene (FID)	140	64-147	EPA 8015B	
Bromofluorobenzene (FID)	114	71-138	EPA 8015B	
Trifluorotoluene (PID)	114	45-151	EPA 8021B	
Bromofluorobenzene (PID)	89	54-134	EPA 8021B	

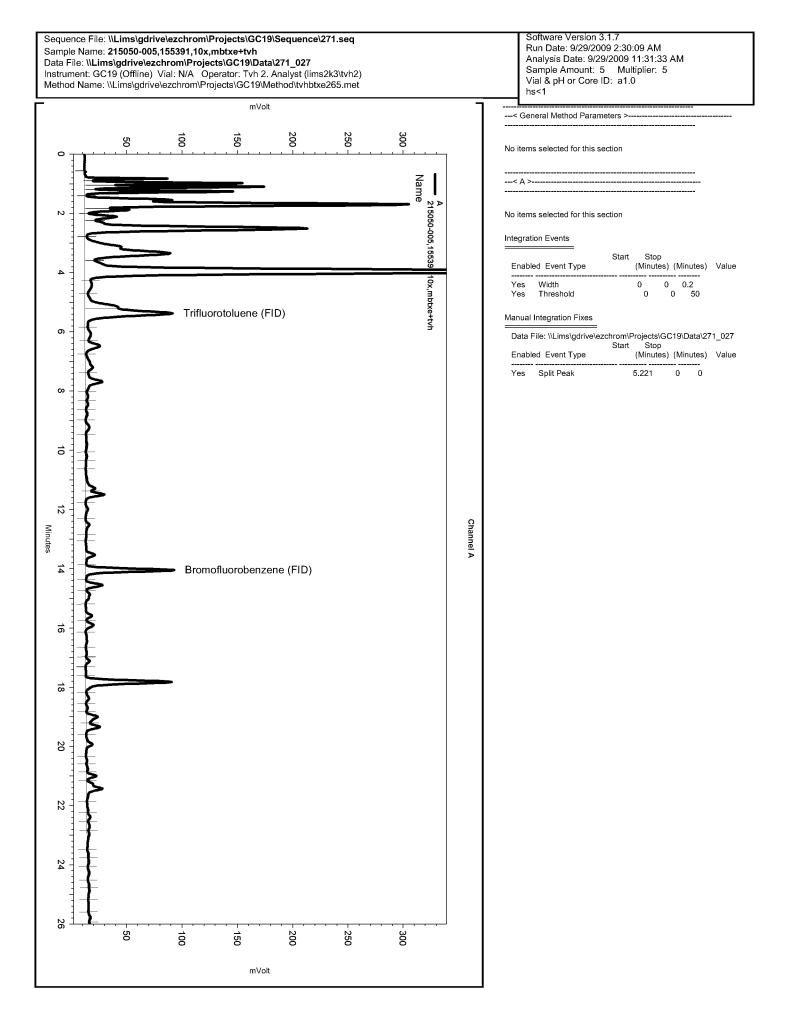
Ту	pe:	MSD	Lab ID		QC514682					
	Analyte	Spike	ed Result	%REC	Limits	RPD	Lim		Analysis	
G	asoline C7-C12	2,000) 2,142	106	66-110	4	11	EPA	8015B	

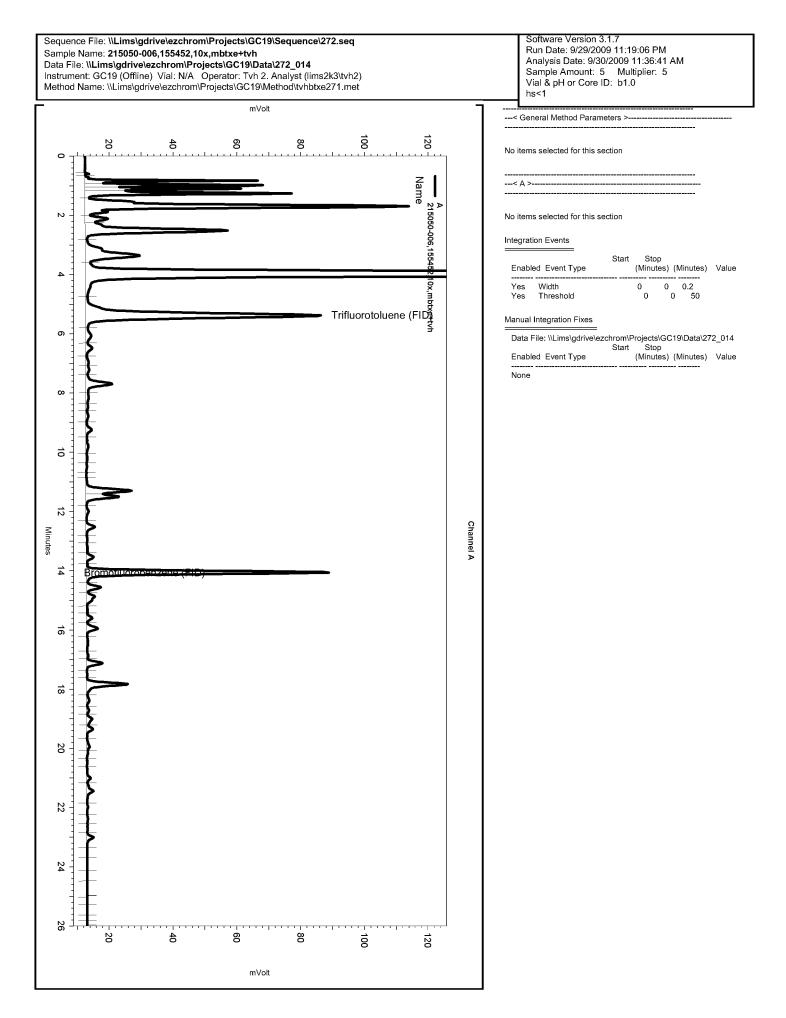
Surrogate	%REC	Limits	Analysis	
Trifluorotoluene (FID)	137	64-147	EPA 8015B	
Bromofluorobenzene (FID)	113	71-138	EPA 8015B	
Trifluorotoluene (PID)	116	45-151	EPA 8021B	
Bromofluorobenzene (PID)	89	54-134	EPA 8021B	

