#### RECEIVED

11:28 am, Jun 20, 2011 Alameda County Environmental Health

# FIRST SEMIANNUAL 2011 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

May 2011



GEOSCIENCE & ENGINEERING CONSULTING

Environmental Solutions, Inc.

## FIRST SEMI-ANNUAL 2011 GROUNDWATER MONITORING AND PRODUCT EXTRACTION REPORT

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

**Prepared** for:

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

Prepared by:

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

May 6, 2011

Project No. 2007-65



2198 Sixth Street, Suite 201-Berkeley, CA 94710 Tel: (510)644-3123 · Fax: (510)644-3859

GEOSCIENCE & ENGINEERING CONSULTING

May 6, 2011

Mr. Mark Detterman Hazardous Materials Specialist Alameda County Department of Environmental Health Local Oversight Program 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Subject: First Semiannual 2011 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 2011 and March 2011 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 2011 groundwater monitoring event.

This report summarizes the 15<sup>th</sup> sampling event conducted at the site since 1988. The plume underlying the open parking garage appears stable when compared to the last two March semiannual events, with the main residual contamination concentrated around wells MW-8, MW-12, MW-14, MW-15 and MW-18. 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,

Neurof S. Makdini

Richard S. Makdisi, P.G., R.E.A. Principal Geochemist & President

Kally Collins

Ms. Kathryn Collins Emerybay Commercial Assoc.



## **TABLE OF CONTENTS**

#### Section

1.0	INTRODUCTION	1
	Project Background Site and Vicinity Description Previous Investigations Objectives and Scope of Work Regulatory Oversight	1 1 6
2.0	PHYSICAL SETTING	7
	Topography and Drainage Geology Groundwater Hydrology	7
3.0	MARCH 2011 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES	10
	Sampling Methods and Activities Current Monitoring Event	
4.0	REGULATORY CONSIDERATIONS, ANALYTICAL RESULTS, AND DISCUSSION OF FINDINGS	13
4.0		13
4.0 5.0	DISCUSSION OF FINDINGS Regulatory Considerations	13 14
	DISCUSSION OF FINDINGS Regulatory Considerations Groundwater Sample Results	13 14 20 20 21 22
	DISCUSSION OF FINDINGS	<ol> <li>13</li> <li>14</li> <li>20</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> </ol>
5.0	DISCUSSION OF FINDINGS	13 14 20 20 21 22 23 25 25

## TABLE OF CONTENTS (continued)

## Section

8.0 LIMITATIONS	
-----------------	--

#### Appendices

Appendix A	Historical Groundwater Well Analytical Results
Appendix B	Groundwater Monitoring Field Data Sheets
Appendix C	Analytical Laboratory Report and Chain-of-Custody Record
Appendix D	Historical Groundwater Elevation Data
Appendix E	Historical Product Extraction Data Table
Appendix F	Groundwater Disposal Documentation

Page

## **TABLES AND FIGURES**

Tables	Page
Table 1 11	
March 30, 2011 Groundwater Monitoring Well Construction and Groundwater Elevation Data 6400 Christie Avenue, Emeryville, California	11
Table 2 Groundwater Sample Analytical Results – March 30 and 31, 20116400 Christie Avenue, Emeryville, California	14
Table 3 Passive Skimmer Product Extraction in Trenches– March 28, 2011	21
Figures	Page
Figure 1 Site Location Map	2
Figure 2 Site Plan	3
Figure 3 Monitoring Well and Trench Locations	5
Figure 4 Groundwater Elevation Map – March 2011	9
Figure 5 Groundwater Monitoring Well Analytical Results – March 2011	15
Figure 6 Total Petroleum Hydrocarbon Plume as Gasoline – March 2011	17
Figure 7 Total Petroleum Hydrocarbon Plume as Diesel – March 2011	18

## **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. (Stellar Environmental) provides environmental consulting services. The site has undergone fuel tank-related investigations and remediation since 1988 (by Stellar Environmental 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 65<sup>th</sup> Avenue, beyond Christie Avenue and to the west by the Bay Center Offices, and to the south by 64<sup>th</sup> Avenue. The surrounding area is developed with apartment complexes, offices, and commercial stores.

#### PREVIOUS INVESTIGATIONS

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

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



Figure 1

_
5
1
3
Ľ.
6
Ō
$\sim$

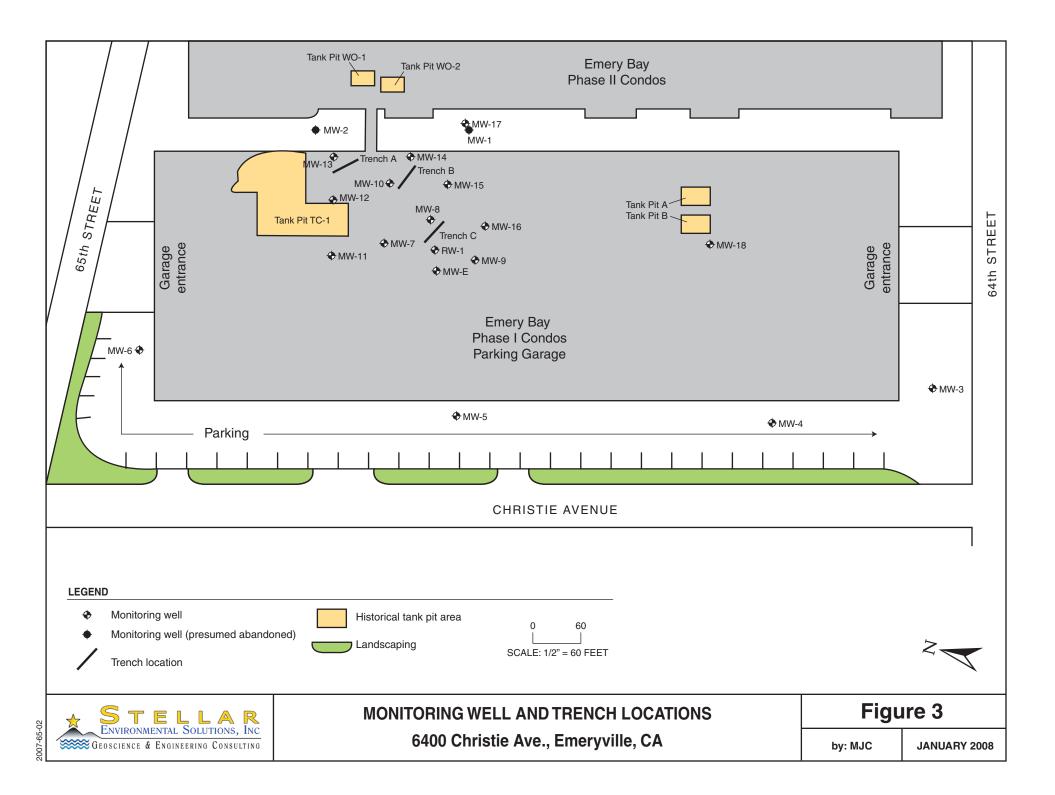
Emeryville, CA



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

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

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



area. The first groundwater monitoring event for the current wells was conducted in March 2004, and the second event was conducted in December 2006. A previous Stellar Environmental report (Stellar Environmental, 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 Appendices D and A, respectively.

#### **OBJECTIVES AND SCOPE OF WORK**

This report discusses the following activities conducted/coordinated by Stellar Environmental 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**

Alameda Department of Environmental Health (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 currently Mr. Mark Detterman (whom replaced Ms. Barbara Jakub of ACEH in mid 2010). In a November 2008 meeting with the Responsible Party (represented by Ms. Sarah Irving), Stellar Environmental (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. Stellar Environmental submitted a letter on November 24, 2008 to ACEH documenting the change in sampling frequency. The Indoor Air Survey and Preferential Pathway Report (Stellar Environmental, 2009b) was submitted to ACEH on April 6, 2009. Stellar Environmental conducted an additional indoor air survey in the ground floor office area on March 22, 2010. The results were presented in a separate report, which was submitted to ACEH on April 6, 2010 (Stellar Environmental, 2010).

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

## 2.0 PHYSICAL SETTING

The following evaluation of the physical setting of the site—including topography, drainage, and geologic and hydrogeologic conditions—is based on previous (1986 through 2006) site investigations conducted by others, and site inspections and subsurface data collection by Stellar Environmental 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, 64<sup>th</sup>, and 65<sup>th</sup> Streets discharges into San Francisco Bay. Stellar Environmental 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 2 feet of soil is generally pavement and imported fill. This is underlain by approximately 20 feet of firm soil consisting of primarily dense, silty sand with intermittent layers of silty and sandy clay. Stiff to very stiff clay lies a depth of approximately 40 feet and extends to the depth of the borings, approximately 101.5 feet (Geomatrix, 1988).

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

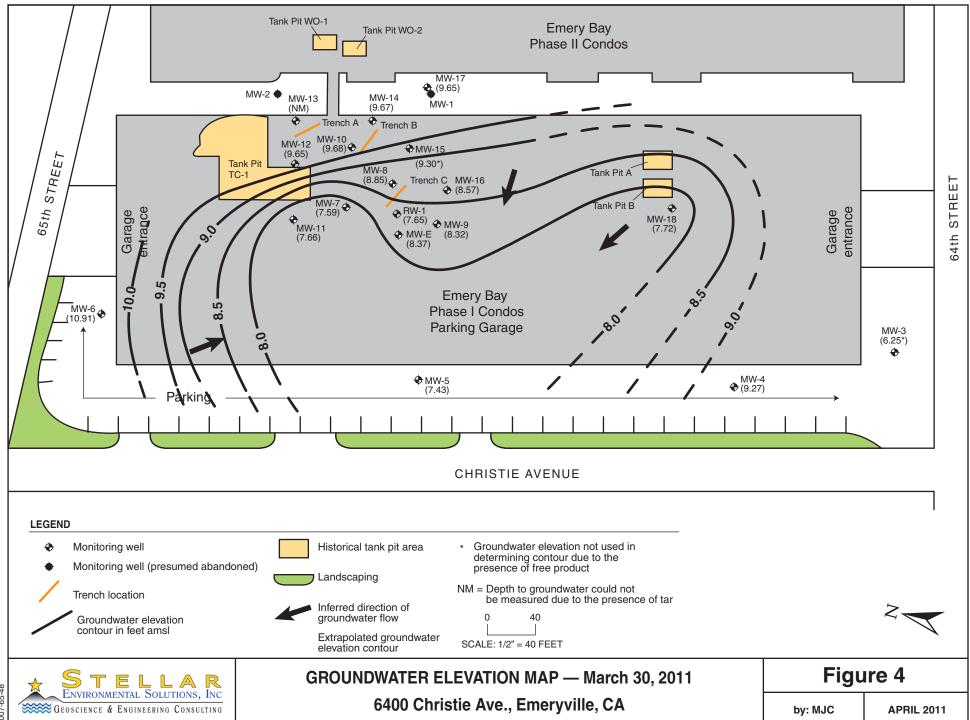
fault zone, the legislatively defined zone of restricted land use 200 feet around an active fault due to the high probability of ground rupture.

#### **GROUNDWATER HYDROLOGY**

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

The groundwater gradient measured during the March 2011 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 2011 event ranged from 6.25 to 10.91 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).



2007-65-48

## 3.0 MARCH 2011 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 level measurements, purging, sampling, and field analyses on March 30 and 31 under the supervision of Stellar Environmental 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

#### March 30, 2011

#### 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 <sup>(a)</sup>	Depth to Free Product (TOC)	Thickness of Free Product (feet)	Groundwater Elevation (March 30, 2011)
MW-3	25	5 to 20	16.65	NM	NM	6.25
MW-4	25	5 to 20	16.29	NP	NP	9.27
MW-5	25	5 to 20	16.72	NP	NP	7.43
MW-6	25	5 to 20	16.82	NP	NP	10.91
MW-7	20	5 to 20	17.73	NP	NP	7.59
MW-8	16	5 to 16	17.84	8.89	0.01	8.85
MW-9	20	5 to 20	17.84	NP	NP	8.32
MW-10	20	5 to 20	17.83	8.14	0.01	9.68
MW-11	20	5 to 20	17.76	NP	NP	7.66
MW-12	20	5 to 20	17.83	NP	NP	9.65
MW-13	20	5 to 20	17.66	9.90	NM	NM
MW-14	20	5 to 20	17.60	7.92	0.01	9.67
MW-15	20	5 to 20	17.80	NM	NM	9.30
MW-16	20	5 to 20	17.74	NP	NP	8.57
MW-17	20	5 to 20	18.17	8.50	0.02	9.65
MW-18	20	5 to 20	16.35	NP	NP	7.72
MW-E	47	7 to 40	17.47	NP	NP	8.37
RW-1	30	unknown	16.70	9.04	0.01	7.65
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:

<sup>(a)</sup> Relative to mean sea level.

<sup>(b)</sup> 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

NP = no free product in well)

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

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

Approximately 50 gallons of purge water and equipment decontamination rinse water from the current groundwater sampling event was containerized in the onsite 1,100 gallon above ground storage tank (AST) located in a locked fenced area on the northeast corner of the property. In addition, 959 gallons of water and 16.55 gallons of product were removed/purged from select wells during the active product removal; 0.14 gallon was removed by passive product removal.

On April 8, 2011, Evergreen Oil, Inc. vacuumed and transported the water to its recycling facility under manifest number 0070039851 (EPA ID No. CAD980887418). Appendix F contains copies of the manifest and recycling certificate.

## 4.0 REGULATORY CONSIDERATIONS, ANALYTICAL RESULTS, AND DISCUSSION OF FINDINGS

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

#### **REGULATORY CONSIDERATIONS**

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

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

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

#### **GROUNDWATER SAMPLE RESULTS**

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

	Analytical Results						
Well ID	TPHg	TPHd	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
MW-3	540	2,600	47	28	7.6	11.8	17
MW-4	<50	590	<0.5	<0.5	<0.5	<0.5	2.4
MW-5	<50	4,900	1.2	<0.5	<0.5	<0.5	5.9
MW-6	<50	1,900	1.3	<0.5	<0.5	<0.5	3.9
MW-7	630	8,100	160	5.3	14	65	<2.0
MW-8	19,000	8,800	8,100	130	890	149	<2.0
MW-9	150	11,000	5.9	0.61	<0.5	0.54	5.5
MW-10	3,700	4,500	1,200	81	25	46.4	<2.0
MW-11	3,400	6,500	1,300	22	9.6	19.9	<2.0
MW-12	15,000	3,300	7,900	180	200	127	<2.0
MW-13	86,000	13,000	44,000	400	3,200	912	<2.0
MW-14	16,000	2,800	6,600	1,600	450	600	<2.0
MW-15	11,000	3,200	5,600	88	110	66.1	<2.0
MW-16	64	9,900	13	1.6	<0.5	2.3	16
MW-17	6,100	3,900	1,100	44	55	70	<2.0
MW-18	68	10,000	5.5	1.1	<0.5	1.3	17
MW-E	4,400	5,900	2,600	46	64	90	<2.0
RW-1	310	810	15	4.4	2.5	3.9	8.8
ESLs (a)	100 / 210	100 / 210	1.0 / 46	40 / 130	30 / 43	20 / 100	5.0 / 1,800

# Table 2Groundwater Sample Analytical Results – March 30 and 31, 20116400 Christie Avenue, Emeryville, California

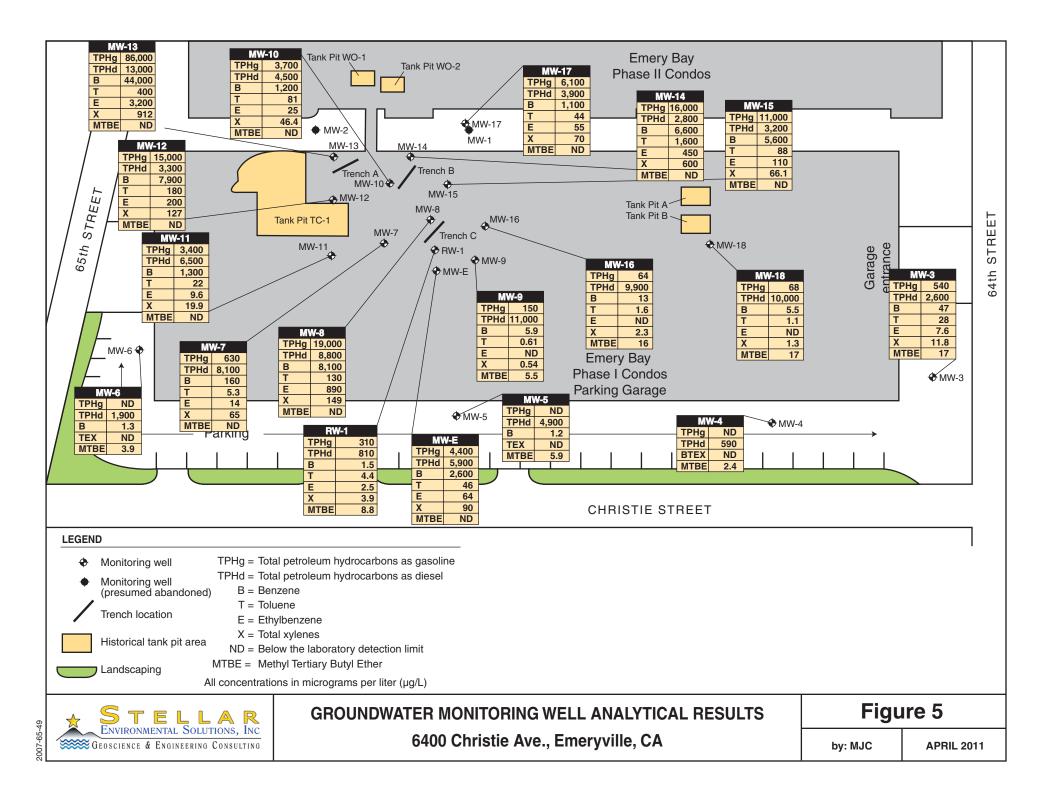
Notes:

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

MTBE = methyl tertiary-butyl ether

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

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



#### **Hydrocarbon Contaminants**

During the March 2011 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.

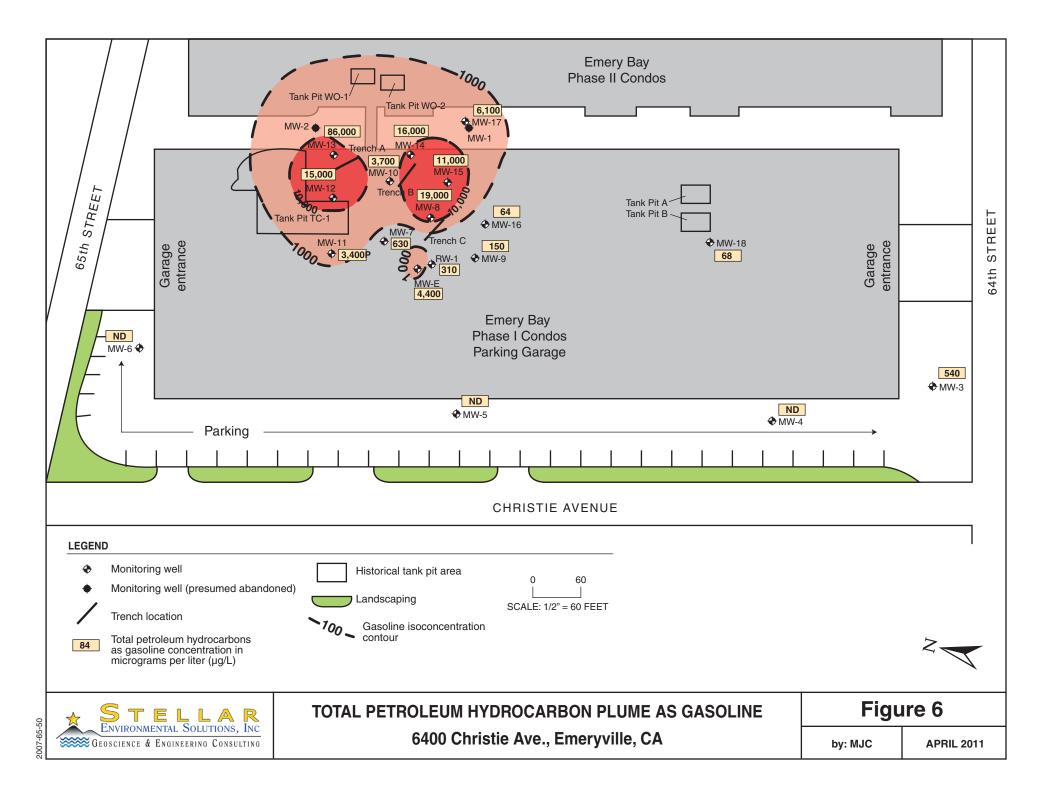
Figure 6 shows an isoconcentration contour map of TPHg concentrations in groundwater based on the April 2011 monitoring well analytical results. Increases in March 2011 compared to the March 2010 monitoring event were observed in wells MW-3, MW-8, MW-10, MW-12, MW-14, MW-15, MW-17, MW-18 and MW-E. The remaining wells either remained below laboratory detection limits (in the perimeter wells MW-4, MW-5 and MW-6) or exhibited a decrease. The higher than average rainfall in the 2011 winter season may have contributed to the results observed.

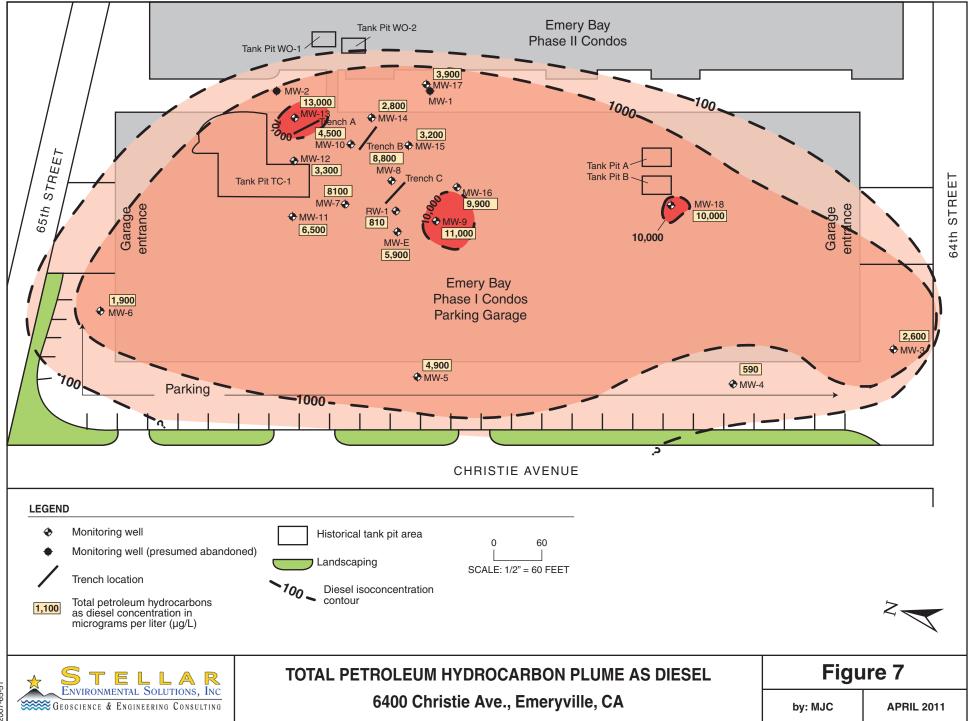
Gasoline was detected in MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E and RW-1 above the ESL where groundwater is not a likely drinking water resource (210 micrograms per liter [ $\mu$ g/L]). Gasoline was also detected in MW-9, MW-16, and MW-18 but at concentrations below the ESL.

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

The highest concentrations of TVHg (86,000  $\mu$ g/L) and TEHd (13,000  $\mu$ g/L) observed during this event were in MW-13. The concentration of hydrocarbons in well MW-13 has decreased significantly below the historic high concentrations of 2,700,000  $\mu$ g/L TVHg and 3,100,000  $\mu$ g/L TEHd observed in this well. The decrease is attributed to the effective LNAPL recovery in 2010 and 2011. However, the average concentration of TEHd and TVHg has remained approximately the same compared to March 2010. While not nearly as significant in percent reduction as observed in MW-13, monitoring wells MW-3, MW-8, MW-12, and MW-15 showed decreased hydrocarbon concentrations in March 2011 as compared to March 2010. The concentrations in MW-3, MW-14, and MW-17, while above the March 2010 values, were below their historic maxima.

Figure 7 is an isoconcentration contour map of TPHd concentrations in groundwater based on the March 2011 monitoring well analytical results.





2007-65-51

In monitoring wells MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, and MW-E concentrations of benzene exceeded the ESL of  $46 \mu g/L$  where groundwater is not a drinking water resource. Benzene was also detected in MW-5, MW-6, MW-9, MW-16, MW-18 and RW-1 but at concentrations below the ESL.

Toluene was detected at or above the ESL of  $130 \mu g/L$  in monitoring wells MW-8, MW-12, MW-13 and MW-14. Toluene was also detected in wells MW-3, MW-7, MW-9, MW-10, MW-11, MW-15, MW-16, MW-17, MW-18, MW-E and RW-1 but at levels below the ESL.

Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a likely drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, MW-17 and MW-E. Ethylbenzene was also detected in MW-3, MW-7, MW-10, MW-1 and RW-1 but at levels below the ESL.

Total xylene concentrations in monitoring wells MW-8, MW-12, MW-13, and MW-14 were above the 100-µg/L ESL where groundwater is not a likely drinking water resource. Total xylenes were also detected in MW-3, MW-7, MW-9, MW-10, MW-11, MW-15, MW-16, MW-17, MW-18, MW-E and RW-1 but below the ESL.

MTBE was not detected above the ESL of 1,800 µg/L in any of the monitoring wells. MTBE was detected in MW-3, MW-4, MW-5, MW-6, MW-9, MW-16, MW-18 and RW-1 but below the ESL.

#### **Quality Control Sample Analytical Results**

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

## 5.0 FREE-PHASE HYDROCARBON PRODUCT REMEDIATION SYSTEM

This section describes the extraction of the historical free product in the Emery Bay Phase I Condo parking garage, the construction details of the current LNAPL remediation system located on the northeastern portion of the garage, and the most recent product removal activities conducted on March 28 and 29, 2011 (immediately prior to the sampling event). Table 3 summarizes the product removed from the skimmers during this event. 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 free product into a collection reservoir located below the water surface. The reservoir can be emptied by opening a valve located on the bottom of the cylindrical shaped reservoir. Each of these skimmers is attached to the sump lid by a rope, and can be removed and transferred to another sump as needed.

Trench ID	Number of Skimmers in Well	Total Product Removed (gallons)
TA-E	2	0.06
TA-M	2	0.06
TA-W	2	0.02
TB-E	0	NM
TB-M	0	NM
TB-W	0	NM
TC-E	1	0.0
TC-M	0	NM
TC-W	0	NM
Total Product Remove	ed	0.15

Table 3Passive Skimmer Product Extraction in Trenches– March 28, 2011

Note:

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

#### HISTORICAL FREE PRODUCT EXTRACTION

As mentioned under the "Previous Investigations" subsection in Section 1.0, in approximately 1986, contaminated soil and groundwater were discovered during the removal of 12 UFSTs from the Emery Bay Phase I and Phase II parcels. To dewater the excavation during the Phase I and Phase II Condo construction, a groundwater extraction and remediation system was installed by GTI in 1988. Approximately 1 million gallons of water yielding 100 gallons of hydrocarbon product was removed from RW-1 during its operation (PES, 2007). However, corrosion and other mechanical problems caused the system to fail in 1991, and it was decommissioned in 1994. In February 2008, Stellar Environmental 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 Stellar Environmental was retained for the project, the skimmer system only yielded 2.82 gallons.

