FIRST SEMIANNUAL 2009 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 2009

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6475 CHRISTIE AVENUE, SUITE 550
EMERYVILLE, CA 94608

Prepared by:

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

April 30, 2009

Project No. 2007-65

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April 30, 2009

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 2009 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 2009 and March 2009 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 and the first semiannual 2009 groundwater monitoring event. In the same timeframe, we also completed an indoor air survey and preferential pathway evaluation, and the report of those activities was submitted earlier this month.

While historical monitoring at the subject site had been sporadic, quarterly sampling conducted in 2008 firmly established hydrological and contaminant trends; therefore, in November 2008, the Alameda County Department of Environmental Health (ACEH) and the Responsible Party agreed that the sampling schedule would be reduced to semiannual events. This report summarizes the 11th sampling event conducted at the site since 1988. 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,

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

Teal Glass, R.E.A.
Project Manager

cc: Ms. Sarah Irving, 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.

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SITE LOCATION ON AERIAL PHOTO

6400 Christie Ave.
Emeryville, CA

By: MJC | JANUARY 2008

Figure 1

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2007-65-01

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SITE PLAN AND ADJACENT LAND USE

6400 Christie Ave. Emeryville, CA	By: MJC	JANUARY 2008
	Figure 2	

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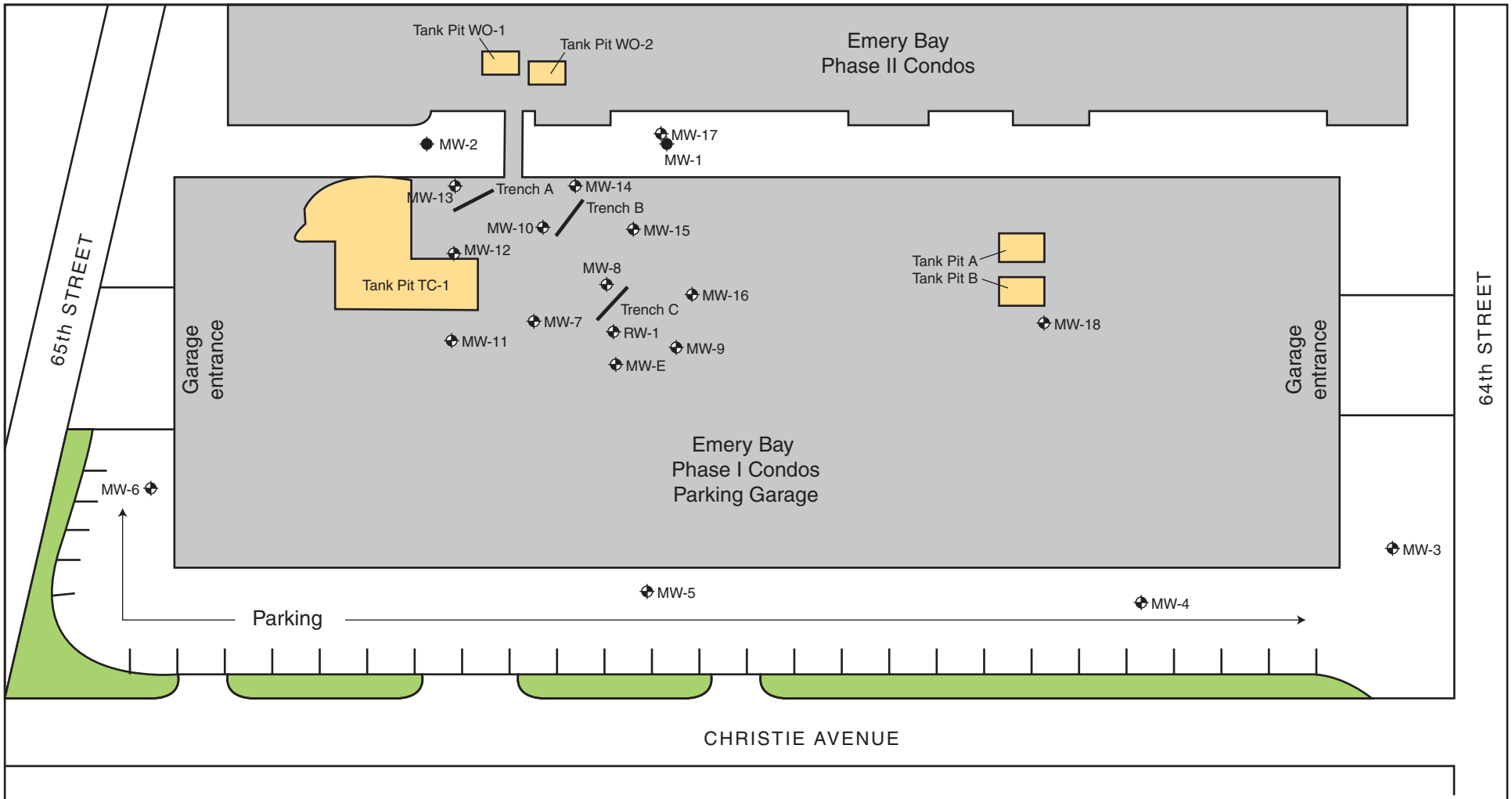
2007-65-07

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 address the contamination in 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 1 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.



LEGEND

- Monitoring well
- Monitoring well (presumed abandoned)
- Trench location
- Historical tank pit area
- Landscaping

0 60

SCALE: 1/2" = 60 FEET

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MONITORING WELL AND TRENCH LOCATIONS

6400 Christie Ave., Emeryville, CA

Figure 3

by: MJC | JANUARY 2008

2007-65-02

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.

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).

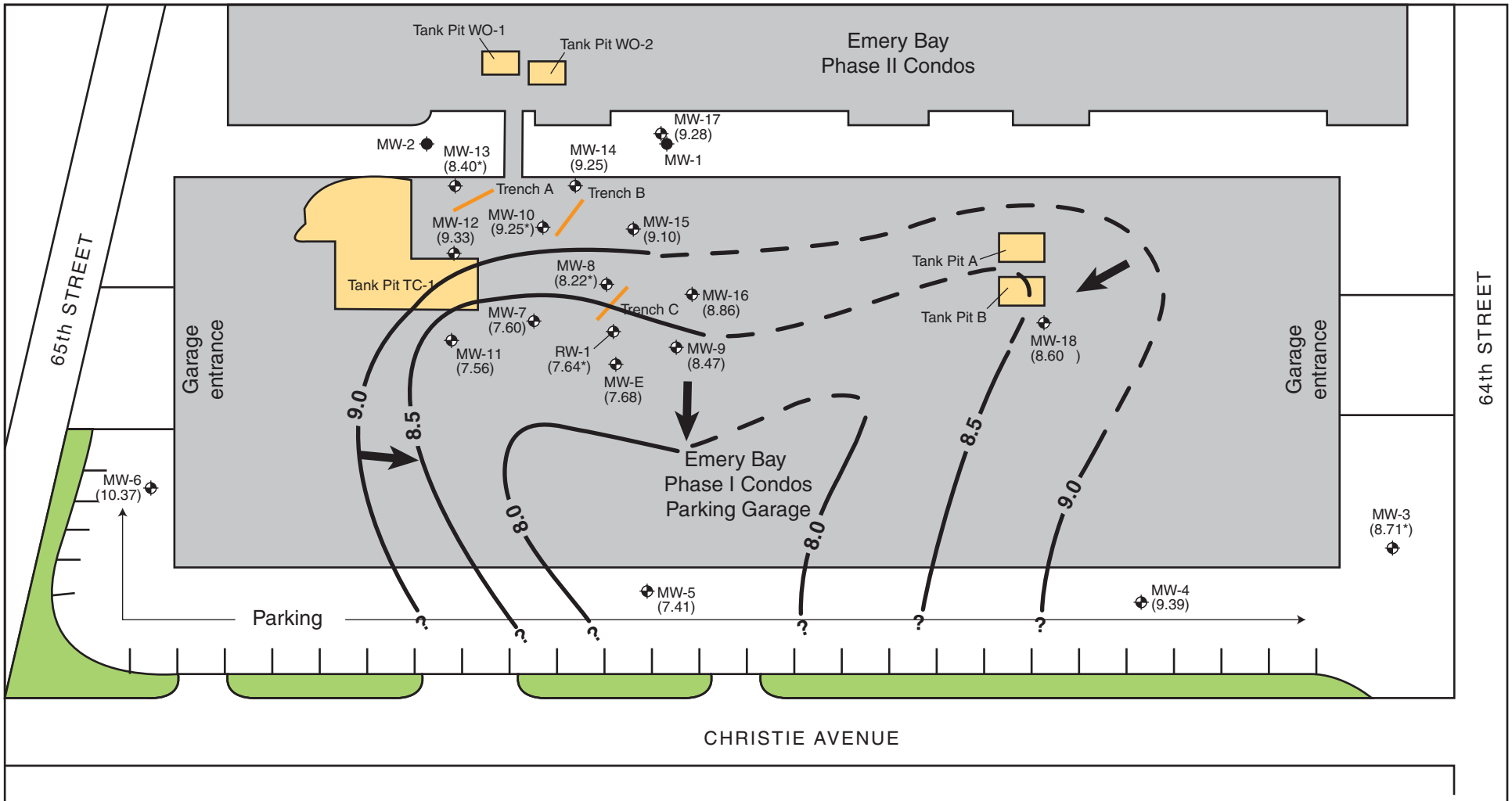
The closest major fault, the Hayward Fault, is located about 3 miles east of the property. While the site is located in a seismically active area, it is not within an Alquist-Priolo Special Studies active

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, and the groundwater gradient measured during the March 2009 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 2009 event ranged from 7.41 to 10.37 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).



LEGEND

- Monitoring well
- Monitoring well (presumed abandoned)
- Trench location
- Groundwater elevation contour in feet amsl
- Historical tank pit area
- Landscaping
- Inferred direction of groundwater flow
- Extrapolated groundwater elevation contour
- * Groundwater elevation not used in determining contour due to the presence of free product
- NM = Depth to groundwater could not be measured due to the presence of tar

0 40

SCALE: 1/2" = 60 FEET

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GROUNDWATER ELEVATION MAP — March 19, 2009

6400 Christie Ave., Emeryville, CA

Figure 4

by: MJC

APRIL 2009

2007-65-30

3.0 MARCH 2009 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 19, 20, and 23 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
Groundwater Monitoring Well Construction and Groundwater Elevation Data
6400 Christie Avenue, Emeryville, California

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 19, 2009)
MW-3	25	5 to 20	16.65	NA	NA	8.71
MW-4	25	5 to 20	16.29	NA	NA	9.39
MW-5	25	5 to 20	16.72	NA	NA	7.41
MW-6	25	5 to 20	16.82	NA	NA	10.37
MW-7	20	5 to 20	17.73	NA	NA	7.60
MW-8	16	5 to 16	17.84	8.89	0.73	8.22
MW-9	20	5 to 20	17.84	NA	NA	8.47
MW-10	20	5 to 20	17.83	8.54	0.04	9.25
MW-11	20	5 to 20	17.76	NA	NA	7.56
MW-12	20	5 to 20	17.83	NA	NA	9.33
MW-13	20	5 to 20	17.66	9.14	0.12	8.40
MW-14	20	5 to 20	17.60	NA	NA	9.25
MW-15	20	5 to 20	17.80	NA	NA	9.10
MW-16	20	5 to 20	17.74	NA	NA	8.86
MW-17	20	5 to 20	18.17	NA	NA	9.28
MW-18	20	5 to 20	16.35	NA	NA	8.60
MW-E	47	7 to 40	17.47	NA	NA	7.68
RW-1	30	unknown	16.70	9.06	NM	NM[b]
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

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 ¾-inch PVC. RW-1 is 10-inch PVC.

Approximately 47 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, 718.25 gallons of water and 1.5 gallons of product were removed/purged from select wells during the passive and active product removal events. All purged groundwater and free product were containerized in a 1,100-gallon onsite aboveground storage tank (AST). On March 27, 2009, Evergreen Oil, Inc. vacuumed and transported the water to its recycling facility under manifest number 004004667 (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 is/is not a potential 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 potential 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 have decreased in the majority of the wells from the last sampling event; however, concentrations of

diesel have increased, with historic highs observed in eight of the wells (MW-4, MW-5, MW-9, MW-12, MW-13, MW-15, MW-16, and MW-18).

GROUNDWATER SAMPLE RESULTS

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

Table 2
Groundwater Sample Analytical Results – March 19, 20, and 23, 2009
6400 Christie Avenue, Emeryville, California

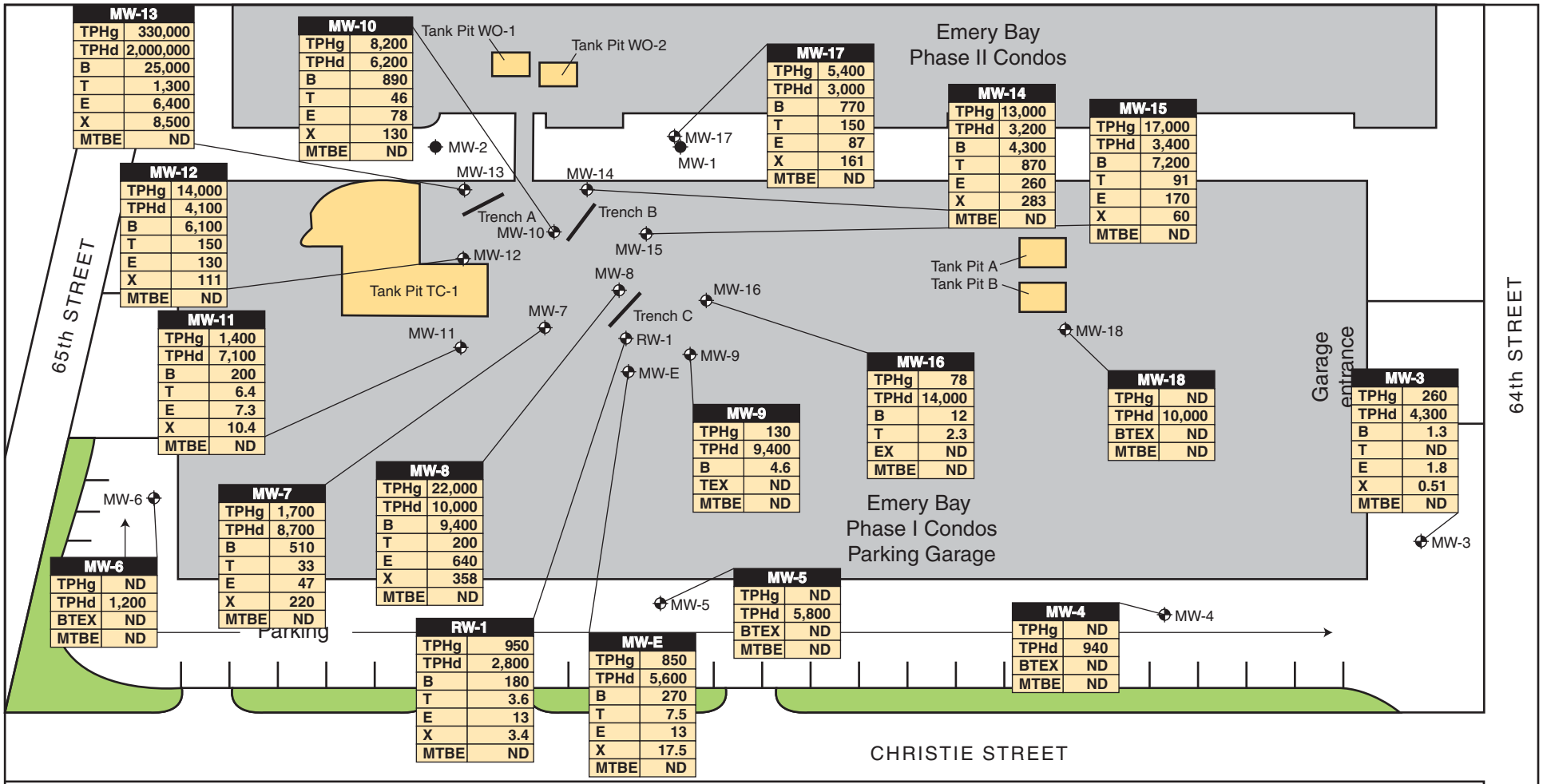
Well ID	Analytical Results						
	TPHg	**TPHd**	**Benzene**	**Toluene**	**Ethyl-benzene**	**Total Xylenes**	**MTBE**
MW-3	**260**	**4,300**	1.3	<0.5	1.8	0.51	2.9
MW-4	<50	**940**	<0.5	<0.5	<0.5	<0.5	<2.0
MW-5	<50	**5,800**	<0.5	<0.5	<0.5	<0.5	<2.0
MW-6	<50	**1,200**	<0.5	<0.5	<0.5	<0.5	<2.0
MW-7	**1,700**	**8,700**	**510**	33	**47**	**220**	<10
MW-8	**22,000**	**10,000**	**9,400**	**200**	**640**	**358**	<50
MW-9	130	**9,400**	4.6	<0.5	<0.5	<0.5	<2.0
MW-10	**8,200**	**6,200**	**890**	46	**78**	**130**	<20
MW-11	**1,400**	**7,100**	**200**	6.4	7.3	10.4	<2.0
MW-12	**14,000**	**4,100**	**6,100**	**150**	**130**	**111**	<40
MW-13	**330,000**	**2,000,000**	**25,000**	**1,300**	**6,400**	**8,500**	<1,000
MW-14	**13,000**	**3,200**	**4,300**	**870**	**260**	**283**	<50
MW-15	**17,000**	**3,400**	**7,200**	91	**170**	60	<50
MW-16	78	**14,000**	12	2.3	<0.5	<0.5	<2.0
MW-17	**5,400**	**3,000**	**770**	**150**	**87**	**161**	<2.0
MW-18	<50	**10,000**	<0.5	<0.5	<0.5	<0.5	<2.0
MW-E	**850**	**5,600**	**270**	7.5	**13**	**17.5**	<2.0
RW-1	**950**	**2,800**	**180**	3.6	**13**	**3.4**	<2.0
ESLs [(a)]	**100 / 210**	**100 / 210**	**1.0 / 46**	**40 / 130**	**30 / 43**	**20 / 100**	**5.0 / 1,800**

Notes:

[(a)] Water Board Environmental Screening Levels for residential sites where groundwater is/is not 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 (µg/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.



LEGEND

- Monitoring well
- Monitoring well (presumed abandoned)
- Trench location
- Historical tank pit area
- Landscaping

TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
ND = Below the laboratory detection limit
MTBE = Methyl Tertiary Butyl Ether

All concentrations in micrograms per liter (µg/L)

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GROUNDWATER MONITORING WELL ANALYTICAL RESULTS

6400 Christie Ave., Emeryville, CA

Figure 5

by: MJC | APRIL 2009

2007-65-33

Hydrocarbon Contaminants

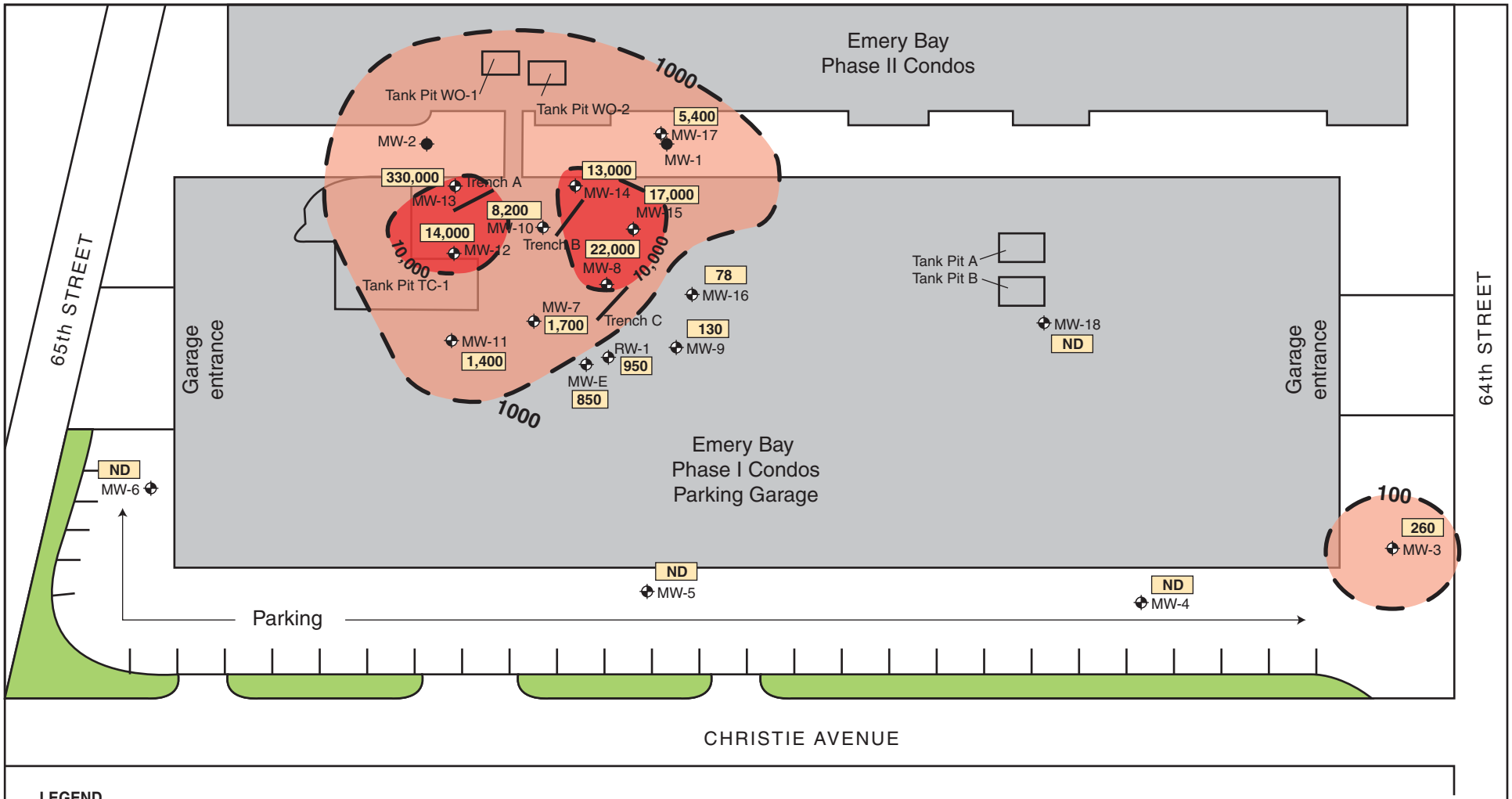
During the March 2009 sampling event, several wells had reported hydrocarbon concentrations greatly in excess of the Water Board ESLs. However, hydrocarbon concentrations in wells can be significantly affected by the purging of accumulated hydrocarbons product, so large swings in concentration (both 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, MW-E, and RW-1 above the ESL where groundwater is not a drinking water resource (210 micrograms per liter [µg/L]). Gasoline was also detected in MW-9 and MW-16, but at concentrations below the ESL. The highest concentration (330,000 µg/L) was observed in MW-13. This concentration is well below the 2,700,000 µg/L observed during the December 2008 event, but above the 98,000 observed during the March 2008 event.

Figure 6 shows an isoconcentration contour map of TPHg concentrations in groundwater based on the December 2008 monitoring well analytical results. Increases compared to the December 2008 monitoring event were observed in wells MW-7, MW-9, MW-11, MW-13, MW-15, MW-16, and RW-1; and decreases were observed in wells MW-3, MW-8, MW-10, MW-12, MW-14, MW-17, and MW-E. Concentrations in perimeter wells MW-4, MW-5, MW-6, and MW-18 remained the same. When comparing the concentrations to the March 2008 sampling event, wells MW-3, MW-8, MW-9, MW-10, MW-14, and MW-16 exhibited increases; wells MW-7, MW-11, MW-12, MW-13, MW-15, MW-17, MW-E, and RW-1 showed decreases; and perimeter wells MW-4, MW-5, MW-6, and MW-18 remained the same.