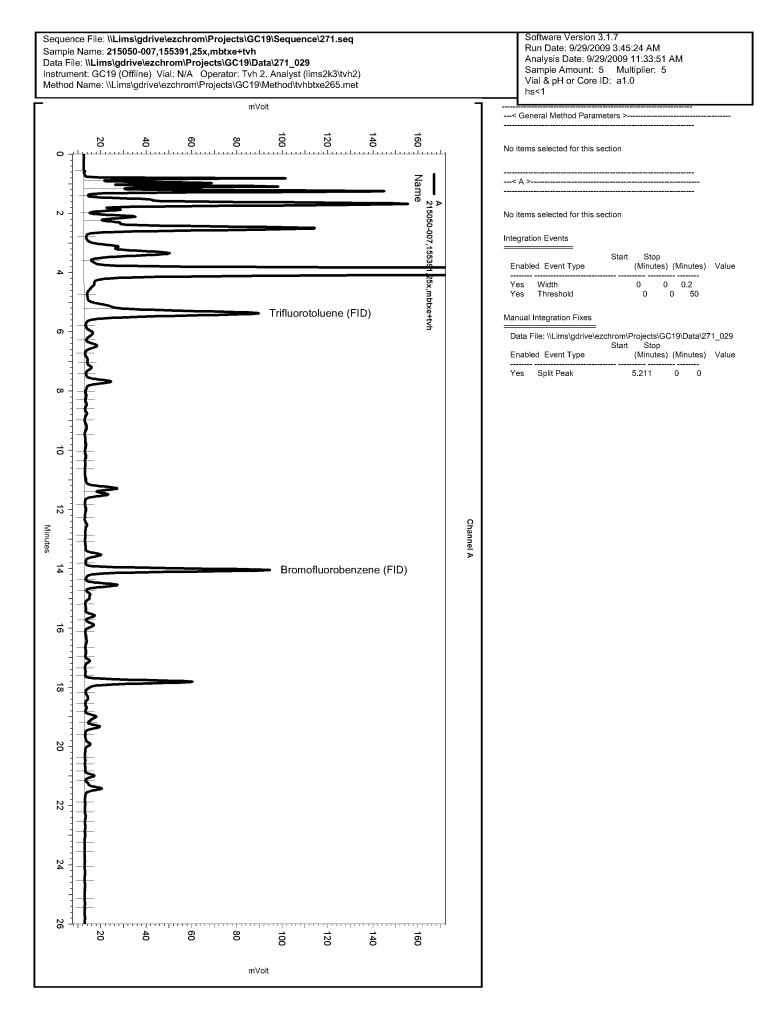


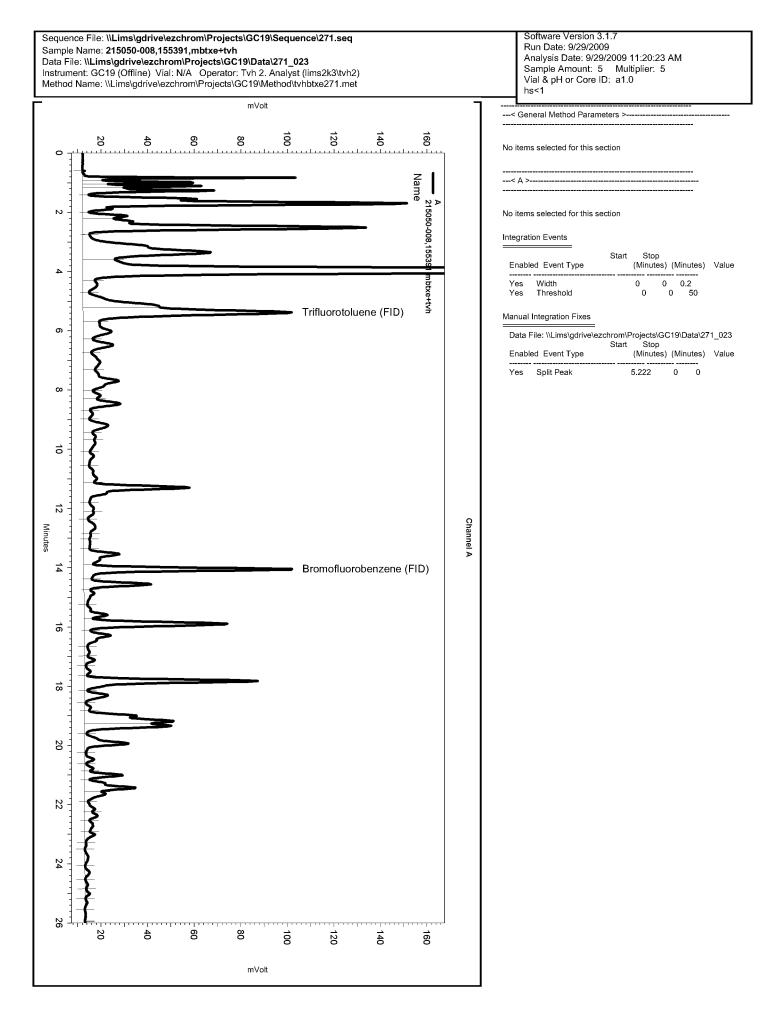


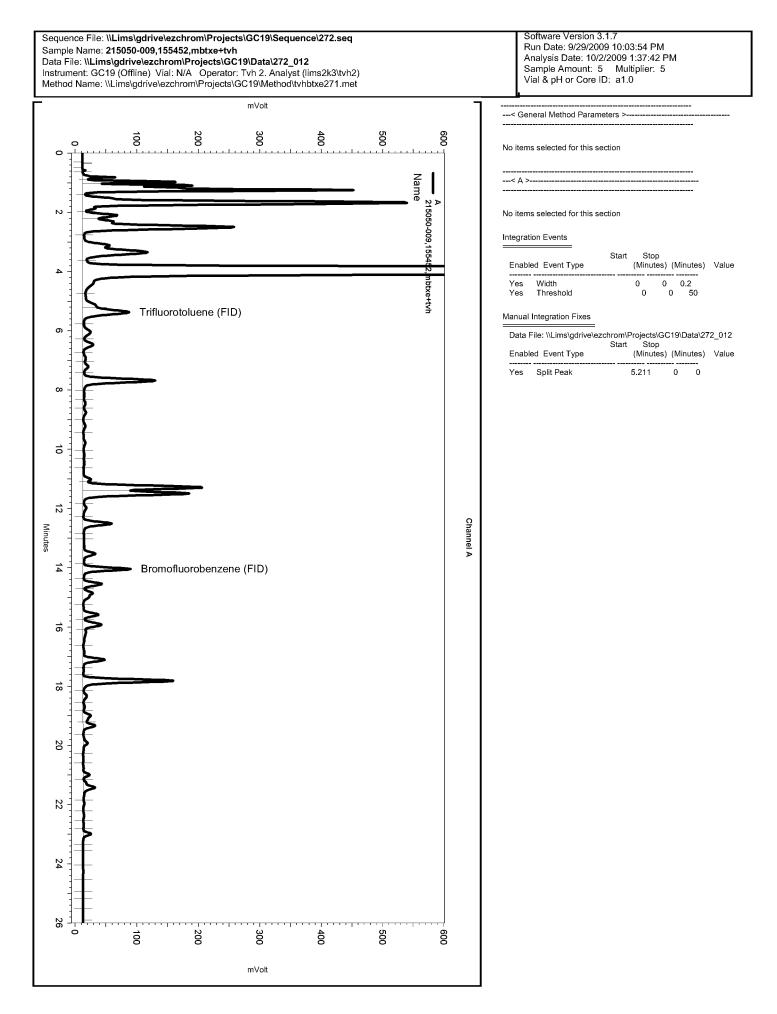


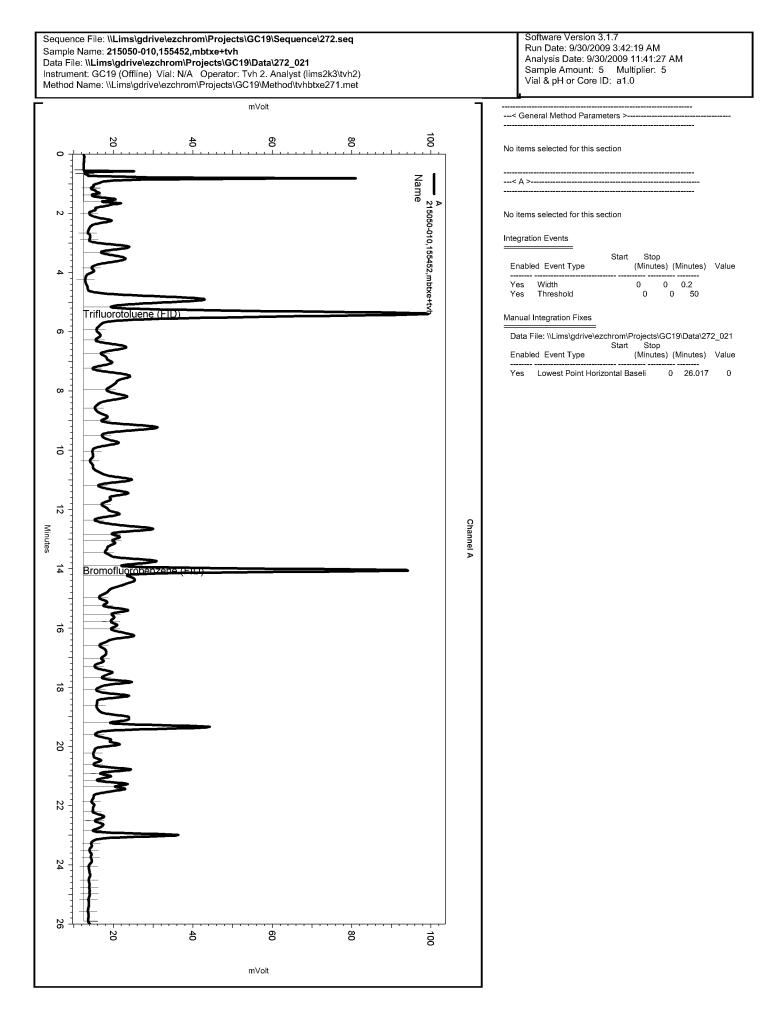


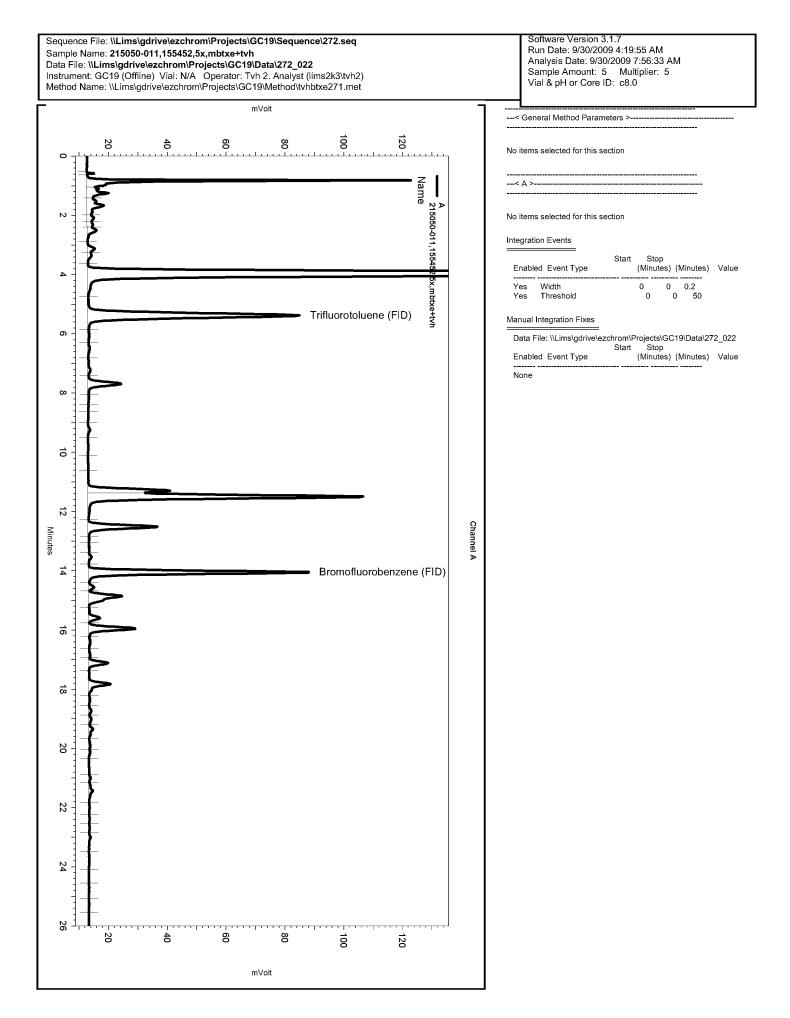


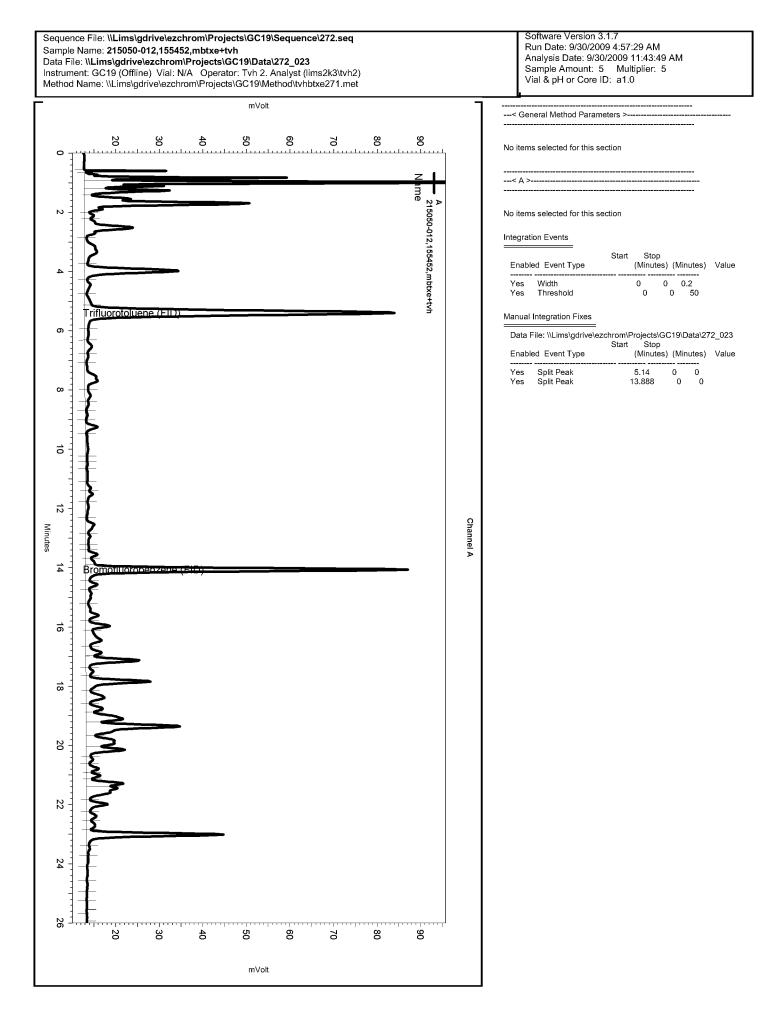


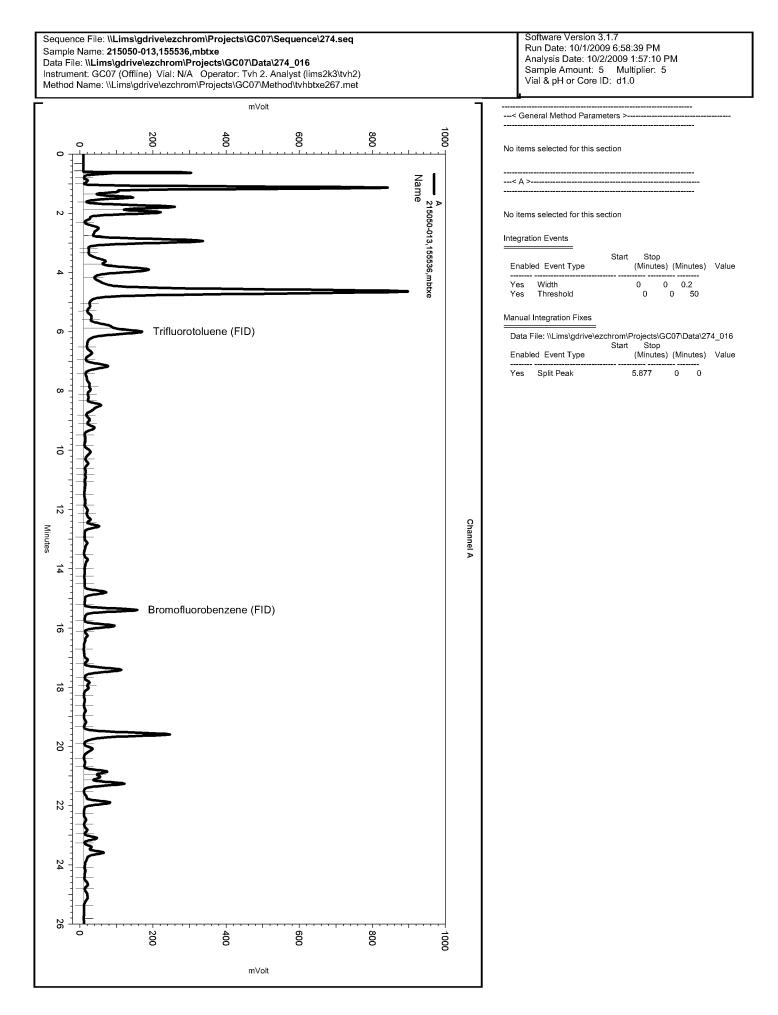


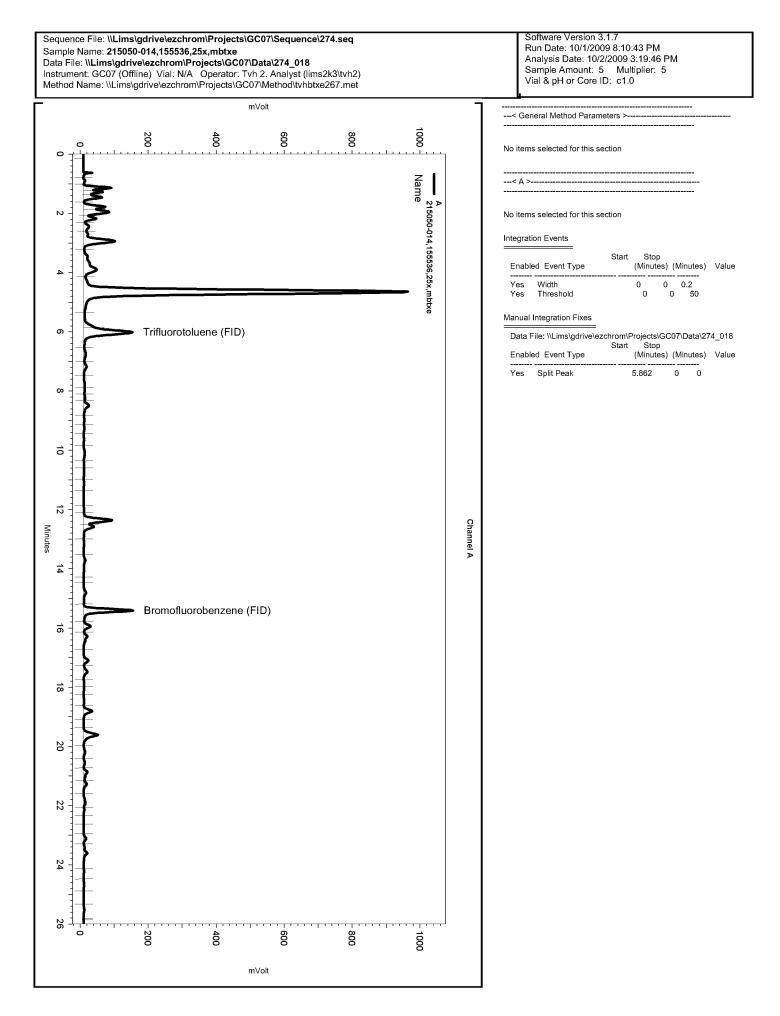


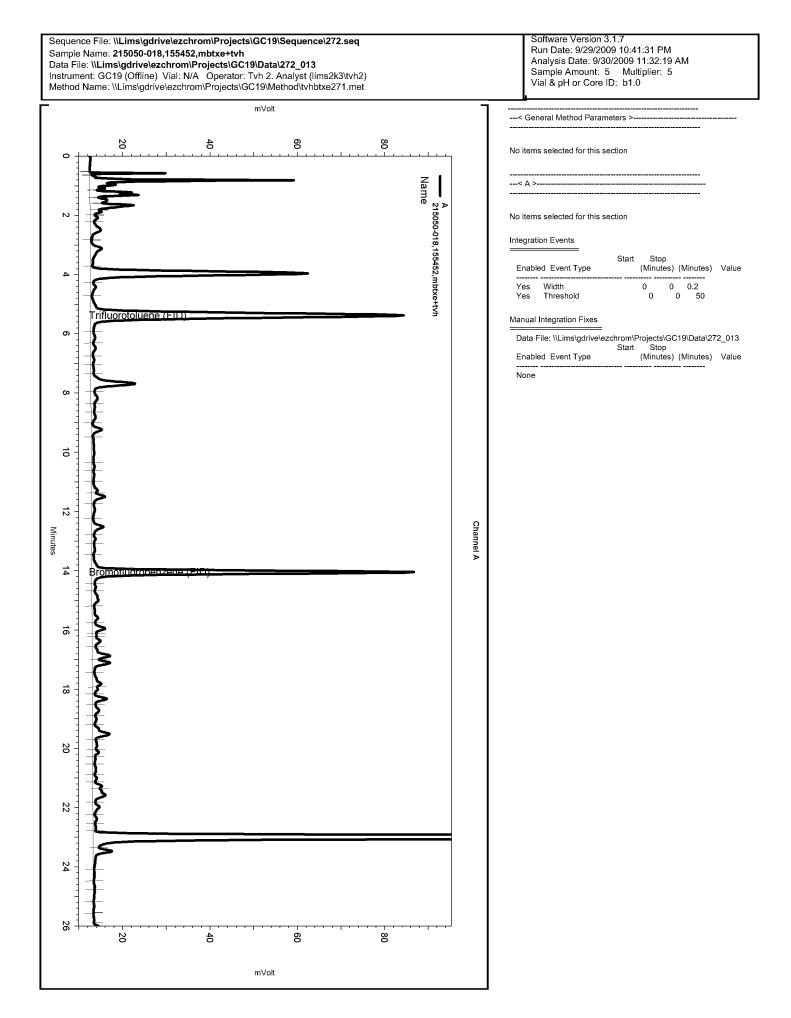


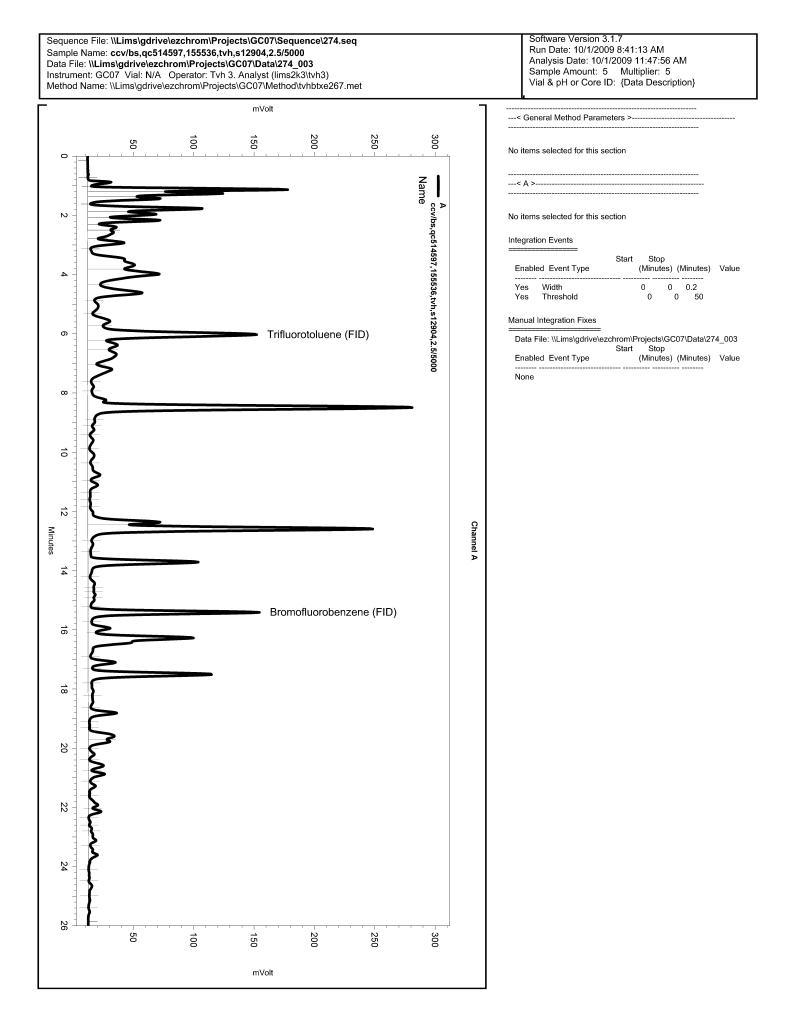














	5	Total Extract	able Hydroca	arbons	
Lab #: Client: Project#:		al Solutions	Location: Prep: Analysis:	Bay Center Apts EPA 3520C EPA 8015B 09/18/09	
Matrix: Units:	Water ug/L		Received:	09/18/09	
Field ID: Type: Lab ID:	MW-4 SAMPLE 215050-001		Batch#: Sampled: Prepared:	155394 09/17/09 09/28/09	
Diln Fac:	1.000		Analyzed:	09/30/09	
Diesel Cl(Analyte 0-C24	Result 660		RL 50	
	Surrogate	%REC Limits			
o-Terpheny	yl	101 60-130			
Field ID: Type:	MW-17 SAMPLE		Batch#: Sampled:	155394 09/17/09	
Lab ID: Diln Fac:	215050-002 1.000		Prepared: Analyzed:	09/28/09 09/30/09	
Diesel Cl(Analyte	Result 3,000		RL 50	
	Surrogate	%REC Limits		50	
o-Terpheny		102 60-130			
Field ID: Type:	MW-12 SAMPLE		Batch#: Sampled:	155394 09/17/09	
Lab ID: Diln Fac:	215050-003 1.000		Prepared: Analyzed:	09/28/09 09/30/09	
Diesel C10	Analyte	Result 3,000		RL 50	
Diebei ei	Surrogate	%REC Limits			
o-Terpheny		103 60-130			
Field ID: Type:	MW-13 SAMPLE		Batch#: Sampled:	155394 09/17/09	
Lab ID: Diln Fac:	215050-004 3.000		Prepared: Analyzed:	09/28/09 09/29/09	
Diesel C10	Analyte	Result 38,000		RL 150	
DICDET CI	0 021	50,000		100	
	Surrogate	%REC Limits			

3.0



	Т	otal I	Extracta	ble Hydroc	arboi	ns
Lab #: Client: Project#:		l Solut	ions	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units:	Water ug/L			Received:		09/18/09
Field ID:	MW-10			Batch#:		155394
Type: Lab ID: Diln Fac:	SAMPLE 215050-005 1.000			Sampled: Prepared: Analyzed:		09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 6,100		RL 50	
Diesei Cit	Surrogate	%REC	Limits		50	
o-Terpheny		108	60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-14 SAMPLE 215050-006 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 2,100		RL 50	
	Surrogate	%REC				
o-Terpheny	71	100	60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-15 SAMPLE 215050-007 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 2,700		RL 50	