It should be noted that no historical product extraction reports were provided to Stellar Environmental 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 2011 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.

The active product removal event was conducted on March 28 and 29, 2011, in which a total of 1,050 gallons of groundwater containing as estimated 15 gallons of LNAPL was purged from the site wells. The extracted groundwater included approximately 0.15 gallons of free product removed from the passive skimmers. Stellar Environmental calculated that an additional 2.3 pound of gasoline and diesel were removed with the dissolved fraction of the purged groundwater based on the analytical results from groundwater monitoring and sampling having an average TVHg concentration of 9,242  $\mu$ g/L and an average TEHd concentration of 5,650  $\mu$ g/L in site wells.

The removal activities occurred as follows:

On March 28-29, 2011 Stellar Environmental removed 50 gallons of groundwater and product from TA-W and TA-M. Product was evident in these wells; however, the skimmers were filled with water (no product). The skimmers on TA-E contained 0.25 gallon of product and an additional 50 gallons of groundwater and product were removed actively. Stellar Environmental removed 50 gallons from TB-M. Stellar Environmental removed 25 gallons each from TB-E and TB-W. On trench well TC-E, 50 gallons were removed actively. Only water was present in the skimmer in this well. Stellar Environmental removed 50 gallons each from TC-M and TC-W. On recovery well RW-1, 200 gallons were removed actively. Stellar Environmental then removed 8 gallons from MW-3 before it dewatered.

- On March 28-29, 2011, a total of approximately 15 gallons of petroleum product was extrapolated to have been removed from the 1,050 gallons of liquid that was removed from all of the monitoring wells and former extraction wells. The petroleum project was estimated based on measured free-product accumulation in the storage tank. Significnatlu higher petroleum project removal was realized (about 15 gallons) from the individual project purging of the key wells prior to the sampling event than was product removal (abut 0.2 gallons) form the "skimmers" designed for the product removal. Product removal was most pronounced at wells MW-3, MW-6, MW-8, MW-11, MW-12, MW-13, MW-15, and 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 April 8, 2011, 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 Stellar Environmental 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. Stellar Environmental 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 a semiannual frequency in 2009.
- The site currently contains 17 monitoring wells, 1 recovery well, and 9 product extraction trench wells. This is the 15<sup>th</sup> 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 2 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 2011 event ranged from 6.25 to 10.91 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 in MW-3, MW-4, MW-5, MW-6, MW-9, MW-16, MW-18 and RW-1 during this event; however, the concentrations were well below the applicable ESL.

- The highest concentrations of TVHg (86,000 µg/L) and TEHd (13,000 µg/L) were observed in MW-13. The concentration of hydrocarbons in well MW-13 has decreased significantly from the historic high concentrations of 2,700,000 µg/L TVHg and 3,100,000 µg/L TEHd observed in this well. The decrease is attributed to the effective LNAPL recovery in 2010 and 2011. However, the average concentration of TEHd and TVHg in the remaining site wells has remained about the same compared to March 2010.
- Monitoring wells MW-3, MW-8, MW-12 and MW-15 showed decreased diesel concentrations in March 2011 compared to March 2010. The concentrations in MW-3, MW-14, and MW-17, while above the March 2010 values, were below their historic maxima.
- Increases in gasoline concentrations compared to the March 2010 monitoring event were observed in wells MW-7, MW-9, MW-13, MW-16, MW-18 and RW-E. The remaining wells either remained below laboratory detection limits (in the perimeter wells MW-4, MW-5, and MW-6) or exhibited a decrease. Decreases were also observed in 5 of the 18 monitoring wells compared to the last semiannual event (September 2010).
- 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 likely drinking water resource (210 micrograms per liter [µg/L]). Gasoline was also detected in MW-9, MW-16 and MW-18 but at concentrations below the ESL.
- Benzene concentrations in monitoring wells MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, and MW-E exceeded the ESL of 46 µg/L where groundwater is not a drinking water resource. Benzene was also detected in MW-5, MW-6, MW-9, MW-16, MW-18 and RW-1 but at concentrations below the ESL.
- Toluene was detected at or above the ESL of 130 µg/L in monitoring wells MW-8, MW-12, MW-13 and MW-14. Toluene was also detected in wells MW-3, MW-7, MW-9, MW-10, MW-11, MW-15, MW-16, MW-17, MW-18, MW-E and RW-1 but at levels below the ESL.
- Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a likely drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, MW-17 and MW-E. Ethylbenzene was also detected in MW-3, MW-7, MW-10, MW-1 and RW-1, but at levels below the ESL.
- Total xylene concentrations in monitoring wells MW-8, MW-12, MW-13, and MW-14 were above the 100-µg/L ESL where groundwater is not a likely drinking water resource. Total xylenes were also detected in MW-3, MW-7, MW-9, MW-10, MW-11, MW-15, MW-16, MW-17, MW-18, MW-E and RW-1 but below the ESL.

- MTBE was not detected above the ESL of 1,800 µg/L in any of the monitoring wells. MTBE was detected in MW-3, MW-4, MW-5, MW-6, MW-9, MW-16, MW-18 and RW-1 but below the ESL.
- Stellar Environmental conducted passive skimmer product removal on the trench wells during the March 2011 removal event. A total of approximately 0.06 gallons were removed from the each skimmer in trench wells TA-M and TA-E and 0.02 gallons was removed from the skimmer in trench well TA-W. The skimmer in trench well TC-E was filled with water.
- Stellar Environmental also conducted active product removal on the trench wells, source area wells, recovery well, and select monitoring wells during the March 2011 event. A total of approximately 1,050 gallons of groundwater that includes approximately 0.15 gallons of free product from the passive skimmers and 15 gallons of free-floating petroleum product from all the wells as estimated by the measurement of the free product layer on top of the 1,050 gallons in the purge water storage tank.
- 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 semiannual 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.

### 7.0 REFERENCES AND BIBLIOGRAPHY

- Aqua Science Engineers (Aqua), 1986a. Hydrocarbon Contamination Abatement Plan for Bay Center, Emeryville, CA. May 23.
- Aqua Science Engineers (Aqua), 1986b. Report Soil Sampling and Determination of Hydrocarbon Contamination from Tank Removal at the Bay Port Development, 64<sup>th</sup> and Lacoste Street, Emeryville, CA. May 27.
- Aqua Science Engineers (Aqua), 1986c. A Proposal for Installing a Fuel Contamination and Recovery System. August 27.
- Aqua Science Engineers (Aqua), 1986d. Phase II Extent of Groundwater Contamination Investigation, Bay Center. August 27.
- Aqua Science Engineers (Aqua), 1986e. Project Report Soils Gas Investigation, Bay Center. August 27.
- Aqua Science Engineers (Aqua), 1986f. Request for Additional Information Regarding Aeration and Sampling Soils Contaminated with Motor Fuel Hydrocarbons. Information addressed to the Alameda County Health Care Services, Hazardous Materials Unit. July 28.
- Aqua Science Engineers (Aqua), 1986g. Additional Information Regarding Aeration and Sampling Soils Contaminated with Motor Fuel Hydrocarbons. July 11.
- Bay Area Air Quality Management District (BAAQMD), 1987. Letter to the Martin Company authorizing the contaminated groundwater and oil recovery system. April 13.
- Chan, Barney, 2007. Project Officer, Alameda County Department of Environmental Health. Personal communication to Richard Makdisi of Stellar Environmental Solutions, Inc. April 10.
- Creps, Rob, 2007. PES Environmental, Inc. Project Manager for the Phase I Apartment Complex Remediation. Personal communication to Teal Glass and Richard Makdisi of Stellar Environmental Solutions, Inc. April 19.

- Earth Metrics, Inc., 1986a. Draft Soils Contamination Characterization for Garret Freight Lines Emeryville Site, 64<sup>th</sup> Street and Lacoste, Emeryville, CA. March 14.
- Earth Metrics, Inc., 1986b. Environmental Assessment for the Proposed Bay Center Apartment Complex in the Redevelopment Project Area of the City of Emeryville. May.
- Earth Metrics, Inc., 1986c. Draft Work Plan for Soils Contamination Characterization of Bay Center Site, Emeryville, CA. May 19.
- Earth Metrics, Inc., 1986d. Soils and Groundwater Contamination Characterization of Bay Center Site, Emeryville, CA. August 20.
- Earth Metrics, Inc., 1987. Safety Plan for Bay Center Offices and Apartments in Emeryville, CA. September 15.
- Geomatrix, 1988. Observation and Testing of Earthwork Construction, Bay Center Apartments. May 20.
- Groundwater Technology, Inc. (GTI), 1987a. Letter to Alameda County Health Department Hazardous Materials Division citing irregularities in the Aqua Science Laboratory Results. August 19.
- Groundwater Technology, Inc. (GTI), 1987b. Report of Further Subsurface Hydrocarbon Investigation, Emeryville, CA, Bay Center Project. September 8.
- Groundwater Technology, Inc. (GTI), 1989a. Well Replacement and Groundwater Assessment Report, Bay Center Project, Emeryville, CA. June.
- Groundwater Technology, Inc. (GTI), 1989b. Water Treatment System Start-Up Report, Bay Center Project, Christie and 64<sup>th</sup> Streets, Emeryville, CA. April 10.
- Groundwater Technology, Inc. (GTI), 1990a. First Quarter Sampling Event. Laboratory Analyses at the Bay Center Project. July 24.
- Groundwater Technology, Inc. (GTI), 1990b. Letter to the Bay Center Apartment Associates detailing problems with the groundwater extraction system. August 14.
- Groundwater Technology, Inc. (GTI), 1990c. Quarterly Report, Bay Center Apartment Associates, Bay Center Project, Christie and 64<sup>th</sup> Streets, Emeryville, CA. October 31.
- Groundwater Technology, Inc. (GTI), 1991a. Quarterly Report, Bay Center Project, Christie and 64<sup>th</sup> Streets, Emeryville, CA. January.

Groundwater Technology, Inc. (GTI), 1991b. Quarterly Status Report. April 15.

- Harding Lawson Associates (HLA), 1991. Preliminary Hazardous Materials Site Assessment. December 16.
- Harding Lawson Associates (HLA), 1992a. Results of Soil and Groundwater Investigation. May 6.
- Harding Lawson Associates (HLA), 1992b. Hazardous Waste Management Plan. May 26.
- Harding Lawson Associates (HLA), 1992c. Conceptual Design of Venting System, Emerybay II Apartments. November 24.
- Harding Lawson Associates (HLA), 1993. Results of Soil Sampling, Emerybay II Apartments. April 21.
- Harding Lawson Associates (HLA), 1994. Results of Services During Construction, Emerybay Apartments Phase II. May 19.
- Johnson, Mark, 2007. Project Officer, Regional Water Quality Control Board. Personal communication to Teal Glass of Stellar Environmental Solutions, Inc. April 11.
- Martin Company, 1986a. Letter to Lowell Miller of Alameda County Health Care Services documenting agreements for the construction workplan involving contaminated soil. June 5.
- Martin Company, 1986b. Letter to Tom Owens of Emeryville Community Developers, Inc. documenting recognized contamination issues. May 21.
- Martin Company, 1986c. Letter to Rafat Shahid of Alameda County Health Care Services documenting agreement of drum removal. May 16.
- Martin Company, 1986d. Letter to the State Water Resources Control Board documenting unused underground storage tanks. December 11.
- PES Environmental, Inc. (PES), 2004a. Status Report, Investigation of Subsurface Petroleum Hydrocarbon Residuals. Bay Center Apartments, Christie Avenue and 64<sup>th</sup> Street, Emeryville, CA. April 5.
- PES Environmental, Inc. (PES), 2004b. Investigation for Missing Wells. April 5.

PES Environmental, Inc. (PES), 2004c. Status Report. August 30.

- PES Environmental, Inc. (PES), 2007. Construction Implementation and Semi-Annual Operations Report. Free-Phase Hydrocarbon Product Remediation System. EmeryBay Commercial Association, Christie Avenue and 64<sup>th</sup> Street, Emeryville, CA. March 30.
- Regional Water Quality Control Board (Water Board), 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report.
- Regional Water Quality Control Board (Water Board), 2008. Environmental Screening Levels for residential properties on shallow soils where groundwater is a drinking water resource / is not a drinking water resource. Written February 2005, revised May 2008.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2007. Phase I Environmental Site Assessment – 6425-6475 Christie Avenue, Emeryville, CA. April 17.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2008a. 2007 Annual Groundwater Monitoring and Product Extraction Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. January 28.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2008b. Quarter One 2008 Groundwater Monitoring and Product Extraction Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. May 7.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2008c. Second Quarter 2008 Groundwater Monitoring and Product Extraction Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. July 18.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2008d. Third Quarter 2008 Groundwater Monitoring and Product Extraction Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. October 15.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2009a. Fourth Quarter 2008 Groundwater Monitoring, Product Extraction Report, and Annual Summary. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. January 16.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2009b. Indoor Air and Preferential Pathway Survey Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. April 4.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2009c. First Semiannual 2009 Groundwater Monitoring Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. April 29.

- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2009d. Second Semiannual 2009 Groundwater Monitoring, Product Extraction Report, and Annual Summary. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. December 31.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2011a. Indoor Air Sampling Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. April 6, 2010.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2010b. First Semiannual 2010 Groundwater Monitoring Report. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. April 21.
- Stellar Environmental Solutions, Inc. (Stellar Environmental), 2011. Second Semiannual 2010 Groundwater Monitoring, Product Extraction Report, and Annual Summary. EmeryBay Condo Phase I Parking Garage – 6400 Christie Avenue, Emeryville, CA. January 4.

#### 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
			Monitor	ing well aban	doned - date u	inclear			

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

				MW	-3				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	4,200	NA	77	1,400	140	560	NA
2	May-89	110	1,800	NA	64	250	61	110	NA
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS
4	Mar-04	3,400	440	3,900	<0.5	<0.5	1.5	<1.0	9.7
5	Dec-06	350	280	230	<0.5	<0.5	<0.5	< 0.5	2.0
6	Dec-07	960	150	NA	0.54	0.54	<0.5	< 0.5	<2.0
7	Mar-08	6,600	450	NA	<0.5	< 0.5	1.8	2.0	4.3
8	Jun-08	4,500	440	NA	<0.5	< 0.5	4.0	2.0	9.5
9	Sep-08	1,700	280	NA	<0.5	< 0.5	1.0	<0.5	<2.0
10	Dec-08	2,300	240	NA	<0.5	< 0.5	1.1	<0.5	<2.0
11	Mar-09	4,300	260	NA	1.3	< 0.5	1.8	0.5	2.9
12	Sep-09	5,000	300	NA	2.5	< 0.5	<0.5	<0.5	<2.0
13	Mar-10	4,500	230	670	1.7	< 0.5	1.0	<0.5	2.7
14	Sep-10	5,100	470	NA	<0.5	0.64	<0.5	1.6	2.9
15	Mar-11	2,600	540	NA	47	28	7.6	11.8	17

				MW	-4				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	100	NA	2.0	1.0	< 0.5	2.0	NA
2	May-89	60	18	NA	1.0	< 0.5	<0.5	< 0.5	NA
3	Feb-91	<10	<10	NA	<0.3	< 0.3	< 0.3	< 0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	<50	50	<200	<0.5	< 0.5	<0.5	< 0.5	<1.0
6	Dec-07	710	<50	NA	<0.5	< 0.5	<0.5	< 0.5	<2.0
7	Mar-08	680	57	NA	<0.5	< 0.5	< 0.5	< 0.5	<2.0
8	Jun-08	620	<50	NA	<0.5	< 0.5	< 0.5	< 0.5	<2.0
9	Sep-08	440	<50	NA	<0.5	< 0.5	< 0.5	< 0.5	<2.0
10	Dec-08	730	<50	NA	<0.5	< 0.5	< 0.5	< 0.5	<2.0
11	Mar-09	940	<50	NA	< 0.5	< 0.5	<0.5	<0.5	<2.0
12	Sep-09	660	<50	NA	< 0.5	< 0.5	< 0.5	<0.5	<2.0
13	Mar-10	680	<50	380	< 0.5	< 0.5	<0.5	< 0.5	<2.0
14	Sep-10	770	71	NA	<0.5	< 0.5	< 0.5	< 0.5	<2.0
15	Mar-11	590	<50	NA	<0.5	< 0.5	<0.5	<0.5	2.4

				MW	-5				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	530	890	NA	<1.0	<1.0	1.0	3.0	NA
2	May-89	90	5.0	NA	1.0	<0.5	<0.5	< 0.5	NA
3	Feb-91	58	<10	NA	0.6	< 0.3	<0.3	<0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	330	<25	<200	0.6	< 0.5	< 0.5	< 0.5	<1.0
6	Dec-07	5,100	1.3	NA	1.3	<0.5	<0.5	1.23	<2.0
7	Mar-08	4,500	<50	NA	0.53	< 0.5	<0.5	<0.5	<2.0
8	Jun-08	3,300	<50	NA	0.64	< 0.5	< 0.5	< 0.5	<2.0
9	Sep-08	4,200	<50	NA	<0.5	< 0.5	< 0.5	<0.5	<2.0
10	Dec-08	5,200	<50	NA	0.61	< 0.5	<0.5	<0.5	<2.0
11	Mar-09	5,800	<50	NA	<0.5	< 0.5	<0.5	<0.5	<2.0
12	Sep-09	5,600	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.0
13	Mar-10	4,300	<50	5,400	4.9	<0.5	<0.5	<0.5	<2.0
14	Sep-10	4,500	<50	NA	0.58	< 0.5	<0.5	< 0.5	2.0
15	Mar-11	4,900	<50	NA	1.3	< 0.5	<0.5	<0.5	5.9

				MW	-6				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	<10	52	NA	1.0	< 0.5	<0.5	<0.5	NA
2	May-89	140	31	NA	1.0	<0.5	<0.5	< 0.5	NA
3	Feb-91	130	40	NA	0.8	< 0.3	<0.3	<0.6	NA
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	200	43	<200	1.1	<0.5	<0.5	< 0.5	<1.0
6	Dec-07	1,000	<50	NA	0.98	0.81	<0.5	0.5	<2.0
7	Mar-08	940	<50	NA	0.87	1.0	<0.5	<0.5	<2.0
8	Jun-08	1,100	56	NA	0.92	< 0.5	<0.5	<0.5	2.9
9	Sep-08	1,000	<50	NA	0.91	< 0.5	<0.5	<0.5	<2.0
10	Dec-08	1,400	<50	NA	1	< 0.5	<0.5	<0.5	<2.0
11	Mar-09	1,200	<50	NA	<0.5	< 0.5	<0.5	<0.5	<2.0
12	Sep-09	1,500	<50	NA	0.79	< 0.5	<0.5	<0.5	<2.0
13	Mar-10	910	<50	1,500	1.9	< 0.5	<0.5	< 0.5	<2.0
14	Sep-10	1,200	72	NA	1.0	< 0.5	<0.5	< 0.5	<2.0
15	Mar-11	1,900	<50	NA	1.3	< 0.5	<0.5	<0.5	3.9

				MW	-7				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	Iarch 2004				
1	Mar-04	1,600	490	1,900	240	100	14	56	<2.5
2	Dec-06	420	<25	470	<0.5	<0.5	<0.5	<0.5	<1.0
3	Dec-07	6,300	3,100	NA	640	28	48	231	<10
4	Mar-08	7,000	360	NA	140	5.8	11	58	<2.0
5	Jun-08	5,400	1,700	NA	480	15	28	139	<2.0
6	Sep-08	9,400	1,200	NA	330	12	21	88	<2.0
7	Dec-08	8,700	2,200	NA	640	100	43	185	<4.0
8	Mar-09	8,700	1,700	NA	510	33	47	220	<10
9	Sep-09	6,800	620	NA	310	9.5	27	117	<10
10	Mar-10	8,700	330	6,800	68	2.2	10	31.6	<2.0
11	Sep-10	10,000	1,300	NA	580	54	35	163	<20
12	Mar-11	8,100	630	NA	160	5.3	14	65	<2.0

				MW	-8				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	Aarch 2004				
1	Mar-04	140,000	51,000	56,000	19,000	720	2,400	3,300	<50
2	Dec-06	2,400	29,000	<380	13,000	<100	640	500	<200
3	Dec-07	5,900	30,000	NA	11,000	180	650	561	<100
4	Mar-08	21,000	47,000	NA	10,000	260	1,200	458	<2.0
5	Jun-08	7,300	27,000	NA	9,300	140	790	290	<2.0
6	Sep-08	13,000	35,000	NA	11,000	190	900	402	<100
7	Dec-08	7,600	19,000	NA	6,800	110	380	236	<50
8	Mar-09	10,000	22,000	NA	9,400	200	640	358	<50
9	Sep-09	9,200	26,000	NA	8,600	100	630	230	170
10	Mar-10	11,000	19,000	1,900	6,200	120	830	149	<2.0
11	Sep-10	7,600	7,800	NA	8,800	110	620	212	<100
12	Mar-11	8,800	19,000	NA	8,100	130	890	149	<2.0

				MW	-9				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in M	Iarch 2004				
1	Mar-04	1,300	95	1,500	4.7	0.68	<0.5	<1.0	< 0.5
2	Dec-06	<50	92	<200	2.8	< 0.5	<0.5	< 0.5	<1.0
3	Dec-07	8,400	84	NA	4.7	1.1	<0.5	1.9	<2.0
4	Mar-08	8,600	100	NA	4.1	1.1	<0.5	< 0.5	2.0
5	Jun-08	5,900	98	NA	4.9	< 0.5	<0.5	< 0.5	2.3
6	Sep-08	9,300	130	NA	4.6	< 0.5	<0.5	< 0.5	<50
7	Dec-08	7,800	95	NA	4.0	0.54	<0.5	< 0.5	<2.0
8	Mar-09	9,400	130	NA	4.6	<0.5	<0.5	<0.5	<2.0
9	Sep-09	8,200	98	NA	4.0	<0.5	<0.5	<0.5	<2.0
10	Mar-10	6,500	140	4,000	5.2	< 0.5	< 0.5	< 0.5	<2.0
11	Sep-10	6,400	170	NA	4.8	0.77	< 0.5	<0.5	<2.0
12	Mar-11	11,000	150	NA	5.9	0.61	<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 M	Iarch 2004				
1	Mar-04	840,000	14,000	<100,000	4,000	77	200	120	<50
2	Dec-06	19,000	12,000	<4,000	4,600	42	90	52	<50
3	Dec-07	4,700	13,000	NA	5,300	96	42	86	<50
4	Mar-08	280,000	10,000	NA	2,600	50	37	58.7	22
5	Jun-08	4,800	10,000	NA	3,800	62	24	61	<2.0
6	Sep-08	4,700	1,200	NA	350	11	3.4	11	<2.0
7	Dec-08	3,200	2,900	NA	550	45	15	56	<20
8	Mar-09	6,200	8,200	NA	890	46	78	130	<20
9	Sep-09	6,100	1,400	NA	1,200	35	19	31	<20
10	Mar-10	3,900	7,800	960	1,200	46	34	56	54
11	Sep-10	3,500	3,400	NA	1,500	47	18	44	<40
12	Mar-11	4,500	3,700	NA	1,200	81	25	46.4	<2.0

				MW	-11				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	May 2004				
1	Dec-06	<50	920	<200	26	4.5	1.8	5.4	<1.0
2	Dec-07	6,900	1,500	NA	320	44	53	140	<2.0
3	Mar-08	7,500	1,200	NA	120	7.6	10	24.9	3.0
4	Jun-08	5,100	2,000	NA	190	11	7.7	16.3	<2.0
5	Sep-08	5,600	2,200	NA	260	20	34	60	<2.0
6	Dec-08	7,800	2,100	NA	270	14	7.6	15.6	<2.0
7	Mar-09	7,100	1,400	NA	200	6.4	7.3	10.4	<2.0
8	Sep-09	6,400	1,900	NA	320	13	9.8	15.2	2.0
9	Mar-10	6,500	1,600	6,900	150	<0.5	3.9	12.8	2.9
10	Sep-10	5,500	1,300	NA	330	15	9.2	17.3	<2.0
11	Mar-11	6,500	3,400	NA	1300	22	9.6	19.9	<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
8	Sep-09	3,000	1,900	NA	4,500	80	14	51	<40
9	Mar-10	4,000	15,000	1,900	6,200	110	73	101	<2.0
10	Sep-10	3,100	4,900	NA	5,900	97	47	73	<100
11	Mar-11	3,300	15,000	NA	7,900	180	200	127	<2.0

				MW	-13				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	April 2004				
1	Dec-06	12,000	87,000	2,100	18,000	470	2,400	3,500	<400
2	Dec-07	NA	68,000	NA	19,000	650	1,700	2,440	<100
3	Mar-08	1,100,000	98,000	NA	19,000	820	2,300	3,190	<100
4	Jun-08	71,000	44,000	NA	12,000	510	1,600	1,950	<2.0
5	Sep-08	440,000	52,000	NA	<100	500	1,600	1,500	<100
6	Dec-08	1,100,000	2,700,000	NA	23,000	<250	40,000	45,000	<1,000
7	Mar-09	2,000,000	330,000	NA	25,000	1,300	6,400	8,500	<1,000
8	Sep-09	38,000	1,400,000	NA	19,000	2,500	19,000	21,300	<1,000
9	Mar-10	15,000	43,000	670	12,000	310	1,600	1,140	<2,500
10	Sep-10	3,100,000	1,700,000	NA	21,000	2,300	30,000	17,200	7,000
11	Mar-11	3,300	15,000	NA	7,900	180	200	127	<2.0

				MW	-14				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	April 2004				
1	Dec-06	<50	8,300	<200	3,700	240	230	260	<50
2	Dec-07	2,600	6,800	NA	3,100	150	220	168	<20
3	Mar-08	4,400	18,000	NA	4,400	330	340	245	<2.0
4	Jun-08	2,600	7,700	NA	2,600	180	200	141	<2.0
5	Sep-08	2,500	4,100	NA	1,300	50	80	61	<10
6	Dec-08	2,800	2,300	NA	830	27	45	30.7	<10
7	Mar-09	3,200	13,000	NA	4,300	870	260	283	<50
8	Sep-09	2,100	550	NA	630	14	28	17	<20
9	Mar-10	3,900	6,700	3,100	2,400	400	140	185	<20
10	Sep-10	2,500	2,000	NA	1,700	44	98	89	<40
11	Mar-11	2,800	16,000	NA	6,600	1600	450	600	<2.0

				MW	-15				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	April 2004				
1	Dec-06	<50	9,200	<200	3,700	<25	60	57	<50
2	Dec-07	3,300	8,100	NA	3,000	48	28	44.5	<20
3	Mar-08	3,000	13,000	NA	3,600	66	210	59.5	<64
4	Jun-08	2,900	15,000	NA	5,800	61	230	56.4	<2.0
5	Sep-08	3,400	18,000	NA	7,800	73	270	59.9	<10
6	Dec-08	3,000	20,000	NA	7,600	95	300	84.2	<50
7	Mar-09	3,400	17,000	NA	7,200	91	170	60	<50
8	Sep-09	2,700	2,300	NA	6,200	71	68	42	<50
9	Mar-10	3,700	14,000	910	5,900	74	170	69	<2.0
10	Sep-10	3,500	5,800	NA	8,100	95	170	71	<100
11	Mar-11	3,200	11,000	NA	5,600	88	110	66.1	<2.0