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 (2,000,000 µg/L) was observed in MW-13. This diesel concentration is a new historic high. In addition, new historically high concentrations were observed in MW-4, MW-5, MW-9, MW-12, MW-13, MW-16, and MW-18. A new historic high was also observed in MW-15, but was the same as the concentration observed in September 2008. Overall, diesel concentrations increased compared to both the December 2008 (12 of 18 wells) and March 2008 (10 of 18 wells) sampling events. Decreases in diesel concentrations compared to the December 2008 event were observed in MW-6, MW-11, MW-17, MW-E, and RW-1. Decreases in diesel concentrations compared to the March 2008 event were observed in MW-3, MW-8, MW-10, MW-11, MW-14, MW-17, MW-E, and RW-1.

Figure 7 is an isoconcentration contour map of TPHd concentrations in groundwater based on the December 2008 monitoring well analytical results.



LEGEND

- Monitoring well
- Monitoring well (presumed abandoned)
- Trench location
- 84 — Total petroleum hydrocarbons as gasoline concentration in micrograms per liter (µg/L)
- Historical tank pit area
- Landscaping
- 100 — Gasoline isoconcentration contour

0 60

SCALE: 1/2" = 60 FEET

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GEOSCIENCE & ENGINEERING CONSULTING

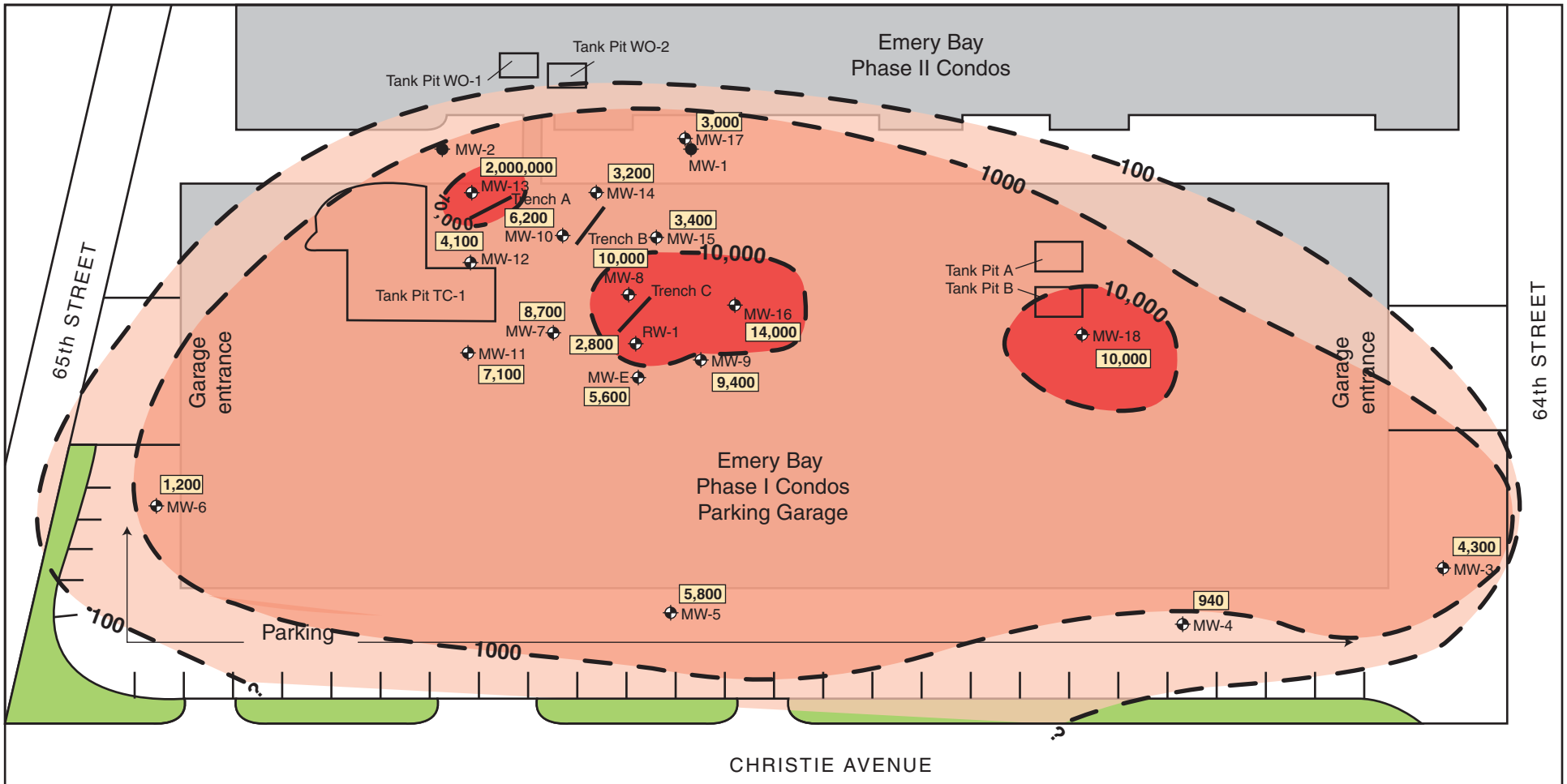
TOTAL PETROLEUM HYDROCARBON PLUME AS GASOLINE

6400 Christie Ave., Emeryville, CA

Figure 6

by: MJC | APRIL 2009

2007-65-32



LEGEND

- Monitoring well
- Monitoring well (presumed abandoned)
- Trench location
- 1,100 — Total petroleum hydrocarbons as diesel concentration in micrograms per liter (µg/L)
- Historical tank pit area
- Landscaping
- 100 — Diesel isoconcentration contour

0 60

SCALE: 1/2" = 60 FEET

N

STELLAR ENVIRONMENTAL SOLUTIONS, INC
GEOSCIENCE & ENGINEERING CONSULTING

TOTAL PETROLEUM HYDROCARBON PLUME AS DIESEL

6400 Christie Ave., Emeryville, CA

Figure 7

by: MJC | APRIL 2009

2007-65-31

In MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1, 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-9, and MW-16, but at concentrations below the ESL.

Toluene was detected above the ESL of 130 µg/L in monitoring wells MW-8, MW-12 MW-13, MW-14, and MW-17. Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a drinking water resource) in monitoring wells MW-7, MW-8, MW-10, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1. Total xylene concentrations in monitoring wells MW-7, MW-8, MW-10, MW-12, MW-13, MW-14, MW-17, MW-E, and RW-1 were above the 100-µg/L ESL where groundwater is not a drinking water resource. MTBE was not detected above the ESL of 1,800 µg/L in any of the monitoring wells. MTBE was detected in MW-3 at 2.9 µg/L, which is well 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 17 and 18, 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.

Table 3
Passive Trench Product Extraction – March 17 and 18, 2009

Trench ID	Number of Skimmers in Well	Total Product Removed (gallons)
TA-E	2	0.3
TA-M	2	0.5
TA-W	2	0.2
TB-E	0	NM
TB-M	0	NM
TB-W	0	NM
TC-E	1	0.5
TC-M	0	NM
TC-W	0	NM
Total Product Removed		**1.5**

Note:
NM = Not measures. No skimmer was located in the well, or no product was present.

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 2009 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 17 and 18) to the groundwater sampling event (March 19, 20, and 23). A total of approximately 718.25 gallons of groundwater and 6.4 gallons of free product were removed during the March 2009 active product removal event, in addition to 1.5 gallons removed passively from the skimmers. A sample taken from the AST on December 31, 2008 contained a TVHg concentration of 6,900 µg/L and TEHd concentration of 340,000 µg/L. Based on the total amount of groundwater removed, 718.25 gallons, SES calculated that approximately 0.04 pound of gasoline and 1.9 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 2009 extraction event.

The removal activities occurred as follows:

- On March 17 2009, SES removed a total of 0.5 gallon of groundwater from MW-13, 20 gallons from MW-12, 25 gallons from MW-10, 1.5 gallons from MW-14, 4 gallons from MW-15, 18 gallons from MW-8, 30 gallons from MW-17, and 10 gallons from MW-3. A total of 0.2 gallon was removed from the skimmers in trench well TA-W, and an additional 40 gallons were removed by active purging; 0.5 gallon was removed from the skimmers on trench well TA-M, and an additional 25 gallons were actively purged; and 0.3 gallon was removed from the skimmers on TA-E, and 25 gallons were actively purged.

Table 4
Active Product Extraction – March 2009

Well	Total Gallons of Product Removed	Well	Total Gallons of Product Removed
MW-3	0.279	MW-17	0.342
MW-5	NP	MW-18	NP
MW-6	NP	MW-E	0.023
MW-7	NP	RW-1	1.800
MW-8	0.378	TA-E	0.450
MW-9	NP	TA-M	0.450
MW-10	0.369	TA-W	0.810
MW-11	NP	TB-E	0.153
MW-12	0.261	TB-M	0.153
MW-13	0.007	TB-W	0.153
MW-14	0.023	TC-E	0.153
MW-15	0.117	TC-M	0.153
MW-16	NP	TC-W	0.153
		Total	**6.38**

Notes:

NP = not purged

Product removal estimates are based on the total amount of free product measured in the purge tank (6.4 gallons) per total amount of groundwater purged (718.25 gallons), which yields 0.009 gallon of product per 1 gallon of purge water.

A total of 0.3 gallon was removed from the skimmer in trench well TC-E, and 17 gallons were purged from TC-E, TC-M, and TC-W. On trench wells TB-E, TB-M, and TB-W, 17 gallons were removed from each. A total of 100 gallons was removed from recovery well RW-1.

- On March 18, 2009, 0.25 gallon was removed from MW-13, 9 gallons from MW-12, 16 gallons from MW-10, 1 gallon from MW-14, 9 gallons from MW-15, 24 gallons from MW-8, 2.5 gallons from MW-E, and 21 gallons from MW-3. The skimmers in trench A were filled with water; however, product was noticeably present. SES purged 50 gallons from trench well TA-W and 25 gallons from trench wells TA-M and TA-E. SES also purged 100 gallons from RW-1, 0.5 gallon from MW-13, 25 gallons from MW-8, and 8 gallons from MW-17.

- 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 March 27, 2009, 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 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 11th 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 2009 event ranged from 7.41 to 10.37 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 detected only in MW-3 during this event, and the concentrations was 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, MW-E, and RW-1 above the ESL where groundwater is not a drinking water resource (210 µg/L). Gasoline was also detected in MW-9 and MW-16, but at concentrations below the ESL. The highest concentration (330,000 µg/L) was observed in MW-13. This concentration is well below the 2,700,000 µg/L observed during the December 2008 event, but above the 98,000 observed during the March 2008 event.
- When comparing the concentrations to the March 2008 sampling event, wells MW-3, MW-8, MW-9, MW-10, MW-14, and MW-16 exhibited increases; wells MW-7, MW-11, MW-12, MW-13, MW-15, MW-17, MW-E, and RW-1 showed decreases; and perimeter wells MW-4, MW-5, MW-6, and MW-18 remained the same.
- 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 (2,000,000 µg/L) was observed in MW-13. This concentration is a new historic high. In addition, new historic high concentrations were observed in MW-4, MW-5, MW-9, MW-12, MW-13, MW-16, and MW-18. A new historic high was also observed in MW-15, but matched the concentration detected in September 2008.
- Overall, diesel concentrations increased compared to both the December 2008 (12 of 18 wells) and March 2008 (10 of 18 wells) sampling events.
- In MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1, 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-9, and MW-16, but at concentrations below the ESL.
- Toluene was detected above the ESL of 130 µg/L in monitoring wells in MW-8, MW-12, MW-13, MW-14, and MW 17.
- Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a drinking water resource) in monitoring wells MW-7, MW-8, MW-10, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1.
- Total xylene concentrations in monitoring wells MW-7, MW-8, MW-10, MW-12, MW-13, MW-14, MW-17, MW-E, and RW-1 were above the 100-µg/L ESL where groundwater is not a drinking water resource.
- MTBE was not detected above the ESL of 1,800 µg/L in any of the monitoring wells. MTBE was detected in MW-3 at 2.9 µg/L, which is well below the ESL.
- SES conducted passive skimmer product removal on the trench wells during the March 2009 removal event. A total of approximately 1.5 gallons was removed from trench wells TA-E, TA-M, TA-W, and TC-E.

- SES also conducted active product removal on the trench wells, source area wells, recovery well, and monitoring well MW-3 during the March 2009 event. A total of approximately 718.25 gallons of groundwater and 6.4 gallons of free product were removed. A sample taken from the AST on December 31, 2008 contained concentrations of TVHg at 6,900 µg/L and TEHd at 340,000 µg/L. Based on the total amount of groundwater removed, 718.25 gallons, SES calculated that approximately 0.04 pound of gasoline and 1.9 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

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

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

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

MW-7									
Sampling Event No.	**Date Sampled**	**TEH-d**	**TVH-g**	**TEH-mo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**
Installed in March 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

MW-8									
Sampling Event No.	**Date Sampled**	**TEH-d**	**TVH-g**	**TEH-mo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**
Installed in 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

MW-9									
Sampling Event No.	**Date Sampled**	**TEH-d**	**TVH-g**	**TEH-mo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**
Installed in March 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	0.54	<0.5	<0.5	<2.0
8	Mar-09	9,400	130	NA	4.6	<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 March 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

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

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

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

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

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

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

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

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

MW-E									
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

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

Notes:

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

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME STELLAR @ BAY CENTER				PROJECT NUMBER 090319-JP1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Ultrameter Myron L	6226032	3/19/09	7.0 pH, 10.0 pH, 4.0 pH, 3900 µS	7.0, 10.0, 4.0 3900 µS	YES	18.7	
ULTRAMETER MYRON L.	6209574	3/19/09	PH 7, 10, 4, 3900	7.16, 9.56, 4.10,	YES	18.9	JP
HACH TURBIDIMETER	68010C027400	3/19/09	100/20	91/21	YES	—	JP
HACH TURBIDIMETER	070800C023524	3/19/09	100/20	104/22	YES	—	JP
HACH TURBIDIMETER	08030C028731	3/20/09	100/20	92/21	YES	—	JP
ULTRAMETER MYRON L	6215691	3/20/09	PH 7, 10, 4 3900 µS	7.02, 9.95, 3.97 3912	YES	17.6	JP
HACH TURBIDIMETER	070800C023524	3/23/09	100/20	21/109	YES	—	JP
MYRON L ULTRAMETER	6226032	3/23/09	PH 7, 10, 4 3900 µS	7.10, 10.18, 4.07 3910	YES	13.7	JP

WELL GAUGING DATA

Project # 090319-SP1 Date 3/19/03 Client Stellar Environmental

Site 65th & Bay Streets, Emeryville, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or ~~TOC~~	Notes
MW-3	1012	2		24.71			7.94	24.91		
MW-4	1045	2					6.90	24.88		
MW-5	1054	2					9.31	24.74		
MW-6	1059	2					6.45	23.25		
MW-17	0955	3/4					~~10.13~~ 8.89 SP	~~19.86~~ 19.50 SP		
MW-7	1030	3/4					10.13	19.86		
MW-9	1054	3/4	odor				9.37	19.63		
MW-11	~~1013~~ 1113	3/4					10.20	1965		
MW-12	1024	3/4	odor				8.50	18.97		SP
MW-16	1116	3/4					8.88	19.03		
MW-18	1110	3/4					7.75	19.49		
MW-E	1100	2					9.79	44.92		
MW-14	1005	3/4					8.35	18.35		
MW-15	0955	3/4					8.70	18.85		
MW-8	~~1030~~ 1048	3/4		8.89			~~10.13~~ 9.62 SP	~~19.86~~ SP		
MW-10	1000	3/4		8.54	0.04		8.58	—		
MW-13	1021	3/4		9.14	0.12		9.26	—	↓	

WELL GAUGING DATA

Project # 090319-JPL Date 3/19/09 Client Stellar Environmental

Site 65th & Bay Streets, Emeryville, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
RW-1	1150	12		9.06			—	—		

WELLHEAD INSPECTION CHECKLIST

Date 3/19/09 Client STELLAR

Site Address 65TH/BAY STREET, EMERYVILLE, CA

Job Number 090319-JP1 Technician JD, CM, AC

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-3							X	
MW-4							X	
MW-5							X	
MW-6							X	
MW-17							X	
MW-7							X	
MW-9							X	
MW-11	X							
MW-12							X	
MW-16							X	
MW-18	X							
MW-E	X						X	
MW-14	X							
MW-15	X							
MW-8	X							
MW-10							X	

NOTES: MW-3-6: CHERRY BOX, MW-17: 1/2 BOLTS MISSING, MW-7: 1/2 BOLTS, MW-9: NO CAP 2/2 BOLTS MISSING, MW-12: 1/2 BOLTS, MW-16: 2/2 BOLTS, MW-E: 2/2 BOLTS MISSING, NO LOCK, MW-10: 1/2 BOLTS MISSING

WELLHEAD INSPECTION CHECKLIST

Date 3/19/01 Client SELLAE

Site Address 65TH/BAY ST. EMERYVILLE, CA

Job Number 010319-JP1 Technician JP, CM, AK

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-13	X							
RW-1	X							

NOTES: RW-1: VAULT,

WELL MONITORING DATA SHEET

Project #: 090319-JP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: 3/19/09
Well I.D.: MW-E	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 44.72	Depth to Water (DTW): 9.79
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.78	

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

Sampling Method: Bailer
~~Disposable Bailer~~
Extraction Port
Dedicated Tubing
Other: NEW TUBING

1 Case Volume		Specified Volumes		Calculated Volume
5.6	(Gals.) X	3	=	16.8 Gals.

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
	* BENT CASING, UNABLE TO DROP BAILER *					
1327	13.7	7.81	3751	573	5.6	
1350	13.8	7.88	3795	677	11.2	
1405	14.2	7.87	4202	>1000	16.8	

Did well dewater? Yes (No) Gallons actually evacuated: 16.8

Sampling Date: 3/23/09 Sampling Time: 1435 Depth to Water: 15.63

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

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

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

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

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

LL MONITORING DATA SI T

Project #: 090319-SP1	Client: Stellar Env.
Sampler: SP/CM/AC	Date: ~~3/19/09~~ 3/23/09
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 24.91	Depth to Water (DTW): 7.94
Depth to Free Product: 24.71	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: ———	

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

Sampling Method: Bailer; (S) ~~X~~ Disposable Bailer; Extraction Port; Dedicated Tubing; Other: NEW TUBING

1 Case Volume		Specified Volumes		Calculated Volume
2.8	(Gals.) X	3	=	8.4 Gals.

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1124	NO PARAMETER DUE TO PRODUCT/SHEEN IN WELL					DTW: 8.21
1127	PURGE @ 400 ~~ml~~ ML/MIN					DTW: 8.72
1133						DTW: 8.96

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

Sampling Date: 3/23/09 Sampling Time: 1135 Depth to Water: 8.96

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

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

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

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

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

...LL MONITORING DATA SH...T

Project #: 090319-SP1	Client: Stellar Env.
Sampler: SP/CM/AC	Date: 3/19/09
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 24.88	Depth to Water (DTW): 6.90
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.50	

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

Sampling Method: Bailer / X Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

2.9 (Gals.) X	3	=	8.7 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1250	15.5	7.58	1067	106	2.9	
1255	15.3	7.57	973.1	198	5.8	
1300	15.6	7.60	990.5	170	8.7	

Did well dewater? Yes (No) Gallons actually evacuated: 8.7

Sampling Date: 3/19/09 Sampling Time: 1305 Depth to Water: 0700

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

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

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

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

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

ELL MONITORING DATA SHEET

Project #: 090319-SP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: 3/19/09
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 24.74	Depth to Water (DTW): 9.31
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.40	

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

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

2.5 (Gals.) X	3	=	7.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1247	17.7	7.11	2702	>1000	2.5	black
1256	17.6	7.68	2510	>1000	5.0	black
1305	17.8	7.77	2549	>1000	7.5	black

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Date: 3/19/09 Sampling Time: 1315 Depth to Water: 12.35

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

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

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

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

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

LL MONITORING DATA SH T

Project #: 090319-SP1	Client: Stellar Env.
Sampler: SP/CM/AC	Date: 3/19/09
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 23.25	Depth to Water (DTW): 6.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.81	

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

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

16.8

2.7 (Gals.) X 3 = 8.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1257	15.1	10.84	1624	63	2.7	
1303	15.0	11.09	1627	61	5.4	
1309	14.8	11.14	1591	66	8.1	

Did well dewater? Yes (No) Gallons actually evacuated: 8.1

Sampling Date: 3/19/09 Sampling Time: 1320 Depth to Water: 6.51

Sample I.D.: MW-6 Laboratory: Kiff CalScience Other CRT

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

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

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

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

ELL MONITORING DATA SHEET

Project #: 090319-JP1	Client: Stellar Env.
Sampler: (JP)/CM/AC	Date: 3/19/09
Well I.D.: MW-7	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD): 19.80	Depth to Water (DTW): 10.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.07	

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

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

0.19 (Gals.) X	3	=	0.57 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1357	15.0	8.40	13.96	127	0.19	
1400	14.9	8.28	13.34	135	0.38	
1404	14.9	8.22	12.96	156	0.57	

Did well dewater? Yes (No) Gallons actually evacuated: 0.57

Sampling Date: 3/19/09 Sampling Time: 1410 Depth to Water: 12.00

Sample I.D.: MW-7 Laboratory: Kiff CalScience Other CRT

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

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

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

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

LL MONITORING DATA SI T

Project #: 090319-SP1	Client: Stellar Env.
Sampler: (SP)/CM/AC	Date: 3/19/09
Well I.D.: MW-8	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD):	Depth to Water (DTW): 9.62
Depth to Free Product: 8.89	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1336		SPH IN WELL	NO PARAMETERS			DTW: 9.21
1339		↓	↓	↓	↓	DTW: 9.21
1342		↓	↓	↓	↓	DTW: 9.22

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

Sampling Date: 3/20/09 Sampling Time: 1350 Depth to Water:

Sample I.D.: MW-8 Laboratory: Kiff CalScience Other CRT

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

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

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

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

LL MONITORING DATA SH .T

Project #: 090319-JP1	Client: Stellar Env.
Sampler: (JP)/CM/AC	Date: 3/19/09
Well I.D.: MW-9	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD): 19.63	Depth to Water (DTW): 9.37
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.42	

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

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

~~0.20~~ 0.23 (Gals.) X 3 = 0.69 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other .023	radius² * 0.163 .12

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1508	15.1	9.14	2386	39	0.23	
1511	15.0	9.46	2097	502	0.46	
1514	15.0	9.50	2058	571	0.69	

Did well dewater? Yes (No) Gallons actually evacuated: 0.69

Sampling Date: 3/19/09 Sampling Time: 1525 Depth to Water: 11.02

Sample I.D.: MW-9 Laboratory: Kiff CalScience Other CRT

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

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

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

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

WELL MONITORING DATA SHEET

Project #: 090319-SP1	Client: Stellar Env.
Sampler: (SP)/CM/AC	Date: ~~3/19/09~~ 3/20/09
Well I.D.: MW-10	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD):	Depth to Water (DTW): 8.58
Depth to Free Product: 8.54	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	UNABLE TO DETERMINE DTW DUE TO PRODUCT ON PROBE					
1420						DEPTH TO PRODUCT: 8.46
1425						8.46
1428						8.46

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

Sampling Date: 3/20/09 Sampling Time: 1435 Depth to Water:

Sample I.D.: MW-10 Laboratory: Kiff CalScience Other C&T

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

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

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

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

...LL MONITORING DATA SH...T

Project #: 090319-JP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: 3/19/09
Well I.D.: MW-11	Well Diameter: 2 3 4 6 8 3/4"
Total Well Depth (TD): 19.65	Depth to Water (DTW): 10.20
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.09	

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

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

9.45

0.2 (Gals.) X 3 = 0.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

0.0

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1450	15.3	7.69	2915	48	0.2	
1453	15.1	7.70	2906	33	0.4	odor
1455	15.1	7.69	2901	13	0.6	"