	Surrogate	%REC	Limits			
o-Terpheny		95	60-130			
Field ID: Type: Lab ID: Diln Fac:	RW-1 SAMPLE 215050-008 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel Cl(Analyte		Result 770		RL 50	
	Surrogate	%REC	Limits			
o-Terpheny	<u>/</u> 1	106	60-130			



		Total E	xtracta	ble Hydroc	arbo	ns
Lab #: Client: Project#: Matrix: Units:	215050 Stellar Environment 2007-65 Water ug/L	al Solut:	ions	Location: Prep: Analysis: Received:		Bay Center Apts EPA 3520C EPA 8015B 09/18/09
Field ID: Type: Lab ID: Diln Fac:	MW-E SAMPLE 215050-009 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 6,200		RL 50	
Diesei Cit			-		50	
o-Terpheny	Surrogate /l	<u>%REC</u> 98	Limits 60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-3 SAMPLE 215050-010 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 5,000		RL 50	
					50	
o-Terpheny	<u>Surrogate</u> /l	%REC 105	<u>Limits</u> 60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-7 SAMPLE 215050-011 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
	Analyte		Result		RL	
Diesel C10			5,800		50	
o-Terpheny	Surrogate /l	%REC 81	Limits 60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-9 SAMPLE 215050-012 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
	Analyte		Result		RL	
Diesel C10			8,200		50	
o-Terpheny	Surrogate /l	%REC 101	Limits 60-130			



	c	Cotal I	Extracta	ble Hydroc	arbo	ns
		al Solut	ions	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units:	Water ug/L			Received:		09/18/09
Field ID: Type: Lab ID: Diln Fac:	MW-11 SAMPLE 215050-013 1.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 6,400		RL 50	
	Surrogate	%REC	Limits			
o-Terpheny		101	60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-8 SAMPLE 215050-014 5.000			Batch#: Sampled: Prepared: Analyzed:		155394 09/17/09 09/28/09 09/30/09
Diesel C10	Analyte		Result 9,200		RL 250	
	Surrogate	%REC	-		200	
o-Terpheny	l	106	60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-6 SAMPLE 215050-015 1.000			Batch#: Sampled: Prepared: Analyzed:		155293 09/16/09 09/24/09 09/28/09
Diesel C10	Analyte		Result 1,500		RL 50	
2		0.580			50	
o-Terpheny	Surrogate	% REC 107	Limits 60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-5 SAMPLE 215050-016 1.000			Batch#: Sampled: Prepared: Analyzed:		155293 09/16/09 09/24/09 09/28/09