				MW	-16				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in A	April 2004				
1	Dec-06	<50	190	<200	11.0	1.4	<0.5	< 0.5	<1.0
2	Dec-07	8,500	71	NA	13	2.6	<0.5	1.46	<2.0
3	Mar-08	12,000	60	NA	11	0.73	<0.5	< 0.5	<2.0
4	Jun-08	10,000	120	NA	13	2.2	<0.5	< 0.5	2
5	Sep-08	8,200	64	NA	9.9	1.9	<0.5	< 0.5	<2.0
6	Dec-08	8,800	60	NA	11	2.8	<0.5	0.53	<2.0
7	Mar-09	14,000	78	NA	12	2.3	<0.5	< 0.5	<2.0
8	Sep-09	10,000	51	NA	9.3	1.6	<0.5	< 0.5	2.2
9	Mar-10	12,000	70	4,700	12	2.1	0.56	1.35	<2.0
10	Sep-10	9,800	77	NA	12	1.9	<0.5	0.55	2
11	Mar-11	9,900	64	NA	13	1.6	<0.5	2.3	16

				MW	-17				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	April 2004				
1	Dec-06	<50	14,000	<200	3,400	1,100	480	< 0.5	<1.0
2	Dec-07	2,900	5,000	NA	1,100	260	110	206	<10
3	Mar-08	3,100	6,800	NA	1,200	110	91	94	21
4	Jun-08	2,900	7,200	NA	1,100	45	75	66	<2.0
5	Sep-08	3,300	5,500	NA	900	63	69	69	<10
6	Dec-08	3,200	7,100	NA	1,100	530	190	390	<10
7	Mar-09	3,000	5,400	NA	770	150	87	161	<2.0
8	Sep-09	3,000	2,200	NA	120	3.1	11	1.6	<2.0
9	Mar-10	3,400	5,000	1,900	910	66	73	93	<2.0
10	Sep-10	2,800	3,500	NA	1,400	62	46	76	<40
11	Mar-11	3,900	6,100	NA	1,100	44	55	70	<2.0

				MW	-18				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
				Installed in	May 2004				
1	Dec-06	<50	120	<200	22	6.2	3.2	6.2	<2.0
2	Dec-07	8,600	<50	NA	0.98	< 0.5	<0.5	< 0.5	<2.0
3	Mar-08	9,800	<50	NA	0.52	<0.5	<0.5	<0.5	2.0
4	Jun-08	8,800	<50	NA	<0.5	<0.5	<0.5	<0.5	3.1
5	Sep-08	8,600	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.0
6	Dec-08	9,300	<50	NA	< 0.5	< 0.5	<0.5	< 0.5	<2.0
7	Mar-09	10,000	<50	NA	<0.5	< 0.5	<0.5	< 0.5	<2.0
8	Sep-09	11,000	<50	NA	<0.5	< 0.5	<0.5	< 0.5	<2.0
9	Mar-10	9,400	<50	2,700	<0.5	< 0.5	<0.5	< 0.5	<2.0
10	Sep-10	6,400	1,800	NA	2200	45	64.0	78.0	<50
11	Mar-11	10,000	68	NA	5.5	1.1	<0.5	1.3	17

				MW	-Е				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	100	5,400	NA	3,200	690	97	330	NA
2	May-89	NS	NS	NS	NS	NS	NS	NS	NS
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS
4	Mar-04	470	810	<500	340	6.1	2.2	7.7	<1.0
5	Dec-06	280	1,900	<200	910	<10	10	<10	<20
6	Dec-07	6,900	7,000	NA	3,300	50	51	80	<20
7	Mar-08	6,300	2,700	NA	780	17	20	20.9	12
8	Jun-08	5,200	7,400	NA	2,900	43	85	50	<2.0
9	Sep-08	7,800	11,000	NA	3,800	170	130	257	<50
10	Dec-08	9,400	9,100	NA	3,400	110	180	182	<50
11	Mar-09	5,600	850	NA	270	7.5	13	17.5	<2.0
12	Sep-09	6,200	540	NA	1,200	22	37	37.2	<2.0
13	Mar-10	3,800	2,400	5,100	1,000	20	37	26.9	4.9
14	Sep-10	6,600	1,800	NA	2,200	45	64	78	<50
15	Mar-11	5,900	4,400	NA	2,600	46	64	90	<50

RW-1 Sampling Event No. Total Xylenes Date Sampled TEH-d TVH-g TEH-mo Benzene Toluene Ethylbenzen MTBE Dec-88 May-89 NS NS NS NS NS NS NS NS NS 2 NS NS NS NS NS NS NS 3 Feb-91 NS NS NS NS NS NS NS NS NS <200 NA 4 Mar-04 NS NS NS NS NS NS NS Dec-06 Dec-07 100 110 1.6 <1.0 <2.0 <50 2,100 640 770 1.3 5 2 3.8 6 Mar-08 11,000 890 NA 100 4.2 4.4 2.0 <2.0 7 1,500 1,200 290 4.8 10 4.8 <2.0 8 Jun-08 NA Sep-08 1,900 1,400 NA 280 9.8 10 6.7 <2.0 9 54,000 2,800 3,200 13 1,100,000 <250 3.6 530 <1,000 10 Dec-08 NA 500 180 11 Mar-09 950 NA 3 <2.0 2 <0.5 <2.0 <2.0 12 Sep-09 770 350 NA 120 3.1 11 13 Mar-10 810 200 <300 <0.5 < 0.5 < 0.5 980 810 8.0 8.8 Sep-10 Mar-11 860 310 170 15 4.0 4.4 5.6 2.5 2.8 3.9 14 NA 15 NA

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 WELLHEAD INSPECTION CHECKLIST

Awn - 5       x         Awn - 6       x         Awn - 6       x         Awn - 6       x         Awn - 7 $m$ Awn - 8 $m$ Awn - 9 $m$ Awn - 10 $m$ Awn - 11 $m$ Awn - 12 $m$ Awn - 13 $m$ Awn - 14 $m$ Awn - 15 $x$ Awn - 16 $m$ Awn - 17 $m$ $m$ MW - 17 $m$ $m$ MW - 18 $m$ $m$ $m$ NOTES: $MW - 17 \cdot 1/2$ $Butts Misse INM (16^1)$ $MW - 7 \cdot 7/2$ $Butts Misse INM (26^1)$	Site Address _6			· = = = = = = = = = = = = = = = = = = =	TERGUI		<i>A</i>		
Well Inspected From Well D         Well Inspected From Well Dx         Inspected From Well Dx         Inspected From Well Dx         Inspected From Well Dx         Well Inspected From Well Dx         Insp	Job Number	0330-444	العالين		. Tec	chnician	JPARU	ER/Willi	224
MW-3     x $MW-4$ x $MW-4$ x $MW-5$ x $MW-6$ x $MW-6$ x $MW-7$ x $MW-7$ x $MW-7$ x $MW-7$ x $MW-7$ x $MW-70$ x		No Corrective	From	Components		Removed From	1	Taken (explain	Inspected (explain
MW-4       x $^{A}$ <	MW-3	×							
MW - 5       ×         MW - 6       ×         MW - 6       ×         MW - 7 $\mathcal{D}$ MW - 7 $\mathcal{D}$ MW - 8 $\mathcal{D}$ MW - 7 $\mathcal{D}$ MW - 10 $\mathcal{N}$ MW - 11 $\mathcal{D}$ MW - 12 $\mathcal{N}$ MW - 12 $\mathcal{N}$ MW - 13 $\mathcal{N}$ MW - 14 $\mathcal{P}$ MW - 15 $\mathcal{X}$ MW - 16 $\mathcal{P}$ MW - 17 $\mathcal{N}$ MW - 18 $\mathcal{N}$ NOTES: $MW - 17 \cdot 1/2$ $Buits Misse JW \in (2/6^4)$		X			٨	9,4			
MW - 6       x       x       x       x $MW - 7$ x       x       x       x $MW - 8$ x       x       x       x $MW - 9$ x       x       x       x $MW - 10$ x       x       x       x $MW - 12$ x       x       x       x $MW - 12$ x       x       x       x $MW - 13$ x       x       x       x $MW - 14$ x       x       x       x $MW - 15$ x       x       x       x $MW - 16$ x       x       x       x         MW - 16       x       x       x       x       x         MW - 18       x       x       x       x       x         NOTES:       MW - 17 · 1/2       BUTS       MUSE (MS - 17 · 1/2       MUSE (MS - 17 · 1/2       MUSE (MS - 17 · 1/2		*							
MW - 8 $M$ MW - 9 $M$ MW - 10 $M$ MW - 11 $D$ MW - 12 $M$ MW - 12 $M$ MW - 13 $X$ MW - 14 $M$ MW - 15 $X$ MW - 16 $M$ MW - 16 $M$ MW - 17 $M$ MW - 18 $M$ NOTES: $MU - 13 \cdot 11 = Bolt TS HISKINK (16)) + MW - 7 = 1/2 Bolt TS HISK [MS (16)).  $	Speciel and second s	×							
WW - 9 $W$ $W$ $MW - 10$ $W$ $W$ $MW - 11$ $D$ $W$ $MW - 12$ $W$ $W$ $MW - 12$ $W$ $W$ $W$ $MW - 12$ $W$ $W$ $W$ $W$ $MW - 13$ $X$ $W$ $W$ $W$ $MW - 16$ $W$ $W$ $W$ $W$ $W$ $MW - 16$ $W$ $W$ $W$ $W$ $W$ $W$ $MW - 18$ $X$ $W$ $W$ $W$ $W$ $W$ $W$ $MW - 18$ $X$ $W$	MW-T							Ø	
mw - 9 $mw - 10$ $mw - 11$ $D$ $mw - 11$ $D$ $mw - 11$ $D$ $mw - 12$ $mw - 12$ $mw - 13$ $mw - 14$ $mw - 14$ $mw - 14$ $mw - 15$ $mw - 17$	Now - 8	6							
MW-11       D         MW-12       D         MW-13       X         MW-14       X         MW-14       X         MW-15       X         MW-16       P         MW-16       P         MW-17       X         MW-18       X         MW-18       X         MOTES:       MW-17:1/1-2       BUTCE       M (SE MM (G)), MW-7:1/2       MUSE MASE MASE (ME (G)).	54. /							X	
MW-12       MW-12       MO         MW-13       MO       MO         MW-14       MO       MO         MW-15       MO       MO         MW-16       MO       MO         MW-17       MO       MO         MW-18       MO       MO         MOTES:       MU-17:11-2       BOLTS       MUSE/MUSE/MUSE/MUSE/MUSE/MUSE/MUSE/MUSE/	MW-10							×	
MW-13       Normal	MW-11	P						- O	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	MW-12								
$\frac{MW-15}{MW-16} \times \frac{1}{12} = \frac{1}{12} + $	Mw-13	×							
$\frac{MW-16}{MW-17} = \frac{1}{12} = $	MW-14	×							
$\frac{MW-16}{MW-17} = \frac{1}{12} = $	MW-15	×							
NOTES: MW-17: 1/2 BUTTS MISSING (16"), MW-7: 1/2 BUTTS MISSING (16").	MW-16	ý							
NOTES: MW-17: 1/2 BOLTS MISSING (16"), MW-7: 1/2 BOLTS MISGING (1/6").	NW-17							X	
NOTES: MW-17: 1/2 BOLTS MISSING (16"), MW-7: 1/2 BOLTS MISSING (2/16"). W-9: 2/2 POLTS MISSING (2/16") MULLID: 1/2 BOLTS MISSING (2/16") MW-10: 1/2 BOLTS MISSING	MW-18	×							
W-9:2/2 POETS MIXING (9/14") MULLIN: 1/2 BOLTS MISSING (1/16) MISSING (1/16)	NOTES Mu	-17:1- 1	BALTE M	icz ne k	(in) L	In. 7 - V.	l	[e]	
	W-9:26 05116	Laiter a falur	1 1. 1	· 1/2	10 / 2 FC	St all	BUCK N	USG INGC	<u>//6).</u>
	<u> </u>		<i></i> ,	<u> 21-11-21×</u>		1			
m-15:1/2 TABS STRIPPED, MW-3/4/5/0: CHRISTY BOX.				***************************************		*** Latentin			adarda ay ang mga ay ata ang ang ata ang ang ata ang ang ata a
		• A					V	44.4	
				1			n ya wangana	· .	

Page 1 of 2

#### WELLHEAD INSPECTION CHECKLIST

Client STELLAE

Site Address	6574	0	BAY	STREETS.	EMERYVII	JUE, CA

·

Job Number 110330-0001

Date 3/30/11

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 N Inspect (explai below	in
MW-E	5							-	
MW-E PW-1	Ø								
	8								
						·			

NOTES:

BLAINE TECH SERVICES, INC.

www.blainetech.com

Page Z of Z

Technician w. wows/J. Parever

#### WELL GAUGING DATA

Project # 110330 - WWI Date 3/30/11 Client STELLAR

Site 65th \$ BAY ST, EMERYVILLE, CA

Well ID	Time	Well Size (in.)	Sheen / Odor		Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or	Notes
Mw -3	0930	Z	প্রি		UN known		10.40			Y EAN THER
MW-4	0900	2		anewer with a			7.02	24.85		
MW-5	0905	2		~			9.29	24.9j		
MW-6	0905	2					5,91	23.31		
Mw-7	0910		0000	ALCON COLOMON DE LA COLOMA			10.14	19.86		
Mm-8	0945	3/4	ODOR SHEEN	8.89	0.10		2.99	Para and a second second		
Mw-9	0914	3/4	ODOR	. State of the second			9.52	19.66		
Mw-10	0953	3/4	SUBEN	8.14	0.01		8.15	***********		
Mw-11	0913	3/4		******			10,10	19.69		
MW-12	0915	3/4	0017-	(Augustion Note:			8.18	19.00		
MNU-13	1002	314	subsul base	9.90			SOUNDER COATER, UNABLE GALL			
MW-14	1003	314	SQUEN ODUC	7.92	0.01		7.93	<b>C/AL</b> 		
MW-15	1013	314	SUGEN	720000000			8.50	18.89		
MW-16	0935	3/4					9,17	19,10		•
Mw-17		3/4	ODUR SHEEN	8.50	0.02		8.52	19.50		
Mw-18	0936	3/4		ger and the second s			8.63	19.59		
MW-E	0970	2		Transformation Stations			9.10	45.15	V	

BLAINE TECH SERVICES, INC.

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE

www.blainetech.com

#### WELL GAUGING DATA

Project # <u>10330-wwi</u> Date  $\frac{3}{30}/11$  Client <u>Stell AR</u>

# Site 65th & BAY ST, EMERYVILLE, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Immiscibles Removed		Depth to well bottom (ft.)	Survey Point: TOB or	Notes
p.w - 1	0952	10	SHEEN DDOR	9.04	10.01		9.05		T	
					-					
, ; ; ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
					¥					

BLAINE TECH SERVICES, INC.

SAN JOSE SACRAMENTO LOS ANGELES SAN DIEGO SEATTLE

www.blainetech.com

# TEST EQUIPMENT CALIBRATION LOG

PROJECT NAM	© STELLANZ 1E-110330-646	Entern VII	LE, CA	PROJECT NUM	IBER (10330-WIL		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT			
MYRON L ULTRAMETER	6209577	3/30/11	PHE. 4.7,10	PM: 4.00; 7000 cond=340000			INITIALS
MULTIPATE		3/30/11	and = 3900 UN	and= 390000	Yes	14.8%	ww
PUS	095-521521	10(6	100 p pm	150bufelera 100 ppm	Yes.	N2Stangoryst v****	kuis
WYRON L VUNAMENER	620 9577	3/31/11	PH: 4.7,10	PH: 7.00 ; 10.00 Cond: 3900 hs	N/ 00		
MULTRAE	095-52150	3/31/11	word: Side ho isubutelene	cond: 3900 hs	1. Contraction of the second sec	19.28	here -
PUUS		0245	looppm	isobutelese 100 ppm	Yes	Granicaes.	ww
			,	v			
			· .				
					e e		4499 - 499
	· .						
3							
					्रभुः 		794 
		~					

nia //sec

### **TEST EQUIPMENT CALIBRATION LOG**

PROJECT NAM	NE STELLAR @	Greanune		PROJECT NUMBER 110330-WW1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
white r	609349	3130111	7/10/4 - 391000	→711014 3892	Ves	in.o	qı

Project #:	110330-	-ww1		Client: 2	ราธน	AR		
Sampler:	hw							
Well I.D.:	MW -	3		Well Dia	Well Diameter $(2)$ 3 4 6 8			
Total Well		Depth to	Wate	r (DTW): Jo."	40			
Depth to Fr		Thicknes	ss of F	Free Product (fee	et): unknown			
Referenced	Grade	D.O. Me	ter (if	req'd):	YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	· Column :	к 0.20	) + DTW]:		
Purge Method:	Bailer Disposable B Positive Air I Electric Subr Gals.) X	ailer Displaceme	ent Extrac Other	Waterra Peristaltic ction Pump	) ell Diameto 1" 2" 3"	Sampling Method:	Disposable Bailer Extraction Port Dedicated Tubing new troburg Diameter Multiplier 0.65 1.47	
Time	Temp (°F or C)	pH	Cond. (mS or μS)	Turbic (NTU	-	Gals. Removed	Observations	
1138	STAR-	r pu	NEFE C	17	Smy	min	heren shaen, od	
1144	STOR	PURE	ат. Тар			1050 ml		
					e			
* UNBBLE		UBE W	6			1 THICK P	2UDULT)	
Did well de	water?	Yes C	No)	Gallons a	ctuall	y evacuated:	1050 mL	
Sampling D	ate: 3/3[	[[[	Sampling Time	e: (150		Depth to Water	Fi 10.51	
Sample I.D.	: Mw-	3		Laborato	ry:	Kiff CalScience	Other <u>C</u> <del>d</del>	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenate	s (5)	Other: See	S-DW	
EB I.D. (if a	pplicable)	•	@ Time	Duplicate	e I.D. (	(if applicable):		
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenate		Other:		
D.O. (if req'	d): Pr	e-purge:	agan ang sing sing sing sing sing sing sing si	mg/L	Р	ost-purge:	<sup>mg</sup> /L	
O.R.P. (if re	eq'd): Pr	e-purge:	<del>, /, , <sup>1</sup> </del>	mV	P	ost-purge:	mV	
			A CARLON CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CARLON	B. B				

## w. L MONITORING DATA SHI.

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

Project #: 110330 - WWI	Client: Stev	Client: StENAR			
Sampler: ww		Date: 3/30/11			
Well I.D.: Mw-4	Well Diameter	Well Diameter: $(2)$ 3 4 6 8			
Total Well Depth (TD): 24.85	Depth to Wate	د. (DTW): آرین	2		
Depth to Free Product:	······································	Thickness of Free Product (feet):			
Referenced to: Grade	D.O. Meter (if		YSI HACH		
DTW with 80% Recharge [(Height of Wate	er Column x 0.20	Annan			
Purge Method: Bailer Disposable Bailer Positive Air Displacement Extr Electric Submersible Other	Waterra Peristaltic raction Pump	Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing		
$\frac{29}{1 \text{ Case Volume}} (\text{Gals.}) \times \frac{3}{\text{Specified Volumes}} = \frac{3.7}{\text{Calculated Volumes}}$	Gals. Volume	Multiplier         Well           0.04         4"           0.16         6"           0.37         Other	<u>Diameter Multiplier</u> 0.65 1.47 r radius <sup>2</sup> * 0.163		
Temp Cond. Time (°F or C) pH (mS or aS)	Turbidity (NTUs)	Gals. Removed	Observations		
1030 999.13.07 644	172	2.9			
1034 514.87.84 656	242	5.8			
1038 14.6 7.78 670	306	81			
	*				
			· · ·		
Did well dewater? Yes No	Gallons actual	ly evacuated:	8.7		
Sampling Date: 3/30/11 Sampling Tin	ne: 1045	Depth to Wate	r: 7.08		
Sample I.D.: MW-4	Laboratory:	Kiff CalScience	e Other CT		
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other: See	Saw		
EB I.D. (if applicable):	Duplicate I.D.				
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other:			
D.O. (if req'd): Pre-purge:	<sup>mg</sup> / <sub>L</sub> P	ost-purge:	<sup>mg</sup> /L		
O.R.P. (if req'd): Pre-purge:	mV P	'ost-purge:	mV		

**v** $\bigcirc$  *L* monitoring data sh $\bigcirc$  .

WELL	MONIT	ORING	DATA	SHELI

Project #:	110330-1			Client	Client: Stellaz			
Sampler: .	9C			Date:	Date: 3/30/11			
Well I.D.:	HU-5			Well I	Diameter	r: ② 3 4	6 8	
Total Well	Depth (TI	): 24.81		Depth	to Wate	er (DTW): 9.20	All and a second se	
Depth to Fi	ree Produc	t:		Thick	ness of F	Free Product (fe	et):	
Referenced	l to:	(PVC)	Grade	D.O. 1	D.O. Meter (if req'd): YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	· Colum	n x 0.20	) + DTW]: 12.	39	
Purge Method:	Bailer Qisposable E Positive Air Electric Subi	Displaceme	ent Extra Other	Waterra Peristaltic ction Pump	;	Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing	
<u>15</u> 1 Case Volume	Gals.) X Speci	3 ified Volum	<b>7.5</b>	Gals. olume	1" 2" 3"	0.04 4" 0.16 6" 0.37 Other	0.65	
Time	Temp (°F or C)	) pH	Cond. (mS or as)	1	bidity TUs)	Gals. Removed	Observations	
1039	16.9	7.80	2161	>1000	>	2.5		
1044	17.0	7.73	2196	>1000		5.0		
1048	[ Π.ι	7.80	2702	אטטר	}	7.5		
Did well de	water?	Yes (	No	Gallon	s actuall	y evacuated:	1.5	
Sampling D	ate: 3/30/1	1000	Sampling Tim	e: //00		Depth to Wate	r: N.U	
Sample I.D.	: MNI-5			Labora	tory:	Kiff CalScience	e Other CAT	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: SEE $C_{\alpha}$	~	
EB I.D. (if a	applicable)	•	@ Time	Duplic	ate I.D.	(if applicable):		
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other:		
D.O. (if req'	d): Pr	e-purge:		<sup>mg</sup> /L	Р	ost-purge:	mg/L	
O.R.P. (if re	eq'd): Pr	e-purge:		mV	, P	ost-purge:	mV	

#### WELL MONITORING DATA SHEE f

Project #:	110330-	www		Client: STELLAR				
Sampler:	9C			Date: 3/30/11				
Well I.D.:	NW-6			Well D	Well Diameter: 2 3 4 6 8			
Total Well	Depth (TI	)):23.3	51	Depth	to Water	r (DTW): 5.9	71	
· · · ·					ess of F	ree Product (fe	et):	
Referenced to: PVC Grade					D.O. Meter (if req'd): YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	Columr	n x 0.20)	+ DTW]: 9.	31	
Purge Method:	Disposable E Positive Air Electric Subr Gals.) X	Displaceme	ent Extrac Other = & 4	Gals.	Well Diamete 1" 2" 3"	Sampling Method Other or <u>Multiplier Well</u> 0.04 4" 0.16 6" 0.37 Othe	Disposable Bailer Extraction Port Dedicated Tubing : Diameter Multiplier 0.65 1.47	
Time	Temp (°F or C)	рН	Cond. (mS or(µS)	(N7	oidity FUs)	Gals. Removed	Observations	
1221	14.9	10.98	1242	40	7	2.9		
1225	14.6	10.94	1271	42	-	5.6		
1229	14.4	10.88	1282	41	1	8.4		
Did well dev	water?	Yes (	No	Gallons	s actually	y evacuated: 8		
Sampling D	ate: 3(30)	11	Sampling Time	e: 1239	5	Depth to Wate	r: 6.02	
Sample I.D.	: Mw-6			Labora	tory:	Kiff CalScienc	e Other_C∢T	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other: SEE C		
EB I.D. (if a	pplicable)	•	@ Time	Duplica	nte I.D. (	if applicable):		
Analyzed fo	r: TPH-G	BTEX		Oxygena	ites (5)	Other:		
D.O. (if req'	d): Pr	e-purge:		<sup>mg</sup> /L	Po	ost-purge:	mg/L	
O.R.P. (if re	q'd): Pr	e-purge:		mV	Po	ost-purge:	mV	

Project #: 110330-WW1			Client: STEWBY					
Sampler:				Date: 3 30 11				
Well I.D.:	·	)	<u> </u>	Well Diameter	7/			
Total Well		1). IQ	26		er (DTW): 10			
Depth to Fr				· · · · · · · · · · · · · · · · · · ·	·······			
Referenced			Grade	D.O. Meter (if	Free Product (fe	YSI HACH		
		arge [(F	leight of Water			12.08		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	ailer Displaceme	Ś	Waterra Peristaltic tion Pump	Sampling Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing		
O.2 (C I Case Volume	Gals.) X Speci	3 fied Volun	$= \frac{0.6}{\text{Calculated Vo}}$	_Gals. 1" 2"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47		
Time	Temp (°F or <b>C</b> )	pН	Cond. (mSor(48))	Turbidity (NTUs)	Gals. Removed	Observations		
1246	15.6	2.35	10.75ms	227	0.2	brown, oder		
1248	15-5	8.35	11.30 ms	195	0.4	U J		
1250	15-1	8.30	11.26 ms	181	0.6	((		
				2	-	Х		
FUNA	BUE TO	GAU	BE DOW	DURING P	VRGE.			
Did well dev	water?	Yes (	No	Gallons actual	y evacuated: C	1.26		
Sampling D	ate: 3 Z	> ((	Sampling Time	: 1255	Depth to Wate	r: 12.0		
Sample I.D.	: Mu =	1		Laboratory:	Kiff CalScience	Other CAFT		
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: See	Sow		
EB I.D. (if a	pplicable)	•	@ Time	Duplicate I.D.	(if applicable):	19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -		
Analyzed fo	er: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:			
D.O. (if req'	d): Pr	e-purge:		<sup>mg</sup> /L P	ost-purge:	nig/L		
O.R.P. (if re	q'd): Pr	e-purge:	10000 Mg (Byp)	mV P	ost-purge:	mV		

W \_ L MONITORING DATA SHO .