Did well dewater? Yes (No) Gallons actually evacuated: 0.6

Sampling Date: 3/19/09 Sampling Time: 1500 Depth to Water: 10.50

Sample I.D.: MW-11 Laboratory: Kiff CalScience Other CRT

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

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

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

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

...LL MONITORING DATA SH...T

Project #: 090319-JP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: ~~3/19/09~~ 3/20/09
Well I.D.: MW-12	Well Diameter: 2 3 4 6 8 (3/4")
Total Well Depth (TD): 18.97	Depth to Water (DTW): 8.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.59	

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

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

0.21 (Gals.) X	3	= 0.63	Gals.
1 Case Volume	Specified Volumes	Calculated Volume	

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

.02

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0905	14.9	7.16	1689	92	0.21	ODOR
0909	14.5	7.32	1550	81	0.42	"
0913	14.4	7.34	1514	153	0.63	"

Did well dewater? Yes (No) Gallons actually evacuated: 063

Sampling Date: 3/20/09 Sampling Time: 0920 Depth to Water: 8.55

Sample I.D.: MW-12 Laboratory: Kiff CalScience Other CRT

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

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

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

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

LL MONITORING DATA SH T

Project #: 090319-JP1	Client: STELLAR
Sampler: JP	Date: 3/20/09
Well I.D.: MW-13	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD):	Depth to Water (DTW): 9.20
Depth to Free Product: 9.14	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	* UNABLE TO DETERMINE DTW DUE TO PRODUCT ON PROBE					
1055					DEPTH TO	PRODUCT : 9.12
1458	BEGAN TO PUMP MOSTLY PRODUCT, LOWERED TUBING					13.30 @ ALLOWED DISCHARGE
1520	BEGAN TO PUMP PRODUCT @ 3 MIN					1589
3/23/09	GRAB	SAMPLE	@ 1230			

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 3/23/09 Sampling Time: 1230 Depth to Water:

Sample I.D.: MW-13 Laboratory: Kiff CalScience Other C&T

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

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

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

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

WELL MONITORING DATA SHEET

Project #: 090319-SP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: ~~3/19/09~~ 3/20/09
Well I.D.: MW-14	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): 18.35	Depth to Water (DTW): 8.35
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.35	

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

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

0.2 (Gals.) X	3	=	0.6 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1202	14.5	8.91	1915	280	0.2	SLIGHT SHEEN/ODOR
1206	14.5	8.52	1681	114	0.4	
1210	14.7	8.38	1662	78	0.6	

Did well dewater? Yes (No) Gallons actually evacuated: 0.6

Sampling Date: 3/20/09 Sampling Time: 1215 Depth to Water: 8.28

Sample I.D.: MW-14 Laboratory: Kiff CalScience Other C&T

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

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

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

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

...LL MONITORING DATA SH...T

Project #: 090319-SP1	Client: Stellar Env.
Sampler: (JP)/CM/AC	Date: 3/19/09
Well I.D.: MW-15	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD): 18.85	Depth to Water (DTW): 8.70
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.73	

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

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

0.2 (Gals.) X	3	=	0.6	Gals.
1 Case Volume	Specified Volumes		Calculated Volume	

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1300	16.5	7.91	1431	>1000	0.2	BLACK/GREY/ODOR
1304	15.4	7.51	1373	>1000	0.4	CLEARING/ODOR
1308	15.2	7.43	1379	305	0.6	" "

Did well dewater? Yes (No) Gallons actually evacuated: 0.6

Sampling Date: 3/20/09 Sampling Time: 1315 Depth to Water:

Sample I.D.: MW-15 Laboratory: Kiff CalScience Other CRT

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

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

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

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

WELL MONITORING DATA SHEET

Project #: 090319-SP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: ~~3/19/09~~ 3/20/09
Well I.D.: MW-1b	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD): 19.03	Depth to Water (DTW): 8.88
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.91	

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

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

1 Case Volume		Specified Volumes		Calculated Volume
0.20	(Gals.) X	3	=	0.60 Gals.

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0952	14.5	10.27	3890	297	0.2	
0956	14.8	10.59	3733	188	0.4	
1000	14.8	10.65	3706	99	0.6	

Did well dewater? Yes (No) Gallons actually evacuated: 0.6

Sampling Date: 3/20/09 Sampling Time: 1005 Depth to Water: 9.17

Sample I.D.: MW-1b Laboratory: Kiff CalScience Other C&T

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

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

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

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

LL MONITORING DATA SH F

Project #: 090319-SP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: 3/19/09
Well I.D.: MW-17	Well Diameter: 2 3 4 6 8 3/4"
Total Well Depth (TD): 19.50	Depth to Water (DTW): 8.89
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.01	

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

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

10.61

0.2 (Gals.) X 3 = 0.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1358	16.8	7.51	1088	68	0.2	Slight odor
1401	16.5	7.38	1030	27	0.4	" "
1405	16.5	7.39	1039	14	0.6	" "

Did well dewater? Yes (No) Gallons actually evacuated: 0.6

Sampling Date: 3/19/09 Sampling Time: 1410 Depth to Water: 8.98

Sample I.D.: MW-17 Laboratory: Kiff CalScience Other CRT

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

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

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

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

...LL MONITORING DATA SI...T

Project #: 090319-JP1	Client: Stellar Env.
Sampler: JP/CM/AC	Date: 3/19/09
Well I.D.: MW-18	Well Diameter: 2 3 4 6 8 (3/4)
Total Well Depth (TD): 19.49	Depth to Water (DTW): 7.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.10	

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

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

0.23 (Gals.) X	3	= 0.69 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1036	14.2	7.40	7696	>1000	0.23	DK. GREY CLOUDY
1040	14.6	7.22	7715	>1000	0.46	" "
1044	14.7	7.22	7705	>1000	0.69	" "

Did well dewater? Yes (No) Gallons actually evacuated: 0.69

Sampling Date: 3/20/09 Sampling Time: 1050 Depth to Water: 8.80

Sample I.D.: MW-18 Laboratory: Kiff CalScience Other C&T

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

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

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

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

LL MONITORING DATA SH T

Project #: 090319-JP1	Client: STELLAR
Sampler: JP	Date: 3/20/09
Well I.D.: RW-1	Well Diameter: 2 3 4 6 8 12"
Total Well Depth (TD):	Depth to Water (DTW):
Depth to Free Product: 9.06	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1407	No parameter due to product/sheen in well					DTW = 9.45
1410		Purge @ 400 mL/min				DTW = 9.51
1413						DTW = 9.54

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

Sampling Date: 3/23/09 Sampling Time: 1420 Depth to Water: 9.54

Sample I.D.: RW-1 Laboratory: Kiff CalScience Other C+T

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See C.O.C.

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

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

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

SPH or Purge Water Drum Log

Client: Stellar Env.

Site Address: 65th + Bay Sts. Emeryville CA.

STATUS OF DRUM(S) UPON ARRIVAL

Date	12/27/07	12/28/07	3/24/08	06/25/08	12/29/08	3/19/09
Number of drum(s) empty:				2	2	2
Number of drum(s) 1/4 full:	1	1				
Number of drum(s) 1/2 full:			1 Stellar		1 (SPH)	1
Number of drum(s) 3/4 full:						
Number of drum(s) full:		1	2 (1) BTS	1 Stellar		
Total drum(s) on site:	1	2	3 (1) BTS	3	3	3
Are the drum(s) properly labeled?	No (Non BTS)	Y	Y	Y	Y	Y
Drum ID & Contents:	?	purgewater & SPH →	→	→	→	→
If any drum(s) are partially or totally filled, what is the first use date:			1 Soaga Poly Full			

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

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

-All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	12/27/07	12/27/07	3/25/08	06/25/08	12/30/08	3/23/09
Number of drums empty:				1	1	1
Number of drum(s) 1/4 full:	1			1		
Number of drum(s) 1/2 full:		1	1 (Stellar)		1 (SPH)	2
Number of drum(s) 3/4 full:			1 (BTS)	1		
Number of drum(s) full:	1	1	2 (1) BTS		1	
Total drum(s) on site:	2	2	4	3	3	3
Are the drum(s) properly labeled?	1 Yes 1 No	Y	Y	Y	Y	Y
Drum ID & Contents:	Purge H_2O (BTS)	H_2O & SPH →	→	→	→	→

LOCATION OF DRUM(S)

Describe location of drum(s): (corner of garage next to 65th St. | 3/25/08 1,500 gal. Poly is full of SPH (Stellar)

FINAL STATUS

Number of new drum(s) left on site this event	1	0	1	0	0	0
Date of inspection:	12/27/07	12/28/07	3/25/08	06/25/08	12/30/08	3/23/09
Drum(s) labelled properly:	Y	Y	Y	Y	Y	Y
Logged by BTS Field Tech:	DR	KF	DR	MO	DR	JP
Office reviewed by:			M	PE	PE	

APPENDIX C

Analytical Laboratory Report and Chain-of-Custody Record


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 210867
ANALYTICAL REPORT

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

Sample ID	Lab ID
MW-3	210867-001
MW-4	210867-002
MW-5	210867-003
MW-6	210867-004
MW-17	210867-005
MW-7	210867-006
MW-9	210867-007
MW-11	210867-008
MW-12	210867-009
MW-16	210867-010
MW-18	210867-011
MW-E	210867-012
MW-14	210867-013
MW-15	210867-014
MW-8	210867-015
MW-10	210867-016
MW-13	210867-017
RW-1	210867-018

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 signatures. 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.

Signature: _____ Date: 04/07/2009
Project Manager

Signature: _____ Date: 04/09/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**210867**
Client:	**Stellar Environmental Solutions**
Project:	**2007-65**
Location:	**Bay Center Apts**
Request Date:	**03/23/09**
Samples Received:	**03/23/09**

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 03/23/09. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
MW-7 (lab # 210867-006) and MW-18 (lab # 210867-011) had pH greater than 2. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
MW-13 (lab # 210867-017) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Chain of Custody Record

Lab job no. 210867
Date 3/23/09
Page 1 of 2

Laboratory C4T
Address 2323 FIFTH ST
BERKELEY, CA

Project Owner
Site Address 6400 CHRISTIE AVE
BERKELEY, CA
Project Name BAY CENTER APARTMENT
Project Number 2007-65

Method of Shipment LAB COURIER
Shipment No.
Airbill No.
Cooler No.
Project Manager TEAL GLASS
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: *(Signature)*

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	Analysis Required: TEH-D (8015m)	TPH-G (8015m)	BTEX + MTBE	Remarks
1	MW-3		3/23	1135	W	AMBER 1L NP x1 HCL VOA 40ML x4					X	X	X	
2	~~MW-4~~		3/19	1305							X	V	Y	
3	MW-5		3/19	1315							Y	Y	X	
4	MW-6		3/19	1320							X	X	X	
5	MW-17		3/19	1410							X	X	X	
6	MW-7		3/19	1410							X	X	X	
7	MW-9		3/19	1525							Y	X	X	
8	MW-11		3/19	1500							X	X	X	
9	MW-12		3/20	920							X	X	X	
10	MW-16		3/20	1005							X	X	X	
11	MW-18		3/20	1050							X	X	X	
12	MW-E		3/23	1435							X	X	X	

Relinquished by:	Date	Received by:	Date	Relinquished by:	Date	Received by:	Date
Signature		Signature		Signature	3/23	Signature Anna Piyarillo	3/23/09
Printed	Time	Printed	Time	Printed J. PARKER	Time 1550	Printed Anna Piyarillo	Time 1550
Company		Company		Company T3		Company C4T	

Turnaround Time: STANDARD
Comments: EDF REQUIRED
GLOBAL ID # SLT20Ø5561

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

2000-00-01

★ Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

Cold + Intact

Chain of Custody Record

Lab job no. 210867
Date 3/23/09
Page 2 of 2

Laboratory C&T
Address 2323 FIFTH ST
BERKELEY, CA

Method of Shipment LAB COURIER
Shipment No.
Airbill No.
Cooler No.

Project Owner
Site Address 6400 CHRISTIE AVE
BERKELEY, CA
Project Name BAY CENTER APARTMENT
Project Number 2007-65

Project Manager TERAL GLASS
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: *(Signature)*

Analysis Required

	Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	TEH-D (8015)	TPH-G (8015)	BTEX / MTBE								Remarks
13	MW-14		3/20	1215	W	1L AMBER N/P x 1 40 ML HCL VOA x 4					X	X	X								
14	MW-15		3/20	1315	↓	↓					X	X	X								
15	MW-8		3/20	1350	↓	↓					X	X	X								
16	MW-10		3/20	1435	↓	↓					X	X	X								
17	MW-13		3/23	1230	↓	↓					X	X	X								
18	RW-1		3/23	1420																	

Relinquished by:	Date / Time	Received by:	Date / Time	Relinquished by:	Date / Time	Received by:	Date / Time
Signature	Date	Signature	Date	Signature [signature]	Date 3/23	Signature [signature]	Date 3/23/09
Printed	Time	Printed	Time	Printed J. STACKER	Time 1550	Printed Anna Pijuri, llo	Time 1550
Company		Company		Company BTS		Company C&T	

Turnaround Time: STANDARD
Comments: EDF REQUIRED
GLOBAL ID # SLT20Ø5561

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

2000-00-01

Tracy Babjar

From: "Teal Glass" <tglass@stellar-environmental.com>
To: "'Tracy Babjar'" <tracy.babjar@ctberk.com>
Sent: Tuesday, March 24, 2009 8:58 AM
Subject: RE: 2007-65 - C&T Login Summary (210867)

Hi Tracy,
RW-1 should be analyzed for TEH and TVH/MBTEX like the others.
Thanks!

Teal Glass
Stellar Environmental Solutions, Inc.
(T) 510-644-3123 (F) 510-644-3859
tglass@stellar-environmental.com

From: Tracy Babjar [mailto:tracy.babjar@ctberk.com]
Sent: Tuesday, March 24, 2009 8:54 AM
To: TGlass@stellar-environmental.com
Cc: Rmakdisi@stellar-environmental.com; HPietropaoli@stellar-environmental.com
Subject: 2007-65 - C&T Login Summary (210867)

Please not that we put sample RW-1 on hold because no analysis was checked off.

C&T Login Summary for 210867

Project: 2007-65	**Report To:** Stellar Environmental Solutions	**Bill To:** Stellar Enviro
Site: Bay Center Apts	2198 6th Street	2198 6th Stre
Lab Login #: 210867	Suite 201	Suite 201
Report Due: 03/30/09	Berkeley, CA 94710	Berkeley, CA
PO#:	ATTN: Teal Glass	ATTN: Teal (
C&T Proj Mgr: Tracy Babjar	(510) 644-3123	(510) 644-31

Client ID	Lab ID	Sampled	Received	Matrix	Analyses	COC #	Comments
MW-3	001	03/23	03/23				
				Water	EDF		
				Water	TEH		
				Water	TVH/MBTXE		
MW-4	002	03/19	03/23				
				Water	TEH		
				Water	TVH/MBTXE		
MW-5	003	03/19	03/23				
				Water	TEH		

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 210867 Date Received 3/23/09 Number of coolers 2
Client SES Project BAY CENTER APARTMENT

Date Opened 3/23/09 By (print) A. VILLANUEVA (sign)
Date Logged in ✓ By (print) ✓ (sign) ✓

1. Did cooler come with a shipping slip (airbill, etc) ____ YES (NO)
   Shipping info ____
2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☐ (NO)
   How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ 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? ____ (YES) NO
10. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
11. Are sample labels present, in good condition and complete? ____ (YES) 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 N/A
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
SAMPLE# 10 3/4 VOA ID# ON SAMPLE MW-6 3/20/09 10:05

SAMPLE# 3 2/4 VOA W/ BUBBLE

SAMPLE# 17 STRONG ODOR STORED IN COLD ROOM

SAMPLE# 18 LOGGED ON HOLD, NO ANALYSIS ON COC

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-3	Batch#:	149358
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-001	Analyzed:	03/28/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	260 Y	50	EPA 8015B
MTBE	2.9	2.0	EPA 8021B
Benzene	1.3	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	1.8 C	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	0.51	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	127	63-146	EPA 8015B
Bromofluorobenzene (FID)	133	70-140	EPA 8015B
Trifluorotoluene (PID)	92	50-140	EPA 8021B
Bromofluorobenzene (PID)	89	56-132	EPA 8021B

Field ID:	MW-4	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-002	Analyzed:	03/31/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	108	63-146	EPA 8015B
Bromofluorobenzene (FID)	104	70-140	EPA 8015B
Trifluorotoluene (PID)	108	50-140	EPA 8021B
Bromofluorobenzene (PID)	102	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-5	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-003	Analyzed:	03/31/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	109	63-146	EPA 8015B
Bromofluorobenzene (FID)	101	70-140	EPA 8015B
Trifluorotoluene (PID)	107	50-140	EPA 8021B
Bromofluorobenzene (PID)	99	56-132	EPA 8021B

Field ID:	MW-6	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-004	Analyzed:	03/31/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	112	63-146	EPA 8015B
Bromofluorobenzene (FID)	106	70-140	EPA 8015B
Trifluorotoluene (PID)	106	50-140	EPA 8021B
Bromofluorobenzene (PID)	102	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-17	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-005	Analyzed:	04/01/09
Diln Fac:	5.000		

Analyte	Result		RL	Analysis
Gasoline C7-C12	5,400		250	EPA 8015B
MTBE	ND		10	EPA 8021B
Benzene	770	C	2.5	EPA 8021B
Toluene	150	C	2.5	EPA 8021B
Ethylbenzene	87	C	2.5	EPA 8021B
m,p-Xylenes	120	C	2.5	EPA 8021B
o-Xylene	41	C	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	129	63-146	EPA 8015B
Bromofluorobenzene (FID)	108	70-140	EPA 8015B
Trifluorotoluene (PID)	106	50-140	EPA 8021B
Bromofluorobenzene (PID)	129	56-132	EPA 8021B

Field ID:	MW-7	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-006	Analyzed:	03/31/09
Diln Fac:	5.000		

Analyte	Result		RL	Analysis
Gasoline C7-C12	1,700		250	EPA 8015B
MTBE	ND		10	EPA 8021B
Benzene	510	C	2.5	EPA 8021B
Toluene	33	C	2.5	EPA 8021B
Ethylbenzene	47	C	2.5	EPA 8021B
m,p-Xylenes	160	C	2.5	EPA 8021B
o-Xylene	60	C	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	111	63-146	EPA 8015B
Bromofluorobenzene (FID)	102	70-140	EPA 8015B
Trifluorotoluene (PID)	113	50-140	EPA 8021B
Bromofluorobenzene (PID)	114	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-9	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-007	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	130	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	4.6 C	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)	111	63-146	EPA 8015B
Bromofluorobenzene (FID)	104	70-140	EPA 8015B
Trifluorotoluene (PID)	108	50-140	EPA 8021B
Bromofluorobenzene (PID)	102	56-132	EPA 8021B

Field ID:	MW-11	Batch#:	149459
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-008	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,400	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	200 C	0.50	EPA 8021B
Toluene	6.4 C	0.50	EPA 8021B
Ethylbenzene	7.3 C	0.50	EPA 8021B
m,p-Xylenes	8.0 C	0.50	EPA 8021B
o-Xylene	2.4	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	141	63-146	EPA 8015B
Bromofluorobenzene (FID)	107	70-140	EPA 8015B
Trifluorotoluene (PID)	127	50-140	EPA 8021B
Bromofluorobenzene (PID)	103	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-12	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-009	Analyzed:	04/01/09
Diln Fac:	20.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	14,000	1,000	EPA 8015B
MTBE	ND	40	EPA 8021B
Benzene	6,100 C	10	EPA 8021B
Toluene	150 C	10	EPA 8021B
Ethylbenzene	130 C	10	EPA 8021B
m,p-Xylenes	100 C	10	EPA 8021B
o-Xylene	11 C	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	123	63-146	EPA 8015B
Bromofluorobenzene (FID)	101	70-140	EPA 8015B
Trifluorotoluene (PID)	123	50-140	EPA 8021B
Bromofluorobenzene (PID)	98	56-132	EPA 8021B

Field ID:	MW-16	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-010	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	78	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	12 C	0.50	EPA 8021B
Toluene	2.3 C	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)	109	63-146	EPA 8015B
Bromofluorobenzene (FID)	105	70-140	EPA 8015B
Trifluorotoluene (PID)	105	50-140	EPA 8021B
Bromofluorobenzene (PID)	102	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-18	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-011	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	111	63-146	EPA 8015B
Bromofluorobenzene (FID)	107	70-140	EPA 8015B
Trifluorotoluene (PID)	108	50-140	EPA 8021B
Bromofluorobenzene (PID)	105	56-132	EPA 8021B

Field ID:	MW-E	Batch#:	149459
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-012	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	850	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	270 C	0.50	EPA 8021B
Toluene	7.5 C	0.50	EPA 8021B
Ethylbenzene	13 C	0.50	EPA 8021B
m,p-Xylenes	12 C	0.50	EPA 8021B
o-Xylene	5.5	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	113	63-146	EPA 8015B
Bromofluorobenzene (FID)	106	70-140	EPA 8015B
Trifluorotoluene (PID)	107	50-140	EPA 8021B
Bromofluorobenzene (PID)	107	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-14	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-013	Analyzed:	04/01/09
Diln Fac:	25.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	13,000	1,300	EPA 8015B
MTBE	ND	50	EPA 8021B
Benzene	4,300 C	13	EPA 8021B
Toluene	870 C	13	EPA 8021B
Ethylbenzene	260 C	13	EPA 8021B
m,p-Xylenes	200 C	13	EPA 8021B
o-Xylene	83 C	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	115	63-146	EPA 8015B
Bromofluorobenzene (FID)	103	70-140	EPA 8015B
Trifluorotoluene (PID)	115	50-140	EPA 8021B
Bromofluorobenzene (PID)	105	56-132	EPA 8021B

Field ID:	MW-15	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-014	Analyzed:	04/01/09
Diln Fac:	25.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	17,000	1,300	EPA 8015B
MTBE	ND	50	EPA 8021B
Benzene	7,200 C	13	EPA 8021B
Toluene	91 C	13	EPA 8021B
Ethylbenzene	170 C	13	EPA 8021B
m,p-Xylenes	60 C	13	EPA 8021B
o-Xylene	ND	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	121	63-146	EPA 8015B
Bromofluorobenzene (FID)	105	70-140	EPA 8015B
Trifluorotoluene (PID)	112	50-140	EPA 8021B
Bromofluorobenzene (PID)	99	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-8	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-015	Analyzed:	04/01/09
Diln Fac:	25.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	22,000	1,300	EPA 8015B
MTBE	ND	50	EPA 8021B
Benzene	9,400 C	13	EPA 8021B
Toluene	200 C	13	EPA 8021B
Ethylbenzene	640 C	13	EPA 8021B
m,p-Xylenes	290 C	13	EPA 8021B
o-Xylene	68 C	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	127	63-146	EPA 8015B
Bromofluorobenzene (FID)	99	70-140	EPA 8015B
Trifluorotoluene (PID)	126	50-140	EPA 8021B
Bromofluorobenzene (PID)	100	56-132	EPA 8021B

Field ID:	MW-10	Batch#:	149459
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-016	Analyzed:	04/01/09
Diln Fac:	10.00		

Analyte	Result	RL	Analysis
Gasoline C7-C12	8,200	500	EPA 8015B
MTBE	ND	20	EPA 8021B
Benzene	890 C	5.0	EPA 8021B
Toluene	46 C	5.0	EPA 8021B
Ethylbenzene	78 C	5.0	EPA 8021B
m,p-Xylenes	99 C	5.0	EPA 8021B
o-Xylene	31 C	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	127	63-146	EPA 8015B
Bromofluorobenzene (FID)	108	70-140	EPA 8015B
Trifluorotoluene (PID)	118	50-140	EPA 8021B
Bromofluorobenzene (PID)	107	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Field ID:	MW-13	Batch#:	149459
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-017	Analyzed:	04/01/09
Diln Fac:	500.0		

Analyte	Result	RL	Analysis
Gasoline C7-C12	330,000	25,000	EPA 8015B
MTBE	ND	1,000	EPA 8021B
Benzene	25,000 C	250	EPA 8021B
Toluene	1,300	250	EPA 8021B
Ethylbenzene	6,400 C	250	EPA 8021B
m,p-Xylenes	6,800 C	250	EPA 8021B
o-Xylene	1,700 C	250	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	131	63-146	EPA 8015B
Bromofluorobenzene (FID)	105	70-140	EPA 8015B
Trifluorotoluene (PID)	109	50-140	EPA 8021B
Bromofluorobenzene (PID)	106	56-132	EPA 8021B