Diegol die	Analyte		Result		RL	
Diesel C10			5,600		50	
o-Terpheny	Surrogate	%REC 106	Limits 60-130			



		Total I	Extracta	ble Hydroca	arbor	າຮ
Project#: 2007	lar Environment -65	al Solut	ions	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units:	Water ug/L			Received:		09/18/09
Field ID: Type: Lab ID:	MW-18 SAMPLE 215050-017			Batch#: Sampled: Prepared:		155293 09/16/09 09/24/09
Diln Fac:	1.000			Analyzed:		09/28/09
Ana Diesel C10-C24	lyte	1	Result		RL 50	
Surr	ogate	%REC	Limits			
o-Terphenyl		111	60-130			
Field ID: Type: Lab ID: Diln Fac:	MW-16 SAMPLE 215050-018 1.000			Batch#: Sampled: Prepared: Analyzed:		155293 09/16/09 09/24/09 09/28/09
Ana	lyte	1	Result		RL	
Diesel C10-C24			.0,000		50	
o-Terphenyl	ogate	%REC 100	Limits 60-130			
Type: Lab ID: Diln Fac:	BLANK QC513591 1.000			Batch#: Prepared: Analyzed:		155293 09/24/09 09/28/09
Ana Diesel C10-C24	lyte	NE	Result		RL 50	
-					50	
o-Terphenyl	ogate	<u>%REC</u> 108	Limits 60-130			
Type: Lab ID:	BLANK			Batch#: Prepared:		155394 09/28/09
Diln Fac:	QC514017 1.000			Analyzed:		09/29/09
Diln Fac:		NI	Result		RL 50	



Batch QC Report

	т	otal 1	Extracta	ble Hydrocarbo	ns			
Lab #:	215050			Location:	Bay Center A	ots		
Client:	Stellar Environmenta	l Solut	cions	Prep:	EPA 3520C			
Project#:	2007-65			Analysis:	EPA 8015B			
Matrix:	Water			Batch#:	155293			
Units:	ug/L			Prepared:	09/24/09			
Diln Fac:	1.000			Analyzed:	09/28/09			
Type: Lab ID:	BS QC513592			Cleanup Method:	EPA 3630C			
	Analyte		Spiked	Result	%REC	Limits		
Diesel Cl	0-C24		2,500	2,315	93	53-122		
	Surrogate	%REC	Limits					
o-Terphen	yl	102	60-130					
Type: Lab ID:	BSD QC513593			Cleanup Method:	EPA 3630C			
Diesel C1	Analyte		Spiked	Result 2,101	8 8 8 4	Limits 53-122	RPD	Lim 36
			_,	2,101	<u> </u>			20
	Surrogate	%REC	Limits					
o-Terphen	vl	105	60-130					

4.0



Batch QC Report

	Total Extract	able Hydrocar	rbons
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Туре:	LCS	Diln Fac:	1.000
Lab ID:	QC514018	Batch#:	155394
Matrix:	Water	Prepared:	09/28/09
Units:	ug/L	Analyzed:	09/30/09

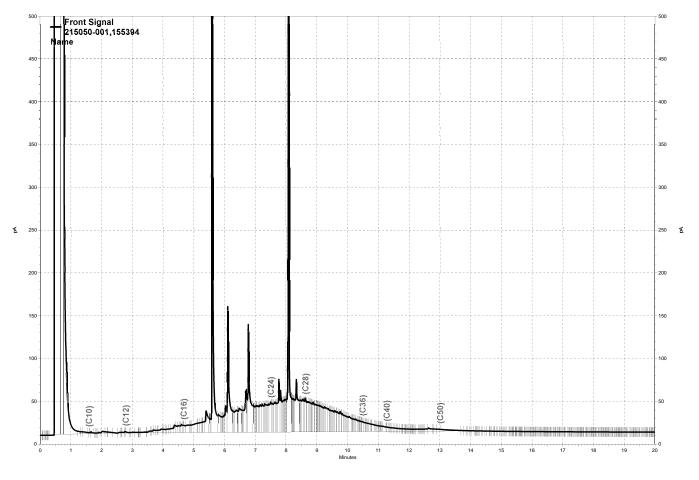
Cleanup Method: EPA 3630C

	Spiked	Result	%REC	Limits
	5,000	4,914	98	53-122
%REC	Limits			
111	60-130			
	%REC		5,000 4,914 %REC Limits	5,000 4,914 98 %REC Limits