WELL MONITO	DRING DATA SHEŁ ſ			
Project #: 110330 - www	Client: STEU AR			
Sampler: ww	Date: 3/31/11			
	Well Diameter: 2 3 4	6 8 3/4		
Total Well Depth (TD):	Depth to Water (DTW): 8,99			
	Thickness of Free Product (fee	5 M		
		YSI HACH		
DTW with 80% Recharge [(Height of Water (	Column x 0.20) + DTW]:	een .		
	Waterra Sampling Method: enstaltic on Pump Other: Well Diameter Multiplier Well D	Bailer Disposable Bailer Extraction Port Dedicated Tubing new tubing iameter Multiplier		
• (Gals.) X =	Gals. 1" 0.04 4" 0.16 6"	0.65 1.47		
1 Case Volume Specified Volumes Calculated Volu	1 2" 0.27 Other	radius <sup>2</sup> * 0.163		
Temp Cond. Time (°F or C) pH (mS or µS) 0912 START PURJE @ 300 0918 STOP PURJE	Turbidity (NTUS) Gals. Removed ml]min 1800 ml	Observations Odby, sheen		
HUNNBLE TO FIT IN TRUE FACE PROCE Did well dewater? Yes (NO)	E DURING PURIF. Gallons actually evacuated: 19			
Sampling Date: 3 2 ( 11 Sampling Time:	PRONG	17.20		
	Depth to Water: Laboratory: Kiff CalScience	Other CAT		
Analyzed for: TPH-G BTEX MTBE TPH-D C	Dxygenates (5) Other: See			
EB I.D. (if applicable): <i>@</i> I	Duplicate I.D. (if applicable):			
	Dxygenates (5) Other:			
D.O. (if req'd): Pre-purge:	<sup>mg</sup> / <sub>L</sub> Post-purge:	mg/L		
O.R.P. (if req'd): Pre-purge:	mV Post-purge:	mV		

Project #:	110330-	NUSI		Client: STELLAZ			
Sampler: 🔾				Date: 3/30/11			
Well I.D.:	MW 9 '			Well Diameter: 2 3 4 6 8 $(3/4)$			
Total Well	Depth (TI	): 19.6	56	Depth	to Water	r (DTW): 9,57	· · · · · · · · · · · · · · · · · · ·
Depth to Fr	ee Produc	t:				ree Product (fe	
Referenced	to:	PVC	Grade		Aeter (if	·····	YSI HACH
DTW with	80% Rech	arge [(E	leight of Water	: Colum	n x 0.20)	) + DTW]: 11,	55
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Bailer Displaceme		Waterra Peristaltic ction Pump	>	Sampling Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing
<u>b-2</u> ( I Case Volume		<u> </u>	= 0.6 $Calculated Ve$		2" 3"	0.16 6" 0.37 Other	1.47 radius <sup>2</sup> * 0.163
Time	Temp (°F or 🕥	рН	Cond. (mS of µS)	1	bidity TUs)	Gals. Removed	Observations
1310	15.9	9.74	1936	3		0.7	
1320	15.6	9,69	2021	78	5	0.4	
1313	15.5	9.61	2100	29	3	0.0	
					4	-	
Did well de	water?	Yes (	No	Gallon	s actuall	y evacuated: C	).6
Sampling D	ate: 3/30	10	Sampling Tim	e: 137	D	Depth to Wate	r. 9.89
Sample I.D.	: MW-C	t	-	Labora	tory:	Kiff CalScience	Other CAT
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: SEE	we
EB I.D. (if a	applicable)	):	@ Time	Duplic	ate I.D. (	(if applicable):	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other:	
D.O. (if req'	d): P1	e-purge:	ngan saya na saka 22 yalan gana yang data yang bada na baharan kang dan saka yang dan saka yang dan saya yang	<sup>mg</sup> /L	P	ost-purge:	<sup>mg</sup> /L
O.R.P. (if re	eq'd): Pr	e-purge:		mV	Р	ost-purge:	mV

1

W L MONITORING DATA SHI .

N	L	MONITORING	DATA	SHI	
---	---	------------	------	-----	--

Project #: 110330-WW1	Client: Steum			
Sampler: ww	Date: 3/31/11			
Well I.D.: MW -10	Well Diameter: 2 3 4	6 8 3/4		
Total Well Depth (TD):	Depth to Water (DTW): 2	5		
Depth to Free Product: 8.14	Thickness of Free Product (fe			
Referenced to: PVC Grade	D.O. Meter (if req'd):	YSI HACH		
DTW with 80% Recharge [(Height of Wate	r Column x 0.20) + DTW]:	and the second		
Electric Submersible Other	Waterra Sampling Method: Peristalitico action Pump Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing		
0939 STANT PURGE	Well Diameter Multiplier Well I 1" 0.04 4"	Diameter Multiplier 0.65		
(Gals.) X = Calculated V I Case Volume Specified Volumes Calculated V	Gals. 2" 0.16 6"	1.47		
I Case Volume Specified Volumes Calculated V		]		
TempCond.Time(°F or C)pH(mS or μS)	Turbidity (NTUs) Gals. Removed	Observations		
STATET PURGE ATO939	C ZUO m/min	odur, sheen		
0945 STOP PURE	1200 ml			
	4			
TUNABLE TO FIT INTERFACE PROB	E TO GANGE DURING LI	W FUCU.		
Did well dewater? Yes	Gallons actually evacuated:	rooml		
Sampling Date: 331 (1 Sampling Tim	he: 0950 Depth to Wate	r: 8.14		
Sample I.D.: MW-10	Laboratory: Kiff CalScience	other <u>C</u> aT		
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other:	⊃/v		
EB I.D. (if applicable):	Duplicate I.D. (if applicable):			
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5) Other:			
D.O. (if req'd): Pre-purge:	<sup>mg</sup> / <sub>L</sub> Post-purge:	mg/L		
O.R.P. (if req'd): Pre-purge:	mV Post-purge:	mV		

M )	L	MONIT	ORING	DATA	SHL
-----	---	-------	-------	------	-----

Project #: 1	10330-	WW I		Client: Statusz			
Sampler: JP				Date: 3/30/11			
Well I.D.:	MW-II			Well Diameter	r: 2 3 4	6 8 (14)	
Total Well	Depth (TE	): 19.1	69	Depth to Wate	er (DTW): 10,1	10	
Depth to Fr	ee Produc	t:	29 - 1983 - H. M. ( <sup>1</sup> . ( ), <sup>1</sup> . (	1.	Free Product (fe		
Referenced	to:	PVC	) Grade	D.O. Meter (if		YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20	)) + DTW]: いて、	02	
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme	ent Extrac Other		Sampling Method	Disposable Bailer Extraction Port Dedicated Tubing NEW WBING	
0-7 (i l Case Volume	Gals.) X Speci	3 fied Volun		Gals. 3"	ter Multiplier Well 0.04 4" 0.16 6" 0.37 Other	Diameter <u>Multiplier</u> 0.65 1.47 radius <sup>2</sup> * 0.163	
Time	Temp (°F or 🕐	pН	Cond. (mS or (µS)	Turbidity (NTUs)	Gals. Removed	Observations	
1346	15.1	8.32	2224	73	02		
1351	14.9	8.19	2229	10	0.4		
1353	14.8	809	2002	77	0.6		
-				¥			
			······································				
Did well de	water?	Yes (	No	Gallons actual	ly evacuated: C	).(j	
Sampling D	ate: 3130	11	Sampling Time	e: 1400	Depth to Wate	r: 1026	
Sample I.D.	: Mw-11		·	Laboratory:	Kiff CalScience	e Other CAT	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: SEC	QL .	
EB I.D. (if a	applicable)	•	@ Time	Duplicate I.D.	(if applicable):		
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:		
D.O. (if req	d): Pr	e-purge:		<sup>mg</sup> /L F	Post-purge:	<sup>mg</sup> /L	
O.R.P. (if re	eq'd: Pr	e-purge:		mV F	Post-purge:	mV	

·····	·····							
Project #: 110330 - 12221					Client: STEUAN			
					Date: $3/30/0$			
Well I.D.:		Well Dia	ŝ		6 8 3/4			
Total Well	Depth (TE	)): 19.	00	Depth to	Wate	r (DTW): <b>จ.</b> เจ	6	
Depth to Fr		1		· ·		ree Product (fee		
Referenced	to:	PVC	Grade	D.O. Me			YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Column x	x 0.20)	) + DTW]: 10	. 34	
Purge Method:	ailer Dísplaceme nersible	<	Waterra <u>Peristaltic</u> ction Pump		Sampling Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing New Whing		
0.2 (I I Case Volume		3 ified Volun	= 0.6 Calculated Vc	_Gals.	1" 1" 2" 3"	er <u>Multiplier Well I</u> 0.04 4" 0.16 6" 0.37 Other	Diameter Multiplier 0.65 1.47 radius <sup>2</sup> * 0.163	
Time	Temp (°F or <b>C</b>	pH	Cond. (mS or (uS)	Turbid (NTU	-	Gals. Removed	Observations	
1406	14.6	7,80	1372	71		0.2	·	
1407	14.6	7.70	1325	41		0.4		
1409	14.3	7.63	1264	30		0.6		
			<i></i>	4	e			
Did well de	water?	Yes	No	Gallons a	ctuall	y evacuated: 🜔	.6	
Sampling D	ate: 330	[4	Sampling Time	e: 1420	)	Depth to Water	r: 8.39	
Sample I.D.	: Mw-1	12		Laborator	ry:	Kiff CalScience	Other CT	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates	s (5)	Other: SCe	Sow	
EB I.D. (if a	applicable)	•	@ Time	Duplicate		(if applicable):	n e parte de la constante de la El constante de la constante de El constante de la constante de	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates	·	Other:		
D.O. (if req'	d): Pr	e-purge:		mg/L	P	ost-purge:	mg/L	
O.R.P. (if re	eq'd): Pr	e-purge:		mV	P	ost-purge:	mV	

# w. L. MONITORING DATA SHI.

Project #:	10330-W	W 1		Client: STAU Anz				
Sampler: V	<b>N</b>			Date: 3/31/11				
Well I.D.:	MW-1	ζ		Well Diamete	er: 2 3 4	6 8 3/4		
Total Well	Depth (TE	)):		Depth to Wat	er (DTW): SOUN	JDER WATED LE TO GAUGE		
Depth to Fr	ee Produc	t: 9,0	70		Free Product (fe	THICK (MENILY		
Referenced	to:	(VC)	Grade	D.O. Meter (i		YSI HACH		
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:								
Purge Method:	Bailer Disposable B Positive Air I Electric Subr Gals.) X Speci	Displaceme	Other	Waterra Peristaltie ction Pump   		Disposable Bailer Extraction Port Dedicated Tubing : New Jubing Diameter Multiplier 0.65 1.47		
				T	I	5		
Time	Temp (°F op C)	pН	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations		
1006	STAR	TPU	NGE O	200 ml	min	heavy		
1012	5708	PURE	- E	Į	1200ml	sheen, odor brun, globules		
			ŝ.					
				¥	1817			
* UNABLE	TO 6750	be w	EU DURING	tow from p	Ralp			
Did well de	water?	Yes 🤇	No	Gallons actual	lly evacuated:	1200 mL		
Sampling D	ate: 331		Sampling Time	e: 1020	Depth to Wate			
Sample I.D.	: MW -	13		Laboratory:	Kiff CalScience	e Other Cat		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: See	SOW		
EB I.D. (if a	pplicable)	•	@ Time	Duplicate I.D.	(if applicable):			
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:			
D.O. (if req'	d): Pr	e-purge:		<sup>mg</sup> /L	Post-purge:	ng/ t		
O.R.P. (if re	q'd): Pr	e-purge:		mV	Post-purge:	mV		

## W LL MONITORING DATA SHI

$\mathbf{v}_{i}$ ) l monitoring data sh( ).
---------------------------------------------

Project #: 110330-WW1				Client: Steven				
				Date: 3 31/11				
Well I.D.:		Ч	****	Well D	)iameter	r: 2 3 4	4 6	8 3/4
Total Well		**************************************		Depth	to Wate	er (DTW): 7	93	
Depth to Fr			iz.			Free Product (		0.01
Referenced		Fvc)	Grade		Aeter (if		YSI	НАСН
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20	) + DTW]:	P 2005 particular and a second	
Purge Method: Bailer Disposable Bailer Positive Air Displacement Extra Electric Submersible Other					Well Diamete			Bailer Disposable Bailer Extraction Port Dedicated Tubing <u>thomag</u> r Multiplier
((	Gals.) X	fied Volun	= nes Calculated Vo	_Gals.	1" 2" 3"	0.04 4 0.16 6 0.37 0		0.65 1.47 radius <sup>2</sup> * 0.163
Time	Temp (°F or C)	pH	Cond. (mS or µS)	1	bidity FUs)	Gals. Remove	ed	Observations
1030	Star	TP	URBE O	2	uo m	4/min	-boli	or, sheen
1036	564	Pul-6	E			1200 ml	~	w <b>e</b> in <b>a</b> 1 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a 2 a
					¥			
XUNHERE	To GANY	EWT	H INTERFAC	ie ni	LING	LOW FLOW	Pun	ls 5 <sup>5</sup>
Did well de		-	No			ly evacuated:		200 ml
Sampling D	ate: 3 31		Sampling Time	e: 10 <sup>1</sup>	15	Depth to Wa	poor ter:-	7.92
Sample I.D.	: MW-	i y		Labora	tory:	Kiff CalScie	nce (	Other CIT
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other: See	SUL	)
EB I.D. (if a	pplicable)	•	(2) Time	Duplic	ate I.D.	(if applicable		. :
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygen	ates (5)	Other:		
D.O. (if req'	d): Pr	e-purge:		<sup>nıg</sup> /L	Р	Post-purge:		mį
O.R.P. (if re	:q'd): Pr	e-purge:		mV	Р	ost-purge:		

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

a generation

					1999 - Contra 19			
Project #:	110330-1	NUKU j		Client: STEU MR				
Sampler: v				Date: 3/31				
Well I.D.:	MW-1	2		Well Diamete	er: 2 3 4	6 8 3/4		
Total Well			89	Depth to Wat	ter (DTW): 7 -	SD		
Depth to Fi	·		in που που το	Thickness of	Free Product (fe	et):		
Referenced	l to:	(VC)	Grade	D.O. Meter (i	if req'd):	YSI HACH		
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.2	0) + DTW]: 10	.58		
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme		Waterra Peristaltic ction Pump	Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing		
L Case Volume	Gals.) X Speci	3 ified Volun	0_6	Gals3"	Multiplier         Well           0.04         4"           0.16         6"           0.37         Other	Diameter Multiplier 0.65 1.47 radius <sup>2</sup> * 0.163		
Time	Temp (°F or 🙆	pH	Cond. (mS or (TS))	Turbidity (NTUs)	Gals. Removed	Observations		
	15	821	1311	53	0.2	odor		
11.0	14.7	7.66	13:85	39	0.4			
1119	14.6	1.50	1394	26	0.6			
		1						
Did well de	water?	Yes (	No	Gallons actually evacuated: 0.6				
Sampling D	Date: 331	. WEIZAN	Sampling Tim	e: 1125	Depth to Wate	r: 8,50		
Sample I.D.	: Mu - 1	5		Laboratory:	Kiff CalScience	e Other C+T		
Analyzed for	Dr: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other: Sle	Suu		
EB I.D. (if a	applicable)	):	@ Time	Duplicate I.D	. (if applicable):			
Analyzed for	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	, , , , , , , , , , , , , , , , , , ,		
D.O. (if req	'd): Pr	e-purge:	na n	mg/L	Post-purge:	<sup>mg</sup> /L		
O.R.P. (if re	eq'd): Pr	e-purge:	997 <del>9</del>	mV	Post-purge:	<sup>a</sup> mV		

W.L. MONITORING DATA SHI

Project #: 110330-ww1					Client: Staular			
					Date: 3/30/11			
Well I.D.:	MW-16	)		Well Di	iameter	: 2 3 4	6 8 3/4	
Total Well	Depth (TI	)): (9.	(0)	Depth to	o Water	r (DTW): 9.	17	
Depth to Fr	ee Produc	t:		Thickne	ess of F	ree Product (fe	et):	
Referenced		(vc)	Grade	D.O. M			YSI HACH	
DTW with	80% Rech	arge [(F	leight of Water	Column	x 0.20	) + DTW]: //	.16	
Purge Method:	Bailer Disposable B Positive Air I Electric Subr	ailer Displaceme	Control 100 (1990)	Waterra Peristaltic ction Pump	Vell Diamete	Sampling Method Other	: Bailer Disposable Bailer Extraction Port Dedicated Tubing	
0.2	fals ) X	3	= 0.6	Gals.	1" 2"	0.04 4" 0.16 6"	0.65	
1 Case Volume		fied Volun	nes Calculated Vo	- 11	3"	0.37 Othe	r radius <sup>2</sup> * 0.163	
Time	Temp (°F or °C)	pН	Cond. (mS or uS)	Turbi (NT		Gals. Removed	Observations	
1311	15.1	9.96	4085	102		0.2	brown	
1312	19.9	10.05	3964	59		0.4	( <	
1313	14.9	10.05	3934	46		0-6		
			× ×		i.	· .		
Did well dev	water?	Yes 🌾	No	Gallons	actuall	y evacuated:	D-6	
Sampling D	ate: 3/35	1.(	Sampling Time	e: 132	ه	Depth to Wate	er: 9.30	
Sample I.D.	: Mw-	16		Laborate	ory:	Kiff CalScienc	e Other CRT	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenat	es (5)	Other: See	Son	
EB I.D. (if a	pplicable)	4	@ Time	Duplicat	te I.D. (	if applicable):		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenat		Other:	·····	
D.O. (if req'	d): Pr	e-purge:	ana a sa na sa	mg/L	Po	ost-purge:	nng/L	
O.R.P. (if re	q'd): Pr	e-purge:		mV	Po	ost-purge:	mV	

# W.L. MONITORING DATA SHI

f								
Project #: 110330 - ww 1					Client: S-TE MAR			
Sampler: KW					Date: 3 30 11			
Well I.D.:	MW-1-	7		Well E	Jiameter	: 2 3 4	6 8 3/4	
Total Well	Depth (TI	): [9	02.1	Depth	to Wate	r (DTW): 🖁 · S	,2	
Depth to Fr	ree Produc	t: B.S	D	Thickr	ness of F	ree Product (fe	et): 0.02	
Referenced	to:	PVC	Grade	D.O. N	Aeter (if	req'd):	YSI HACH	
DTW with	80% Rech	arge [(H	leight of Water	Colum	n x 0.20	) + DTW]:	Ng Arkitana.	
Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Other					>	Sampling Method: Other:	Disposable Bailer Extraction Port Dedicated Tubing	
		• 4			Well Diamete	0.04 4"	Diameter Multiplier 0.65	
1 Case Volume	Gals.) X Spec	ified Volum	nes Calculated Vo	gals.	2" 3"	0.16 6" 0.37 Other	1.47 radius <sup>2</sup> * 0.163	
Time	Temp (°F or °C)	pH	Cond. (mS or μS)	ł	bidity ГUs)	Gals. Removed	Observations	
1207	REVIN	PURFE	@ 200	nc/m	in		odor; sheen	
1213	EN D	PUREFE		U.S.		1200 ml r	odor; sheen	
		ei .						
					Ξ <i>φ</i> ε			
FUNABU	10 6AU	WE w	INTERFACE	DURING PURDING.				
Did well de	water?	Yes /	No			y evacuated:	1200 ml	
Sampling D	ate: 3/30		Sampling Time	e: 126	30	Ppmo Depth to <del>Wate</del>	Λ	
Sample I.D.	: <u>M</u> W-	()	a <sup>4</sup>	Labora	tory:	Kiff CalScience	Other Car	
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other: See	5.0w	
EB I.D. (if a	applicable)	):	@ Time	Duplica		(if applicable):		
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other:		
D.O. (if req	'd): P1	re-purge:	on and a second	<sup>nıg</sup> /L	Р	ost-purge:	mg/L	
O.R.P. (if re	eq'd): Pi	e-purge:		mV	Р	ost-purge:	mV	

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

## W L MONITORING DATA SHO.

w. L MONITORING DATA SHL							
Project #: 110330-WW1	Client: Stel	Client: Statut					
Sampler: www	Date: 3/30	10					
Well I.D.: MW-18	Well Diameter	: 2 3 4	6 8 3/4				
Total Well Depth (TD): \9.59	Depth to Wate	r (DTW): 😪 🖞	63				
Depth to Free Product:	Thickness of F	ree Product (fe	et):				
Referenced to: Grade	D.O. Meter (if	'req'd):	YSI HACH				
DTW with 80% Recharge [(Height of Wate	er Column x 0.20	) + DTW]: (	0.82				
Purge Method: Bailer Disposable Bailer Positive Air Displacement Extr Electric Submersible Other	Waterra Peristaltic action Pump		Disposable Bailer Extraction Port Dedicated Tubing new fulfing Diameter Multiplier				
$\frac{0.2}{1 \text{ Case Volume}} (\text{Gals.}) \times \frac{3}{3 \text{ Specified Volumes}} = \frac{3}{3 \text{ Calculated Volumes}}$	Gals. 3"	0.04 4" 0.16 6" 0.37 Othe	0.65 1.47 r radius <sup>2</sup> * 0.163				
Temp Cond. Time (°F or C) pH (mS or nS)	Turbidity (NTUs)	Gals. Removed	Observations				
1328 19.7 7.33 6965	944	0.2	dir				
1330 14.7 7.32 6991	899	0.4	<i>t</i> (				
1332 14.6 7.33 7242	867	0.6					
	*		<u>}</u>				
Did well dewater? Yes No	Gallons actuall	y evacuated:	0.6				
Sampling Date: 3/30/11 Sampling Tin	ne: 1340	Depth to Wate	er: 10.11				
Sample I.D.: MW - 18	Laboratory:	Kiff CalScience	e Other <u>Ct</u> T				
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other: See	Saw				
EB I.D. (if applicable): @	Duplicate I.D.	(if applicable):					
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other:					
D.O. (if req'd): Pre-purge:	<sup>mg</sup> / <sub>L</sub> P	ost-purge:	mg/L				
O.R.P. (if req'd): Pre-purge:	mV P	ost-purge:	mV				

#### WELL MONITORING DATA SHEE ſ

Client: STEU Me			
Date: 3/31/11			
Well Diameter: 2 3 4 6 8			
Depth to Water (DTW): 9, (0			
Thickness of Free Product (feet):			
D.O. Meter (if req'd): YSI HACH			
Column x 0.20) + DTW]: 16.3(			
Waterra       Sampling Method:       Bailer         Peristaltic       Disposable Bailer         etion Pump       Extraction Port         Dedicated Tubing       Other:         Mell Diameter       Multiplier         1"       0.04			
Gals. $2"$ $0.16$ $6"$ $1.47$ $3"$ $0.37$ Other $radius^2 * 0.163$			
Turbidity (NTUs)Gals. RemovedObservations>10005.8odor8 6ACS			
Gallons actually evacuated: $\Im$ e: [210 Depth to Water: $994$			
Laboratory: Kiff CalScience Other Ct T			
Oxygenates (5) Other: See Sow			
Duplicate I.D. (if applicable):			
Oxygenates (5) Other:			
<sup>mg</sup> /L Post-purge:			
mV Post-purge: mV			

<b>N</b> (	L	MONITORING	DATA	SHL
------------	---	------------	------	-----

Project #:	<u>1~U</u>		Client: Steller					
Sampler: w			Date: 3 31 11					
Well I.D.:			Well Diameter: 2 3 4 6 8 10					
Total Well	): <u> </u>		Depth to Water (DTW): 9.05					
Depth to Fr	: 9.0	ч	Thickness of Free Product (feet): 0.01					
Referenced	(PTC)	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 B Positive Air I Electric Subn Gals.) X Speci	Displaceme	ent Extrac Other	_Gals.	<u>Vell Diamete</u> 1" 2" 3"		Disposable Bailer Extraction Port Dedicated Tubing New transport Diameter Multiplier 0.65 1.47	
Time	Temp (°F or °C)	pН	Cond. (mS or μS)	Turbi (NT	2	Gals. Removed	Observations	
1217	S-1 MR	( pu	RGE C	200 1	1 /mi	r.	HEAVY SHEEN	
1223	5-108	PURG	F		e	nooml		
·····								
-					2			
Did well dewater? Yes So Gallons actually evacuated: 1200 ml								
Sampling D	ate: 3 31		Sampling Tim	e: 123	0	Depth to Water	9.04	
Sample I.D.	: RW -	90 		Laborate	ory:	Kiff CalScience	Other C27	
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenat	es (5)	Other: $\zeta \mathcal{O} \mathcal{P}$	Gow.	
EB I.D. (if applicable):								
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenat	es (5)	Other:		
D.O. (if req'd): Pre-purge: <sup>mg</sup> / <sub>L</sub> Post-purge: <sup>mg</sup> / <sub>L</sub>								
O.R.P. (if re	q'd): Pr	e-purge:	ost-purge:	mV				

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558

# **APPENDIX C**

# Analytical Laboratory Report and Chain-of-Custody Record



and setting to the

H



### Laboratory Job Number 226992 ANALYTICAL REPORT

Stellar Environmental	Solutions
2198 6th Street	
Berkeley, CA 94710	

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

<u>Sample ID</u> MW-4 MW-5 MW-6 MW-7 MW-7 MW-11 MW-11 MW-12 MW-16 MW-17	Lab ID 226992-001 226992-002 226992-003 226992-004 226992-005 226992-006 226992-007 226992-008 226992-008
MW-18	226992-010
MW-3 MW-8	226992-011 226992-012
MW-8 MW-10	226992-012
MW-13	226992-014
MW-14	226992-015
MW-15	226992-016
MW-E	226992-017
RW-1	226992-018

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

The Barr

Signature:

Project Manager

Date: <u>04/07/2011</u>

NELAP # 01107CA



#### CASE NARRATIVE

Laboratory number: Client: Project: Location: Request Date: Samples Received: 226992 Stellar Environmental Solutions 2007-65 Bay Center Apts 03/31/11 03/31/11

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 03/31/11. The samples were received cold and intact.

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

MW-7 (lab # 226992-004) had pH greater than 2. No other analytical problems were encountered.

#### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

	· · · · · · · · · · · · · · · · · · ·						hain o	Ŧ Ċu	otody I	2000	سما		77	t a	97					·	
	· ~ •	_				U U		u	stody I	ieco	ra				(ک			L	ab job no	7.1	
	Laboratory C 17 Address 2323 BECK					lethod of Shi	pment	AB	Conn	men_								C	Date SL	30/11 _ of :Z	
	Address 2323	6FM	<u>+ 51</u>		— s	hipment No.								$\neg \neg$				P	age	_ of :2	<b>~</b>
	BERGL	ELEY, C	4	. <u></u>	A	irbill No				~			1	1	. An	alysis Re				7	
		· · · · · · · · · · · · · · · · · · ·			— c	ooler No. 🚄		K Di	s í	6			1	350	¥ 3		7	<del>, , ,</del>	/	/	
	Project Owner	HRIST	715 A	hts	Pi	ooler No. 🗲 roject Manag	er See		Genss		/ .	See.	8	00 A	9				/ /		
	BERK	ELEY.	3		Te	elephone No.	(510) 644	-3123	~		Fillered	ontair							/ /		
	Site Address 6400 C BERK Project Name BAY CE	NRE	A 84	gui	MTE	ax No	(510) 644	-3859	$ \rangle$	_ /	<u> </u>	ol Containers	V Y	XX				/ /	/ 8	Remarks	
	Project Number2.cc	6	5		Sa	amplers: <i>(Sig</i>	nature) <b>I</b> k	A	N	- /			5				' /		/ .		
	Field Sample Number	Location/	Date	Time	Sample	1			eservation	- -, -, -, -, -, -, -, -, -, -, -, -, -, -		4		7 /		' /					
ŧ		Depth	+		Type	4100	0 as	Cooler	Chemical	1-7	{·	<u> </u>	7 7	_/_/	/_/_			_/			
12	MW-9		પ્રશ્નપ	1045	W	2 500 m	Lamber	P			<u>अ</u>	9	$\varphi$								
			11	1100							Ø	P	0							<u> </u>	
3	MW-6			235							2	9	0								1
Ŧ				1255							6	0	Ø					-		·····	-
5	MW-9			1320							6		D			-					-
				1400						+	5		0								-
7	HNW 72	1	┼╌╂╌			<u>├</u> ╂	·······				K	6 2	2								4
878	MW-16	1	┝╌┠╌	1422		<b> </b>				+-+		-									_
ğ				1320						┼──┼	9	P	0			_					
	MW-17			1220							0	0	0					_			
Ø	MW-12		<b>√</b>	1340	+	4					6	Ø	Ø								7
				、 、																	-
	-					j															-
.	Relinquished by:		Date	Received	by:	- R	1	Date	Relinquished	by:		.l		Date	Receive	d by:				Date	-
	Signature	B	311	Signati	ure 🚅	(J)	<u>4</u>	334	Signature							ature		<u> </u>			
	Printed WULLAM WU BLAINE TECH	NG	Time	Printed	$\Box$	CaCul	,	Time	Printed												_
	Company SERVICE	4 Eù			$\sim$	N.	St	2:20	12-5					Time	Print	ed				Time	
ł				Compa	iny <u>(</u>	urts	4 cm	ans.	Company					·	Com	pany				_	
		NDARD							Relinquished	by:				Date	Receive	•				Date	]
	Comments:EDF	220	un	Ð		······			Signature .			•••• <u> </u>			Signa	Signature				-	
10-0	GLOBAL ID #	SL7	<u>r2</u>	o Ø	55	61			Printed					Time	Print	ed				Time	-
2000-00-01																					
ΝL		· · · · · · · · · · · · · · · · · · ·							Company .						Com	pany				<b></b>	

J

\* Stellar Environmental Solutions

2198 Sixth Street #201, Berkeley, CA 94710

3 of 60

					Chain o	f Cus	stody Reco	rd		22	269	92	-			Lab job no.	
Laboratory C 17 Address 2323 BRSC	г 8 бб	1.57			lethod of Shipment		Connen									Date $\frac{3}{31}$ Page $\underline{1}$	ot 2
BRUK	ELEY, C	4			hipment No		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		[ ]	1	22	ι.	natysis R	Required		/	
Project Owner Site Address Beeve	CHRIST	ie A S	ve	— Co — Pr — Te	ooler No. <b>R. MAI</b> roject Manager <b>SC</b> elephone No. (510) 644-		si A	Fillered	No. of Containers	80	No Co		$\left  \right $		//		
Project Name <b>BAY C</b>	enter	<u>A 84</u>	STM6	<b>M</b> Fa		1	/		* * *	7_7	ا کیچ		.			Ren	narks
Field Sample Number	Location/	Date	Time	Sample	amplers: (Signature)	Pre	servation		$\widetilde{\mathcal{A}}$	0/19 10/19				' /			
MW-3	Depth	3/31/4	1150	∵Type W	4 FILL VUELS F 2 SUD IL NF ander	Cooler	Chemical /		0	7/	-(-(	<u></u>		$\left( \right)$	$\square$	/	
- MW-8		1	0925	)	1			,	0 0								
3 MW-10			0950					×						-			
+ MW-13			1020						80	b						· · · · · · · · · · · · · · · · · · ·	
MW-14			1045					k	00	X							
0 MW-15			11:25					Ŕ	0	-						-	
1 MW - 2			1210					۲	0 0	0							
3 pw - (		J.	1230	· V				¥	0	ρ			-				
					2												
			、 						_								
Relinquished by: Signature Wink I Am Wink I Am Printed BUAINE TECH BLAIN E TE	wrs	Date 3-131/11	Received Signal		TE BE	Date 3/31/11	i				- Date		ved by: nature		I		Date
Printed BUAINE TECH BLAINE TE Company SEALVILLES	<u>Sq200</u> 51 Ci-1	Time	Printe		ray 351 - f	Time 212	Printed Pricompany				- Time		mpany _				Time
Comments:ED	ANDARI F REO	un	Ð				Relinquished by: Signature				Date	1	ved by: nature _				Date
<u>GLOBAL ID</u> #	f 51.	<u>T2</u>	oø	55	61		Printed				- Time	Prir	nted				- Țime
5				······			Company				-	Cor	mpany _				

1

\* Stellar Environmental Solutions

4 of 60

2198 Sixth Street #201, Berkeley, CA 94710

COOLER RECEIPT CHECKLIST	Curtis & Tompkins, Ltd.
Login # 2210992 Client Stellar Environment aproject Bay C	umber of coolers 2 enter Apartment
Date Opened 333111 By (print) R. Parus (sign) Date Logged in By (print) (sign)	
1. Did cooler come with a shipping slip (airbill, etc) Shipping info	YES NO
<ul> <li>2A. Were custody seals present? □ YES (circle) on cooler How manyName</li> <li>2B. Were custody seals intact upon arrival?</li> <li>3. Were custody papers dry and intact when received?</li> <li>4. Were custody papers filled out properly (ink, signed, etc)?</li> <li>5. Is the project identifiable from custody papers? (If so fill out top of 6. Indicate the packing in cooler: (if other, describe)</li> </ul>	
☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ Cloth material ☐ Cardboard ☐ Styrofoam 7. Temperature documentation:	None Paper towels
Type of ice used: 🗶 Wet 🗌 Blue/Gel 🗌 None T	Cemp(°C)
Samples Received on ice & cold without a temperature blar	nk
Samples received on ice directly from the field. Cooling pro	$\bigcap$
Samples received on ice directly from the field. Cooling pro         8. Were Method 5035 sampling containers present?         If YES, what time were they transferred to freezer?         9. Did all bottles arrive unbroken/unopened?         10. Are samples in the appropriate containers for indicated tests?         11. Are sample labels present, in good condition and complete?         12. Do the sample labels agree with custody papers?         13. Was sufficient amount of sample sent for tests requested?         14. Are the samples appropriately preserved?         15. Did you check preservatives for all bottles for each sample?         16. Did you document your preservative check         17. Are bubbles > 6mm absent in VOA samples?         18. Was the client contacted concerning this sample delivery?         If YES, Who was called?         By	YES NO YES NO

5 of 60

Į

ĺ



	Curtis & T	ompkin	s Labo:	ratories An	alytical	Report	5	
	lar Environmenta	l Soluti	lons	Location: Prep:	Bay C EPA 5	Center 2 5030B	Apts	
Project#: 2007- Matrix: Units:	-65 Water ug/L			Sampled: Received:	03/30 03/31			
01100				110001700		_,		
Field ID: Type: Lab ID:	MW-4 SAMPLE 226992-001			Diln Fac: Batch#: Analyzed:	1.000 17335 04/01	50		
403	lyte	т	Result	-	RL	• 	Analysis	
Gasoline C7-C12		r ND			50	EPA	8015B	
MTBE Benzene		ND	2.4		2.0 0.50		8021B 8021B	
Toluene		ND			0.50	EPA	8021B	
Ethylbenzene m,p-Xylenes		ND ND			0.50 0.50		8021B 8021B	
o-Xylene		ND ND			0.50		8021B	
Surro	ogate	%REC	Limits	Analys	is			
Bromofluorobenz	zene (FID)	101	75-130	EPA 8015B				
Bromofluorobenz	zene (PID)	94	58-121	EPA 8021B				
Field ID:	MW-5			Diln Fac:	1.000	)		
Type:	SAMPLE			Batch#:	17335			
Lab ID:	226992-002			Analyzed:	04/01			
Lab ID:	226992-002 Lyte		Result		04/01 RL	/11	Analysis	
Lab ID: Ana Gasoline C7-C12	226992-002 Lyte	F ND			04/01 RL 50	EPA	8015B	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene	226992-002 Lyte	ND	<b>Result</b> 5.9 1.2	Analyzed:	04/01 <u>RL</u> 50 2.0 0.50	EPA EPA EPA	80158 80218 80218	
Lab ID: Casoline C7-C12 MTBE Benzene Toluene	226992-002 Lyte	ND ND	5.9	Analyzed:	04/01 <u>RL</u> 50 2.0 0.50 0.50	EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes	226992-002 Lyte	ND	5.9	Analyzed:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	226992-002 Lyte	ND ND ND	5.9	Analyzed:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218	
Lab ID: Anal Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surre	226992-002 Lyte 2 ogate	ND ND ND ND <b>%REC</b>	5.9 1.2 Limits	Analyzed: C Analys	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surro Bromofluorobenz	226992-002 Lyte 2 Dgate zene (FID)	ND ND ND ND <b>%REC</b> 98	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C <u>Analys</u> EPA 8015B	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surre	226992-002 Lyte 2 Dgate zene (FID)	ND ND ND ND <b>%REC</b>	5.9 1.2 Limits	Analyzed: C Analys	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surro Bromofluorobenz	226992-002 Lyte 2 Dgate zene (FID)	ND ND ND ND <b>%REC</b> 98	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C <u>Analys</u> EPA 8015B	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surro Bromofluorobenz	226992-002 Lyte 2 Dgate zene (FID) zene (PID)	ND ND ND ND <b>%REC</b> 98	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C EPA 8015B EPA 8021B	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 <b>Sis</b>	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Field ID: Type:	226992-002 Lyte 2 Dgate 2 2 2 2 2 2 2 2 2 2 2 2 2	ND ND ND ND <b>%REC</b> 98	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C <u>Analys</u> EPA 8015B EPA 8021B Diln Fac: Batch#:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 <b>Sis</b> 1.000 17335	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Field ID:	226992-002 Lyte 2 Dgate zene (FID) zene (PID) MW-6	ND ND ND ND <b>%REC</b> 98	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C <u>Analys</u> EPA 8015B EPA 8021B Diln Fac:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.	EPA EPA EPA EPA EPA EPA EPA	80158 80218 80218 80218 80218 80218 80218	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surro Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana:	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND <b>%REC</b> 98 89	5.9 1.2 <b>Limits</b> 75-130	Analyzed: C <u>Analys</u> EPA 8015B EPA 8021B Diln Fac: Batch#:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.4/01 <b>RL</b>	EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana: Gasoline C7-C12	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND <u>%REC</u> 98 89	5.9 1.2 <b>Limits</b> 75-130 58-121	Analyzed: C <u>Analys</u> EPA 8015B EPA 8021B Diln Fac: Batch#:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.4/01 <b>RL</b> 50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana Gasoline C7-C12 MTBE Benzene	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND 8 89 89 <b>8</b> 89	5.9 1.2 <b>Limits</b> 75-130 58-121	Analyzed: C EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 <b>Sis</b> 1.000 17335 04/01 <b>RL</b> 50 2.0 0.50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8015B 8021B 8021B 8021B	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND ND 98 89 F ND ND	5.9 1.2 <b>Limits</b> 75-130 58-121 Result 3.9	Analyzed: C EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed:	04/01 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B	
Lab ID: Ana Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana Gasoline C7-C12 MTBE Benzene	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND 8 89 89 <b>8</b> 89	5.9 1.2 <b>Limits</b> 75-130 58-121 Result 3.9	Analyzed: C EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 <b>SIS</b> 1.000 17335 04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Field ID: Type: Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND ND <b>%REC</b> 98 89 89 ND ND ND	5.9 1.2 <b>Limits</b> 75-130 58-121 Result 3.9	Analyzed: C EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed:	04/01 RL 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B 8021B	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz	226992-002 Lyte 2 Dgate Zene (FID) Zene (PID) MW-6 SAMPLE 226992-003 Lyte	ND ND ND ND ND <b>%REC</b> 98 89 89 ND ND ND ND	5.9 1.2 <b>Limits</b> 75-130 58-121 Result 3.9	Analyzed: C <u>Analys</u> EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed: C Analyzed:	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 <b>BL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	80155 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218	
Lab ID: Ana: Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz Bromofluorobenz	226992-002 Lyte 2 Dgate Zene (FID) Zene (FID) MW-6 SAMPLE 226992-003 Lyte 2 Dgate Zene (FID)	ND ND ND ND ND <b>%REC</b> 98 89 89 ND ND ND ND ND ND ND ND	5.9 1.2 <b>Limits</b> 75-130 58-121 <b>Result</b> 3.9 1.3	Analyzed: C EPA 8015B EPA 8021B Diln Fac: Batch#: Analyzed: C	04/01 <b>RL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 <b>BL</b> 50 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	EPA EPA EPA EPA EPA EPA EPA EPA EPA EPA	80155 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218 80218	

C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit

Page 1 of 7



Curtis & Tompkins Laboratories Analytical Report									
Lab #: Client: Project#:	226992 Stellar Environmental Solutions 2007-65	Location: Prep:	Bay Center Apts EPA 5030B						
Matrix: Units:	Water ug/L	Sampled: Received:	03/30/11 03/31/11						

Field ID: MW-7	Diln Fac:	1.000	
Type: SAMPLE	Batch#:	173350	
Lab ID: 226992-004	Analyzed:	04/01/11	

Analyte	Result	RL	Analysis	
Gasoline C7-C12	630	50	EPA 8015B	
MTBE	ND	2.0	EPA 8021B	
Benzene	160	0.50	EPA 8021B	
Toluene	5.3	0.50	EPA 8021B	
Ethylbenzene	14	0.50	EPA 8021B	
m,p-Xylenes	52	0.50	EPA 8021B	
o-Xylene	13	0.50	EPA 8021B	

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FII	) 92	75-130	EPA 8015B	
Bromofluorobenzene (PIL	) 87	58-121	EPA 8021B	

Field ID: Type: Lab ID:	MW-9 SAMPLE 226992-005			Diln Fac Batch#: Analyzed	1'	.000 73350 4/01/11	
Anal	yte	Re	sult		RL		Analysis
Gasoline C7-C12			150 Y		50	EPA	8015B
MTBE			5.5		2.0	EPA	8021B
Benzene			5.9		0.50	EPA	8021B
Toluene			0.61		0.50	EPA	8021B
Ethylbenzene		ND			0.50	EPA	8021B
m,p-Xylenes		ND			0.50	EPA	8021B
o-Xylene			0.54		0.50	EPA	8021B
Surro	ogate	%REC L	imits	Ana	lysis		
Bromofluorobenz	ene (FID)	99 7	5-130	EPA 8015B			
Bromofluorobenz	ene (PID)	89 5	8-121	EPA 8021B			

Field ID: Type:	MW-11 SAMPLE			Lab I	ID:	22699:	2-006	
Analyte	l	Result	F	sг	Diln I	Fac Batch# 2	Analyzed	Analysis
Gasoline C7-C12		3,400		50	1.000	173350 (	04/01/11	EPA 8015B
MTBE		ND		2.0	1.000	173350	04/01/11	EPA 8021B
Benzene		1,300		2.5	5.000	173394 (	04/04/11	EPA 8021B
Toluene		22		0.50	1.000	173350	04/01/11	EPA 8021B
Ethylbenzene		9.6		0.50	1.000	173350	04/01/11	EPA 8021B
m,p-Xylenes		15		0.50	1.000	173350	04/01/11	EPA 8021B
o-Xylene		4.9		0.50	1.000	173350	04/01/11	EPA 8021B
Surro	gate	%REC	Limits	Diln	Fac I	Batch# Analy:	zed	Analysis
Bromofluorobenz	ene (FID)	103	75-130	1.000	-	173350 04/01,	/11 EPA	8015B
Bromofluorobenz	ene (PID)	97	58-121	1.000	-	173350 04/01,	/11 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

Page 2 of 7



Client:Stellar Environmental SolutionsPrep:EPA 5030BProject#:2007-65Matrix:WaterUnits:ug/LReceived:03/31/11Vield ID:MW-12Lab ID:226992-007		Curtis & Tomp	kins Labor	atories Ana	lytical Report	
Matrix:         Water         Sampled:         03/30/11           Units:         uq/L         Received:         03/31/11           "iald ID:         MW-12         Lab ID:         226992-007           ype:         SAMPLE         Lab ID:         226992-007           Analyte         Result         RL         Diln Fac         Datch# Analyzed         Analysis           Gascline C7-Cl2         15,000         2.50         1.000         173350         04/01/11         EPA 8021B           Benzene         7,900         25         50.00         173350         04/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         04/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         04/01/11         EPA 8021B           Toluene         17         0.50         1.000         173350         04/01/11         EPA 8021B           Bromofluorobenzene (FID)         102         75-130         1.000         173350         04/01/11         EPA 8015B           Bromofluorobenzene (FID)         97         58-121         1.000         173350         04/01/11         EPA 8015B           Bromofluorobenzen	Client: Stella	r Environmental Sc	olutions			S
Sield ID:       NW-12 SAMPLE       Lab ID:       226992-007         Analyte       Result       Ri       Din Fac       BatCh# Analyzed       Analyzis         Gasoline       ND       2.50       50.00       173354 04/04/11       EPA 80155         Benzene       7,900       25       50.00       173350 04/01/11       EPA 80218         Toluene       180       0.50       1.000       173350 04/01/11       EPA 80218         Ethylbenzene       200       0.50       1.000       173350 04/01/11       EPA 80218         m.p-xylenes       110       0.50       1.000       173350 04/01/11       EPA 80218         Scorogate       %REC       Limits       Diln Fac       BatCh# Analyzed       Analysis         Bromofluorobenzene (FID)       102       75-130       1.000       173350 04/01/11       EPA 80218         Scorogate       %REC       Limits       Diln Fac       1.000       173350 04/01/11       EPA 80218         Bromofluorobenzene (FID)       102       75-130       1.000       173350 04/01/11       EPA 80218         Bromofluorobenzene (FID)       97       58-121       1.000       173350 04/01/11       EPA 80158         Gasoline C7-Cl2       64       So </td <td>Matrix:</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td>	Matrix:	Water				
Type:         SAMPLE         Number         Sample           Analyte         Result         RL         Diln Fac         Batch#         Analyzed         Analysis           Gasoline C7-Cl2         15,000         2,500         50,000         173394         Ot/04/11         EPA 8015B           MTRE         ND         2.0         1,000         173394         Ot/04/11         EPA 8021B           Benzene         7,900         25         50,000         173350         Ot/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         Ot/01/11         EPA 8021B           w.p.xylenes         110         0.50         1.000         173350         Ot/01/11         EPA 8021B           Surrogate         %REC         Limits         Diln Fac         Batch#         Analyzed         Analysis           Bromofluorobenzene (FID)         102         75-130         1.000         173350         04/01/11         EPA 8021B           Bromofluorobenzene (FID)         102         75-130         1.000         173350         04/01/11         EPA 8021B           Samothuorobenzene (FID)         97         58-121         1.000         173350         04/04/11						
Gasoline C7-C12         15,000         2,500         50.00         173350         04/04/11         EPA 8015B           Benzene         7,900         25         50.00         173350         04/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         04/01/11         EPA 8021B           Ethylbenzene         200         0.50         1.000         173350         04/01/11         EPA 8021B           m.p-Xylenes         110         0.50         1.000         173350         04/01/11         EPA 8021B           Surrogate         %REC         Limits         Diln Fac         Batch# Analyzed         Analysis           Bromofluorobenzene (FID)         97         75-130         1000         173350         04/01/11         EPA 8021B           Stromofluorobenzene (FID)         97         58-121         1.000         173350         04/01/11         EPA 8015B           Bromofluorobenzene (FID)         97         58-121         1.000         173350         04/04/11         EPA 8015B           Bromofluorobenzene (FID)         97         58-121         1.000         173350         04/04/11           Bach#         1.3         0.50         EPA 8015B         1.00				Lab ID:	226992-007	
MTEE         ND         2.0         1.000         173350         04/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         04/01/11         EPA 8021B           Toluene         180         0.50         1.000         173350         04/01/11         EPA 8021B           Toluene         110         0.50         1.000         173350         04/01/11         EPA 8021B           o-Xylene         17         0.50         1.000         173350         04/01/11         EPA 8021B           o-Xylene         17         0.50         1.000         173350         04/01/11         EPA 8021B           Somofluorobenzene (PID)         102         75-130         1.000         173350         04/01/11         EPA 8021B           Bromofluorobenzene (PID)         97         58-121         1.000         173350         04/01/11         EPA 8021B           Somofluorobenzene (PID)         97         58-121         1.000         173350         04/01/11         EPA 8021B           Somofluorobenzene (PID)         97         58-121         1.000         173350         04/04/11           Ethylbenzene         Somofluorobenzene (PID)         97         58-121						
Toluene       180       0.50       1.000       173350       04/01/11       EPA 8021B         m.p-Fylenes       110       0.50       1.000       173350       04/01/11       EPA 8021B         o-Xylene       17       0.50       1.000       173350       04/01/11       EPA 8021B         o-Xylene       17       0.50       1.000       173350       04/01/11       EPA 8021B         Surrogate       %REC       Limits       Diln Fac       Batch# knalyzed       Analysis         Bromofluorobenzene (PID)       97       58-121       1.000       173350       04/01/11       EPA 8021B         ield ID:       MW-16       Diln Fac:       1.000       173350       04/01/11       EPA 8021B         ield ID:       MW-16       Batch#:       173350       04/01/11       EPA 8021B         ield ID:       MW-16       Batch#:       173350       04/01/11       EPA 8021B         MTEE       64       50       EFA 8015B       EPA 8021B         Benzene       13       0.50       EPA 8021B       EPA 8021B         Toluene       1.6       2.0       EPA 8021B       EPA 8021B         Stromofluorobenzene (FID)       92       75-130 <td< td=""><td></td><td>ND</td><td>2.</td><td>0 1.000</td><td>173350 04/01/11</td><td>EPA 8021B</td></td<>		ND	2.	0 1.000	173350 04/01/11	EPA 8021B
Ethylbenzene         200         0.50         1.000         173350         04/01/11         EPA 8021B           o-Xylene         17         0.50         1.000         173350         04/01/11         EPA 8021B           surrogate         %REC         Limits         Diln Fac         Batch#         Analyzed         Analysis           Bromofluorobenzene (FID)         102         75-130         1.000         173350         04/01/11         EPA 8021B           Surrogate         %REC         Limits         Diln Fac         Batch#         Analyzed         Analysis           Bromofluorobenzene (FID)         97         58-121         1.000         173350         04/01/11         EPA 8021B           Surrogate         MM-16         Diln Fac:         1.000         173350         04/04/11           Analyte         Batch#:         173350         04/04/11         EPA 8021B           MTBE         16         2.0         EPA 8021B         EPA 8021B           Benzene         1.6         0.50         EPA 8021B         EPA 8021B           Toluene         1.6         0.50         EPA 8021B         EPA 8021B           Bromofluorobenzene (FID)         92         75-130         EPA 8015B <td< td=""><td></td><td></td><td></td><td>50.00</td><td>173394 04/04/11</td><td>EPA 8021B</td></td<>				50.00	173394 04/04/11	EPA 8021B
o-Xylène         17         0.50         1.000         173350         04/01/11         EPA 8021B           Surrogate         %REC         Limits         Diln Fac         Batch#         Analyzed         Analysis           Bromofluorobenzene (FID)         102         75-130         1.000         173350         04/01/11         EPA 8021B           Bromofluorobenzene (FID)         97         58-121         1.000         173350         04/01/11         EPA 8021B           'ield ID:         MW-16         Diln Fac:         1.000         173350         04/01/11         EPA 8021B           'ield ID:         MW-16         Diln Fac:         1.000         173350         04/04/11           Analyte         Result         R         Nalyzei         04/04/11           Analyte         Result         R         Analysis           Gasoline C7-C12         64         2.0         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           Toluene         1.3         0.50         EPA 8021B           m.p-Xylenes         1.3         0.50         EPA 8021B           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzen	Ethylbenzene	200	0.	50 1.000	173350 04/01/11	EPA 8021B
Bromofluorobenzene (FID)       102       75-130       1.000       173350       04/01/11       EPA 8015B         Bromofluorobenzene (FID)       97       58-121       1.000       173350       04/01/11       EPA 8021B         "ield ID:       MW-16       Diln Fac:       1.000       173350       04/01/11       EPA 8021B         "ield ID:       MW-16       Batch#:       173394       Analysis         Gasoline C7-C12       64       50       EPA 8021B         MTEB       16       2.0       EPA 8021B         Toluene       1.3       0.50       EPA 8021B         Toluene       1.3       0.50       EPA 8021B         m.p-Xylenes       1.3       0.50       EPA 8021B         o-Xylene       1.0       0.50       EPA 8021B         Bromofluorobenzene (FID)       92       75-130       EPA 8015B         SampLe       ND       2.0       1.000       173350       04/02/11       EPA 8015B         Toluene </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Bromofluorobenzene (FID)       102       75-130       1.000       173350       04/01/11       EPA 8015B         Bromofluorobenzene (FID)       97       58-121       1.000       173350       04/01/11       EPA 8021B         "ield ID:       MW-16       Diln Fac:       1.000       173350       04/01/11       EPA 8021B         "ype:       SAMPLE       Batch#:       173394       Analysis         Gasoline C7-C12       64       50       EPA 8021B         MTBE       16       2.0       EPA 8021B         Toluene       13       0.50       EPA 8021B         Toluene       1.3       0.50       EPA 8021B         m.p-Xylenes       1.3       0.50       EPA 8021B         o-Xylene       1.0       0.50       EPA 8021B         Bromofluorobenzene (FID)       92       75-130       EPA 8015B         SampLe       ND       2.0       1.000       173350       04/02/11       EPA 8015B         Toluene		ate %R	EC Limits		tch# Analyzed	Analysis
Sield ID:       MW-16 ype:       Diln Fac:       1.000 Batch#:       173394 173394 Analyzed:       Analysis         Analyte       Result       RL       Analysis         Gasoline C7-Cl2       64       50       EPA 8015B         MTBE       16       2.0       EPA 8021B         Benzene       13       0.50       EPA 8021B         Toluene       1.6       0.50       EPA 8021B         Ethylbenzene       ND       0.50       EPA 8021B         m.p-Xylenes       1.3       0.50       EPA 8021B         o-Xylene       1.0       0.50       EPA 8021B         Surrogate       %REC       Limits       Analysis         Bromofluorobenzene (FID)       92       75-130       EPA 8015B         Bromofluorobenzene (PID)       99       58-121       EPA 8015B         Stree       ND       2.0       1.000       173350       04/02/11       EPA 8015B         Stree       ND       2.0       1.000       173350       04/02/11       EPA 8015B         Bromofluorobenzene (PID)       92       50       1.000       173350       04/02/11       EPA 8015B         Stree       ND       2.0       1.000       173350 <td>Bromofluorobenze</td> <td>ne (FID) 102</td> <td>2 75-130</td> <td>1.000 17</td> <td>3350 04/01/11 EPA</td> <td>8015B</td>	Bromofluorobenze	ne (FID) 102	2 75-130	1.000 17	3350 04/01/11 EPA	8015B
Sype:         SAMPLE         Batch#:         173394           ab ID:         226992-008         Batch#:         173394           Analyte         Result         RL         Analysis           Gasoline C7-Cl2         64         50         EPA 8015B           MTBE         16         2.0         EPA 8021B           Douge         1.6         0.50         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           m,p-Xylenes         1.3         0.50         EPA 8021B           o-Xylene         1.3         0.50         EPA 8021B           scored         REC         Limits         Analysis           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (FID)         90         50         1.000         173350         04/02/11         EPA 8015B           MTBE	PT OIIIOT TUOT ODEUZE		121-00	<u>1.000 1/</u>	5550 04/01/11 EPA	UVZID
Sype:         SAMPLE         Batch#:         173394           ab ID:         226992-008         Batch#:         173394           Analyte         Result         RL         Analysis           Gasoline C7-Cl2         64         50         EPA 8015B           MTBE         16         2.0         EPA 8021B           Douge         1.6         0.50         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           m,p-Xylenes         1.3         0.50         EPA 8021B           o-Xylene         1.3         0.50         EPA 8021B           scored         REC         Limits         Analysis           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (FID)         90         50         1.000         173350         04/02/11         EPA 8015B           MTBE	ield ID:	MW-16		Diln Fac:	1 000	
Analyte         Result         RL         Analysis           Gasoline C7-Cl2         64         50         EPA 8015B           MTBE         16         2.0         EPA 8021B           Benzene         1.3         0.50         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           Ethylbenzene         1.6         0.50         EPA 8021B           m,p-Xylenes         1.3         0.50         EPA 8021B           m,p-Xylenes         1.3         0.50         EPA 8021B           o-Xylene         1.0         0.50         EPA 8021B           m,p-Xylenes         1.0         0.50         EPA 8021B           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (FID)         92         75-130         EPA 8021B           Sanofluorobenzene (FID)         92         75-130         EPA 8021B           Sacoline C7-Cl2         6,100 Y         50         1.000         173350 04/02/11         EPA 8012B           MTBE         ND         2.0         1.000         173350 04/02/11         EPA 8021B           MTBE         ND         2.0         1.000         173350 04/02/11         EPA 80	'ype:	SAMPLE		Batch#:	173394	
Gasoline C7-C12         64         50         EPA 8015B           MTBE         16         2.0         EPA 8021B           Benzene         13         0.50         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           Ethylbenzene         ND         0.50         EPA 8021B           m.p-Xylenes         1.3         0.50         EPA 8021B           o-Xvlene         1.0         0.50         EPA 8021B           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (PID)         99         58-121         EPA 8021B           Yield ID:         MW-17         Lab ID:         226992-009           Yige:         SAMPLE         EA         Diln Fac         Batch# Analyzed         Analysis           Gasoline C7-C12         6,100 Y         50         1.000         173350         04/02/11         EPA 8015B           MTBE         ND         2.0         1.000         173350         04/02/11         EPA 8021B           Benzene         1,100         5.0         1.000         173350         04/02/11         EPA 8021B           Toluene         44         0.50         1.000         173	lab ID:	226992-008		Analyzed:	04/04/11	
Benzene         13         0.50         EPA 8021B           Toluene         1.6         0.50         EPA 8021B           Toluene         ND         0.50         EPA 8021B           m,p-Xylenes         1.3         0.50         EPA 8021B           o-Xylene         1.0         0.50         EPA 8021B           Surrogate         %REC         Limits         Analysis           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (PID)         99         58-121         EPA 8021B           'ield ID:         MW-17         Lab ID:         226992-009           'ype:         SAMPLE         SAMPLE         Lab ID:         226992-009           'ield ID:         MW-17         Lab ID:         226992-009           'ype:         SAMPLE         SO         1.000         173350         04/02/11         EPA 8015B           Benzene         1,100         5.0         1.000         173350         04/02/11         EPA 8021B           Toluene         44         0.50         1.000         173350         04/02/11         EPA 8021B           Ethylbenzene         52         0.50         1.000         173350         04		te				
Toluene       1.6       0.50       EPA 8021B         Ethylbenzene       ND       0.50       EPA 8021B         m,p-Xylenes       1.3       0.50       EPA 8021B         o-Xylene       1.0       0.50       EPA 8021B         surrogate       %REC       Limits       Analysis         Bromofluorobenzene (FID)       92       75-130       EPA 8015B         Bromofluorobenzene (PID)       99       58-121       EPA 8021B         'ield ID:       MW-17       Lab ID:       226992-009         'ype:       SAMPLE       Lab ID:       226992-009         'ield ID:       MW-17       Lab ID:       226992-009         'ype:       SAMPLE       SampLe       Analyzed       Analysis         Gasoline C7-Cl2       6,100 Y       50       1.000       173350       04/02/11       EPA 8021B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       1.000       173350       04/02/11       EPA 8021B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Brownofluorobenzene       52       0.50 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
m.pXylenes       1.3       0.50       EPA 8021B         o-Xylene       1.0       0.50       EPA 8021B         surrogate       %REC       Limits       Analysis         Bromofluorobenzene (FID)       92       75-130       EPA 8015B         Bromofluorobenzene (PID)       99       58-121       EPA 8021B         'ield ID:       MW-17       Lab ID:       226992-009         'ype:       SAMPLE       Lab ID:       226992-009         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8015B         Benzene       1,100       5.0       10.000       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Toluene       52       0.50       1.000       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Toluene       52       0.50       1.000       173350       04/02/11       EPA 8021B         Toluene       42       0.50       1.000       173350       04/02/11       EPA 8021B         m.p-Xylenes						
o-Xylene         1.0         0.50         EPA 8021B           Surrogate         %REC         Limits         Analysis           Bromofluorobenzene (FID)         92         75-130         EPA 8015B           Bromofluorobenzene (PID)         99         58-121         EPA 8021B           Sield ID:         MW-17         Lab ID:         226992-009           'ype:         SAMPLE         Lab ID:         226992-009           MW-17         Lab ID:         226992-009           MW-17         Lab ID:         226992-009           'ype:         SAMPLE         SAMPLE           MW-17         Lab ID:         226992-009           MW-17         Lab ID:         226992-009           'ype:         SAMPLE         Analyte         Analyzed         Analysis           Gasoline C7-Cl2         6,100 Y         50         1.000         173350         04/02/11           Benzene         1,100         5.0         1.000         173350         04/02/11         EPA 8021B           Toluene         44         0.50         1.000         173350         04/02/11         EPA 8021B           m,p-Xylenes         52         0.50         1.000         173350         04/02/11 </td <td></td> <td></td> <td></td> <td></td> <td>0.50 EPA 802</td> <td>1B</td>					0.50 EPA 802	1B
Bromofluorobenzene (FID)       92       75-130       EPA 8015B         Bromofluorobenzene (PID)       99       58-121       EPA 8021B         'ield ID:       MW-17       Lab ID:       226992-009         'ype:       SAMPLE       Lab ID:       226992-009         MW-17       Lab ID:       226992-009         'ype:       SAMPLE       SAMPLE       Analyte       Analyzed       Analysis         Gasoline C7-C12       6,100 Y       50       1.000       173350       04/02/11       EPA 8015B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B						
Bromofluorobenzene (PID)       99       58-121       EPA 8021B         Sield ID:       MW-17 SAMPLE       Lab ID:       226992-009         MW-17       Lab ID:       226992-009         SampLe       Analyte       Result       RL       Diln Fac       Batch# Analyzed       Analysis         Gasoline C7-C12       6,100 Y       50       1.000       173350       04/02/11       EPA 8015B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B					S	
Analyte         Result         RL         Diln         Fac         Batch#         Analyzed         Analysis           Gasoline C7-C12         6,100 Y         50         1.000         173350         04/02/11         EPA 8015B           MTBE         ND         2.0         1.000         173350         04/02/11         EPA 8021B           Benzene         1,100         5.0         10.00         173350         04/02/11         EPA 8021B           Toluene         44         0.50         1.000         173350         04/02/11         EPA 8021B           Ethylbenzene         55         0.50         1.000         173350         04/02/11         EPA 8021B           m.p-Xylenes         52         0.50         1.000         173350         04/02/11         EPA 8021B           o-Xylene         18 C         0.50         1.000         173350         04/02/11         EPA 8021B           Bromofluorobenzene (FID)         117         75-130         1.000         173350         04/02/11         EPA 8015B						
Analyte       Result       RL       Diln       Fac       Batch#       Analyzed       Analysis         Gasoline C7-C12       6,100 Y       50       1.000       173350       04/02/11       EPA 8015B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m.p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B						
SAMPLE       Result       RL       Diln Fac       Batch# Analyzed       Analysis         Gasoline C7-C12       6,100 Y       50       1.000       173350       04/02/11       EPA 8015B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173350       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m.p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B	ield ID:	MW-17		Lab ID:	226992-009	
Gasoline C7-C12       6,100 Y       50       1.000       173350       04/02/11       EPA 8015B         MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173394       04/02/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B	'ype:	SAMPLE				
MTBE       ND       2.0       1.000       173350       04/02/11       EPA 8021B         Benzene       1,100       5.0       10.00       173394       04/04/11       EPA 8021B         Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18       C       0.50       1.000       173350       04/02/11       EPA 8021B         Surrogate       %REC       Limits       Diln       Fac       Batch# Analyzed       Analysis         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B						
Toluene       44       0.50       1.000       173350       04/02/11       EPA 8021B         Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Surrogate       %REC       Limits       Diln       Fac       Batch# Analyzed       Analysis         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B	MTBE	ND	2	2.0 1.000	173350 04/02/11	EPA 8021B
Ethylbenzene       55       0.50       1.000       173350       04/02/11       EPA 8021B         m,p-Xylenes       52       0.50       1.000       173350       04/02/11       EPA 8021B         o-Xylene       18 C       0.50       1.000       173350       04/02/11       EPA 8021B         Surrogate       %REC       Limits       Diln       Fac       Batch# Analyzed       Analysis         Bromofluorobenzene (FID)       117       75-130       1.000       173350       04/02/11       EPA 8015B						
o-Xylene         18 C         0.50         1.000         173350         04/02/11         EPA 8021B           Surrogate         %REC         Limits         Diln         Fac         Batch# Analyzed         Analysis           Bromofluorobenzene (FID)         117         75-130         1.000         173350         04/02/11         EPA 8015B	Ethylbenzene	55	C	0.50 1.000	173350 04/02/11	EPA 8021B
Surrogate%RECLimitsDilnFacBatch#AnalyzedAnalysisBromofluorobenzene (FID)11775-1301.00017335004/02/11EPA8015B						
Bromofluorobenzene (FID) 117 75-130 1.000 173350 04/02/11 EPA 8015B						
	Bromofluorobenze	ne (FID) 117	75-130	1.000 17	3350 04/02/11 EPA	8015B
	Bromofluorobenze	ne (PID) 99	58-121			8021B
	C= Presence conf	irmed, but RPD bet			esemble standard	