Field ID:	RW-1	Batch#:	149459
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-018	Analyzed:	04/01/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	950	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	180 C	0.50	EPA 8021B
Toluene	3.6 C	0.50	EPA 8021B
Ethylbenzene	13 C	0.50	EPA 8021B
m,p-Xylenes	2.3 C	0.50	EPA 8021B
o-Xylene	1.1 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	128	63-146	EPA 8015B
Bromofluorobenzene (FID)	111	70-140	EPA 8015B
Trifluorotoluene (PID)	110	50-140	EPA 8021B
Bromofluorobenzene (PID)	109	56-132	EPA 8021B

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

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	03/23/09
Units:	ug/L		

Type:	BLANK	Batch#:	149358
Lab ID:	QC489309	Analyzed:	03/28/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	63-146	EPA 8015B
Bromofluorobenzene (FID)	101	70-140	EPA 8015B
Trifluorotoluene (PID)	87	50-140	EPA 8021B
Bromofluorobenzene (PID)	82	56-132	EPA 8021B

Type:	BLANK	Batch#:	149459
Lab ID:	QC489722	Analyzed:	03/31/09
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	63-146	EPA 8015B
Bromofluorobenzene (FID)	100	70-140	EPA 8015B
Trifluorotoluene (PID)	104	50-140	EPA 8021B
Bromofluorobenzene (PID)	100	56-132	EPA 8021B

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	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:	QC489310	Batch#:	149358
Matrix:	Water	Analyzed:	03/28/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	988.5	99	76-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	123	63-146
Bromofluorobenzene (FID)	101	70-140

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	149358
Units:	ug/L	Analyzed:	03/28/09
Diln Fac:	1.000		

Type: BS Lab ID: QC489311

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	8.868	89	53-152
Benzene	10.00	9.207	92	79-120
Toluene	10.00	10.22	102	76-122
Ethylbenzene	10.00	10.78	108	77-125
m,p-Xylenes	10.00	11.08	111	76-126
o-Xylene	10.00	10.65	106	77-126

Surrogate	%REC	Limits
Trifluorotoluene (PID)	85	50-140
Bromofluorobenzene (PID)	80	56-132

Type: BSD Lab ID: QC489312

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	18.12	91	53-152	2	37
Benzene	20.00	19.90	100	79-120	8	20
Toluene	20.00	17.52	88	76-122	15	21
Ethylbenzene	20.00	19.59	98	77-125	10	21
m,p-Xylenes	20.00	20.34	102	76-126	9	23
o-Xylene	20.00	19.03	95	77-126	11	21

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	50-140
Bromofluorobenzene (PID)	86	56-132

RPD= Relative Percent Difference

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	MW-3	Batch#:	149358
MSS Lab ID:	210867-001	Sampled:	03/23/09
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Analyzed:	03/28/09
Diln Fac:	1.000		

Type: MS Lab ID: QC489313

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	257.4	2,000	2,157	95	66-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	139	63-146
Bromofluorobenzene (FID)	114	70-140

Type: MSD Lab ID: QC489314

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,176	96	66-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	135	63-146
Bromofluorobenzene (FID)	114	70-140

RPD= Relative Percent Difference

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Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	149459
Units:	ug/L	Analyzed:	03/31/09
Diln Fac:	1.000		

Type: BS Lab ID: QC489723

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	11.34	113	53-152
Benzene	10.00	11.47	115	79-120
Toluene	10.00	10.54	105	76-122
Ethylbenzene	10.00	11.33	113	77-125
m,p-Xylenes	10.00	11.33	113	76-126
o-Xylene	10.00	10.93	109	77-126

Surrogate	%REC	Limits
Trifluorotoluene (PID)	110	50-140
Bromofluorobenzene (PID)	98	56-132

Type: BSD Lab ID: QC489724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	9.927	99	53-152	13	37
Benzene	10.00	9.868	99	79-120	15	20
Toluene	10.00	9.918	99	76-122	6	21
Ethylbenzene	10.00	9.688	97	77-125	16	21
m,p-Xylenes	10.00	10.50	105	76-126	8	23
o-Xylene	10.00	9.607	96	77-126	13	21

Surrogate	%REC	Limits
Trifluorotoluene (PID)	108	50-140
Bromofluorobenzene (PID)	102	56-132

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	149459
Units:	ug/L	Analyzed:	03/31/09
Diln Fac:	1.000		

Type: BS Lab ID: QC489725

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	941.9	94	76-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	63-146
Bromofluorobenzene (FID)	99	70-140

Type: BSD Lab ID: QC489726

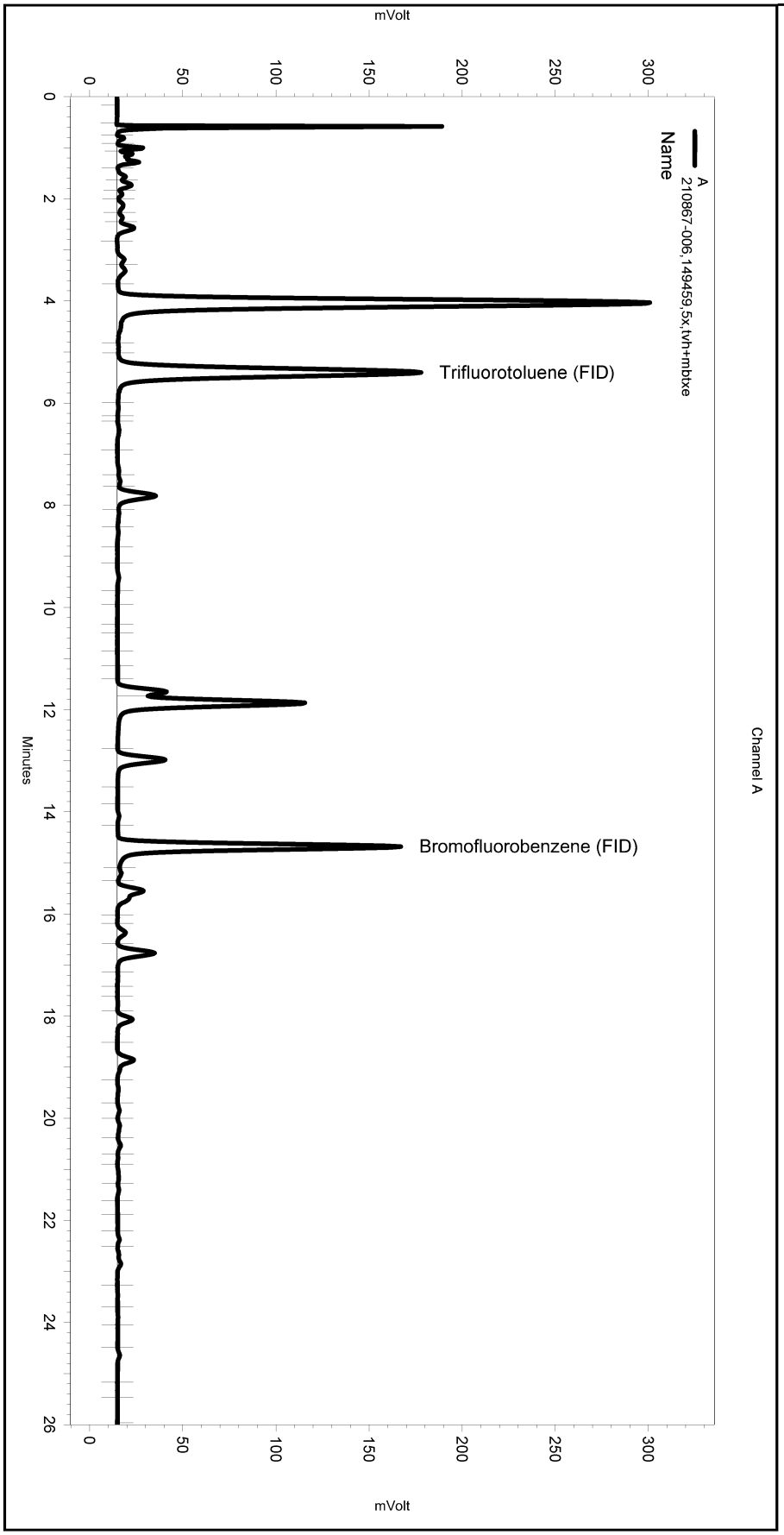
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	968.0	97	76-121	3	21

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	63-146
Bromofluorobenzene (FID)	101	70-140

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\090.seq**
Sample Name: **210867-006,149459,5x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\090_010**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxemtbesinglepoint078.met

Software Version 3.1.7
Run Date: 3/31/2009 9:23:56 PM
Analysis Date: 3/31/2009 9:52:36 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: B7



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\090_010_D1BE.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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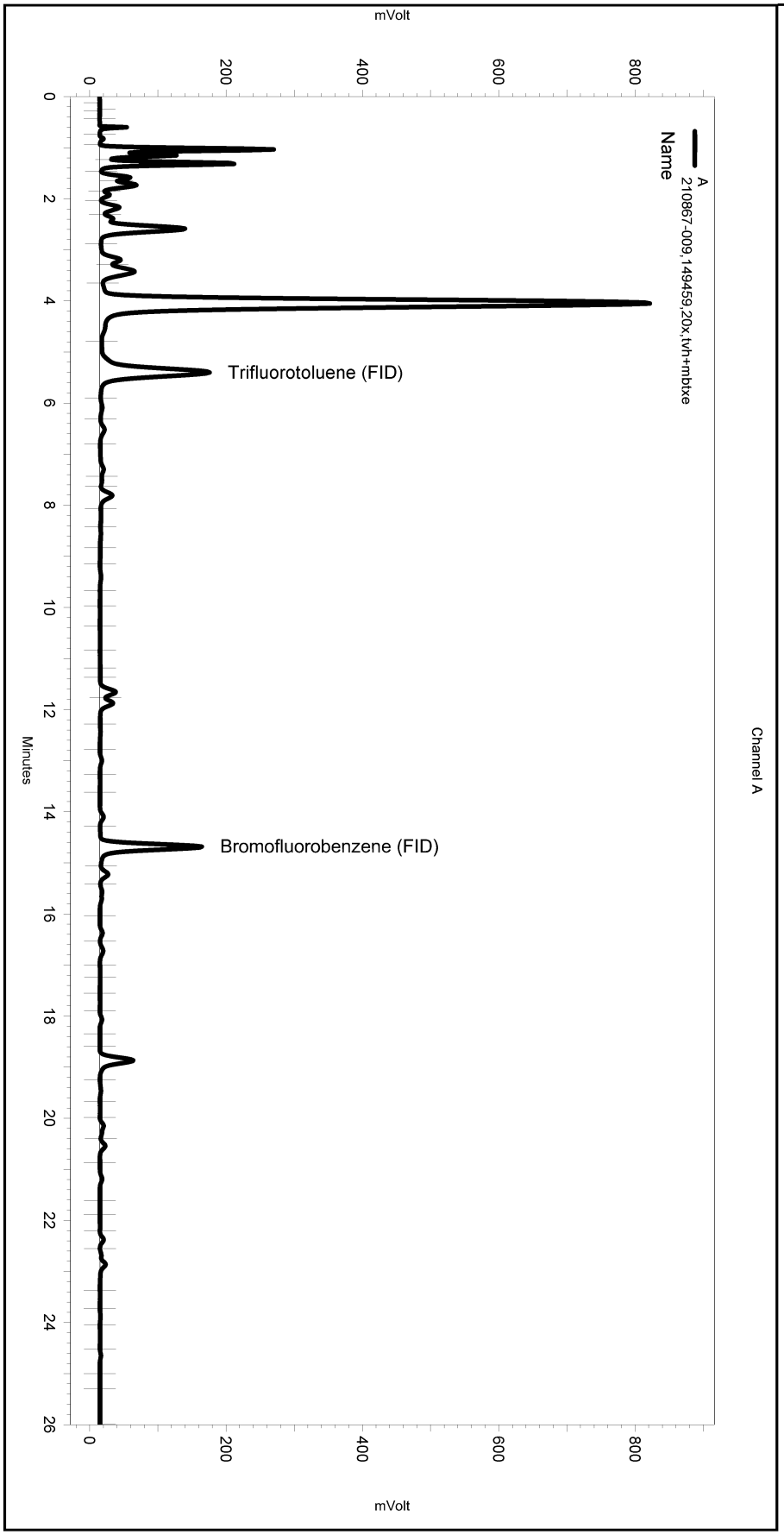
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\090.seq**
Sample Name: **210867-009,149459,20x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\090_020**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxemtbesinglepoint078.met

Software Version 3.1.7
Run Date: 4/1/2009 3:17:09 AM
Analysis Date: 4/1/2009 3:45:51 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.3



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\090_020_D1C8.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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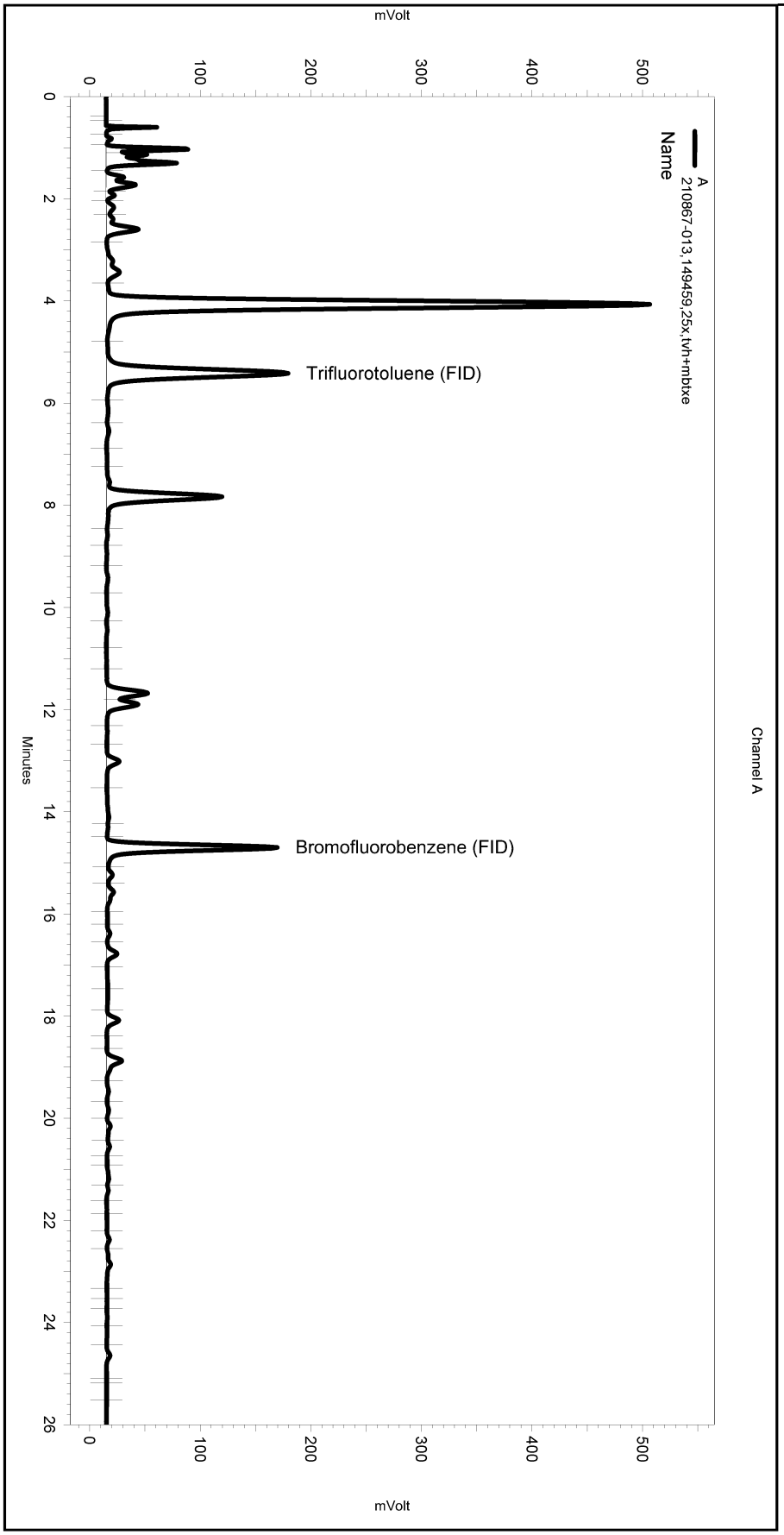
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\090.seq**
Sample Name: **210867-013,149459,25x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\090_024**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxemtbesinglepoint078.met

Software Version 3.1.7
Run Date: 4/1/2009 5:39:58 AM
Analysis Date: 4/1/2009 6:08:41 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.3



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\090_024_D1CC.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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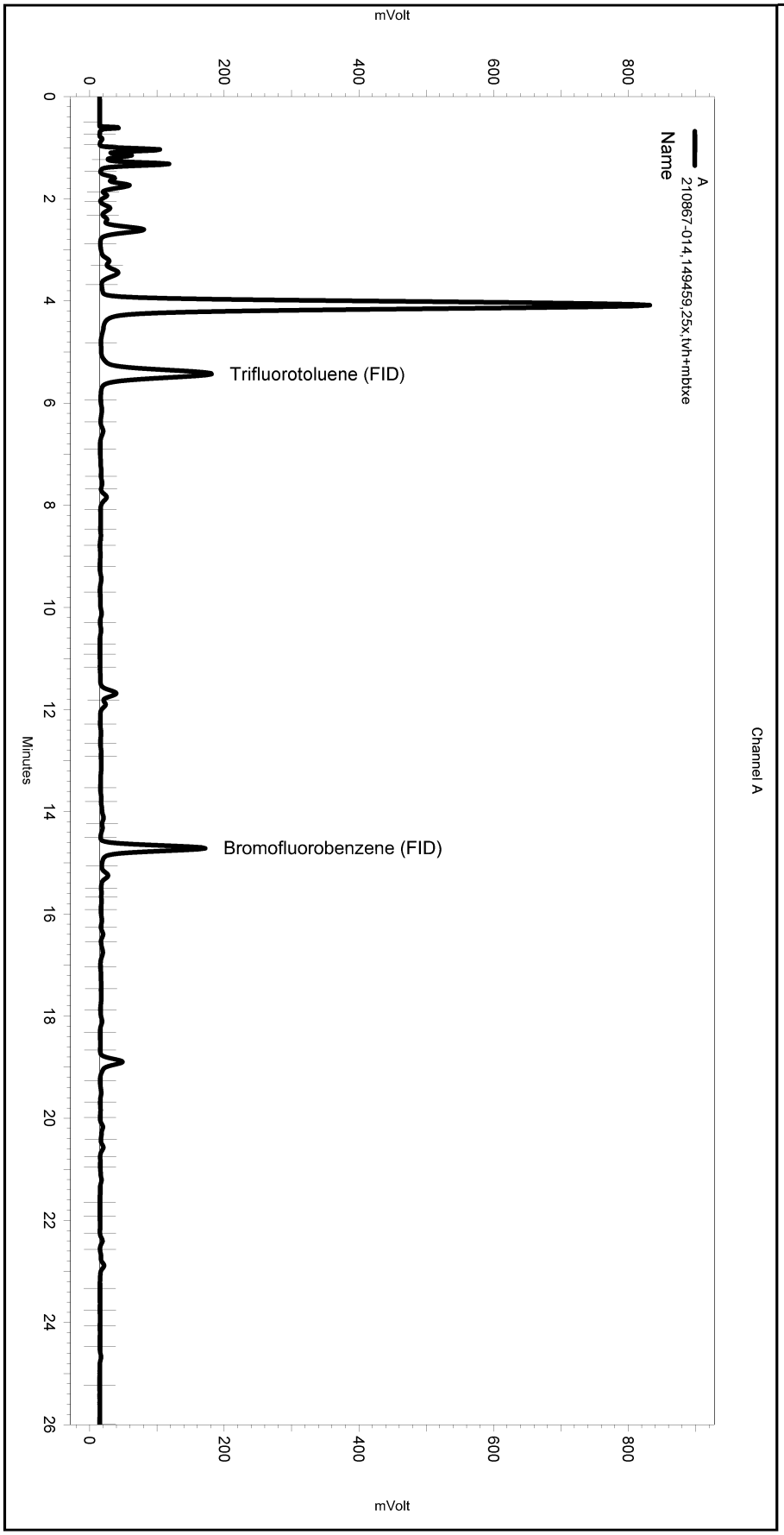
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\090.seq**
Sample Name: **210867-014,149459,25x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\090_025**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxemtbesinglepoint078.met

Software Version 3.1.7
Run Date: 4/1/2009 6:15:50 AM
Analysis Date: 4/1/2009 6:44:33 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.3



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\090_025_D1CD.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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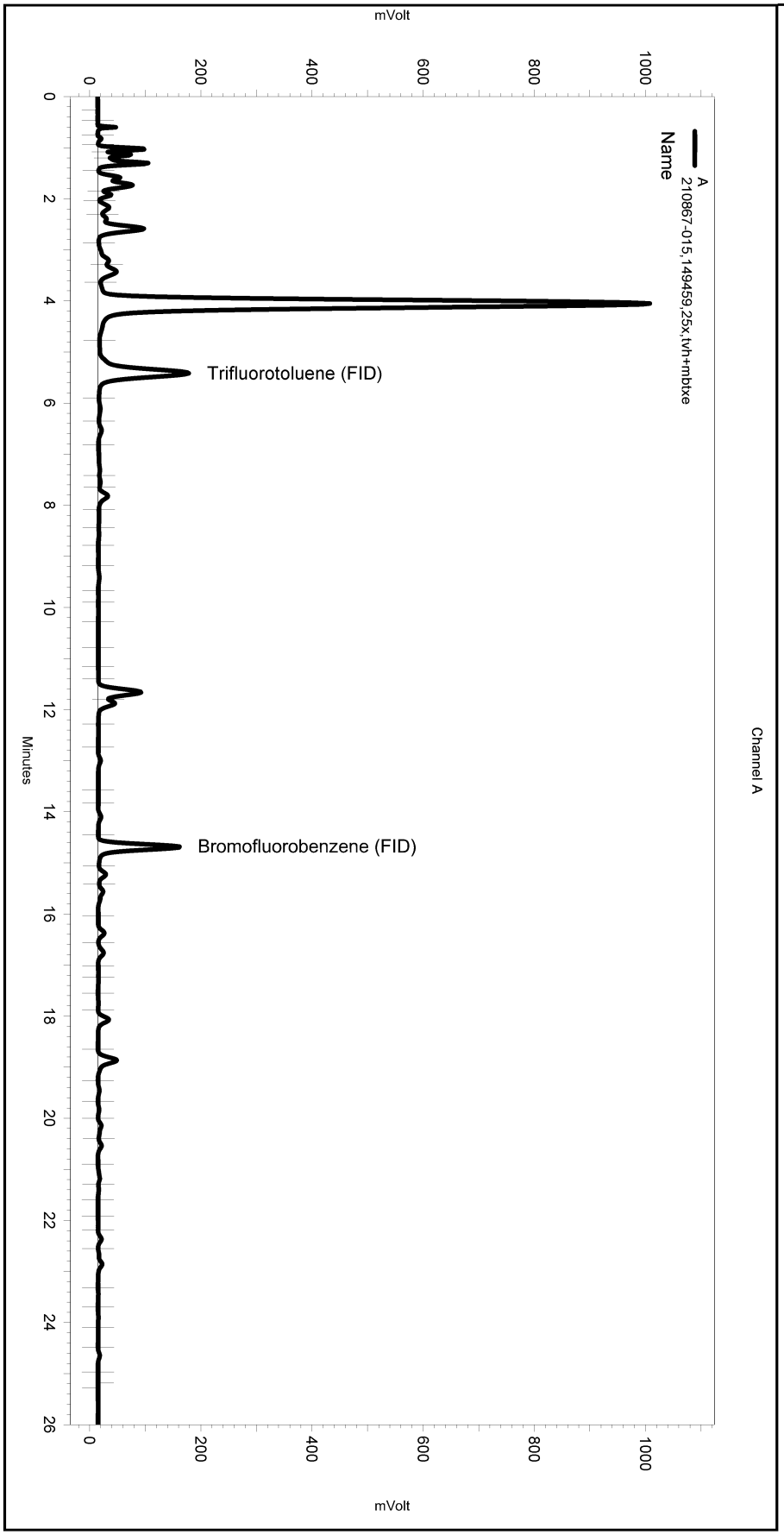
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\090.seq**
Sample Name: **210867-015,149459,25x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\090_029**
Instrument: GC07 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxemtbesinglepoint078.met