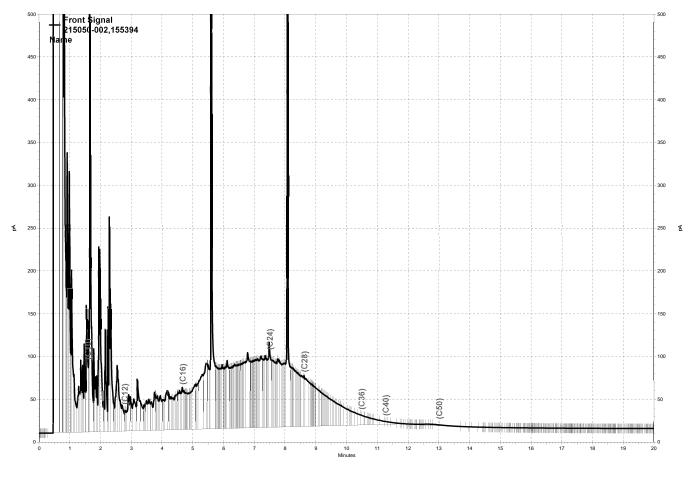


Batch QC Report

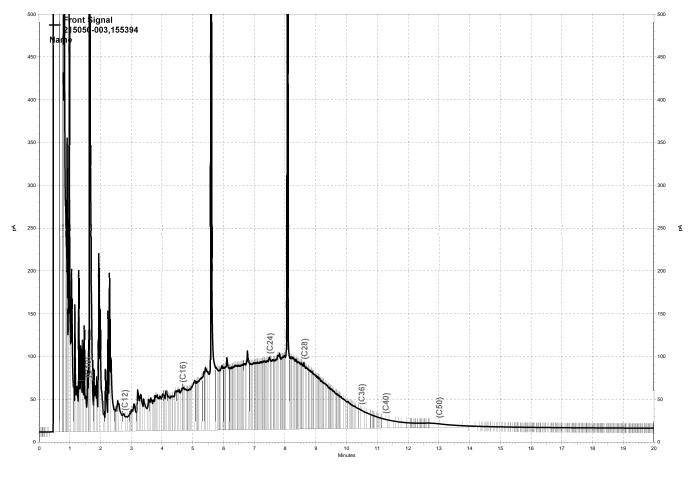
		Total :	Extracta	ble Hydrocarbo				
Lab #: 2150	50			Location:	Bay Center Ap	ots		
Client: Stell	lar Environment	al Solut	tions	Prep:	EPA 3520C			
Project#: 2007	-65			Analysis:	EPA 8015B			
Field ID:	ZZZZZZZZZZ			Batch#:	155394			
MSS Lab ID:	215143-001			Sampled:	09/22/09			
Matrix:	Water			Received:	09/24/09			
Units:	ug/L			Prepared:	09/28/09			
Diln Fac:	1.000			Analyzed:	09/30/09			
Type: Lab ID:	MS QC514019			Cleanup Method:	EPA 3630C			
Analyte		MSS Result						
	te			Spiked	Result	%REC	Limi	
Analy Diesel C10-C24	te		sult 9.639	Spiked 2,500	Result 2,011	%REC 80	Limi 45-1	
Diesel C10-C24	te ogate			-				
Diesel C10-C24		< 2	9.639	-				
Diesel C10-C24		< <u>?</u> %REC	9.639 Limits	-	2,011			
Diesel C10-C24 Surre o-Terphenyl Type: Lab ID:	bgate MSD	< <u>?</u> %REC	9.639 Limits	2,500 Cleanup Method: Result	2,011 EPA 3630C			
Diesel C10-C24 Surre o-Terphenyl Type: Lab ID:	MSD QC514020	< <u>?</u> %REC	9.639 Limits 60-130	2,500 Cleanup Method:	2,011 EPA 3630C	80	45-1	37
Diesel C10-C24 Surre o-Terphenyl Type: Lab ID: Ana: Diesel C10-C24	MSD QC514020	< <u>?</u> %REC	9.639 Limits 60-130 Spiked	2,500 Cleanup Method: Result	2,011 EPA 3630C %REC	80 Limits	45-1 RPD	37