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

Page 3 of 7



	Curtia	6. Tompkin	a Labor	stories A	nalytical	Peport	
Lab #: 226992		& IOmprii			_		
	r Environm	ental Solut	ions	Location: Prep:	EPA	Center Apt 5030B	LS .
Matrix: Units:	Water ug/L			Sampled: Received:	03/3 03/3	- /	
	MW-18			Diln Fac:	1.00		
<b>Z L</b> -	SAMPLE 226992-010	)		Batch#: Analyzed:	1733 04/0		
Analyt	te		Result		RL		Analysis
Gasoline C7-C12 MTBE			68 Y 17		50 2.0	EPA 801 EPA 802	-
Benzene			5.5		0.50	EPA 802	21B
Toluene		NTD	1.1 (	2	0.50	EPA 802	
Ethylbenzene m,p-Xylenes		ND	1.3		0.50 0.50	EPA 802 EPA 802	
o-Xylene		ND			0.50	EPA 802	
Surroga	ate	%REC	Limits	Analy	zis		
Bromofluorobenzen		97	75-130	EPA 8015B	610		
Bromofluorobenzen	ne (PID)	102	58-121	EPA 8021B			
	MW-3			Diln Fac:	1.00		
	SAMPLE 226992-011			Batch#: Analyzed:	1733 04/0		
	220992-011	-		Anaryzeu	04/0	J/ I I	
Analyt	te		Result		RL		Analysis
Gasoline C7-C12 MTBE			540 Y 17		50 2.0	EPA 801 EPA 802	
Benzene			47		0.50	EPA 802	
Toluene			28		0.50	EPA 802	
Ethylbenzene			7.6		0.50	EPA 802	
m,p-Xylenes			8.5		0.50	EPA 802	7TR
						<b>FD</b> 7 80'	21p
o-Xylene			3.3		0.50	EPA 802	21B
o-Xylene Surroga		%REC	3.3 Limits	Analy	0.50	EPA 802	218
o-Xylene Surroga Bromofluorobenzer	ne (FID)	100	3.3 Limits 75-130	EPA 8015B	0.50	EPA 80:	218
o-Xylene Surroga	ne (FID)		3.3 Limits		0.50	EPA 802	218
o-Xylene Surroga Bromofluorobenzer	ne (FID)	100	3.3 Limits 75-130	EPA 8015B	0.50	EPA 802	218
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer	ne (FID) ne (PID)	100	3.3 Limits 75-130	EPA 8015B EPA 8021B	0.50 7 <b>sis</b>		218
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M	ne (FID)	100	3.3 Limits 75-130	EPA 8015B	0.50 7 <b>sis</b>	EPA 802	218
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S	ne (FID) ne (PID) MW-8 SAMPLE	100 100	3.3 Limits 75-130 58-121	EPA 8015B EPA 8021B Lab ID:	0.50 <b>7515</b> 2269	92-012	
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M	ne (FID) ne (PID) MW-8 SAMPLE	100 100 Result	3.3 Limits 75-130 58-121 RL	EPA 8015B EPA 8021B Lab ID: Diln	0.50 vsis 2269 Fac Batch#	92-012 Analyzed	Analysis
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte	ne (FID) ne (PID) MW-8 SAMPLE	100 100 <b>Result</b> 19,000 ID	3.3 Limits 75-130 58-121	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000	0.50 vsis 2269 Fac Batch# 0 173394 173350	92-012 Analyzed 04/05/11 04/02/11	<b>Analysis</b> EPA 8015B EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene	ne (FID) ne (PID) MW-8 SAMPLE	100 100 <b>Result</b> 19,000 ID 8,100	3.3 Limits 75-130 58-121 2,500 2 25	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 50.00	0.50 7515 2269 Fac Batch# 0 173394 173350 0 173394	92-012 Analyzed 04/05/11 04/02/11 04/05/11	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B
o-Xylene           Surroga           Bromofluorobenzer           Bromofluorobenzer           Field ID:         M           Type:         S           Analyte           Gasoline C7-C12           MTBE           Benzene           Toluene	ne (FID) ne (PID) MW-8 SAMPLE	100 100 <b>Result</b> 19,000 ID 8,100 130	3.3 Limits 75-130 58-121	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 50.00 .50 1.000	0.50 <b>7sis</b> 2269 <b>Fac Batch#</b> 0 173394 0 173350 0 173350	92-012 Analyzed 04/05/11 04/02/11 04/05/11 04/02/11	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene	ne (FID) ne (PID) MW-8 SAMPLE	100 100 <b>Result</b> 19,000 ID 8,100	3.3 Limits 75-130 58-121	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 50.00	0.50 <b>7sis</b> 2269 <b>Fac Batch#</b> 0 173394 0 173394 173394	92-012 <b>Analyzed</b> 04/05/11 04/02/11 04/05/11 04/02/11 04/05/11	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene	ne (FID) ne (PID) MW-8 SAMPLE	100 100 <b>Result</b> 19,000 ID 8,100 130 890	3.3 Limits 75-130 58-121 2,500 2 25 0 25 0 25 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 50.00 .50 1.000 50.00	0.50 <b>7sis</b> <b>2269</b> <b>Fac Batch#</b> 0 173394 173350 0 173394 173350 0 173354 0 173350	92-012 <b>Analyzed</b> 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11	Analysis EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	ne (FID) ne (PID) MW-8 SAMPLE N	100 100 <b>Result</b> 19,000 ID 8,100 130 890 130 19	3.3 Limits 75-130 58-121 2,500 2 25 0 25 0 25 0 0 0 0 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 .50 1.000 .50 1.000 .50 1.000 .50 1.000	0.50 <b>rsis</b> 2269 <b>Fac</b> Batch# 0 173394 173350 173394 0 173394 0 173350 0 173394 0 173350 0 173350	92-012 <b>Analyzed</b> 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene           Surroga           Bromofluorobenzer           Bromofluorobenzer           Bromofluorobenzer           Field ID:         M           Type:         S           Analyte         Gasoline C7-C12           MTBE         Benzene           Toluene         Ethylbenzene           m,p-Xylenes         o-Xylene           Bromofluorobenzer         Surroga	ne (FID) ne (PID) MW-8 SAMPLE N N <b>ate</b> ne (FID)	100 100 <b>Result</b> 19,000 ID 8,100 130 890 130	3.3 Limits 75-130 58-121 2,500 2 25 0 25 0 25 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 .50 1.000 .50 1.000 .50 1.000 .50 1.000	0.50 <b>7sis</b> <b>2269</b> <b>Fac Batch#</b> 0 173394 173350 0 173394 173350 0 173354 0 173350	92-012 Analyzed 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 vzed	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surroga	ne (FID) ne (PID) MW-8 SAMPLE N N <b>ate</b> ne (FID)	100 100 <b>Result</b> 19,000 ID 8,100 130 130 19 <b>%REC</b>	3.3 Limits 75-130 58-121 2,500 2 25 0 25 0 0 25 0 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 0 25 0 0 25 0 0 25 0 0 0 0 25 0 0 0 0 0 0 0 0 0 0 0 0 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 .50 1.000 .50 1.000 .50 1.000 .50 1.000 .50 1.000	0.50 vsis 2269 Fac Batch# 0 173394 173350 0 173394 0 173350 0 173394 0 173350 0 173350 0 173350 0 173350 0 173350	92-012 Analyzed 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 2/11 EPA	<b>Analysis</b> EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene           Surroga           Bromofluorobenzer           Bromofluorobenzer           Field ID:         M           Type:         S           Analyte         Gasoline C7-C12           MTBE         Benzene           Toluene         Ethylbenzene           m,p-Xylenes         o-Xylene           Bromofluorobenzer         Surroga	ne (FID) ne (PID) MW-8 SAMPLE N N <b>ate</b> ne (FID)	100 100 100 <b>Result</b> 19,000 ID 8,100 130 130 19 <b>%REC</b> 114	3.3 Limits 75-130 58-121 2,500 2 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 0 0 0 0 0 0 0 0 0 0 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 .50 1.000 .50 1.000 .50 1.000 <b>Diln Fac</b> 1.000	0.50 75is 2269 Fac Batch# 173394 173350 173350 173350 173350 Batch# Anal 173350 04/0	92-012 Analyzed 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 2/11 EPA	Analysis           EPA 8015B           EPA 8021B           EPA 8021B
o-Xylene Surroga Bromofluorobenzer Bromofluorobenzer Field ID: M Type: S Analyte Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Surroga Bromofluorobenzer	ne (FID) ne (PID) MW-8 SAMPLE N N N N N N N N N N N N N N N N N N N	100 100 <b>Result</b> 19,000 ID 8,100 130 890 130 19 <b>%REC</b> 114 103	3.3 Limits 75-130 58-121 2,500 2 2,500 2 25 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 25 0 0 0 25 0 0 0 25 0 0 0 25 0 0 0 25 0 0 0 0 0 0 0 0 0 0 0 0 0	EPA 8015B EPA 8021B Lab ID: <b>Diln</b> 50.00 .0 1.000 50.00 .50 1.000 .50 1.000 <b>Diln Fac</b> 1.000 1.000	0.50 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515 7515	92-012 Analyzed 04/05/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 04/02/11 2/11 EPA	Analysis           EPA 8015B           EPA 8021B           EPA 8021B

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

Page 4 of 7



c	urtis & Tompkin	s Laboratori	ies Analy	tical Report	
Lab #: 226992 Client: Stellar E Project#: 2007-65	nvironmental Soluti		tion: :	Bay Center Apt EPA 5030B	S
Matrix: Wa Units: ug	ter /L	Samp Rece	led: ived:	03/30/11 03/31/11	
Field ID: MW- Type: SAM		Lab	ID:	226992-013	
Analyte	Result	RL	Diln Fac	Batch# Analyzed	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes	3,700 ND 1,200 81 C 25 38	50 2.0 2.5 0.50 0.50 0.50	1.000 1.000 5.000 1.000 1.000 1.000	173350 04/02/11 173350 04/02/11 173394 04/05/11 173350 04/02/11 173350 04/02/11 173350 04/02/11	EPA 8015B EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
o-Xylene	8.4	0.50	1.000	173350 04/02/11	EPA 8021B EPA 8021B
Surrogate				n# Analyzed	Analysis
Bromofluorobenzene Bromofluorobenzene	(FID) 98 (PID) 95	75-130 1.000 58-121 1.000			8015B 8021B
Field ID: MW- Type: SAM		Lab	ID:	226992-014	
Analyte Gasoline C7-C12	Result	<b>RL</b>	Diln Fac	Batch# Analyzed	
MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	86,000 ND 44,000 400 3,200 830 82	10,000 2.0 100 100 100 100 0.50	200.0 1.000 200.0 200.0 200.0 200.0 1.000	173394 04/05/11 173350 04/02/11 173394 04/05/11 173436 04/05/11 173394 04/05/11 173436 04/05/11 173436 04/05/11 173350 04/02/11	EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
Surrogate	%REC	Limits Diln	Fac Batc	n# Analyzed	Analysis
Bromofluorobenzene Bromofluorobenzene	(FID) 114 (PID) 106	75-130 1.000 58-121 1.000	1733	50 04/02/11 EPA	8015B 8021B
Field ID: MW- Type: SAM		Lab	ID:	226992-015	
Analyte	Result	RL	Diln Fac	Batch# Analyzed	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	16,000 ND 6,600 1,600 450 430 170	1,300 2.0 13 13 13 13 13 0.50	25.00 1.000 25.00 25.00 25.00 25.00 1.000	173394 04/05/11 173350 04/02/11 173394 04/05/11 173436 04/05/11 173394 04/05/11 173436 04/05/11 173436 04/05/11 173350 04/02/11	EPA 8021B EPA 8021B EPA 8021B EPA 8021B EPA 8021B
Surrogate		Limits Diln		n# Analyzed	Analysis
Bromofluorobenzene Bromofluorobenzene		75-130 1.000 58-121 1.000			8015B 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 Page 5 of 7



	Curtis	& Tompkin	s Labo:	ratori	es An	alytica	al Rep	ort		
Lab #: 226992 Client: Stellar Project#: 2007-65	Environme	ental Solut:	ions	Locat Prep			ay Cent PA 5030		S	
Matrix:	Water ug/L			Samp Rece			3/30/11 3/31/11			
011105.				Nece.	lveu	0.	)/ ) 1 / 1 1			
	W-15 AMPLE			Lab I	ID:	22	26992-0	16		
Analyte		Result		L	Diln		ch# An			nalysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	NI	1,000 5,600 88 110 57 9.1 C	1,3	2.0 13 0.50 0.50 0.50 0.50 0.50	$\begin{array}{c} 25.00 \\ 1.000 \\ 25.00 \\ 1.000 \\ 1.000 \\ 1.000 \\ 1.000 \\ 1.000 \end{array}$	173 173 173 173 173	3394 04 3350 04 3394 04 3350 04 3350 04 3350 04 3350 04 3350 04	/02/11 /05/11 /02/11 /02/11 /02/11	EPA EPA EPA EPA EPA	8021B 8021B 8021B 8021B 8021B 8021B
Surroga	to	%REC	Limits	Diln		atch# Ar			Anal	vala
Bromofluorobenzen Bromofluorobenzen	e (FID)	101 99	75-130 58-121	1.000 1.000	1	73350 04	1/02/11	EPA	8015B 8021B	
	W-E AMPLE			Lab I	ID:	22	26992-0	17		
Analyte Gasoline C7-C12		<b>Result</b> 4,400 Y		<b>L</b> 0	<b>Diln F</b> 1.000		<b>ch# Ana</b> 350 04/			<b>nalysis</b> 8015B
MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene	1	1D 2,600 46 64 71 19		2.0 3 0.50 0.50 0.50 0.50	1.000 25.00 1.000 1.000 1.000 1.000	1733 1733 1733 1733 1733	350 04/ 394 04/ 350 04/ 350 04/ 350 04/ 350 04/	02/11 05/11 02/11 02/11 02/11	EPA EPA EPA EPA EPA	8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surroga	te	%REC	Limits	Diln		Batch# Ar			Anal	
Bromofluorobenzen Bromofluorobenzen	e (FID) e (PID)	94 92	75-130 58-121	1.000 1.000		.73350 04 .73350 04			8015B 8021B	
	W-1 AMPLE			Lab I Diln			26992-0 .000	18		
Analyte		Result		RI			Analy			alysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		310 8.8 15 4.4 2.5 1.6 2.5	<del>1</del> 5	( ( (	) 2.0 ).50 ).50 ).50 ).50 ).50	173394 173350 173350 173394 173350	$\begin{array}{c} 0 & 04/02 \\ 4 & 04/05 \\ 0 & 04/02 \\ 0 & 04/02 \\ 4 & 04/05 \\ 0 & 04/02 \\ 0 & 04/02 \\ 0 & 04/02 \\ \end{array}$	/11 E /11 E /11 E /11 E /11 E	PA 80 PA 80 PA 80 PA 80 PA 80 PA 80 PA 80 PA 80	21B 21B 21B 21B 21B
Surroga		%REC	Limits		Analy			lysis		
Bromofluorobenzen Bromofluorobenzen		101 95	75-130 58-121		) 04/02 ) 04/02		A 8015B A 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

Page 6 of 7



	Curtis &	Tompkins Labo	oratories Ar	alytical Repor	rt
Lab #: 22699 Client: Stell Project#: 2007-	ar Environment	al Solutions	Location: Prep:	Bay Center EPA 5030B	Apts
Matrix: Units:	Water ug/L		Sampled: Received:	03/30/11 03/31/11	
Type: Lab ID: Diln Fac:	BLANK QC586098 1.000		Batch#: Analyzed:	173350 04/01/11	
Ana		Result		RL	Analysis
Gasoline C7-C12 MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene		ND ND ND ND ND ND ND		2.0 EPA 0.50 EPA 0.50 EPA 0.50 EPA 0.50 EPA	8015B 8021B 8021B 8021B 8021B 8021B 8021B 8021B
Surro		%REC Limits	Analy	sis	
Bromofluorobenz Bromofluorobenz		98 75-130 91 58-121			
Type: Lab ID: Diln Fac:	BLANK QC586263 1.000		Batch#: Analyzed:	173394 04/04/11	
Anal Gasoline C7-C12		Result ND		<b>RL</b> 50 EPA	Analysis 8015B
MTBE		ND		2.0 EPA	8021B
Benzene Toluene		ND ND			8021B 8021B
Ethylbenzene		ND		0.50 EPA	8021B
m,p-Xylenes o-Xylene		ND ND			8021B 8021B
Surro	gate	%REC Limits	Analy		
Bromofluorobenz	zene (FID)	99 75-130	EPA 8015B	510	
Bromofluorobenz	zene (PID)	108 58-121	EPA 8021B		
Type: Lab ID: Diln Fac:	BLANK QC586417 1.000		Batch#: Analyzed:	173436 04/05/11	
Anal	yte	Result		RL HDA	Analysis
Toluene m,p-Xylenes		ND ND			8021B 8021B
	gata		- <b>T</b> mol		
Bromofluorobenz	zene (FID)	%REC         Limits           100         75-130		272	
Bromofluorobenz	zene (PID)	89 58-121	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 Page 7 of 7



	Curtis & Tompkins Labo	oratories Anal	ytical Report	
Lab #:	226992	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65			
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC586099	Batch#:	173350	
Matrix:	Water	Analyzed:	04/01/11	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	987.8	99	75-126	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	100	75-130	EPA 8015B
Bromofluorobenzene (PID)	104	58-121	EPA 8021B