Software Version 3.1.7
Run Date: 4/1/2009 8:54:46 AM
Analysis Date: 4/1/2009 9:23:29 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.3



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10049\090_029_D1D2.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Prepared:	03/26/09
Batch#:	149298		

Field ID:	MW-3	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-001	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	4,300 Y	50

Surrogate	%REC	Limits
o-Terphenyl	118	61-127

Field ID:	MW-4	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-002	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	940 Y	50

Surrogate	%REC	Limits
o-Terphenyl	119	61-127

Field ID:	MW-5	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-003	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	5,800 Y	50

Surrogate	%REC	Limits
o-Terphenyl	123	61-127

Field ID:	MW-6	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-004	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	1,200 Y	50

Surrogate	%REC	Limits
o-Terphenyl	112	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Prepared:	03/26/09
Batch#:	149298		

Field ID:	MW-17	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-005	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	3,000 Y	50

Surrogate	%REC	Limits
o-Terphenyl	105	61-127

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-006	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	8,700 Y	50

Surrogate	%REC	Limits
o-Terphenyl	94	61-127

Field ID:	MW-9	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-007	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	9,400 Y	50

Surrogate	%REC	Limits
o-Terphenyl	115	61-127

Field ID:	MW-11	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/19/09
Lab ID:	210867-008	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	7,100 Y	50

Surrogate	%REC	Limits
o-Terphenyl	105	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Prepared:	03/26/09
Batch#:	149298		

Field ID:	MW-12	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-009	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	4,100 Y	50

Surrogate	%REC	Limits
o-Terphenyl	106	61-127

Field ID:	MW-16	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-010	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	14,000 Y	50

Surrogate	%REC	Limits
o-Terphenyl	123	61-127

Field ID:	MW-18	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-011	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	10,000 Y	50

Surrogate	%REC	Limits
o-Terphenyl	108	61-127

Field ID:	MW-E	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-012	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	5,600 Y	50

Surrogate	%REC	Limits
o-Terphenyl	119	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Prepared:	03/26/09
Batch#:	149298		

Field ID:	MW-14	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-013	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	3,200 Y	50

Surrogate	%REC	Limits
o-Terphenyl	105	61-127

Field ID:	MW-15	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-014	Analyzed:	04/06/09

Analyte	Result	RL
Diesel C10-C24	3,400 Y	50

Surrogate	%REC	Limits
o-Terphenyl	105	61-127

Field ID:	MW-8	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-015	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	10,000 Y	50

Surrogate	%REC	Limits
o-Terphenyl	120	61-127

Field ID:	MW-10	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/20/09
Lab ID:	210867-016	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	6,200 Y	50

Surrogate	%REC	Limits
o-Terphenyl	127	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	03/23/09
Units:	ug/L	Prepared:	03/26/09
Batch#:	149298		

Field ID:	MW-13	Diln Fac:	100.0
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-017	Analyzed:	04/03/09

Analyte	Result	RL
Diesel C10-C24	2,000,000 Y	10,000

Surrogate	%REC	Limits
o-Terphenyl	DO	61-127

Field ID:	RW-1	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	03/23/09
Lab ID:	210867-018	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	2,800 Y	50

Surrogate	%REC	Limits
o-Terphenyl	111	61-127

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC489077	Analyzed:	04/04/09

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	109	61-127

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	210867	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	149298
Units:	ug/L	Prepared:	03/26/09
Diln Fac:	1.000	Analyzed:	04/04/09

Type: BS Lab ID: QC489078

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,712	108	50-120

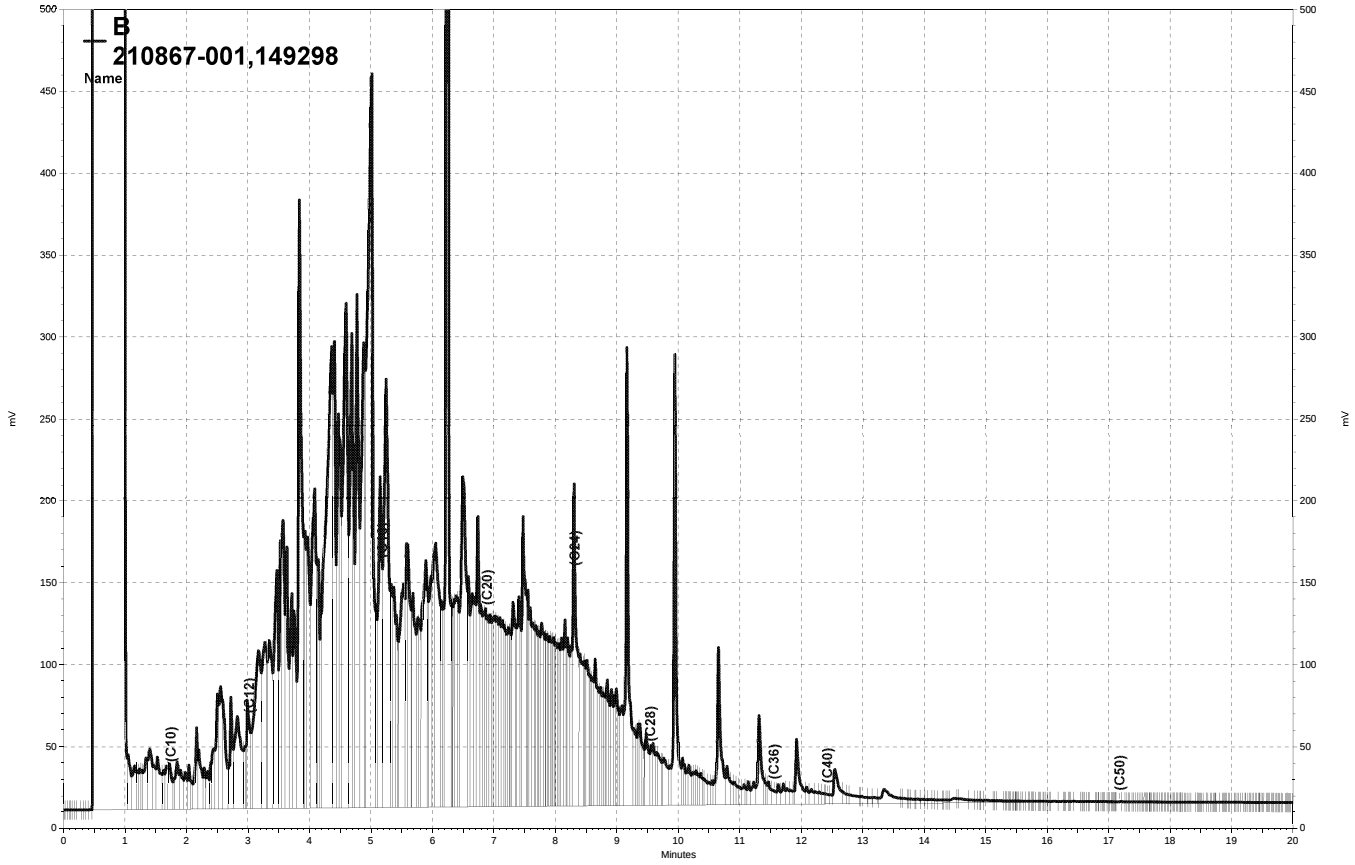
Surrogate	%REC	Limits
o-Terphenyl	104	61-127

Type: BSD Lab ID: QC489079

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,638	106	50-120	3	37

Surrogate	%REC	Limits
o-Terphenyl	104	61-127

RPD= Relative Percent Difference



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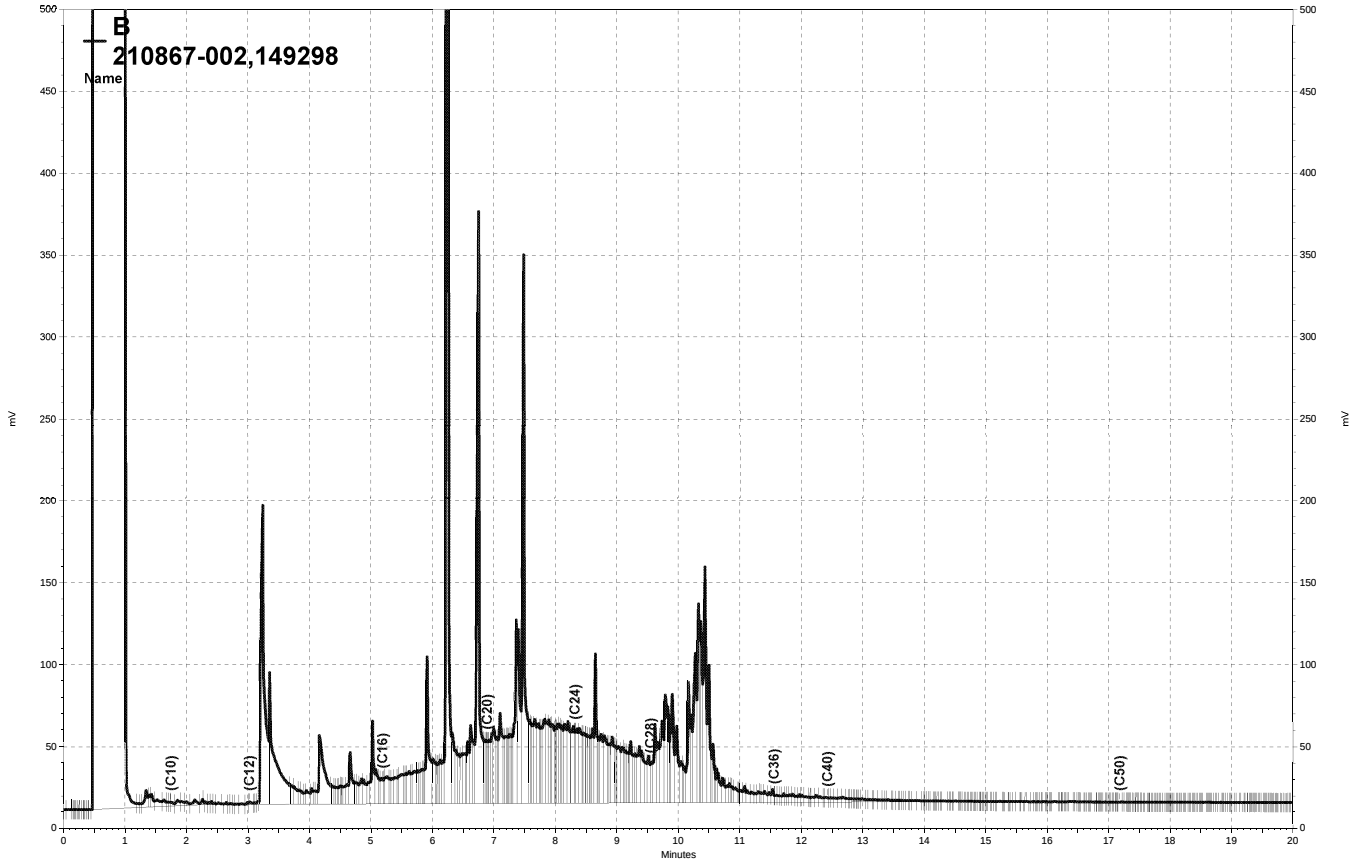

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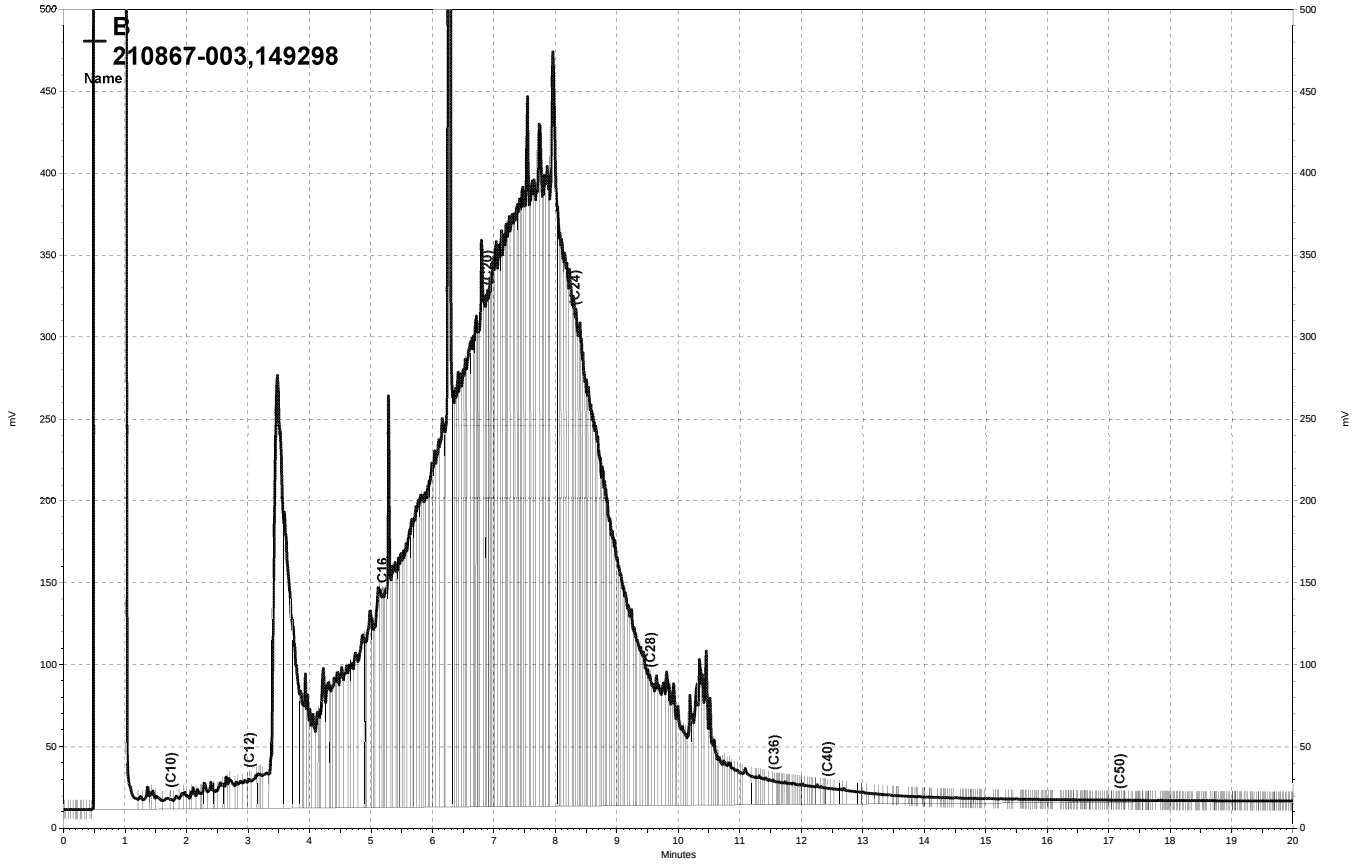

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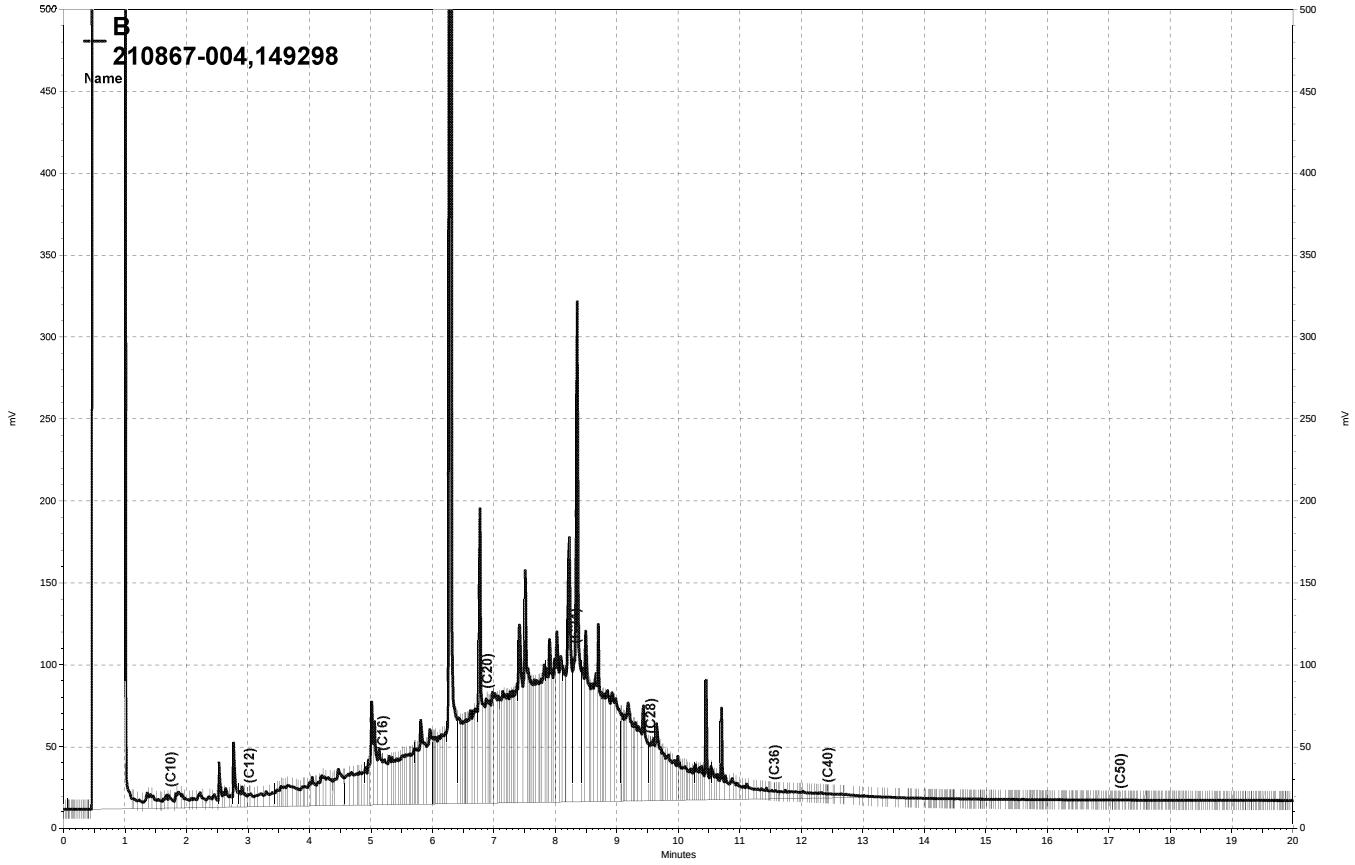

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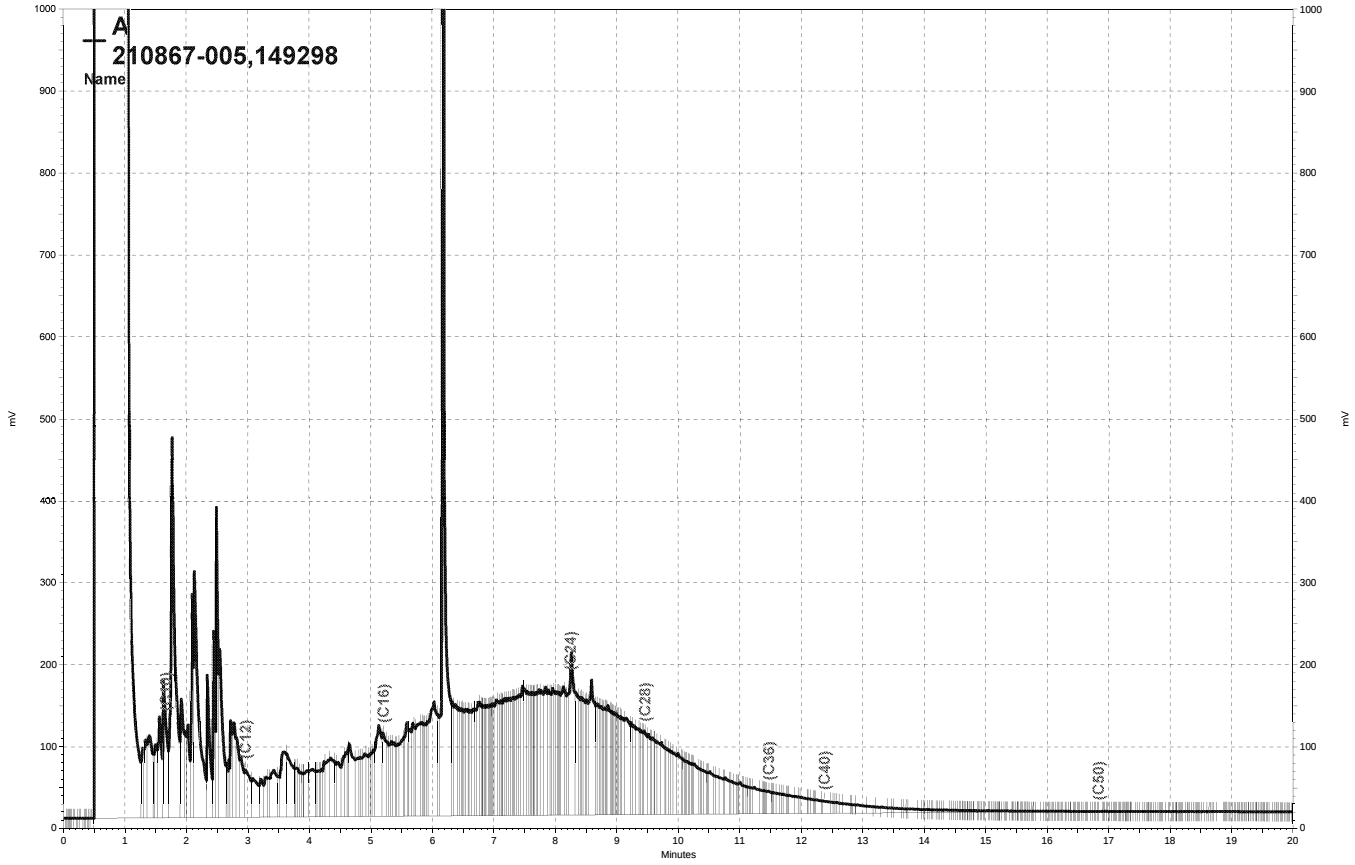