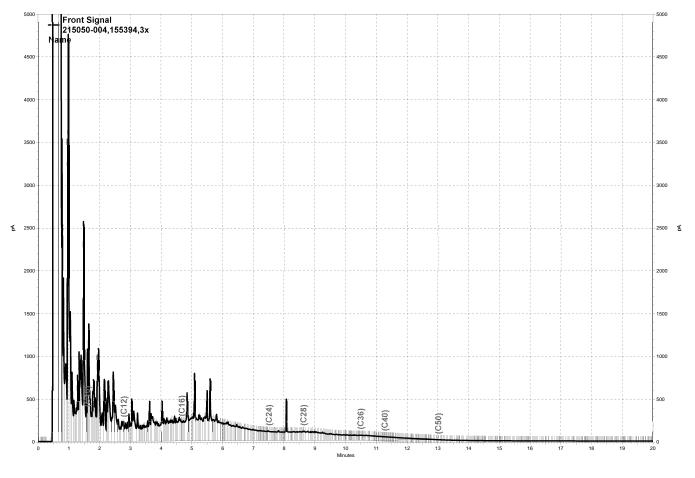
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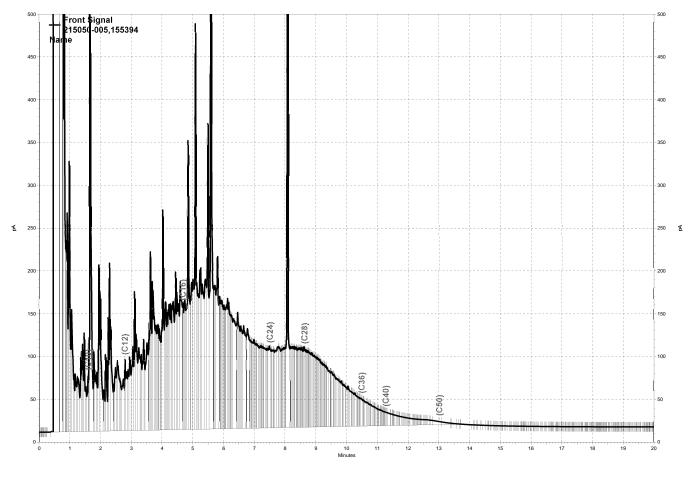
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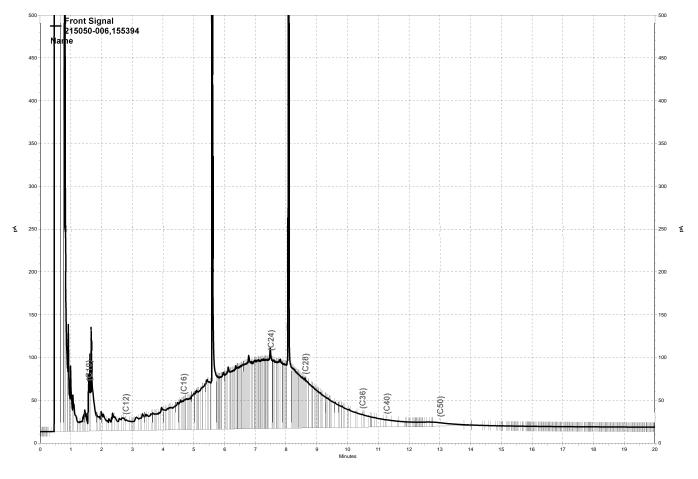
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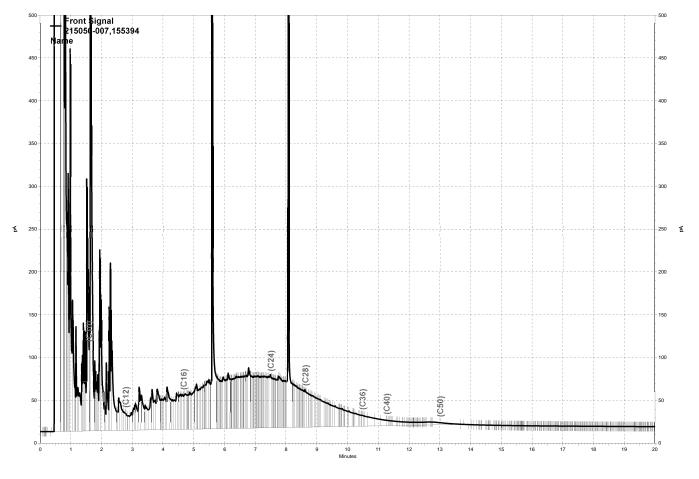
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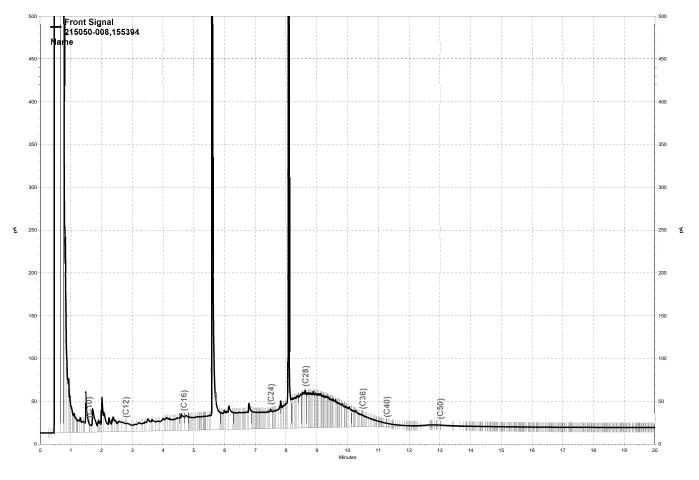
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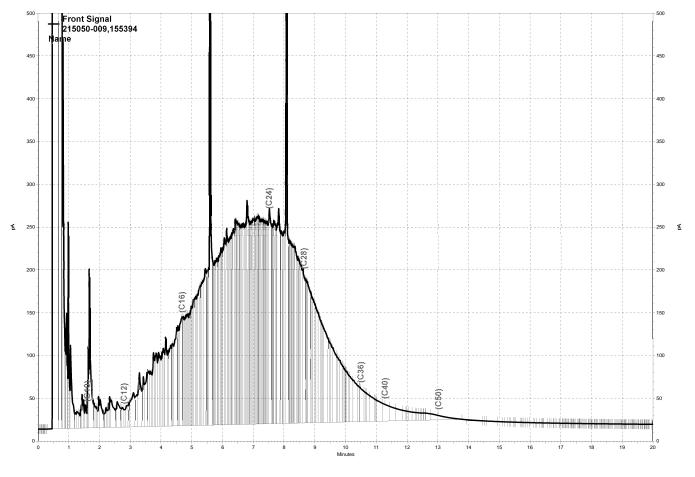
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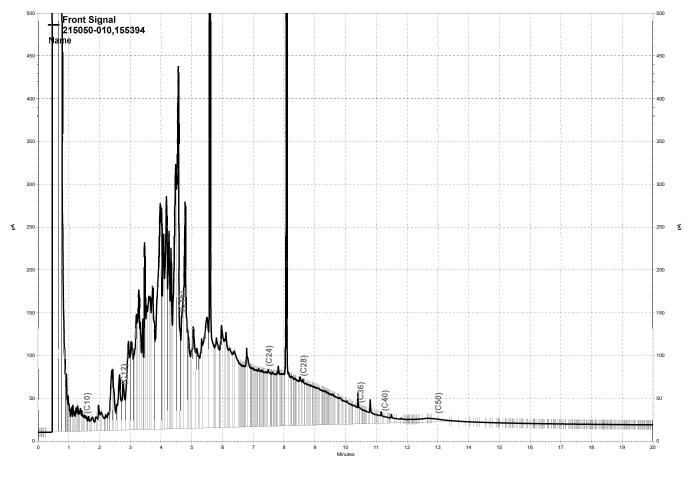
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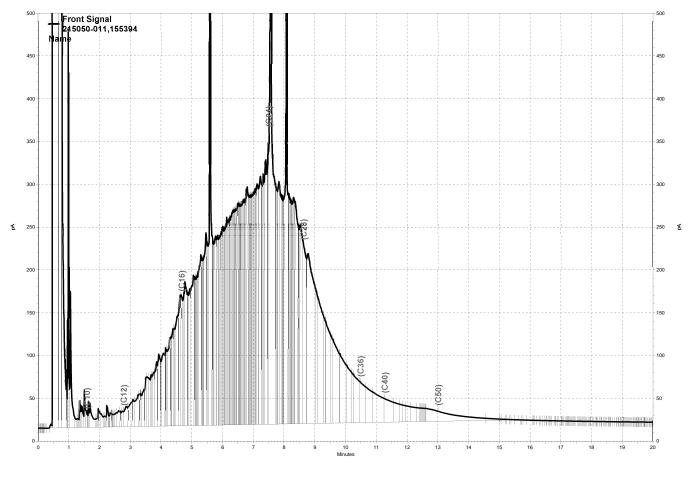
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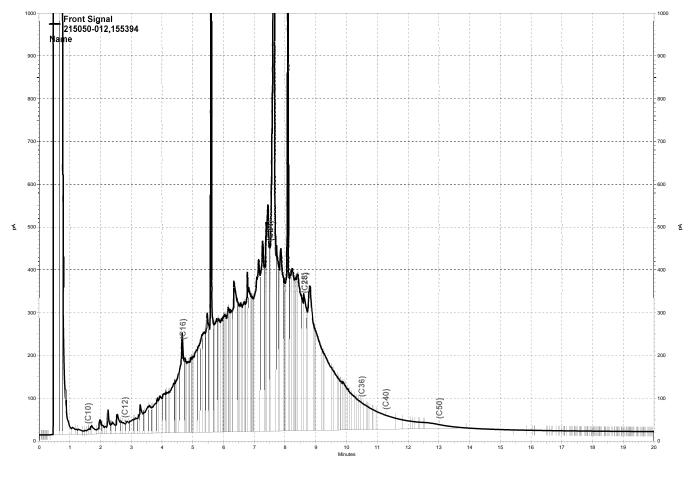
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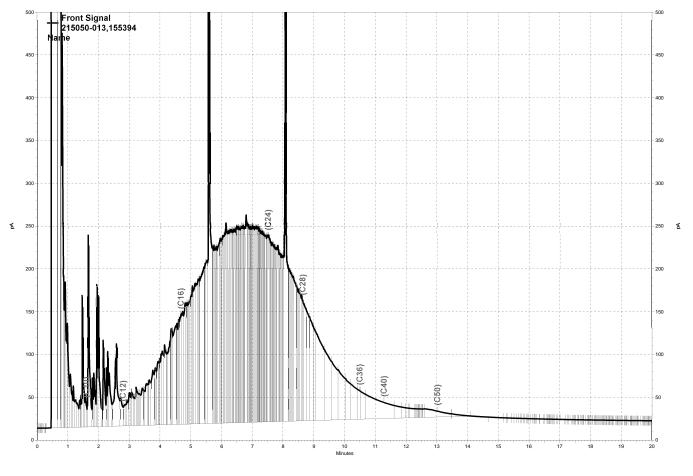
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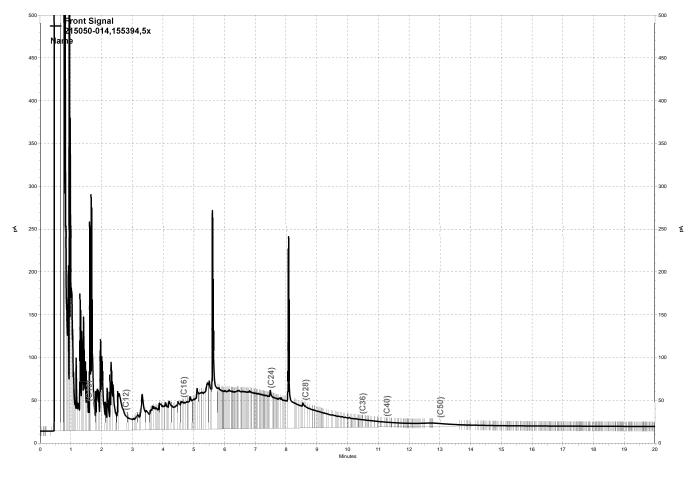
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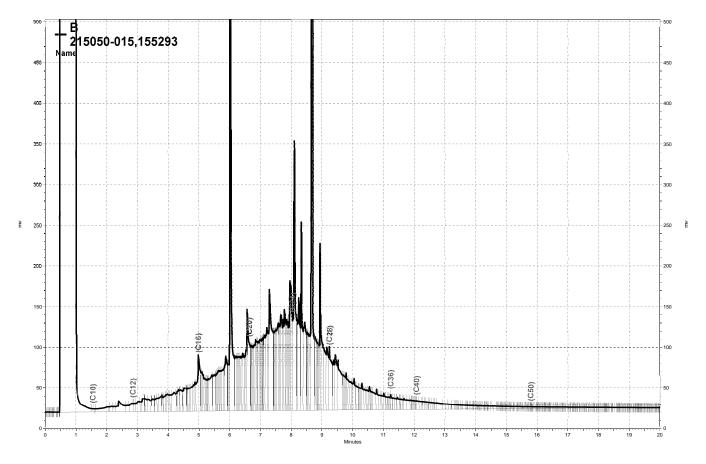
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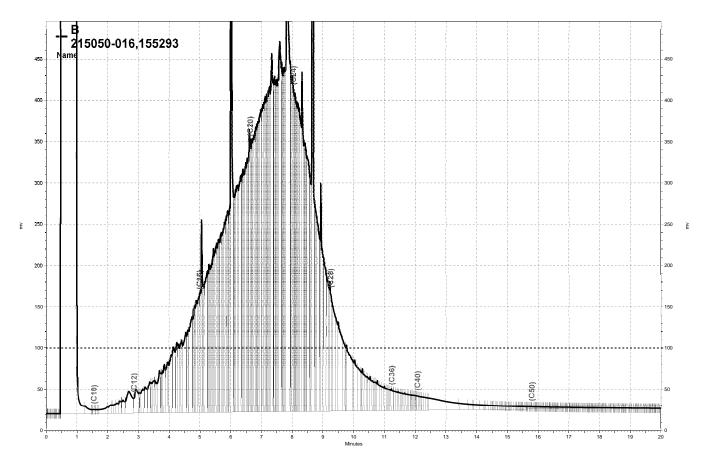
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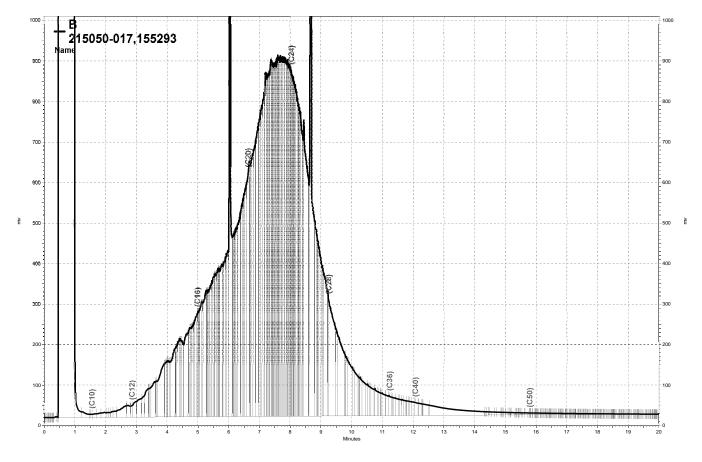
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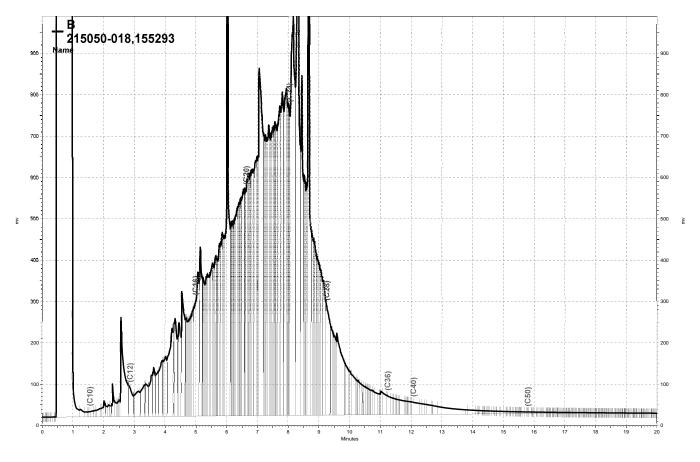
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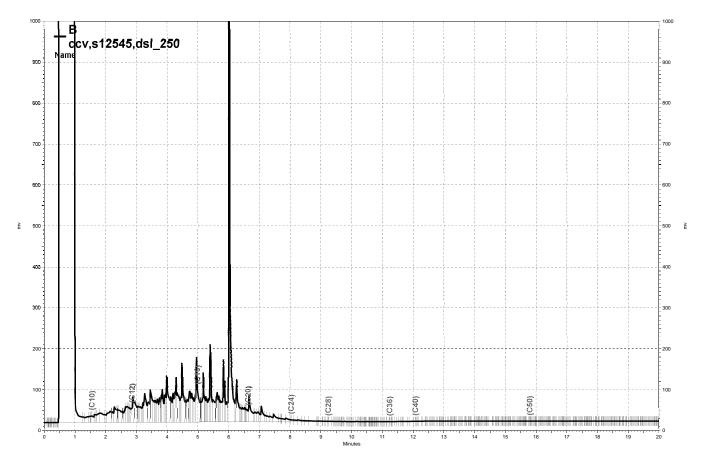
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APPENDIX D