	Curtis & Tompkins Labor	atories Analyt	ical Report
Lab #: 226992		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5		
Field ID:	MW-4	Batch#:	173350
MSS Lab ID:	226992-001	Sampled:	03/30/11
Matrix:	Water	Received:	03/31/11
Units:	ug/L	Analyzed:	04/02/11
Diln Fac:	1.000		

Type:	MS		Lab ID:			QC58	QC586100			
Ar	nalyte	MSS Result	Spik	ed	Resul	t %RE	C Li	mits	2	Analysis
Gasoline	C7-C12	36.99	2,0	00	1,832	90	68	-120	EPA	8015B
	Surrogate	%REC	Limits		Analysis					
Bromofluc	probenzene (FID)	104	75-130	EPA 8	3015B					
Bromofluc	probenzene (PID)	106	58-121	EPA 8	3021B					
Type:	MSD			Lab	ID:	QC58	6101			
I	Analyte	Spiked	R	esult	%REC	Limits	RPD	Lim		Analysis
Gasoline	C7-C12	2,000	1	,839	90	68-120	0	26	EPA	8015B
	Surrogate	%REC	Limits		Analysis					

		LIMITS	Analysis
Bromofluorobenzene (FID)	108	75-130	EPA 8015B
Bromofluorobenzene (PID)	111	58-121	EPA 8021B



	Curtis & Tompkins Labo	oratories Anal	lytical Report	
Lab #:	226992	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65			
Туре:	LCS	Diln Fac:	1.000	
Lab ID:	QC586261	Batch#:	173394	
Matrix:	Water	Analyzed:	04/04/11	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	10.26	103	67-136	EPA 8021B
Benzene	10.00	10.03	100	74-121	EPA 8021B
Toluene	10.00	10.42	104	75-122	EPA 8021B
Ethylbenzene	10.00	10.65	106	75-122	EPA 8021B
m,p-Xylenes	10.00	10.55	105	76-123	EPA 8021B
o-Xylene	10.00	10.02	100	73-127	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	103	75-130	EPA 8015B	
Bromofluorobenzene (PID)	108	58-121	EPA 8021B	



	Curtis & Tompkins Labo	oratories Anal	lytical Report	
Lab #:	226992	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65			
Туре:	LCS	Diln Fac:	1.000	
Lab ID:	QC586262	Batch#:	173394	
Matrix:	Water	Analyzed:	04/04/11	
Units:	ug/L			
			0-, 0-, -,	_

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	977.3	98	75-126	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	99	75-130	EPA 8015B
Bromofluorobenzene (PID)	107	58-121	EPA 8021B



	Curtis & Tompkins Labor	atories Analyt	ical Report
Lab #: 226992		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5		
Field ID:	ZZZZZZZZZ	Batch#:	173394
MSS Lab ID:	227012-001	Sampled:	03/24/11
Matrix:	Water	Received:	04/01/11
Units:	ug/L	Analyzed:	04/05/11
Diln Fac:	1.000		

Gasoline C7-C12 2,000 1,866 93 68-120 2 26 EPA 8015B	Туре:	MS			Lab	ID:	QC	586266				
Surrogate%RECLimitsAnalysisBromofluorobenzene (FID)10175-130EPA 8015BBromofluorobenzene (PID)10958-121EPA 8021BType:MSDLab ID:QC586267AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B	Analy	zte	MSS Result	Spik	ed	Resu	lt %I	REC L	imits	2	Analysis	
Bromofluorobenzene (FID)10175-130EPA 8015BBromofluorobenzene (PID)10958-121EPA 8021BType:MSDLab ID:QC586267AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B	Gasoline C7-	-C12	12.43	2,0	000	1,82	0 90	) 6	8-120	EPA	8015B	
Bromofluorobenzene (PID)10958-121EPA 8021BType:MSDLab ID:QC586267AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B	Su	irrogate	%REC	Limits		Analysi	s					
Type:MSDLab ID:QC586267AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B	Bromofluorok	oenzene (FID)	101	75-130	EPA 8	8015B						
AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B	Bromofluorok	penzene (PID)	109	58-121	EPA 8	8021B						
AnalyteSpikedResult%RECLimitsRPDLimAnalysiGasoline C7-C122,0001,8669368-120226EPA 8015B												
Gasoline C7-C12 2,000 1,866 93 68-120 2 26 EPA 8015B	Туре:	MSD			Lab	ID:	QC	586267				
	Anal	lyte	Spiked	F	lesult	%REC	Limits	s RPD	Lim		Analysis	
	Gasoline C7-	-C12	2,000	1	,866	93	68-120	) 2	26	EPA	8015B	
Surrogate %REC Limits Analysis	Su	ırrogate	%REC	Limits		Analysi	s					

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	103	75-130	EPA 8015B
Bromofluorobenzene (PID)	109	58-121	EPA 8021B



	Curtis & Tompkins Labo	oratories Anal	lytical Report	
Lab #:	226992	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B	
Project#:	2007-65			
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC586418	Batch#:	173436	
Matrix:	Water	Analyzed:	04/05/11	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits	Analysis
Toluene	10.00	9.922	99	75-122	EPA 8021B
m,p-Xylenes	10.00	9.372	94	76-123	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	96	75-130	EPA 8015B
Bromofluorobenzene (PID)	88	58-121	EPA 8021B



QC586419

### Batch QC Report

Curtis & Tompkins Laboratories Analytical Report										
Lab #: 22699	92	Location:	Bay Center Apts							
Client: Stell	lar Environmental Solutions	Prep:	EPA 5030B							
Project#: 2007-	-65									
Field ID:	ZZZZZZZZZ	Diln Fac:	100.0							
MSS Lab ID:	227026-005	Batch#:	173436							
Matrix:	Water	Sampled:	04/04/11							
Units:	ug/L	Received:	04/04/11							

MS

Analyte	MSS Result	Spiked	Result	%REC	Limits Analyzed	Analysis
Toluene	9,999	2,000	9,779	-11 NM	38-148 04/06/11	EPA 8021B
m,p-Xylenes	5,932	2,000	6,847	46	45-138 04/06/11	EPA 8021B

Lab ID:

Surrogate	%REC	Limits	Analyzed	Analysis
Bromofluorobenzene (FID)	101	75-130	04/05/11	EPA 8015B
Bromofluorobenzene (PID)	92	58-121	04/05/11	EPA 8021B

Туре:	MSD		Lab ID:	QC586420	
Analyte	Spik	d Result	%REC Limit	s RPD Lim Analyzed	Analysis
Toluene	2,00	10,460	23 NM 38-14	8 7 30 04/06/11	EPA 8021B
m,p-Xylenes	2,00	7,339	70 45-13	8 7 30 04/06/11	EPA 8021B
Surr	ogate	%REC Limits	a Analyzed	Analysis	

Surrogate	%REC	Limits	Analyzed	Analysis
Bromofluorobenzene (FID)	103	75-130	04/05/11	EPA 8015B
Bromofluorobenzene (PID)	94	58-121	04/05/11	EPA 8021B



	Curtis & Tompkins Labo	oratories Anal	ytical Report
Lab #:	226992	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Batch#:	173350
Units:	ug/L	Analyzed:	04/01/11
Diln Fac:	1.000		

Type:

BS

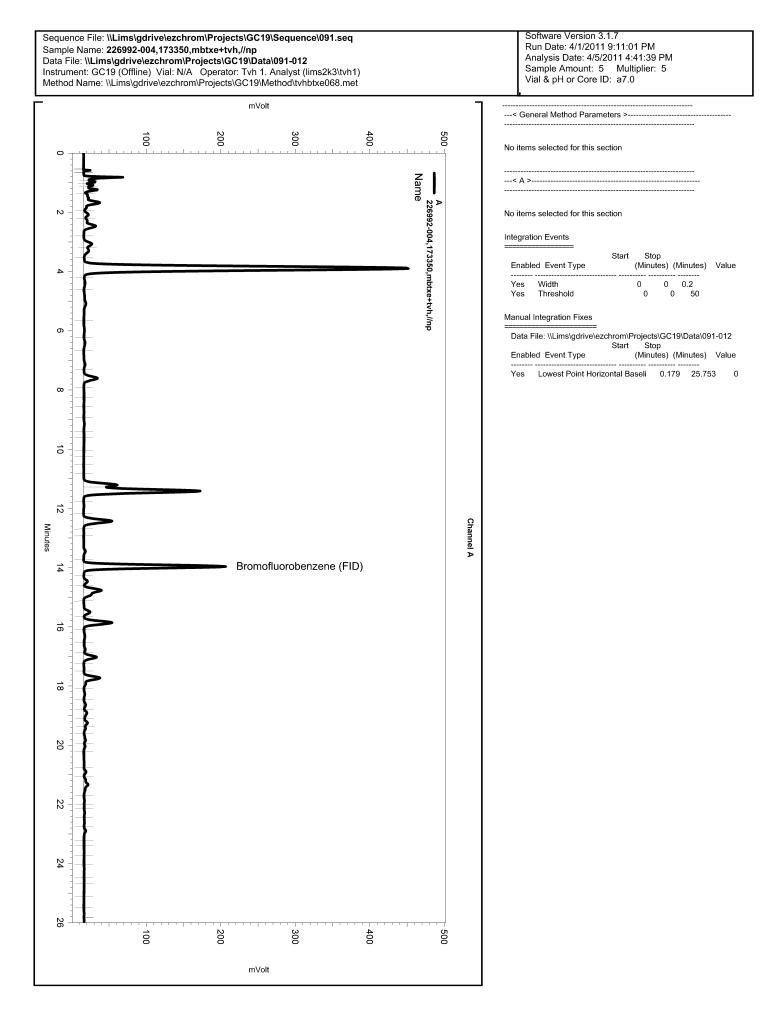
Lab ID:

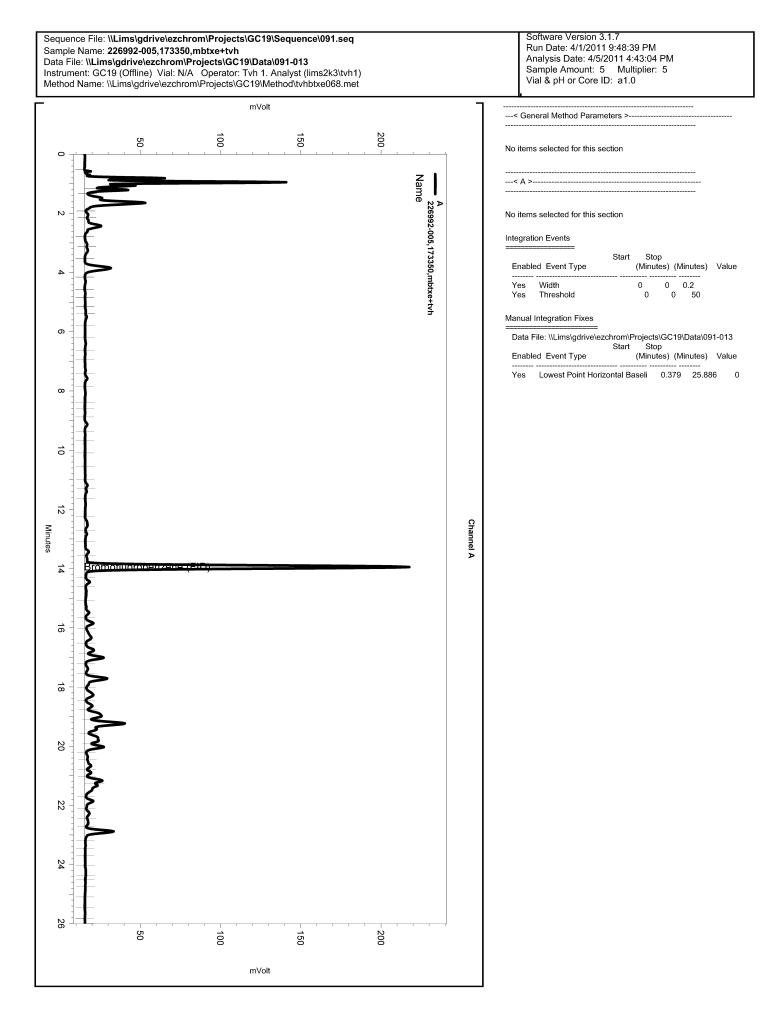
QC586566

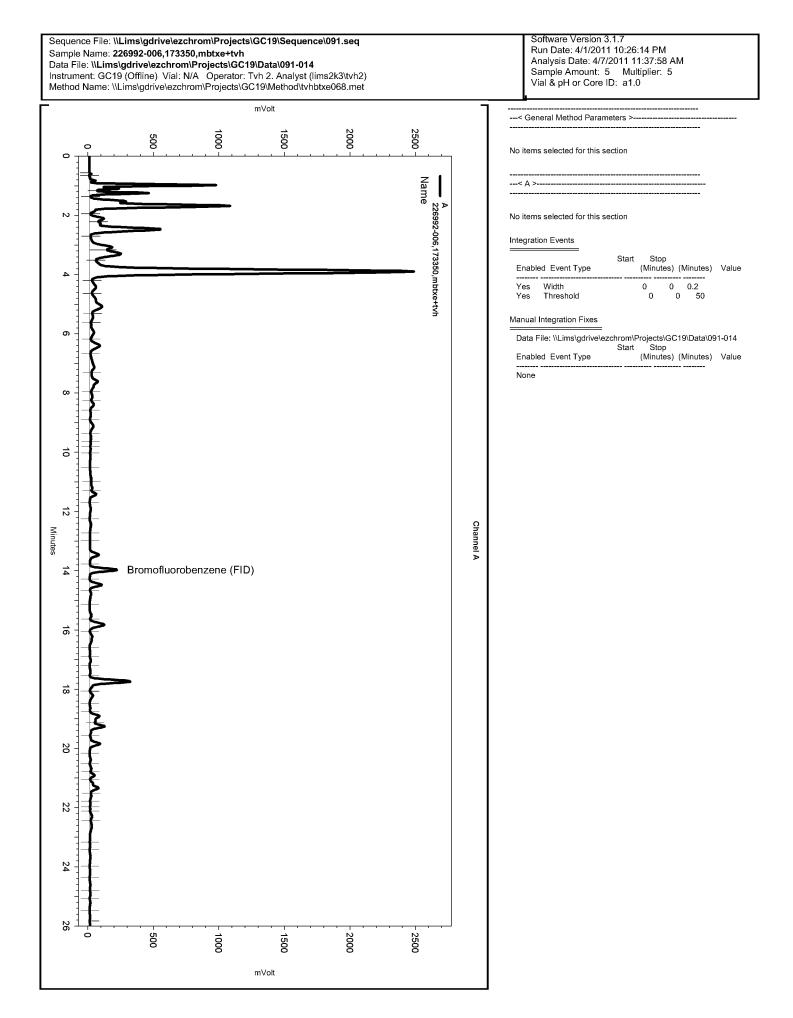
Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	9.110	91	67-136	EPA 8021B
Benzene	10.00	10.21	102	74-121	EPA 8021B
Toluene	10.00	8.510	85	75-122	EPA 8021B
Ethylbenzene	10.00	8.577	86	75-122	EPA 8021B
m,p-Xylenes	10.00	8.519	85	76-123	EPA 8021B
o-Xylene	10.00	9.985	100	73-127	EPA 8021B

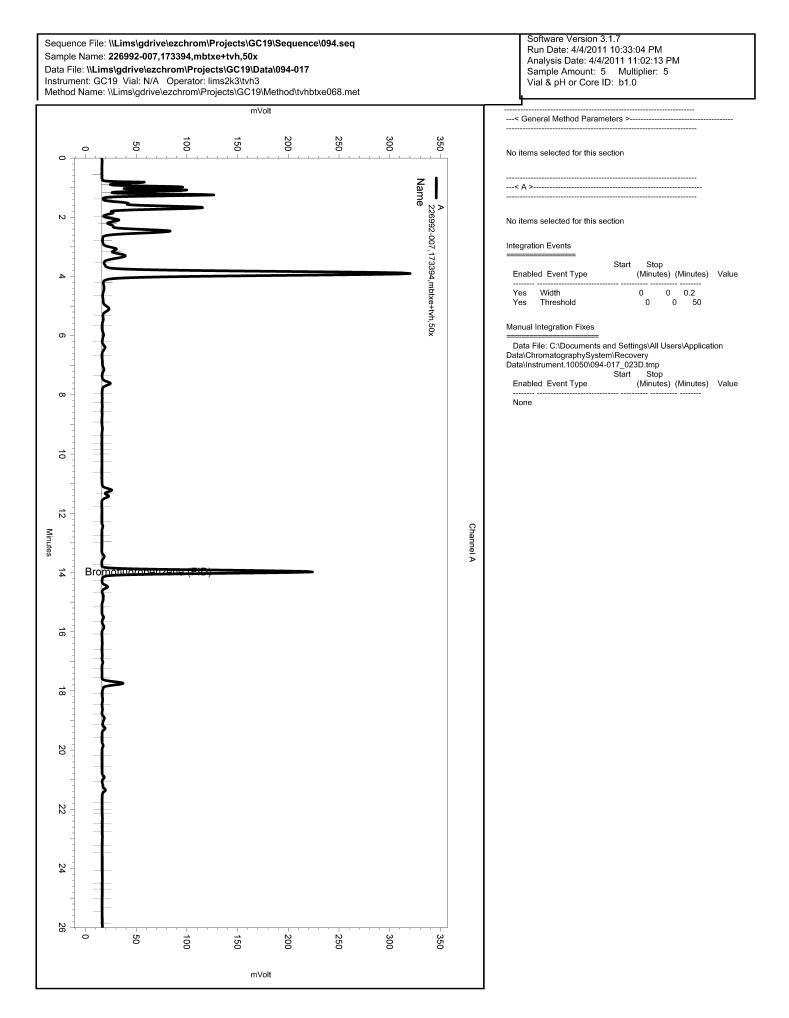
Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	100	75-130	EPA 8015B	
Bromofluorobenzene (PID)	94	58-121	EPA 8021B	

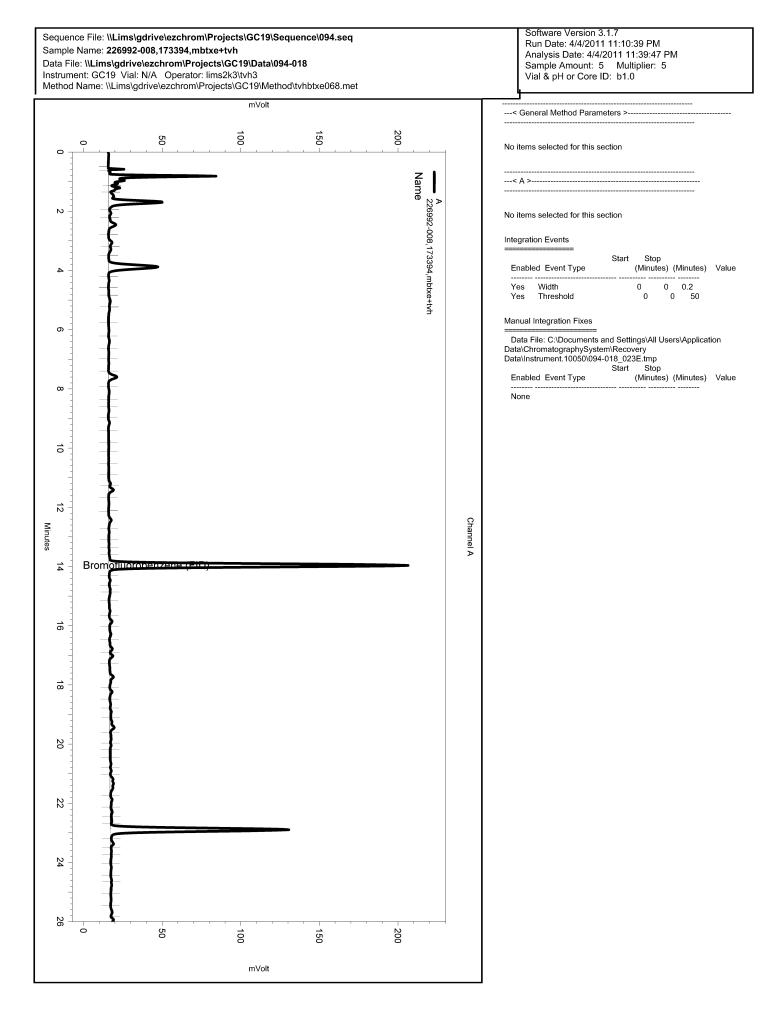
Type: BSD			Lab :	ID:	QC58	6567			
Analyte	Spiked	Re	sult	%REC	Limits	RPD	Lim		Analysis
MTBE	10.00		9.776	98	67-136	7	39	EPA	8021B
Benzene	10.00		10.63	106	74-121	4	29	EPA	8021B
Toluene	10.00		8.800	88	75-122	3	20	EPA	8021B
Ethylbenzene	10.00		8.701	87	75-122	1	20	EPA	8021B
m,p-Xylenes	10.00		8.820	88	76-123	3	20	EPA	8021B
o-Xylene	10.00		10.25	103	73-127	3	20	EPA	8021B
Surrogate	%REC	Limits		Analysis	ł				
Bromofluorobenzene (FID)	100	75-130	EPA 8	015B					
Bromofluorobenzene (PID)	94	58-121	EPA 8	021B					