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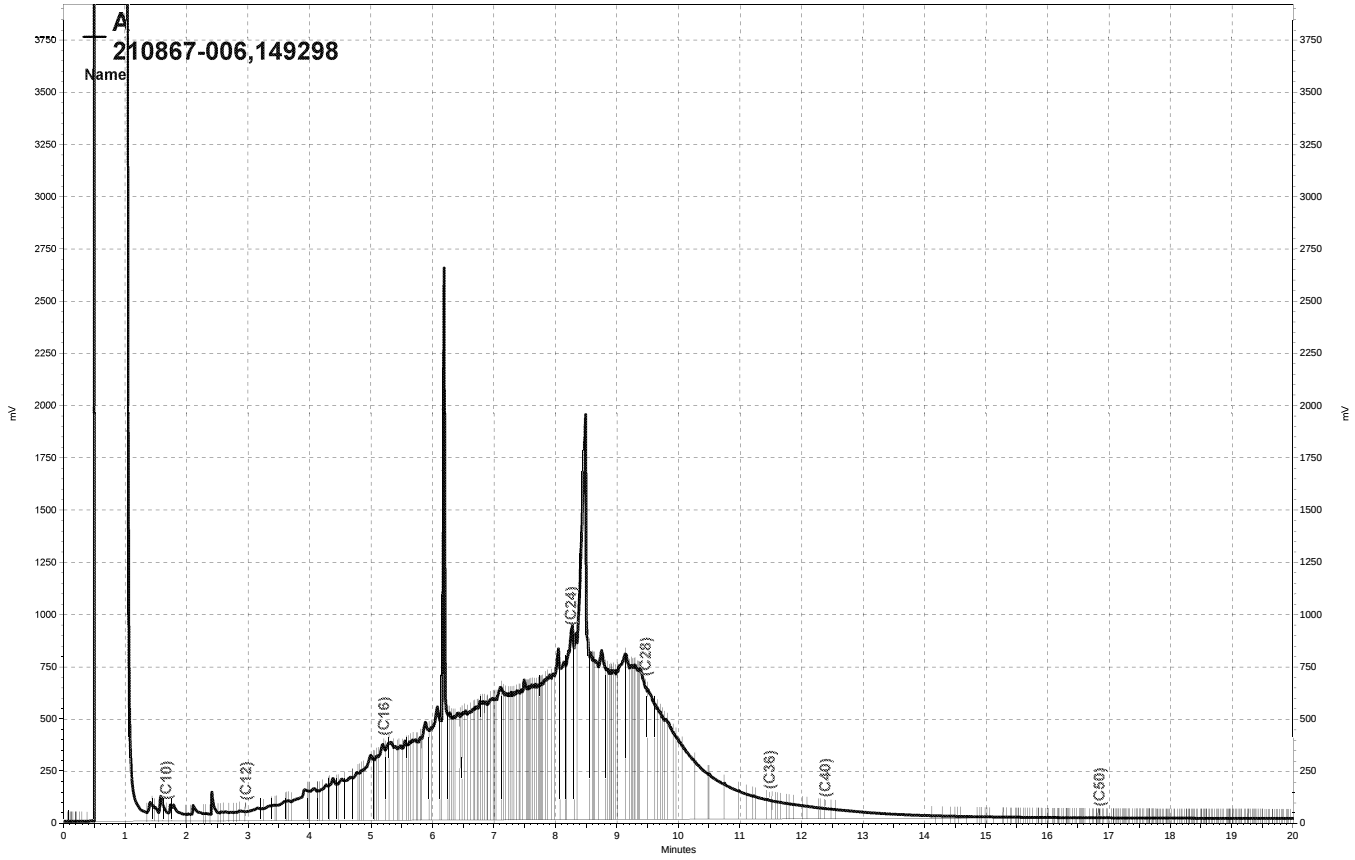

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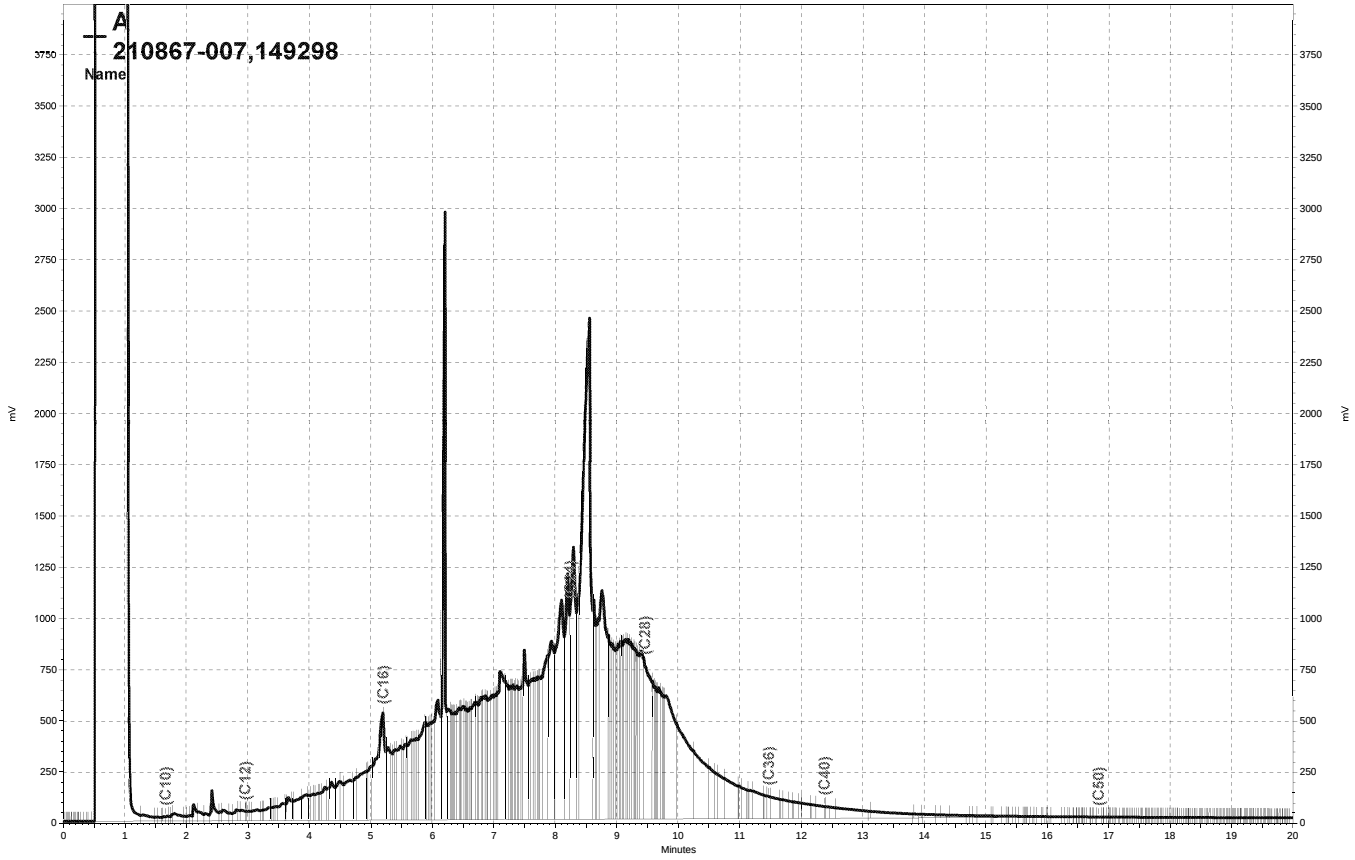

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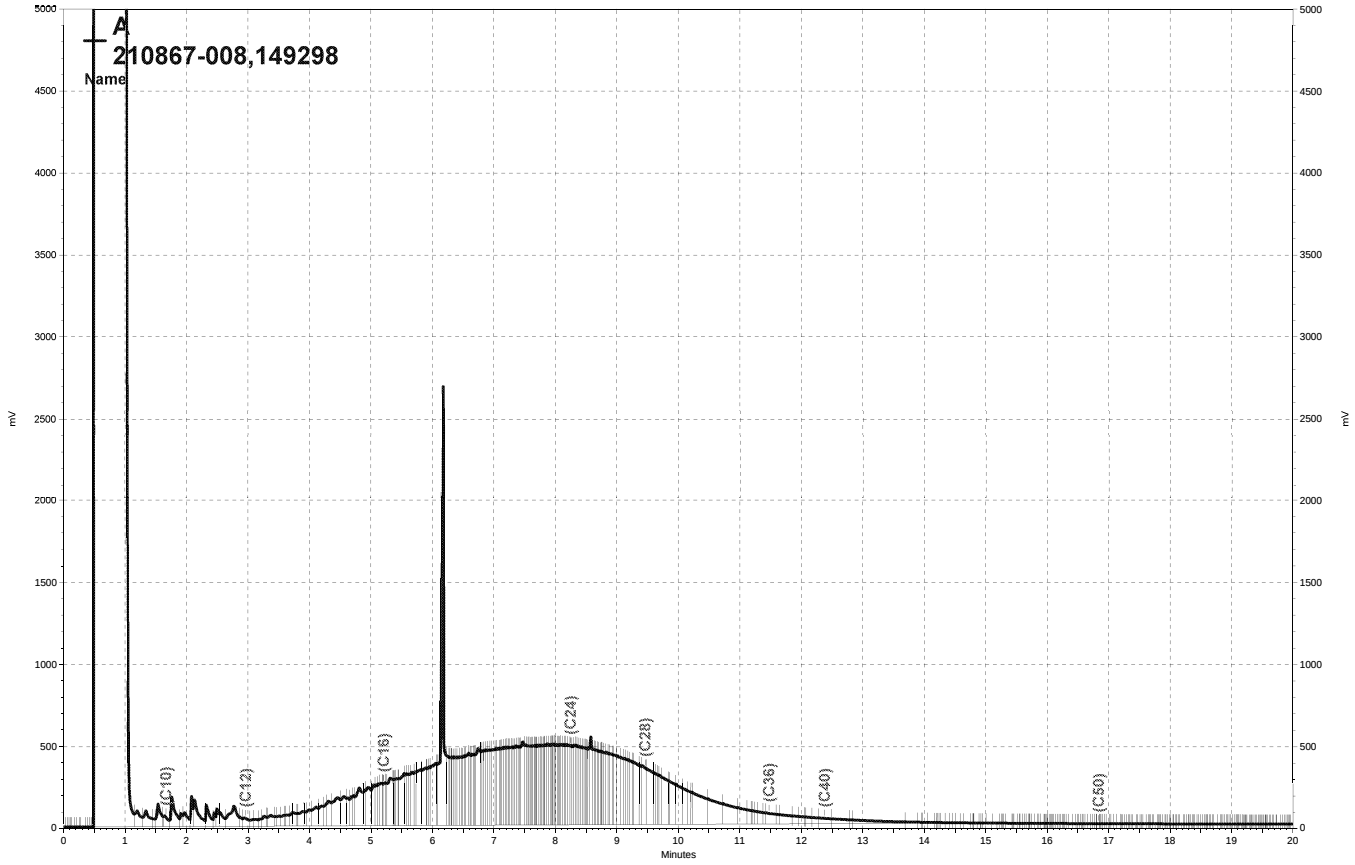

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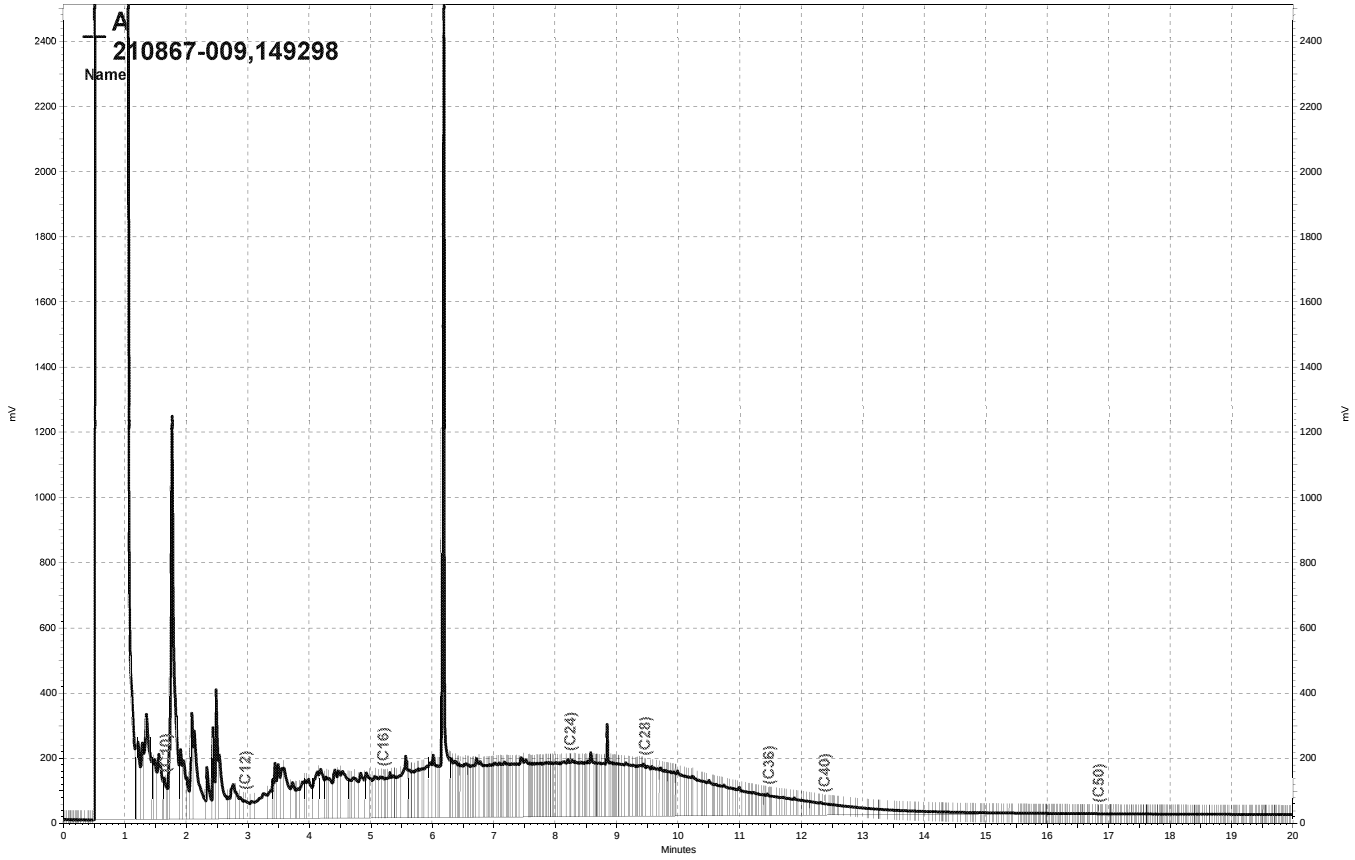

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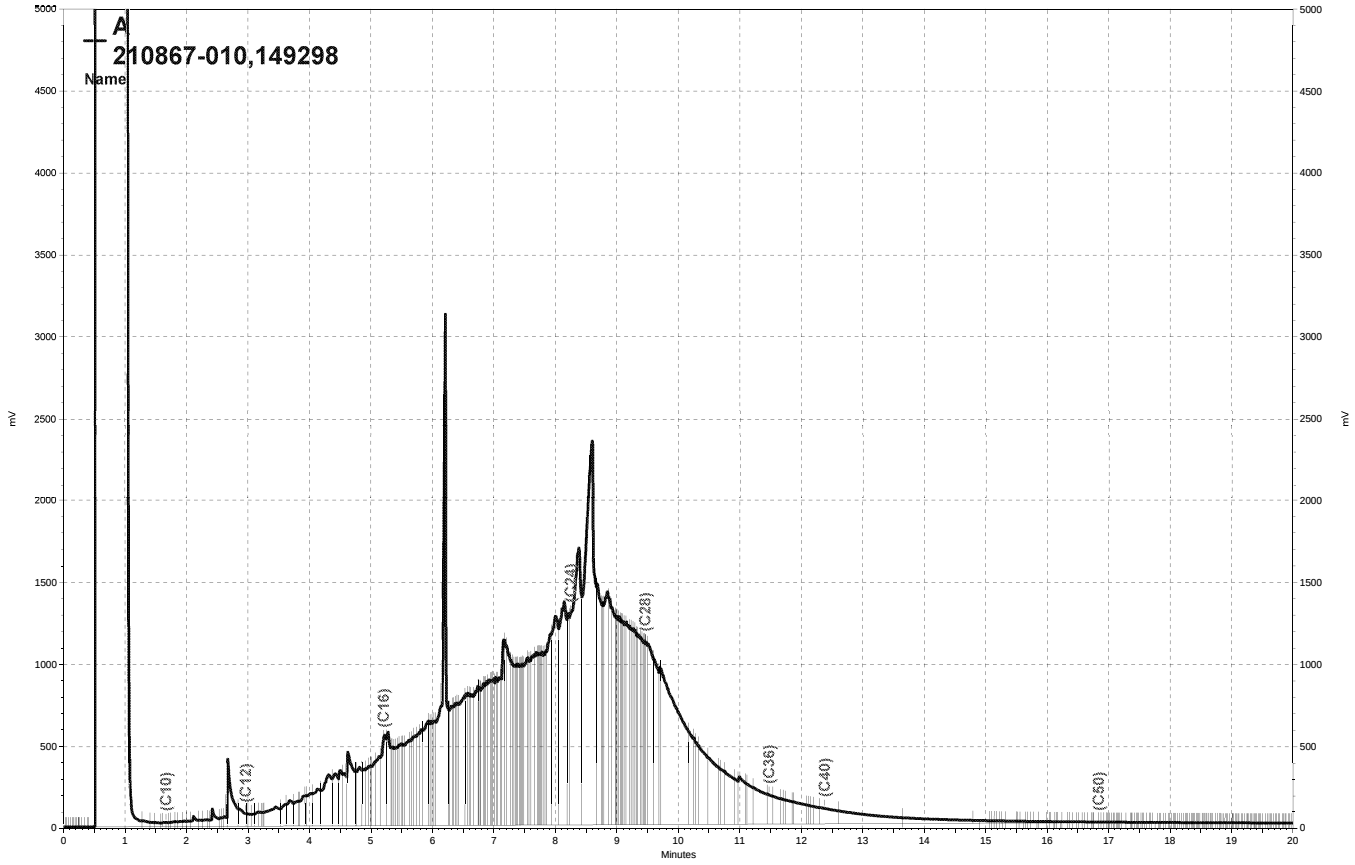

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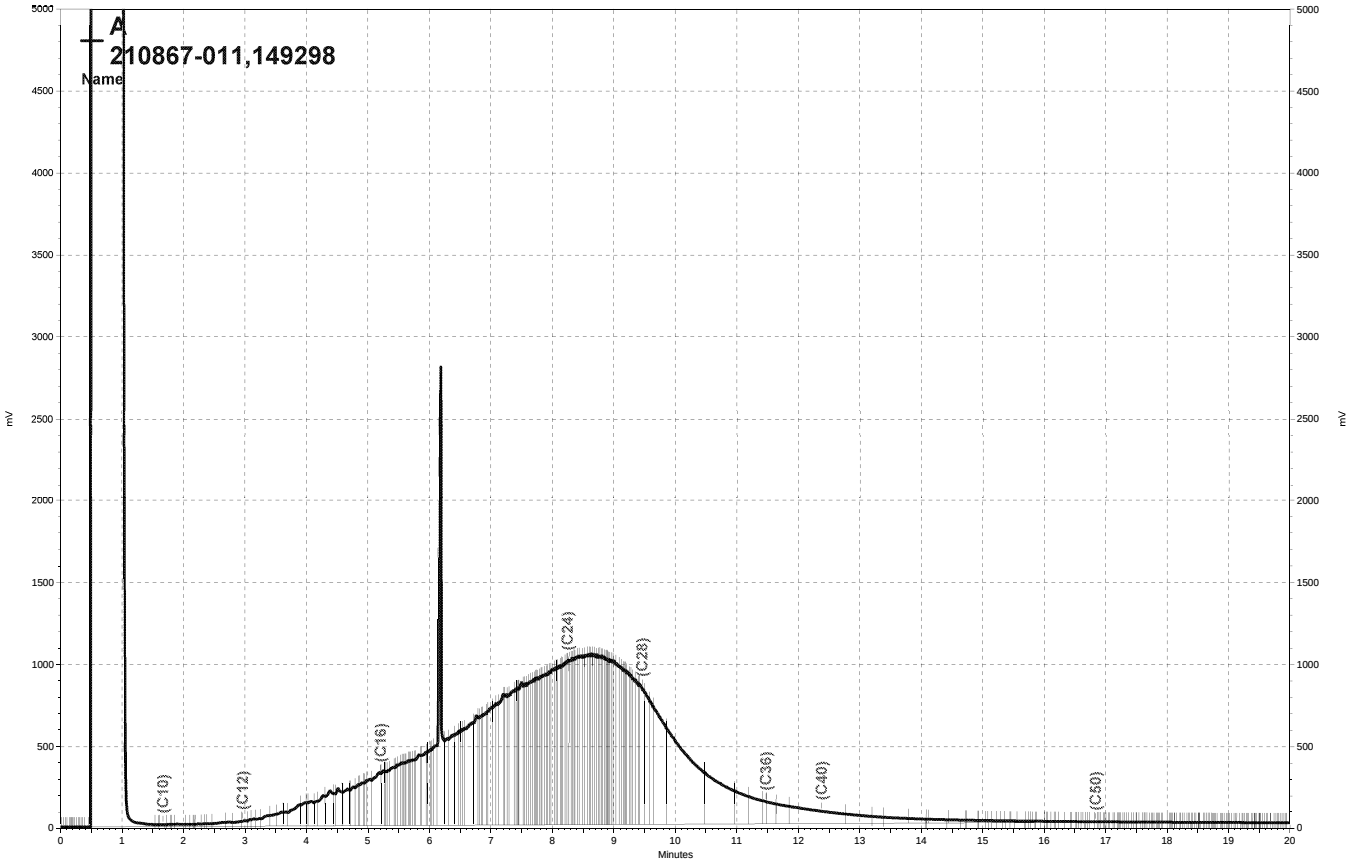

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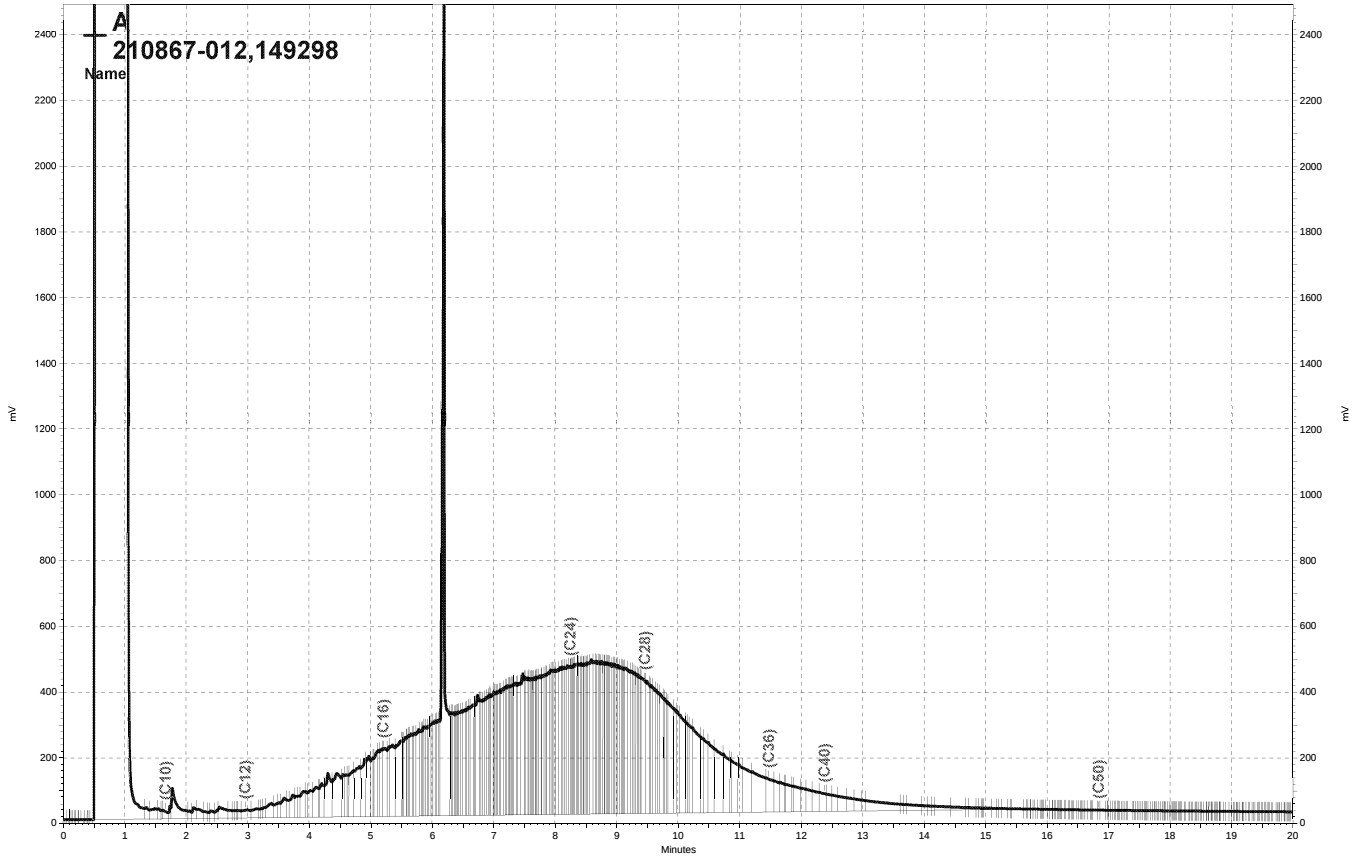