Historical Groundwater Elevation Data

TABLE B Historical Monitoring, Extraction, and Trench Well Elevations 6400 Christie Avenue, Emeryville, California

	MW-1								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	14.39	9.60	NP	4.79				
2	May-89	14.31 ^(a)	8.73	NP	5.58				
3	Feb-91	14.31	9.18	NP	5.13				
		Monitoring well	abandoned - date	unclear					

	MW-2								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	14.36	9.64	NP	4.72				
2	May-89	14.28 ^(a)	8.78	NP	5.50				
3	Feb-91	14.28	9.61	NP	4.67				
		Monitoring well	abandoned - dat	e unclear					

	MW-3								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	14.53	8.93	trace	5.60				
2	May-89	14.43 ^(a)	8.69	NP	5.74				
3	Feb-91	14.43	8.31	NP	6.12				
4	Mar-04	16.96 ^(b)	9.47	NP	7.49				
5	Dec-06	NA	NA	NA	NA				
6	Dec-07	16.65 ^(c)	7.76 ^(e)	7.76	8.89				
7	Mar-08	16.65	8.72	8.70	7.93				
8	Jun-08	16.65	8.56	NP	8.09				
9	Sep-08	16.65	9.27	7.95	7.38				
10	Dec-08	16.65	8.36	7.49	8.29				
11	Mar-09	16.65	7.94	NP	8.71				
12	Mar-10	16.65	8.08 ^(e)	8.08	8.57				

MW-4								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
1	Dec-88	14.21	8.29	NP	5.92			
2	May-89	14.12 ^(a)	7.75	NP	6.37			
3	Feb-91	14.12	8.04	NP	6.08			
4	Mar-04	16.74 ^(b)	6.90	NP	7.49			
5	Dec-06	NA	NA	NA	NA			
6	Dec-07	16.29 ^(c)	6.61	NP	9.68			
7	Mar-08	16.29	7.24	NP	9.05			
8	Jun-08	16.29	6.94	NP	9.35			
9	Sep-08	16.29	6.85	NP	6.85			
10	Dec-08	16.29	7.42	NP	8.87			
11	Mar-09	16.29	6.90	NP	9.39			
12	Mar-10	16.29	7.08	NP	9.21			

	MW-5								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	14.65	10.23	NP	4.42				
2	May-89	14.56 ^(a)	9.29	NP	5.27				
3	Feb-91	14.56	10.04	NP	4.52				
4	Mar-04	17.11 ^(b)	9.10	NP	8.01				
5	Dec-06	NA	NA	NA	NA				
6	Dec-07	16.72 ^(c)	9.66	NA	7.06				
7	Mar-08	16.72	9.72	NP	7.00				
8	Jun-08	16.72	9.72	NP	7.00				
9	Sep-08	16.72	8.56	NP	8.16				
10	Dec-08	16.72	9.75	NP	6.97				
11	Mar-09	16.72	9.31	NP	7.41				
12	Mar-10	16.72	9.48	NP	7.24				

	MW-6								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	14.75	8.10	NP	6.65				
2	May-89	14.67 ^(a)	7.58	NP	7.09				
3	Feb-91	14.67	7.05	NP	7.62				
4	Mar-04	17.22 ^(b)	6.51	NP	10.71				
5	Dec-06	NA	NA	NA	NA				
6	Dec-07	16.82 ^(c)	6.61	NP	10.21				
7	Mar-08	16.82	7.02	NP	9.80				
8	Jun-08	16.82	7.55	NP	9.27				
9	Sep-08	16.82	6.06	NP	10.76				
10	Dec-08	16.82	6.91	NP	9.91				
11	Mar-09	16.82	6.45	NP	10.37				
12	Mar-10	16.82	6.66	NP	10.16				

MW-7								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Install	ed March 2004					
1	Mar-04	18.09	9.93	NP	8.16			
2	Dec-06	NA	NA	NA	NA			
3	Dec-07	17.73 ^(c)	10.30	NP	7.43			
4	Mar-08	17.73	10.51	NP	7.22			
5	Jun-08	17.73	10.50	NP	7.23			
6	Sep-08	17.73	10.37	NP	7.36			
7	Dec-08	17.73	10.60	NP	7.13			
8	Mar-09	17.73	10.13	NP	7.60			
9	Mar-10	17.73	10.02	NP	7.71			

MW-8									
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Instal	led March 2004	<u>.</u>					
1	Mar-04	18.25	9.32	8.15	8.93				
2	Nov-06 ^(d)	16.96	10.59	NP	6.37				
3	Dec-07	17.84 ^(c)	9.42	NP	8.42				
4	Mar-08	17.84	10.50	9.18	7.34				
5	Jun-08	17.84	9.68	9.10	8.16				
6	Sep-08	17.84	9.63	8.89	8.21				
7	Dec-08	17.84	9.58	8.89	8.26				
8	Mar-09	17.84	9.62	8.89	8.22				
9	Mar-10	17.84	9.02 ^(e)	9.02	8.82				

MW-9									
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
•		Instal	led March 2004	•					
1	Mar-04	18.27	9.38	NP	8.89				
2	Dec-06	NA	NA	NA	NA				
3	Dec-07	17.84 ^(c)	9.54	NP	8.30				
4	Mar-08	17.84	9.77	NP	8.07				
5	Jun-08	17.84	9.68	NP	9.27				
6	Sep-08	17.84	9.30	NP	8.54				
7	Dec-08	17.84	9.83	NP	8.01				
8	Mar-09	17.84	9.37	NP	8.47				
9	Mar-10	17.84	9.46	NP	8.38				

	MW-10									
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation					
		Install	ed March 2004							
1	Mar-04	18.21	9.87	8.24	8.34					
2	Dec-06	18.21	9.30	8.86	8.91					
3	Dec-07	17.83 ^(c)	8.98 ^(e)	8.98	8.85					
4	Mar-08	17.83	9.28	8.98	8.55					
5	Jun-08	17.83	8.86	8.78	7.23					
6	Sep-08	17.83	8.95	8.84	8.88					
7	Dec-08	17.83	8.97	8.74	8.86					
8	Mar-09	17.83	9.25	8.54	9.25					
9	Mar-10	17.83	10.30	8.58	7.53					

MW-11									
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Insta	alled May 2004						
1	Nov-06 ^(d)	17.76 ^(c)	10.33	NP	7.43				
2	Dec-07	17.76	10.27	NP	7.49				
3	Mar-08	17.76	10.34	NP	7.42				
4	Jun-08	17.76	10.20	NP	8.16				
5	Sep-08	17.76	10.03	NP	7.73				
6	Dec-08	17.76	10.34	NP	7.42				
7	Mar-09	17.76	10.20	NP	7.56				
8	Mar-10	17.76	10.23	NP	7.53				

MW-12								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
•		Installed b	etween 2004-20	06				
1	Nov-06 ^(d)	17.83 ^(c)	9.37	NP	8.46			
2	Dec-07	17.83	9.15	NP	8.68			
3	Mar-08	17.83	9.11	NP	8.72			
4	Jun-08	17.83	8.86	NP	8.97			
5	Sep-08	17.83	8.76	NP	9.07			
6	Dec-08	17.83	8.98	NP	8.85			
7	Mar-09	17.83	8.50	NP	9.33			
8	Mar-10	17.83	8.66	NP	9.17			

		MW-13													
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation										
	Installed between 2004-2006														
1	Dec-06	17.66 ^(c)	9.81	9.44	7.85										
2	Dec-07	17.66	9.95	9.39	7.71										
3	Mar-08	17.66	10.02	9.54	7.64										
4	Jun-08	17.66	9.86	9.45	7.80										
5	Sep-08	17.66	10.34	9.54	7.32										
6	Dec-08	17.66	10.54	9.65	7.12										
7	Mar-09	17.66	9.26	9.14	8.40										
8	Mar-10	17.66	9.22 ^(e)	9.22	8.44										

			MW-14											
Sampling Event No.	Date	TOC Elevation	DTP	GW Elevation										
Installed between 2004-2006														
1	Nov-06 ^(d)	17.60 ^(c)	9.11	9.11(sheen)	8.49									
2 Dec-07		17.60	8.86	8.84	8.74									
3	Mar-08	17.60	8.91	8.88	8.69									
4	Jun-08	17.60	8.66	8.62	8.94									
5	Sep-08	17.60	8.64	NP	8.96									
6	Dec-08	17.60	8.70	NP	8.90									
7	Mar-09	17.60	9.25	NP	9.25									
8	Mar-10	17.60	8.42	NP	9.18									

			MW-15		
Sampling Event No.	Date	TOC Elevation	DTP	GW Elevation	
•		Installed	between 2004-200	6	
1	Dec-06	17.80 ^(c)	9.15	NP	8.65
2 Dec-07		17.80	9.30	NP	8.50
3	Mar-08	17.80	9.20	9.18	8.60
4	Jun-08	17.80	9.60	9.63	8.20
5	Sep-08	17.80	8.84	8.84 ^(f)	8.96
6	Dec-08	17.80	9.19	8.36	8.61
7 Mar-09		17.80	8.70	NP	9.10
8	Mar-10	17.80	8.81 ^(e)	8.81	8.99

]	MW-16		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installed b	etween 2004-20	06	
1	Dec-06	NA	NA	NA	NA
2	Dec-07	17.74 ^(c)	9.36	NP	8.38
3	Mar-08	17.74	9.88	NP	7.86
4	Jun-08	17.74	9.25	NP	7.80
5	Sep-08	17.74	9.07	NP	8.67
6	Dec-08	17.74	9.45	NP	8.29
7	Mar-09	17.74	8.88	NP	8.86
8	Mar-10	17.74	8.92	NP	8.82

		I	MW-17		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installed be	etween 2004-20	06	
1	Dec-06	NA	NA	NA	NA
2 Dec-07		18.17 ^(c)	9.40	9.32	8.77
3	Mar-08	18.17	9.34	9.18	8.83
4	Jun-08	18.17	8.98	8.97	9.19
5	Sep-08	18.17	9.21	7.92	8.96
6	Dec-08	18.17	9.25	9.11	8.92
7	Mar-09	18.17	8.89	NP	9.28
8	Mar-10	18.17	8.93	NP	9.24