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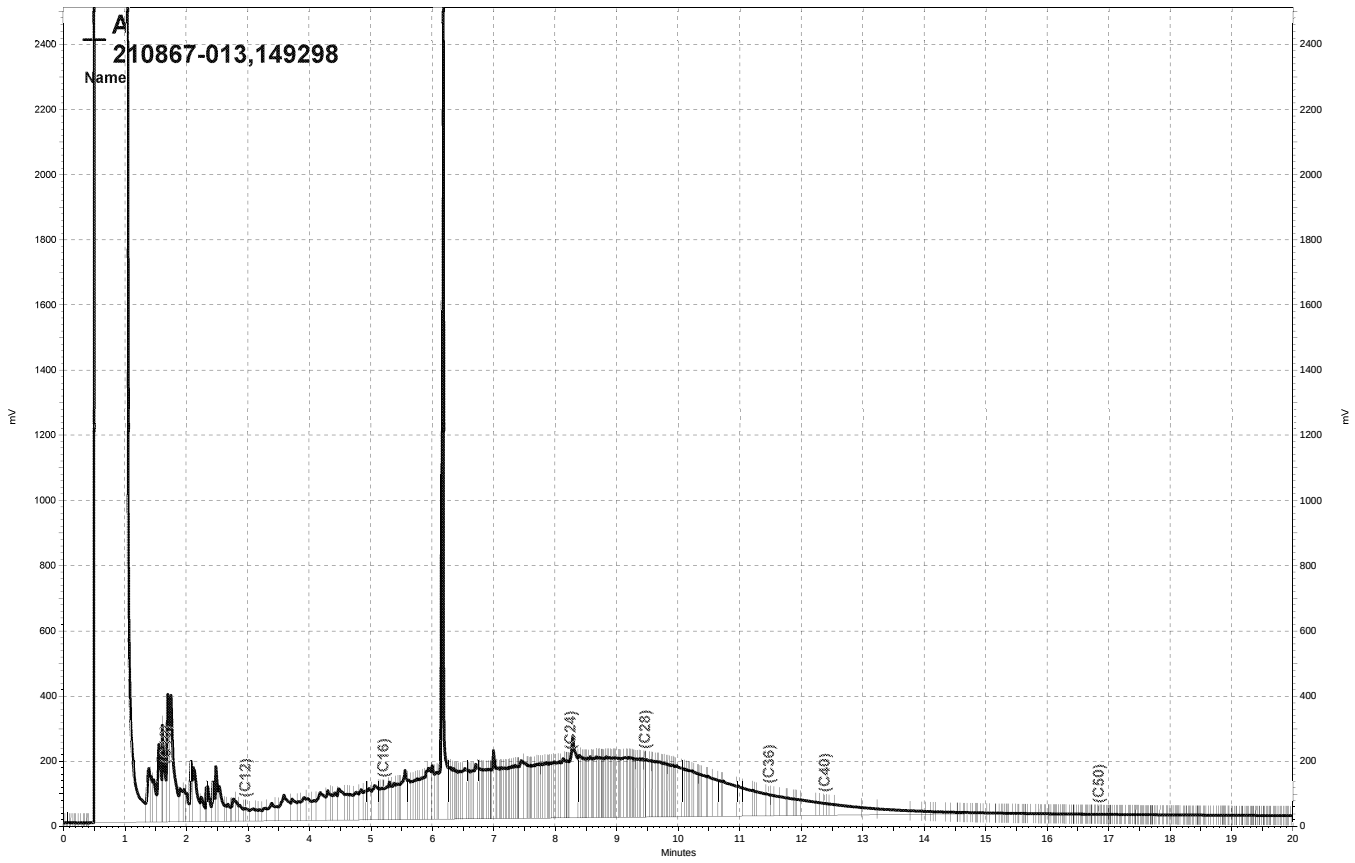

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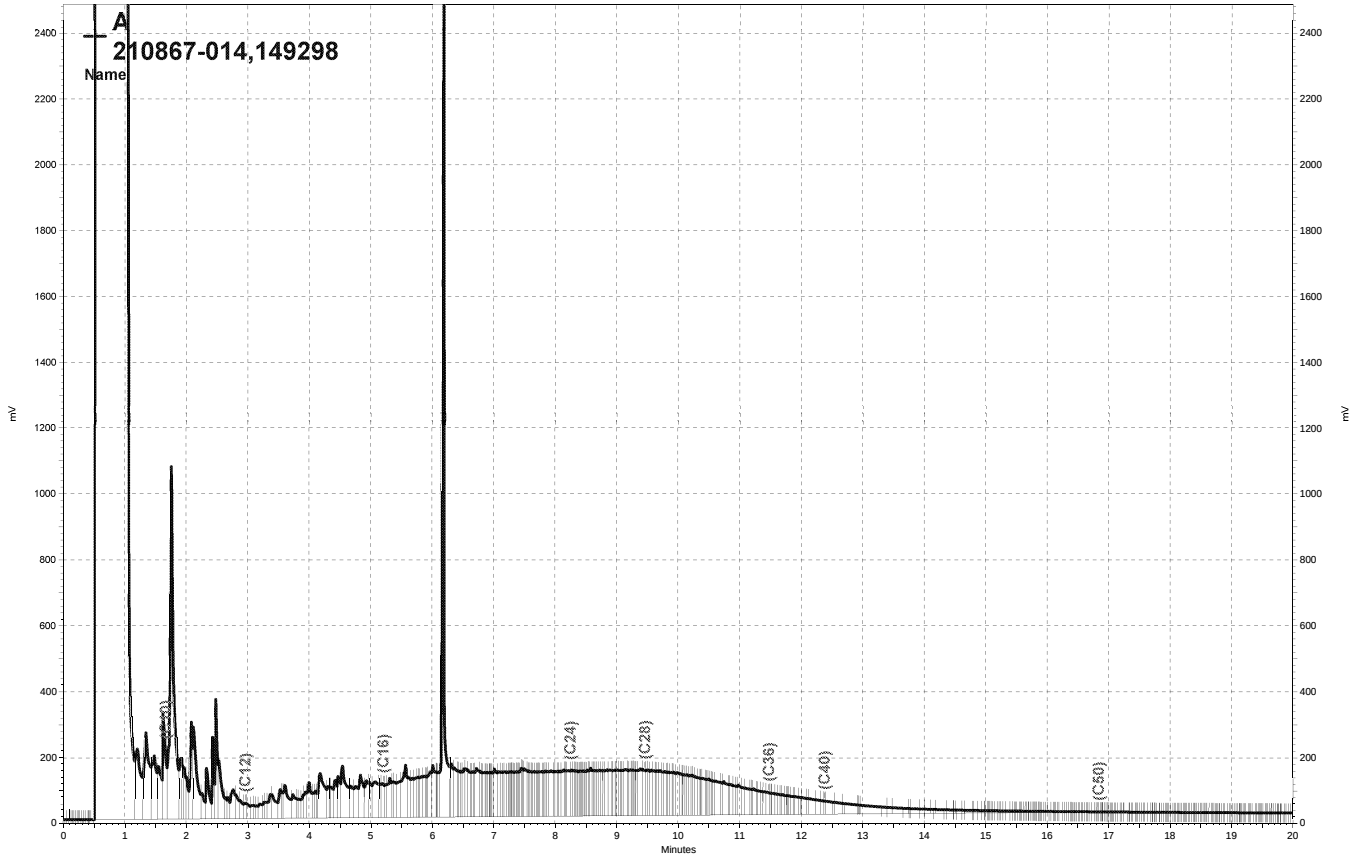

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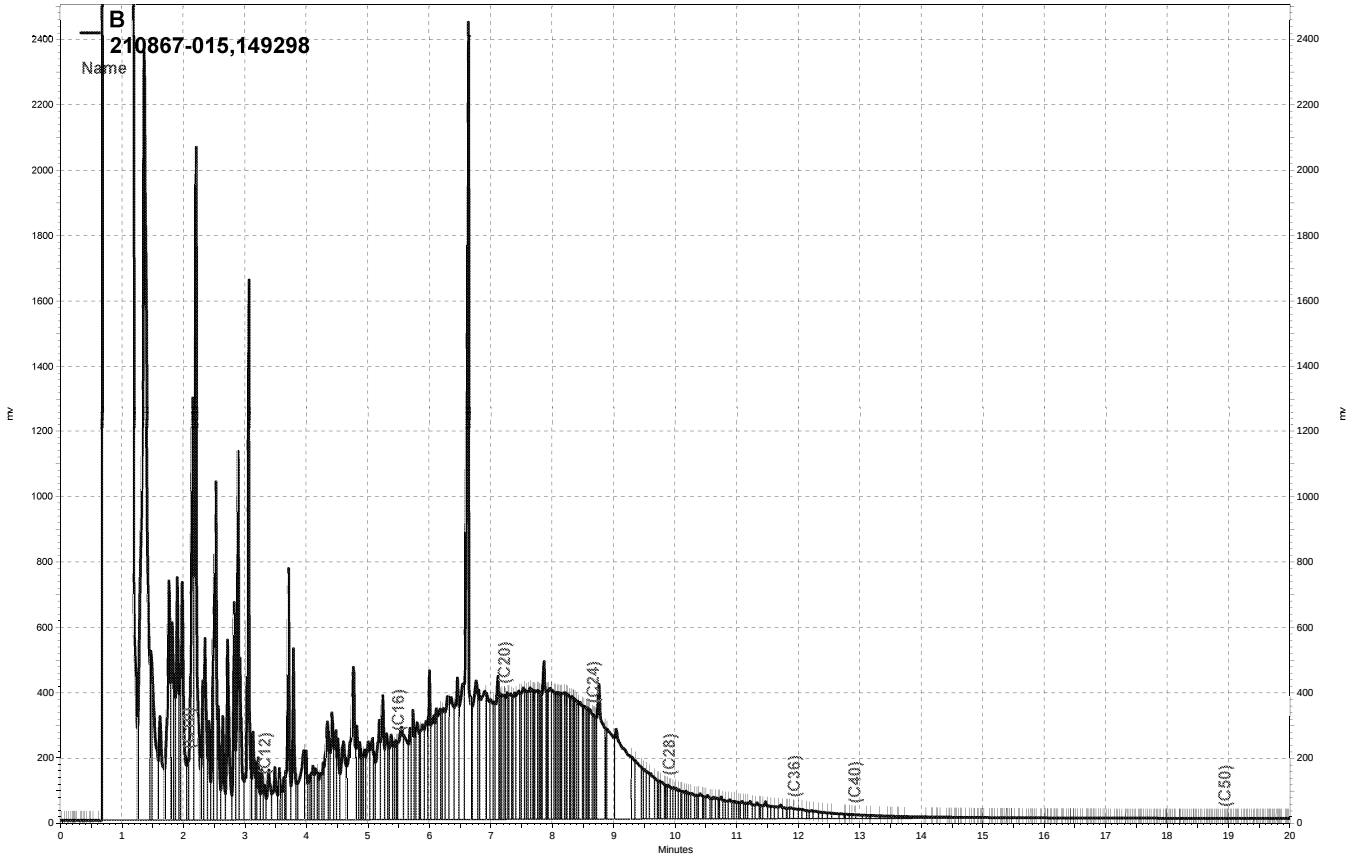

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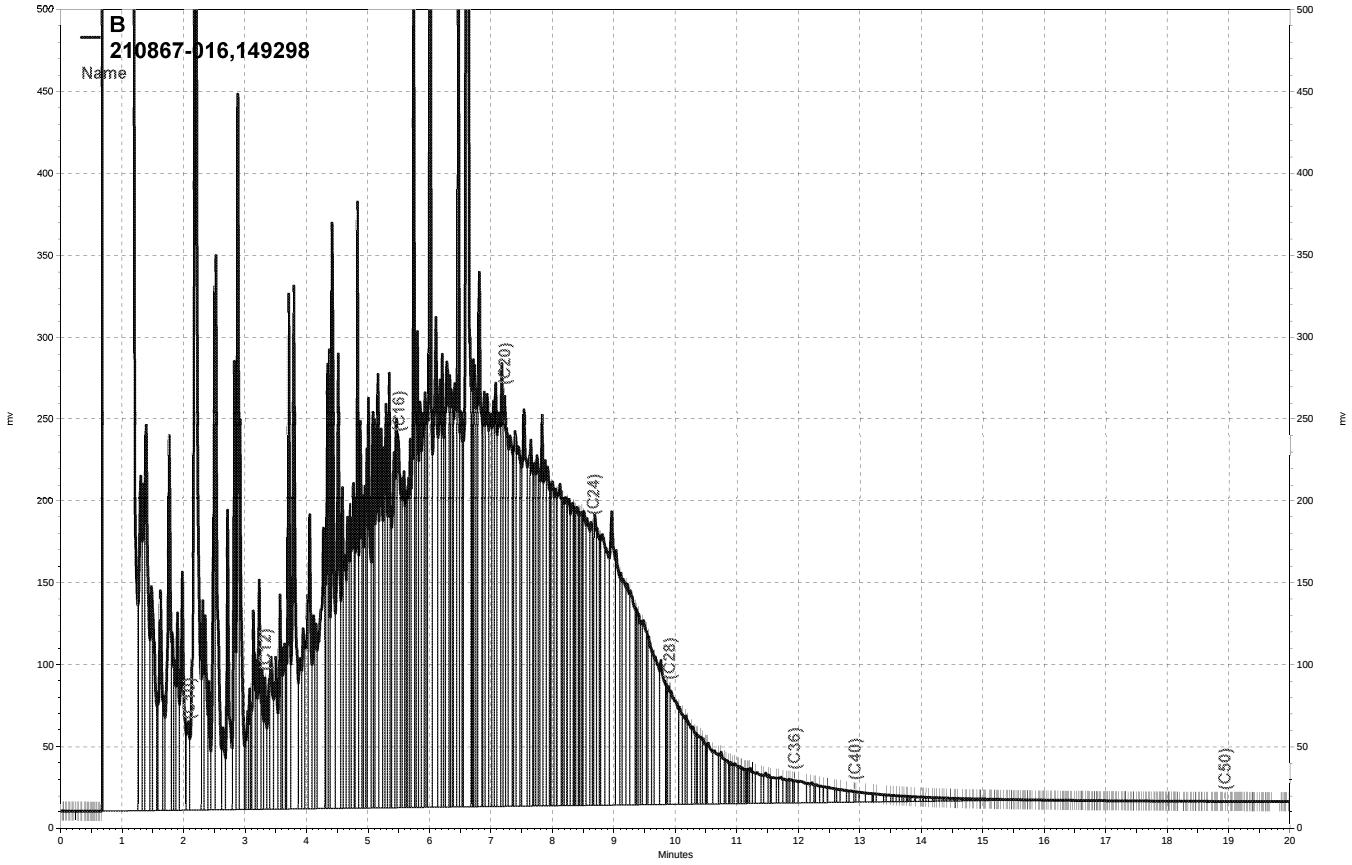

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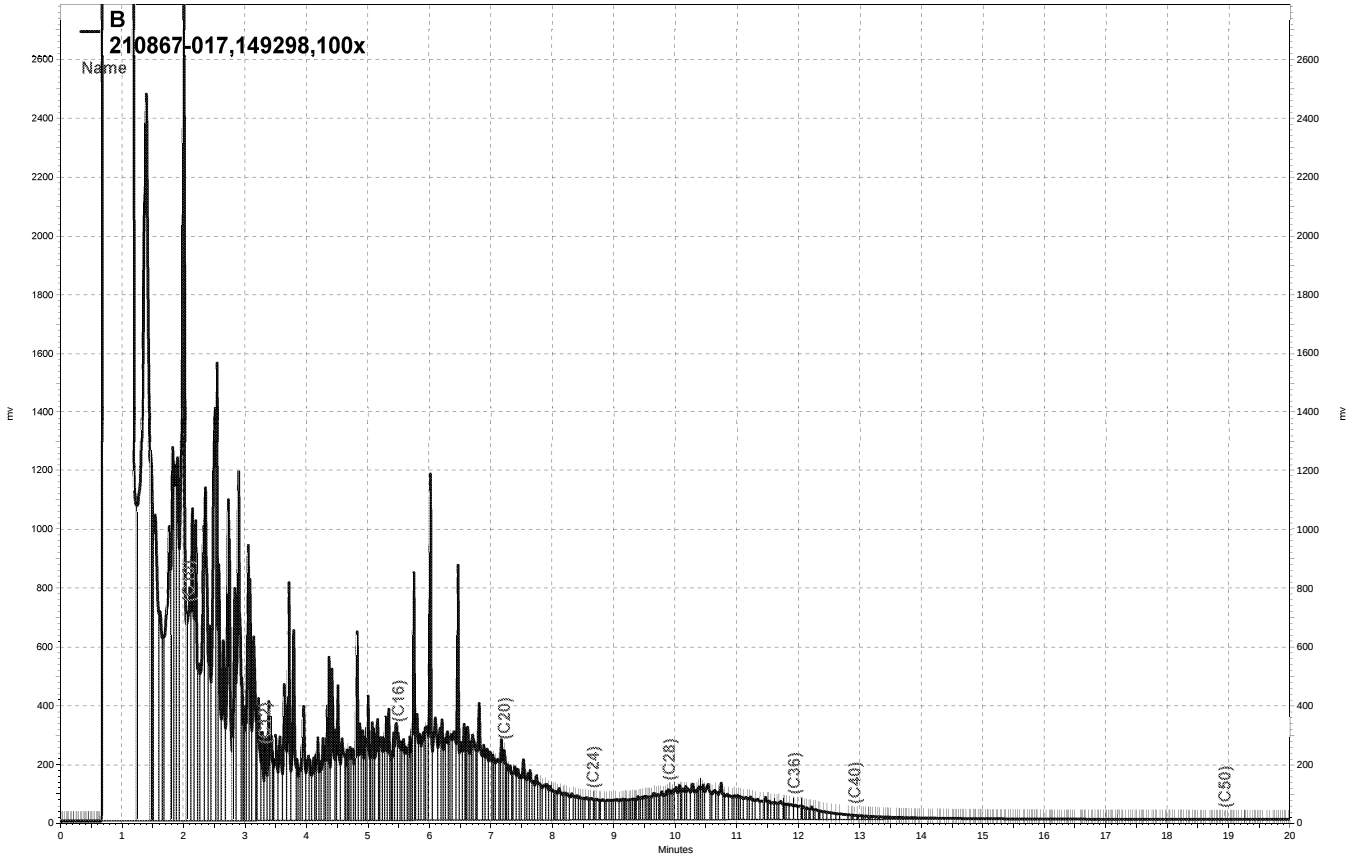

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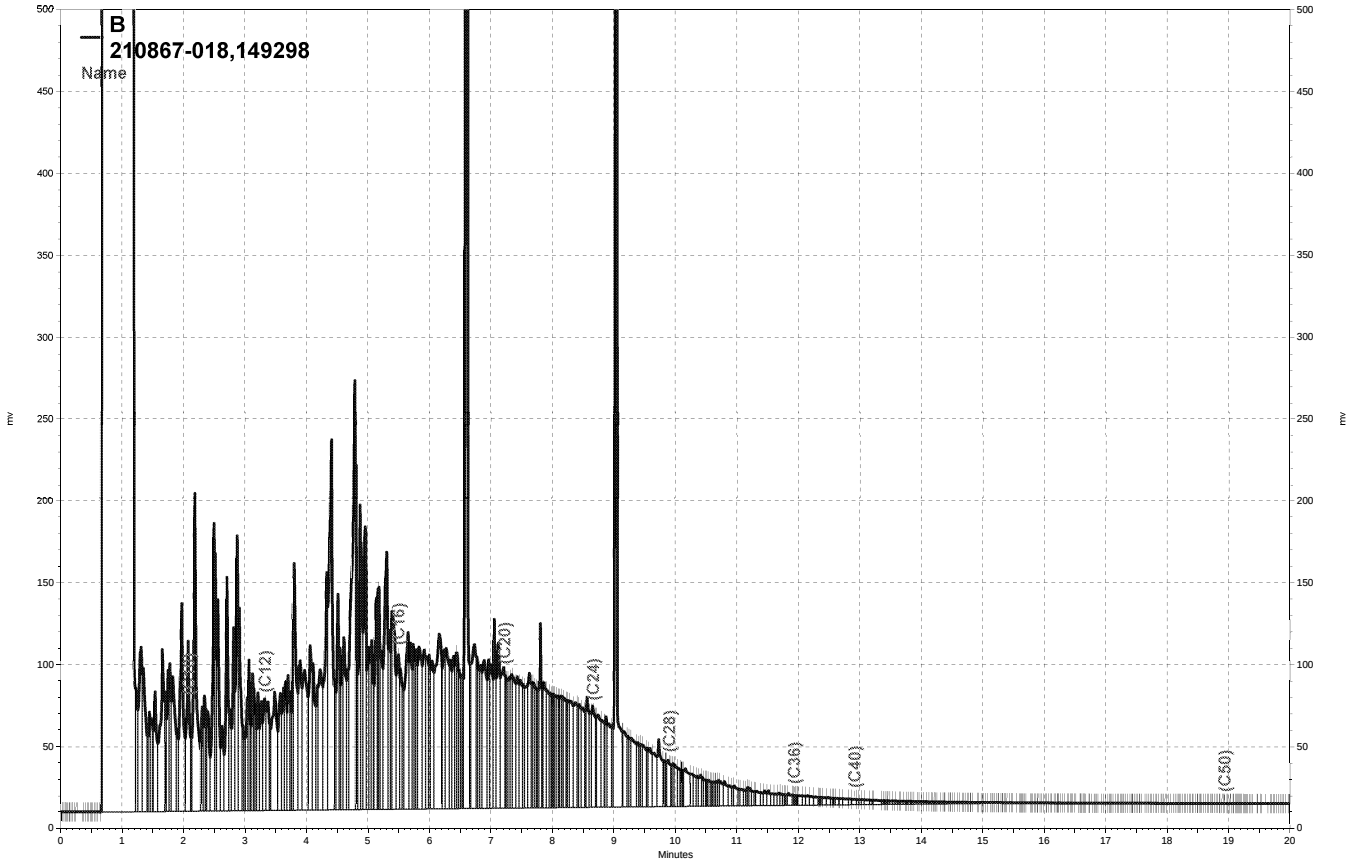

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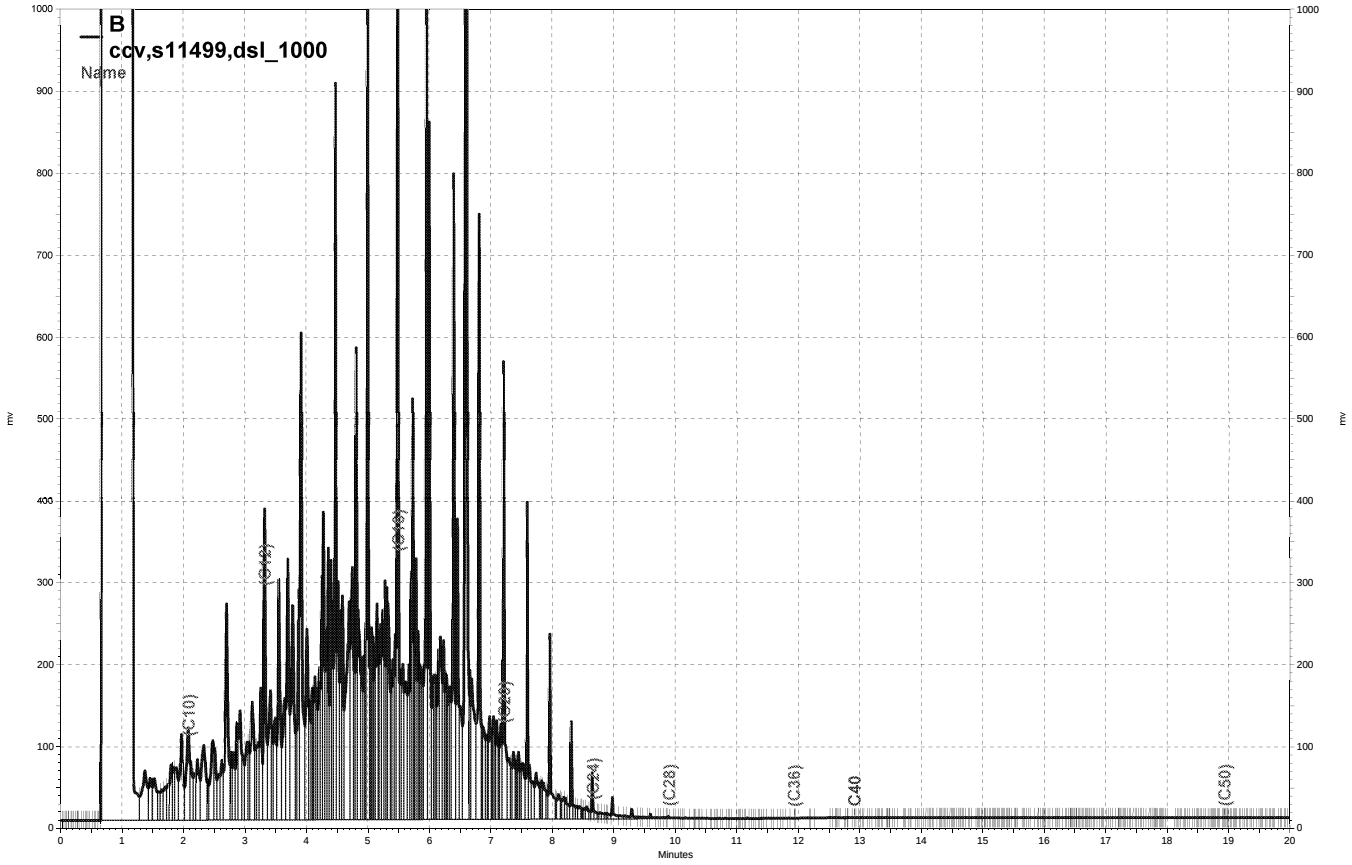

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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 210983
ANALYTICAL REPORT

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

Sample ID	Lab ID
TANK-1	210983-001

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 signatures. 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.

Signature: _____ Date: 04/07/2009
Project Manager

Signature: _____ Date: 04/09/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**210983**
Client:	**Stellar Environmental Solutions**
Project:	**2007-65**
Location:	**Bay Center Apts**
Request Date:	**03/27/09**
Samples Received:	**03/27/09**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 03/27/09. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
High surrogate recovery was observed for o-terphenyl in the method blank for batch 149353; no target analytes were detected in the sample. TANK-1 (lab # 210983-001) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

210983

Chain of Custody Record

Lab job no. _____

Date _____

Page 1 of 1

Laboratory Curtis and Tompkins, Ltd.
Address 2323 Fifth Street
Berkeley, California 94710
510-486-0900

Project Owner Bay Center Investor, LLC
6400 Christie Avenue
Site Address ~~Emeryville, California~~

Project Name Emerybay Phase I Condos
Project Number 2007-65

Method of Shipment Hand Delivery
Shipment No. _____
Airbill No. _____
Cooler No. _____
Project Manager Teal Glass
Telephone No. (510) 644-3123
Fax No. (510) 644-3859
Samplers: *(Signature)* Teal Glass

Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Preservation: Cooler	Preservation: Chemical	Filtered	No. of Containers	Analysis Required: TVH & MBTEX	Analysis Required: TEPH	Remarks
Tank-1	AST	3-27-09	1135	W	1 L, VOA	Y	(a)	N	5	X	X	

Relinquished by:	Date	Time	Received by:	Date	Time
Signature Teal Glass	3-27-09	1000	Signature [illegible]	3/27/09	11:30
Printed Teal Glass			Printed Tracy Boyd		
Company Stellar Environmental			Company CET		

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

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

Turnaround Time: Standard

Comments: (a) VOA w/ HCL

2000-00-01

★ Stellar Environmental Solutions

Cold & Intact.

2198 Sixth Street #201, Berkeley, CA 94710

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 210983 Date Received 3-27-9 Number of coolers 1

Client STEWART Project EMERY BAY PHASE 1 / CONDOS

Date Opened 3-27-9 By (print) S. Evans (sign) [signature]

Date Logged in / By (print) / (sign) /

1. Did cooler come with a shipping slip (airbill, etc) YES ~~NO~~ (circled: NO)

 Shipping info

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO

 How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A (circled: N/A)

3. Were custody papers dry and intact when received? YES NO (circled: YES)

4. Were custody papers filled out properly (ink, signed, etc)? YES NO (circled: YES)

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO (circled: YES)

6. Indicate the packing in cooler: (if other, describe)

☐ 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 (circled: NO)

 If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO (circled: YES)

10. Are samples in the appropriate containers for indicated tests? YES NO (circled: YES)

11. Are sample labels present, in good condition and complete? YES NO (circled: YES)

12. Do the sample labels agree with custody papers? YES NO (circled: YES)

13. Was sufficient amount of sample sent for tests requested? YES NO (circled: YES)

14. Are the samples appropriately preserved? YES NO N/A (circled: YES)

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A * (circled: NO)

16. Was the client contacted concerning this sample delivery? YES NO

 If YES, Who was called? By Date:

COMMENTS

* Sample #1 = 1/4 voas have bubbles.

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210983	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Field ID:	TANK-1	Sampled:	03/27/09
Matrix:	Water	Received:	03/27/09
Units:	ug/L	Analyzed:	04/02/09
Batch#:	149547		

Type: SAMPLE Diln Fac: 10.00
Lab ID: 210983-001

Analyte	Result	RL	Analysis
Gasoline C7-C12	6,900	500	EPA 8015B
MTBE	ND	20	EPA 8021B
Benzene	1,300	5.0	EPA 8021B
Toluene	38	5.0	EPA 8021B
Ethylbenzene	13	5.0	EPA 8021B
m,p-Xylenes	250	5.0	EPA 8021B
o-Xylene	50	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	63-146	EPA 8015B
Bromofluorobenzene (FID)	89	70-140	EPA 8015B
Trifluorotoluene (PID)	103	50-140	EPA 8021B
Bromofluorobenzene (PID)	90	56-132	EPA 8021B

Type: BLANK Diln Fac: 1.000
Lab ID: QC490092

Analyte	Result	RL	Analysis
Gasoline C7-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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	80	63-146	EPA 8015B
Bromofluorobenzene (FID)	73	70-140	EPA 8015B
Trifluorotoluene (PID)	75	50-140	EPA 8021B
Bromofluorobenzene (PID)	75	56-132	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210983	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	149547
Units:	ug/L	Analyzed:	04/02/09
Diln Fac:	1.000		

Type: BS Lab ID: QC490093

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	989.8	99	76-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	63-146
Bromofluorobenzene (FID)	93	70-140

Type: BSD Lab ID: QC490094

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,793	90	76-121	10	21

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	63-146
Bromofluorobenzene (FID)	94	70-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	210983	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	149547
Units:	ug/L	Analyzed:	04/02/09
Diln Fac:	1.000		

Type: BS Lab ID: QC490095

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.11	101	53-152
Benzene	10.00	9.624	96	79-120
Toluene	10.00	11.20	112	76-122
Ethylbenzene	10.00	11.31	113	77-125
m,p-Xylenes	10.00	11.36	114	76-126
o-Xylene	10.00	11.24	112	77-126

Surrogate	%REC	Limits
Trifluorotoluene (PID)	73	50-140
Bromofluorobenzene (PID)	78	56-132

Type: BSD Lab ID: QC490096

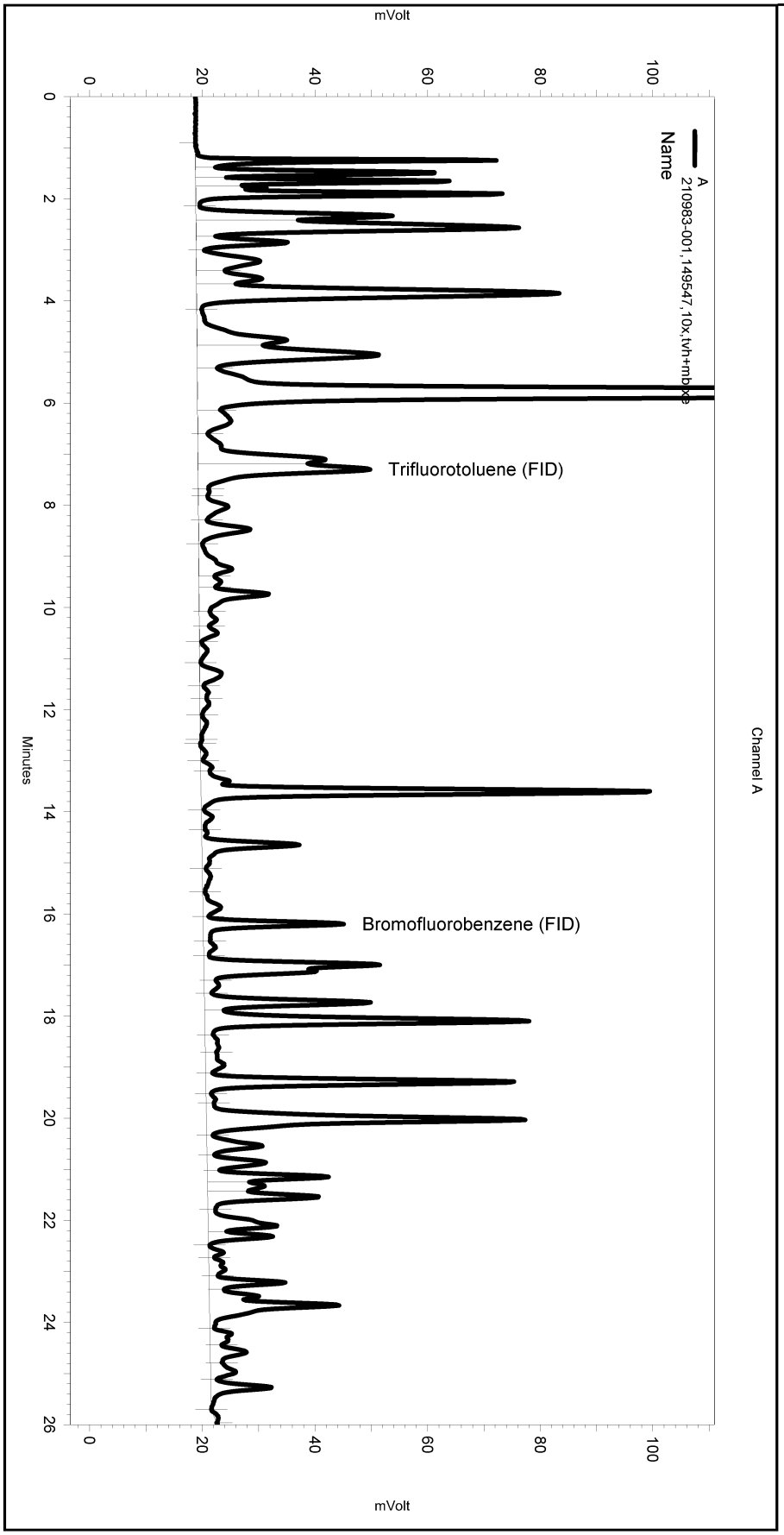
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	9.550	95	53-152	6	37
Benzene	10.00	8.518	85	79-120	12	20
Toluene	10.00	9.250	92	76-122	19	21
Ethylbenzene	10.00	9.290	93	77-125	20	21
m,p-Xylenes	10.00	9.227	92	76-126	21	23
o-Xylene	10.00	9.401	94	77-126	18	21

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	50-140
Bromofluorobenzene (PID)	88	56-132

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\092.seq**
Sample Name: **210983-001,149547,10x,tvh+mbtxe**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\092_011**
Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe083.met

Software Version 3.1.7
Run Date: 4/2/2009 3:01:03 PM
Analysis Date: 4/2/2009 3:30:11 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: b1.3



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No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10050\092_011_E91D.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	210983	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	TANK-1	Sampled:	03/27/09
Matrix:	Water	Received:	03/27/09
Units:	ug/L	Prepared:	03/27/09
Batch#:	149353		

Type:	SAMPLE	Diln Fac:	50.00
Lab ID:	210983-001	Analyzed:	04/03/09

Analyte	Result	RL
Diesel C10-C24	340,000	2,500

Surrogate	%REC	Limits
o-Terphenyl	DO	61-127

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC489294	Analyzed:	04/01/09

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	131 *	61-127

*= Value outside of QC limits; see narrative
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	210983	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	149353
Units:	ug/L	Prepared:	03/27/09
Diln Fac:	1.000	Analyzed:	03/30/09

Type: BS
Lab ID: QC489295
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,507	100	50-120

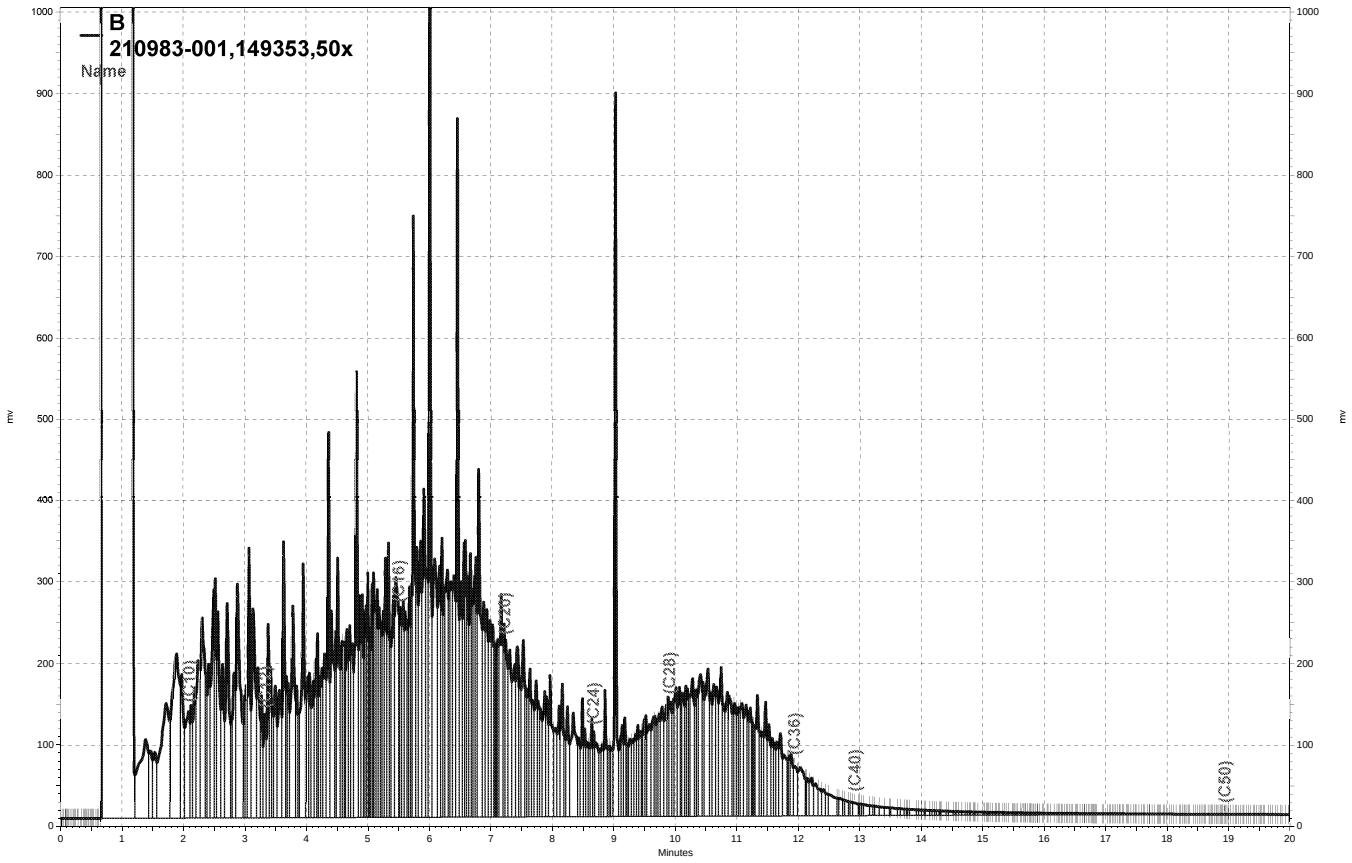
Surrogate	%REC	Limits
o-Terphenyl	112	61-127

Type: BSD
Lab ID: QC489296
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,733	109	50-120	9	37

Surrogate	%REC	Limits
o-Terphenyl	121	61-127

RPD= Relative Percent Difference



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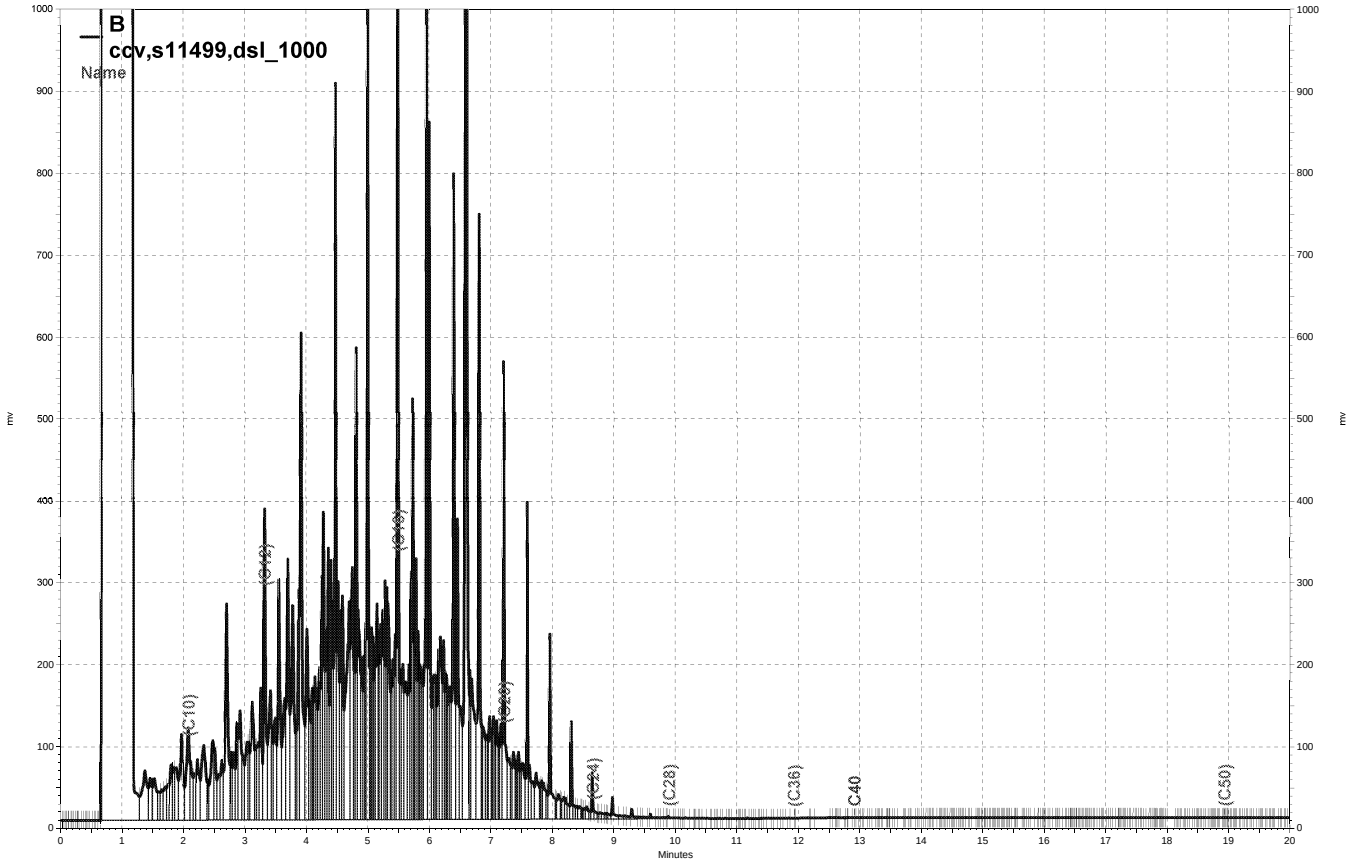

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APPENDIX D

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 - date 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

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

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

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

MW-7					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed 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

MW-8					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed March 2004					
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

MW-9					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed 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

MW-10					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed 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

MW-11					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed 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

MW-12					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed between 2004-2006					
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

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

MW-14					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**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

MW-15					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed between 2004-2006					
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

MW-16					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed between 2004-2006					
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

MW-17					
Sampling Event No.	**Date**	**TOC Elevation**	**DTW**	**DTP**	**GW Elevation**
Installed between 2004-2006					
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

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

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

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[c]	NM[c]	NM[c]
11	Mar-09	16.70	9.06[c]	9.06[c]	7.64

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.

[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 Recovery
6400 Christie Avenue, Emeryville, CA

	Well or Trench Location																									
Extraction Date	**MW-3**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**	**MW-14**	**MW-15**	**MW-16**	**MW-17**	**MW-18**	**MW-E**	**RW-1**	**TA-E**	**TA-M**	**TA-W**	**TB-E**	**TB-M**	**TB-W**	**TC-E**	**TC-M**	**TC-W**	**Total Extracted**
Apr-04	---	---	---	---	1	---	1	---	---	---	---	---	---	---	---	---	19.75	---	---	---	---	---	---	---	---	---	21.75
May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22.5	---	---	---	---	---	---	---	---	---	22.50
Sep-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.74	---	---	---	---	---	---	---	---	---	0.74
Oct-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.22	---	---	---	---	---	---	---	---	---	5.22
2004 Total																											**50.21**
Jan-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00
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
2009 Total																											**7.73**
Total Extracted	**0.60**	**0.05**	**0.02**	**0.00**	**2.21**	**0.00**	**3.13**	**0.02**	**0.45**	**1.25**	**0.54**	**0.34**	**0.01**	**0.54**	**0.00**	**0.04**	**53.96**	**17.43**	**20.42**	**24.99**	**0.55**	**0.57**	**0.27**	**1.67**	**0.29**	**0.29**	**129.64**

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

EES-4

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	CAL000331636	1	800-424-9300	004004667 JJK

GENERATOR

5. Generator's Name and Mailing Address
Bay Center Apartments
6400 Christie St
Emeryville CA 94608.
Generator's Phone: 510-594-2050

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES
U.S. EPA ID Number: CAD982413262

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
EVERGREEN OIL, INC.
6880 SMITH AVENUE
NEWARK CA 94560
Facility's Phone: 510-795-4400
U.S. EPA ID Number: CAD980887418

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-RCRA HAZARDOUS WASTE, LIQUID (Oil & water)	001	TT	1150	G	221 223
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
PROFILE # _____
DOT ERG# 171 WEAR PROTECTIVE CLOTHING
Invoice # 509264
Sales Order # 027351

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Ted Glass Agent of Bay Center LLC
Signature: [signature]
Month 03 Day 27 Year 09

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Jesse Falcon
Signature: [signature]
Month 03 Day 27 Year 09

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H135			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Michael Sayers
Signature: [signature]
Month 03 Day 27 Year 09

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Certificate of Recycling

Dear Valued Customer:

Evergreen certifies that the **used oil, used antifreeze, oily water,** and **used oil filters** collected from your facility were fully recycled in accordance with all applicable state and federal regulations.

Evergreen Environmental Services also provides emergency spill response: vacuum cleaning of tanks, clarifiers, and sumps; transportation of hazardous waste, steam cleaning, management of oily solids, and treatment of non-hazardous wastewater.

For more information regarding the services Evergreen provides, please call:

1-800-972-5284

We appreciate your business!

This certificate also serves as notification, as required by Title 22, Section 66264.12, that Evergreen Oil, Inc. has the appropriate permits for, and will accept the wastes manifested to Evergreen facilities.

"dedicated to the protection of the environment"