	MW-18														
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation										
	Installed between 2004-2006														
1	Dec-06	NA	NA	NA	NA										
2	Dec-07	16.35 ^(c)	8.30	NP	8.05										
3	Mar-04	16.35	8.34	NP	8.01										
4	Jun-08	16.35	8.34	NP	8.20										
5	Sep-08	16.35	8.48	NP	7.87										
6	Dec-08	16.35	8.61	NP	7.74										
7	Mar-09	16.35	7.75	NP	8.60										
8	Mar-10	16.35	7.97	NP	8.38										

			MW-E													
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation											
1	Dec-88	NM	NM	NM	NM											
2	May-89	15.32	10.39	NP	4.93											
3	Feb-91	NM	NM	NM	NM											
4	Mar-04	17.80	9.92	NP	7.88											
5	Nov-06 ^(d)	17.80	10.22	NP	7.58											
6	Dec-07	17.47 ^(c)	10.03	NP	7.44											
7	Mar-08	17.47	10.21	NP	7.26											
8	Jun-08	17.47	10.20	NP	7.27											
9	Sep-08	17.47	9.55	NP	7.92											
10	Dec-08	17.47	10.32	NP	7.15											
11	Mar-09	17.47	9.79	NP	7.68											
12	Mar-10	17.47	9.82	NP	7.65											

			RW-1						
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
1	Dec-88	NM	NM	NM	NM				
2	May-89	14.54	10.17	10.14	4.37				
3	Feb-91	14.54	11.46	10.85	3.57				
4	Mar-04	18.32	7.20	5.62	11.12				
5	Nov-06 ^(d)	18.32	9.15	9.11	9.17				
6	Dec-07	16.70 ^(c)	9.53 ^(e)	9.53	7.17				
7	Mar-08	16.70	8.99	8.92	7.71				
8	Jun-08	16.70	8.95	8.87	7.75				
9	Sep-08	16.70	NM ^(c)	NM ^(c)	NM ^(c)				
10	Dec-08	16.70	NM	NM	NM				
11	Mar-09	16.70	9.06 ^(e)	9.06	7.64				
12	Mar-10	16.70	8.93 ^(e)	8.93	7.77				

Notes:

The 1988, 1989, and 1991 water elevations were measured by Groundwater Technology, Inc.

The 2004 and 2006 water elevations were measured by PES Environmental.

NS = Not sampled

NP = No product

NM - Not measured

NA = data not available from the previous consultant for this event

TOC Elevation = Top of Casing Elevation

DTW = Depth to water from the top of the casing

DTP - Depth to product from the top of the casing

GW Elevation - Groundwater elevation as compared to mean sea level

^(a) Wells resurveyed in May 1989

^(b)New elevation recorded by PES. Date of survey unclear.

 $^{\rm (c)}$ Wells resurveyed by PES in April 2007

^(d) no water level data available for the December 2006 sampling event

^(e) Thickness of product interfered with determining oil/water interface.

^(f)Depth to groundwater = depth to free product as difference could not be determined

APPENDIX E

Historical Product Extraction Data Table

Table D	
Historical Trench and Monitoring Well Product Recove	ry
6400 Christie Avenue, Emeryville, CA	-

												W	ell or T	rench L	ocation													
Extraction Date	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-0	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-E	RW-1	ТА-Е	ТА-М	TA-W	тв-е	тв-м	TB-W	тс-е	тс-м	тс-w	Total Extracted
Apr-04	MI11-3		1111-5	1111-0		1.00		1.00		11111-12	MI W-15		MI 11-13	11111-10	14144-17		MIW-L	19.75	14-12	14-14	14-11	ID-L	10-11	10-11	IC-L	10-11	10-11	21.75
May-04						1.00		1.00										22.5										22.50
Sep-04																		0.74										0.74
Oct-04																		5.22										5.22
2004 Total	14 Total 50.21																											
Jan-05																												
Apr-06																					3.3							3.30
Jun-06																			8.9	9.2	10.3							28.40
Jul-06																			3.6	5	5.3							13.90
Aug-06						0.8		0.8			1	0.2	0.2						0.2	0.2	0.4							3.80
Sep-06								0.8			0.2	0.3							0.6		0.6							2.50
Nov-06																			0.2									0.20
Dec-06																			0.2									0.20
2006 Total						· · · · · · · · · · · · · · · · · · ·																						52.30
Jan-07																			0.2									0.20
Feb-07																			0.2									0.20
Mar-07																			0.2									0.20
Nov-07																				0.81	0.68				0.63			2.12
Dec-07																			0.01	0.61	0.07				0.002			0.69
2007 Total																												3.41
Feb-08	0.03																	0.45	0.08	0.06	0.18	0.04	0.06	0.06	0.08	0.05	0.05	1.14
Feb-08			0.05															0.45	0.15	0.15	0.30							1.10
Mar-08				0.02	0.002	0.02	0.001	0.04	0.02	0.03	0.004	0.01	0.02	0.01	0.01	0.003	0.012	0.3	0.09	0.06	0.09				0.06			0.80
Mar-08																				0.002	0.008		-					0.01
May-08	0.09							0.075		0.075	0.019	0.009			0.13			1.397	0.866	1.466	1.431							5.56
Jun-08																			0.15	0.11	0.57		-					0.83
Aug-08	0.12							0.048		0.024	0.009							0.75	0.9	1.6	0.7	0.3	0.3		0.15			4.90
Sep-08																			0.03	0.09	0.048							0.17
Nov-08	0.078					0.009				0.06	0.009			0.003	0.06			0.6	0.1	0.03		0.06	0.06	0.06	0.06	0.09	0.09	1.37
Dec-08																			0.0003	0.08					0.03			0.11
2008 Total																												15.99
Mar-09	0.279					0.378		0.369		0.261	0.007	0.023	0.117		0.342		0.023	1.800	0.750	0.950	1.010	0.153	0.153	0.153	0.653	0.153	0.153	7.73
Jun-09																			0.5									0.50
Sep-09	0.286				0.022	0.418		0.176	0.308	0.176	0.088	0.007	0.176	0.088	0.176	0.022	0.066	7.15	1.4	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	19.46
Dec-09																			0	0.9	0.06				0			0.96
2009 Total																												28.65
Mar-10	0.14				0.01	0.18	0.02	0.60		0.60	0.03	0.10	0.69	0.04	0.30	0.02		8.00	1.30	1.00	1.00	0.50	1.00	0.50	1.00	1.00	1.00	19.03
Total Extracted	1.02	0.00	0.05	0.02	0.03	2.81	0.02	3.91	0.33	1.23	1.37	0.65	1.20	0.14	1.02	0.05	0.10	69.11	20.63	23.42	27.25	2.15	2.67	1.87	3.77	2.39	2.39	169.59

Note:

All free product quantities presented in gallons

Product extraction events conducted before November 2007 were completed by PES Environmental

APPENDIX F

Groundwater Disposal Documentation

				·**;								
				F	EES-4							
Plea	se nri	int or type. (Form desig	gned for use on elite (12-pitch) typ									DMB No. 2050-0039
		FORM HAZARDOUS	1. Generator ID Number		2. Page 1 of	3. Emerge	ncy Response	Phone	4. Manifest	Iracking N	5369	
11	14/	ASTE MANIEEST	(A100033	1636	4	180	0-424-93	300		סווָכ	0303	JJK
	5 Ge	nerator's Name and Mailin	ng Address Address Address Stie Stie CA 9460 Y	1000		Generator's	Site Address	(if different th	an mailing addres	ss)		
	٦. ۲	AV CDAte	apartments									
	6	400 CHr	istie St									
	ĕ	meryville erator's Phore: 51	CA 4460Y		1							
	Gene	ansporter 1 Company Nam	0 594 -2010						U.S. EPA ID I	Number		
	0. 118		N ENVIRONMENTAL	SERVICES						98241	3262	
									U.S. EPA ID N			
	7.16	ansporter 2 Company Nam	ne.						1			
									U.S. EPAID N	lumber		
Π	8. De	esignated Facility Name an	•						U.S. LPAND	iunider)
11			RGREEN OIL, INC.			•						
11		6880 Smith Av	ve. Newark, Ca. 9 510-795-4400	94560					L CAD9	80887	418	
	Faci	lity's Phone:	510-795-4400	,								
	9a.		tion (including Proper Shipping Name, I	Hazard Class, ID Number	r,		10. Contain	iers	11. Total	12 Unit	13. W	aste Codes
11	нм	and Packing Group (if a	any))				No.	Туре	Quantity	Wu/Vol.		
12		1.					001				223	
12		NON-RCRA	HAZARDOUS WAS	TE, LIQUID			001	TT	1000	G	25	
R			(Oil E	water)					1020			
GENERATOR		2.										
15									• •			
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	14 5	Special Handling Instruction	ns and Additional Information						1	1	1	
		j										
		PROFILE #							INVO	ICE #	5556	575
		DOT FRG# 17	71 WEAR PROTEC	TIVE CLOTH	ING							271764
			OR'S CERTIFICATION: I hereby decla			are fully and	accurately de	scribed abov				
		marked and labeled/placa	arded, and are in all respects in proper	condition for transport ac	cording to appli	cable intern	ational and nati					
			contents of this consignment conform									
		erator's/Offeror's Printed/Ty	nimization statement identified in 40 Cl	-R 202.27(d) (ii 1 dili d id		ierator) or (c) (ii i am a sma		nerator) is true.		Mont	h Day Year
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11	18. C	Discrepancy										
	18a.	Discrepancy Indication Spa	oace Quantity	🗌 Туре			Residue		Partial Re	jection	[Full Rejection
Ľ						Man	ifest Reference	Number:				
DESIGNATED FACILITY	18b.	Alternate Facility (or Gener	erator)						U.S. EPA ID	Number		
V												
L E		ity's Phone.									· · · · · · · · · · · · · · · · · · ·	
E	180.	Signature of Alternate Faci	sility (or Generator)								Mor	nth Day Year
N.												
	19. H	lazardous Waste Report M	lanagement Method Codes (i.e., code	s for hazardous waste tre	eatment, disposa	al, and recyc	ling systems)					
ЦЩ	1.		2.		3.				4.			
11	<u> </u>											
	20.0	Designated Facility Owner of	or Operator: Certification of receipt of	nazardous materials cove	ered by the man	ifest except	as noted in Iter	n 18a				
	Print	ed/Typed Name				gnature					Mor	nth Day Year
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