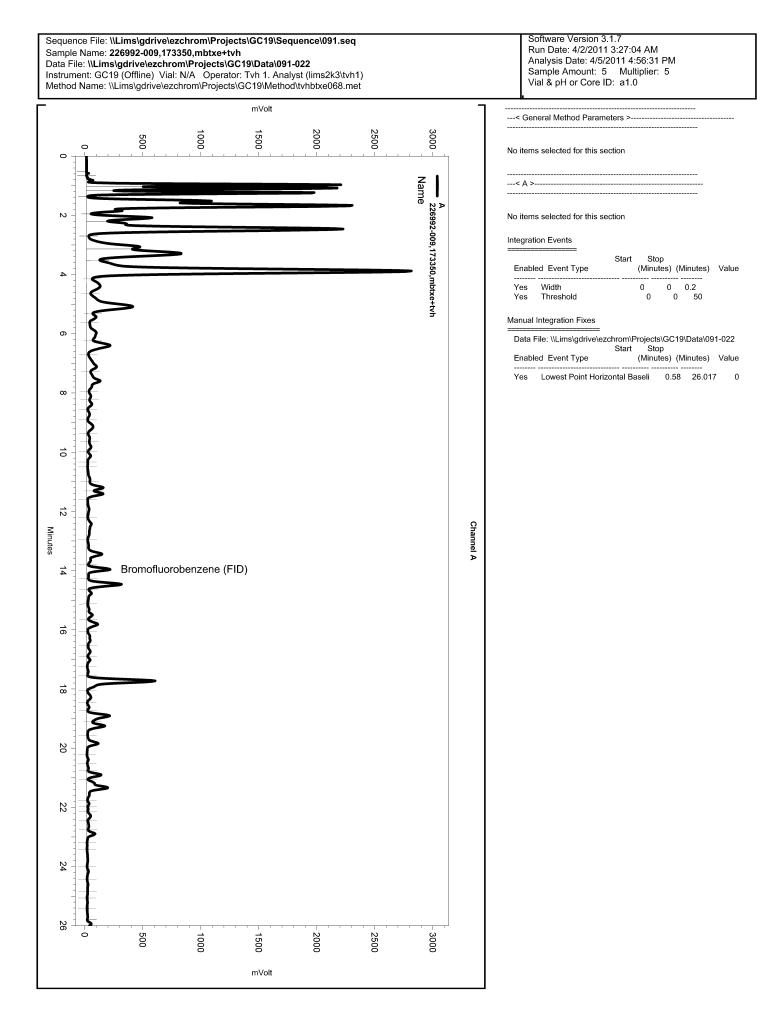


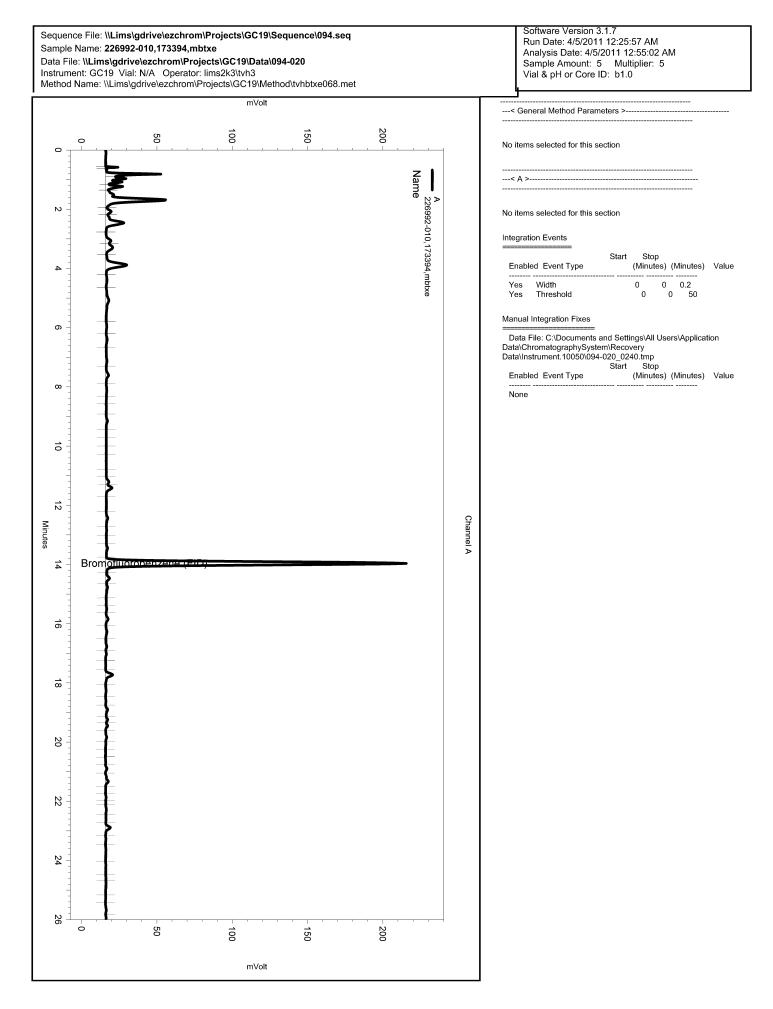


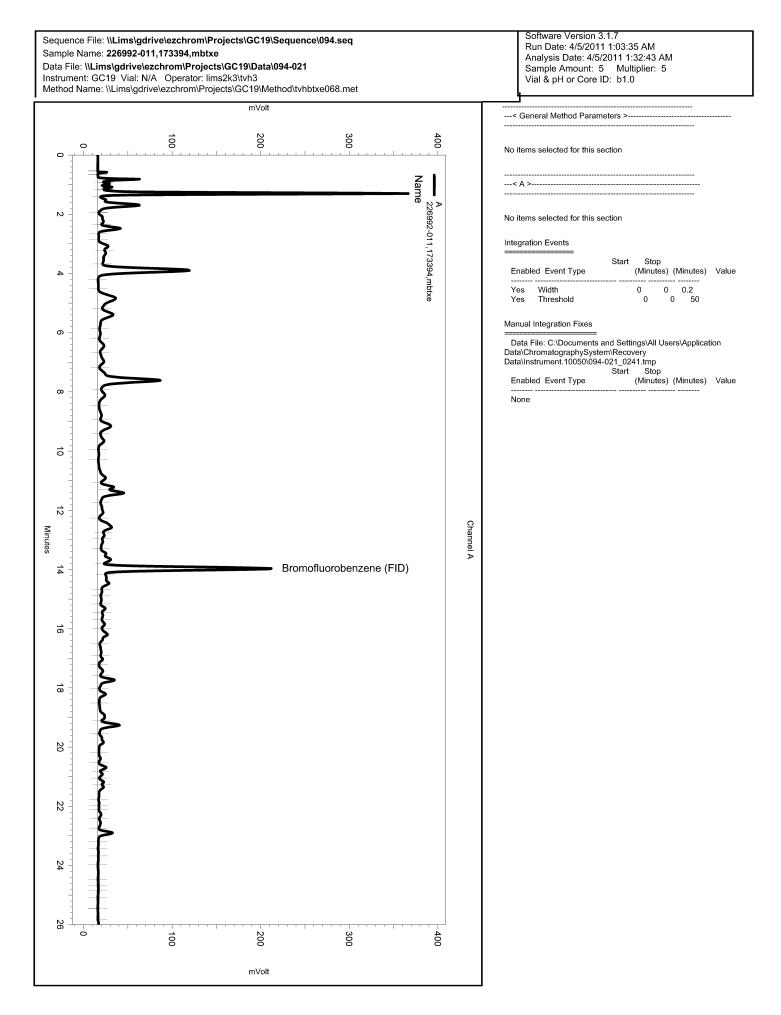


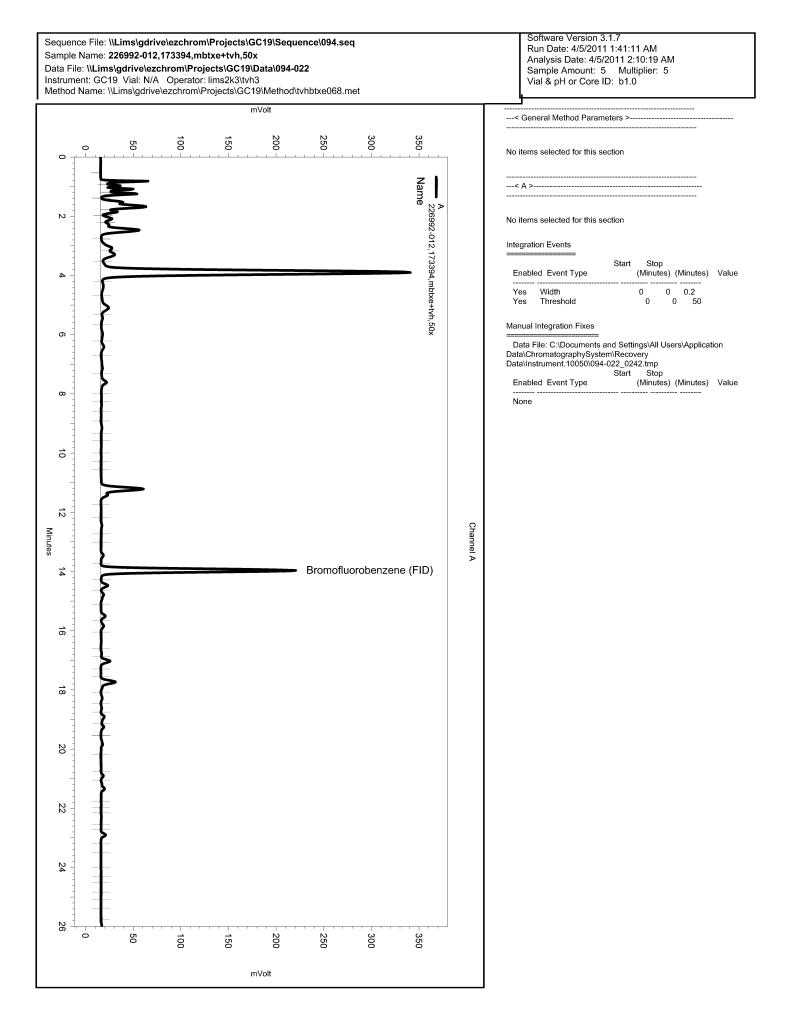


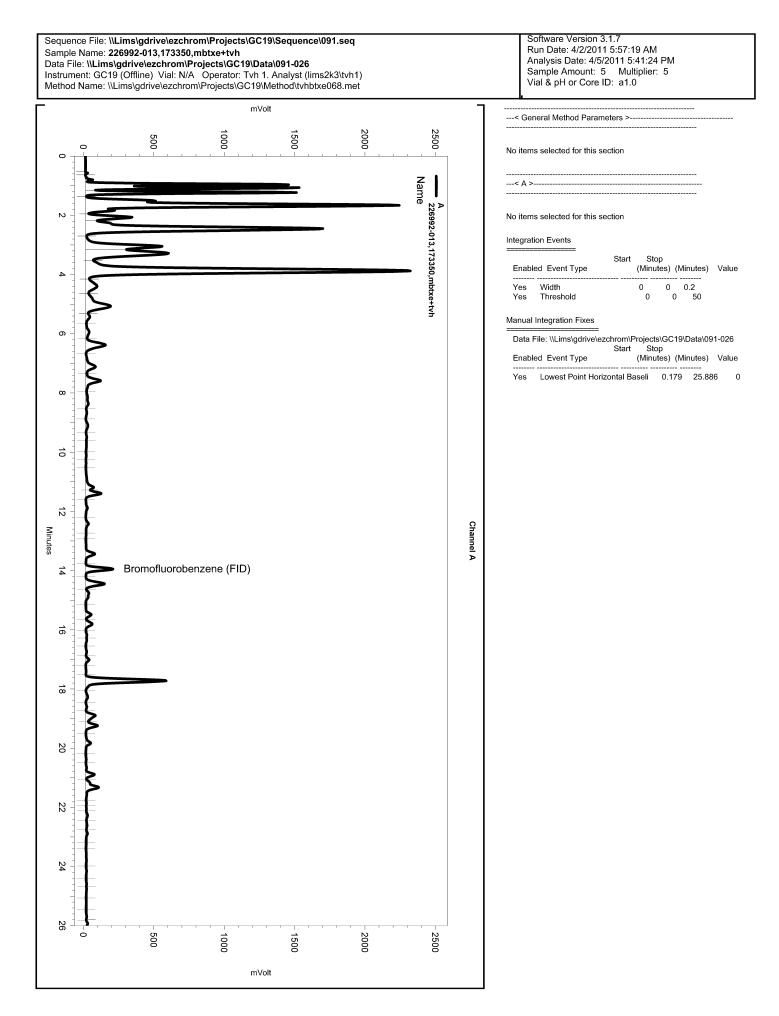


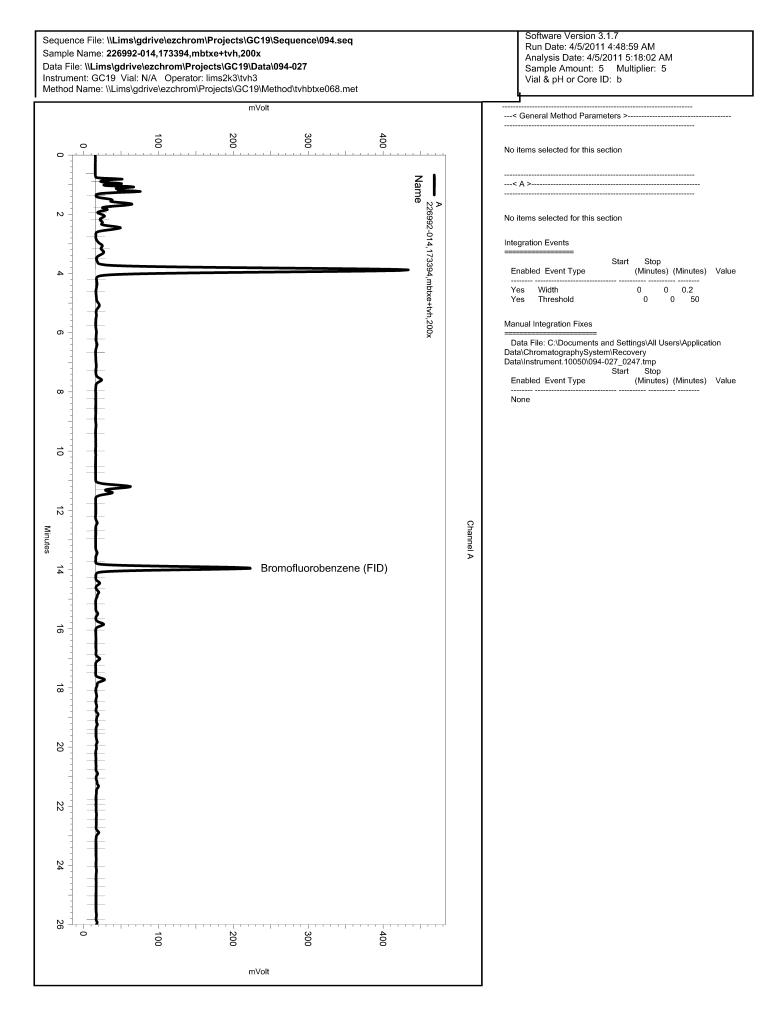


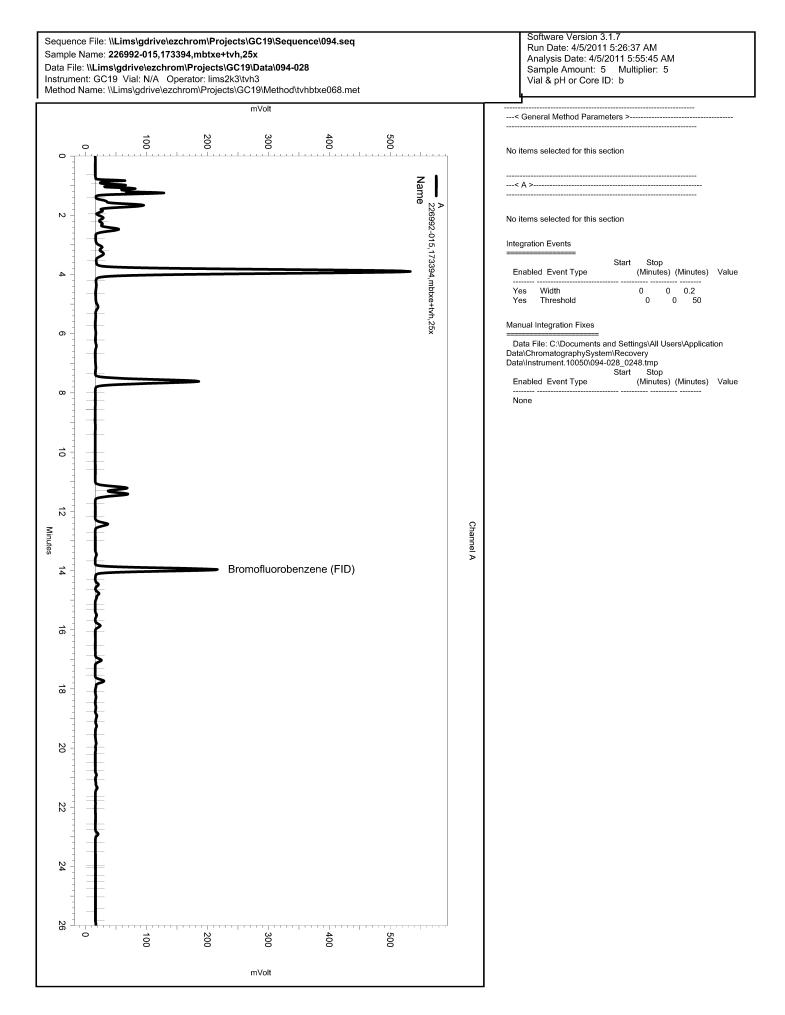


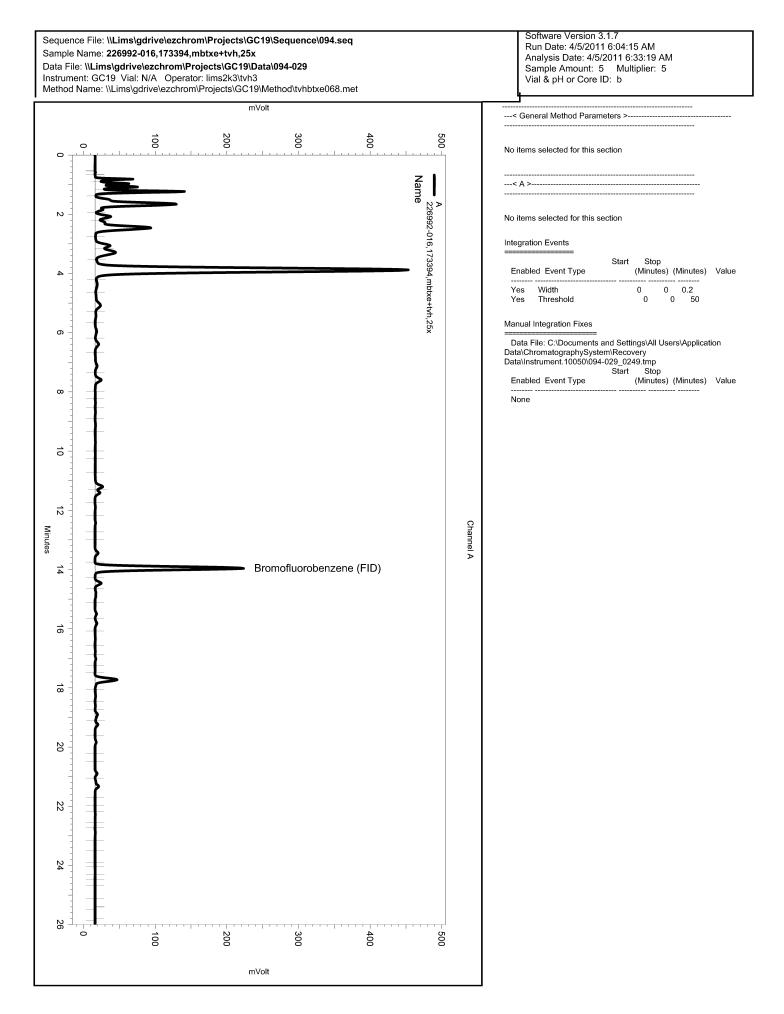


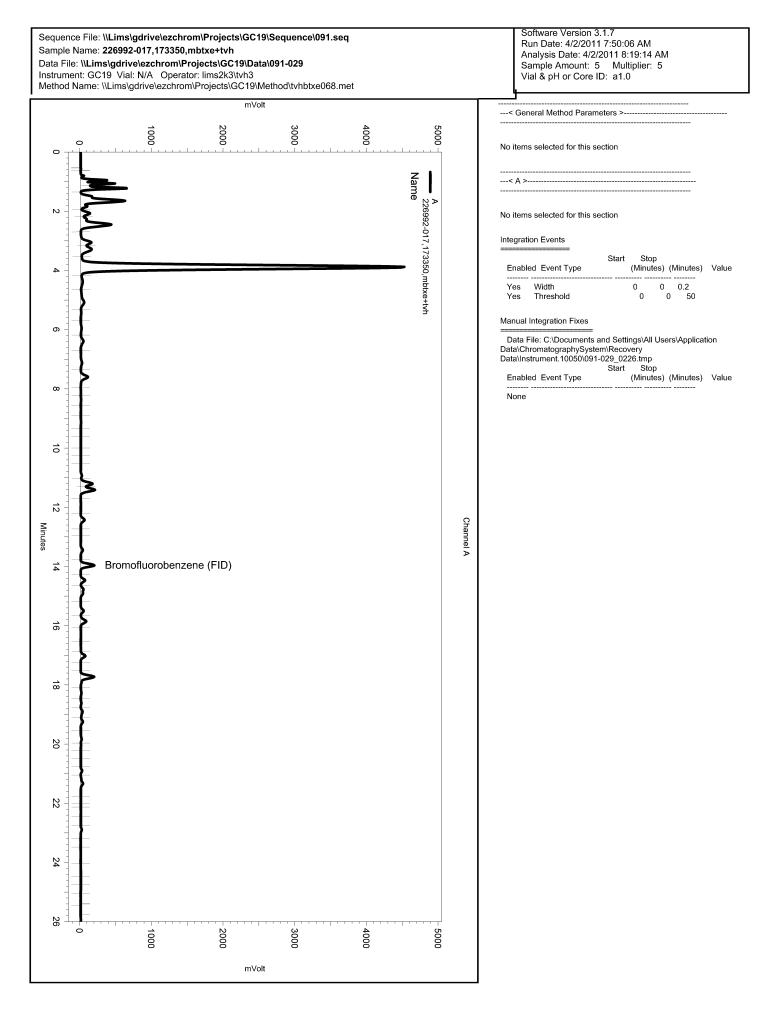


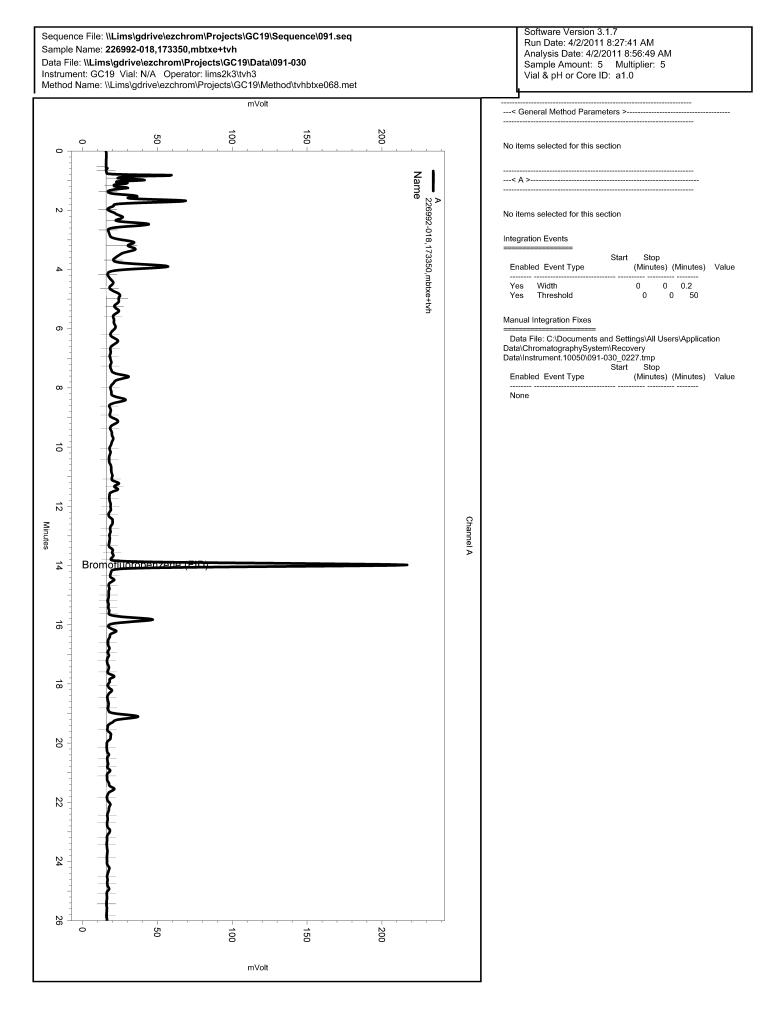


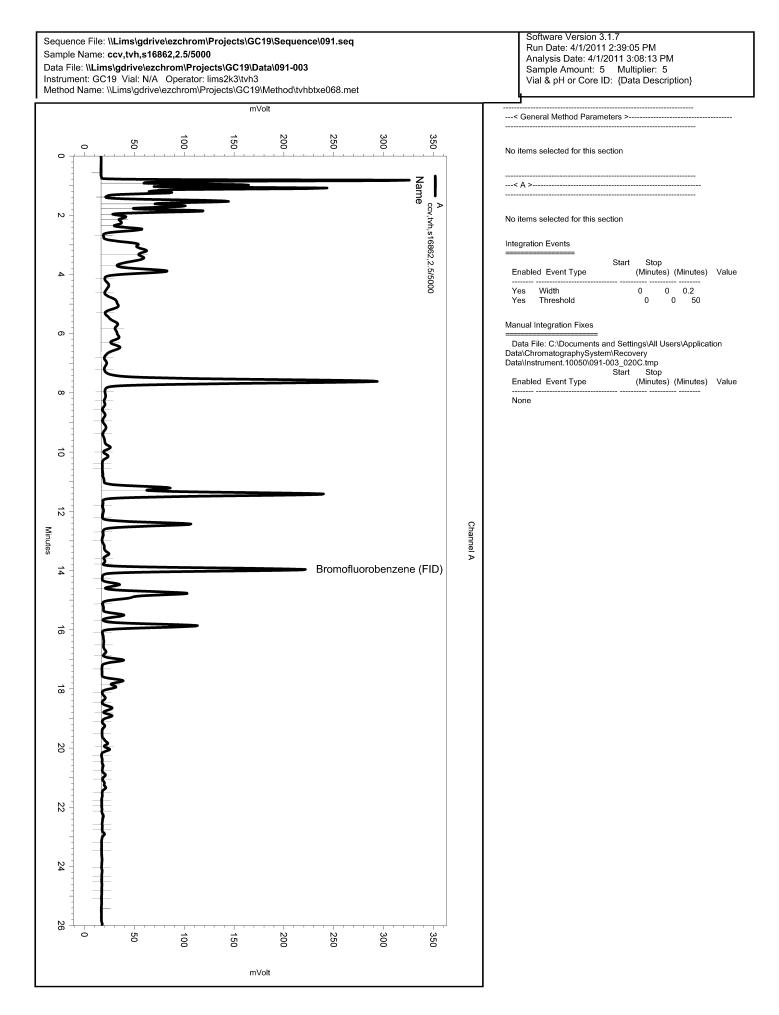














		Total E	xtracta	ble Hydroc	arbo	ns
Lab #: Client: Project#:	226992 Stellar Environment 2007-65	al Soluti	lons	Location: Prep: Analysis:		Bay Center Apts EPA 3520C EPA 8015B
Matrix: Units: Diln Fac: Batch#:	Water ug/L 1.000 173355			Sampled: Received: Prepared:		03/30/11 03/31/11 04/01/11
Field ID: Type:	MW-4 SAMPLE			Lab ID: Analyzed:		226992-001 04/04/11
Diesel Cl(	Analyte D-C24	I	<b>Result</b> 590		<b>RL</b> 50	
o-Terpheny	<b>Surrogate</b> Yl	<b>%REC</b> 94	<b>Limits</b> 60-129			
Field ID: Type:	MW-5 SAMPLE			Lab ID: Analyzed:		226992-002 04/04/11
Diesel Cl(	Analyte D-C24		Result 1,900		<b>RL</b> 50	
	Surrogate	%REC	Limits			
o-Terpheny	yl	71	60-129			
Field ID: Type:	MW-6 SAMPLE			Lab ID: Analyzed:		226992-003 04/04/11
Diesel Cl(	Analyte D-C24		Result L,900		<b>RL</b> 50	
o-Terpheny	Surrogate Yl	<b>%REC</b> 82	<b>Limits</b> 60-129			
Field ID: Type:	MW-7 SAMPLE			Lab ID: Analyzed:		226992-004 04/04/11
Diesel Cl(	Analyte D-C24	<b>H</b> 5	<b>Result</b> 3,100		<b>RL</b> 50	
o-Terpheny	<b>Surrogate</b> Yl	<b>%REC</b> 66	<b>Limits</b> 60-129			
Field ID: Type:	MW-9 SAMPLE			Lab ID: Analyzed:		226992-005 04/04/11
Diesel Cl(	Analyte D-C24	<b>H</b> 11	Result ,000		<b>RL</b> 50	
o-Terpheny	<b>Surrogate</b> Yl	% <b>REC</b> 83	<b>Limits</b> 60-129			

ND= Not Detected RL= Reporting Limit Page 1 of 4



		Total	Extracta	ble Hydrod	arbo	ns
	26992 cellar Environmer 007-65 Water ug/L 1.000 173355	ntal Solu	tions	Location: Prep: Analysis: Sampled: Received: Prepared:		Bay Center Apts EPA 3520C EPA 8015B 03/30/11 03/31/11 04/01/11
	MW-11 SAMPLE		Result	Lab ID: Analyzed:	RL	226992-006 04/04/11
Diesel C10-C	24		6,500		50	
o-Terphenyl	irrogate	% <b>REC</b> 74	<b>Limits</b> 60-129			
Field ID: Type:	MW-12 SAMPLE			Lab ID: Analyzed:		226992-007 04/04/11
Diesel C10-C	nalyte 224		Result 3,300		<u>RL</u> 50	
		0.DEC	-			
o-Terphenyl	irrogate	<b>%REC</b> 85	<b>Limits</b> 60-129			
Field ID: Type:	MW-16 SAMPLE			Lab ID: Analyzed:		226992-008 04/04/11
Diesel C10-C	nalyte		<b>Result</b> 9,900		<u>RL</u> 50	
	irrogate	<b>%REC</b> 69	-			
Field ID: Type:	MW-17 SAMPLE			Lab ID: Analyzed:		226992-009 04/04/11
Diesel C10-C	<b>nalyte</b> 224		<b>Result</b> 3,900		<b>RL</b> 50	
o-Terphenyl	irrogate	<b>%REC</b> 72	<b>Limits</b> 60-129			
Field ID: Type:	MW-18 SAMPLE			Lab ID: Analyzed:		226992-010 04/04/11
Diesel C10-C	nalyte		<b>Result</b> 10,000		<b>RL</b> 50	
					50	
o-Terphenyl	irrogate	<b>%REC</b> 73	<b>Limits</b> 60-129			

ND= Not Detected RL= Reporting Limit Page 2 of 4



	Tot	tal I	Extracta	ble Hydroc	arboi	າຮ
Lab #: 2269 Client: Stel Project#: 2007 Matrix: Units: Diln Fac: Batch#:	lar Environmental	Solut	ions	Location: Prep: Analysis: Sampled: Received: Prepared:		Bay Center Apts EPA 3520C EPA 8015B 03/30/11 03/31/11 04/01/11
	MW-3 SAMPLE <b>lyte</b>		Result	Lab ID: Analyzed:	RL	226992-011 04/05/11
Diesel C10-C24			2,600		50	
o-Terphenyl	ogate 1	<b>%REC</b> 12	<b>Limits</b> 60-129			
Field ID: Type:	MW-8 SAMPLE			Lab ID: Analyzed:		226992-012 04/05/11
Diesel C10-C24	lyte		Result 8,800		<b>RL</b> 50	
Gumm	~~~~	%REC	-			
o-Terphenyl		<u>8REC</u> 11	60-129			
	MW-10 SAMPLE <b>lyte</b>		Result	Lab ID: Analyzed:	RL	226992-013 04/05/11
Diesel C10-C24			4,500		50	
Surr o-Terphenyl	ogate 1	% <b>REC</b> 13	<b>Limits</b> 60-129			
Field ID: Type:	MW-13 SAMPLE			Lab ID: Analyzed:		226992-014 04/05/11
Ana Diesel C10-C24	lyte	1	Result		<b>RL</b> 50	
		%REC				
o-Terphenyl		<u>8860</u> 06	<u>Limits</u> 60-129			
Field ID: Type:	MW-14 SAMPLE			Lab ID: Analyzed:		226992-015 04/05/11
Ana Diesel C10-C24	lyte		Result 2,800		<b>RL</b> 50	
o-Terphenyl		<b>%REC</b> 06	<b>Limits</b> 60-129			

ND= Not Detected RL= Reporting Limit Page 3 of 4



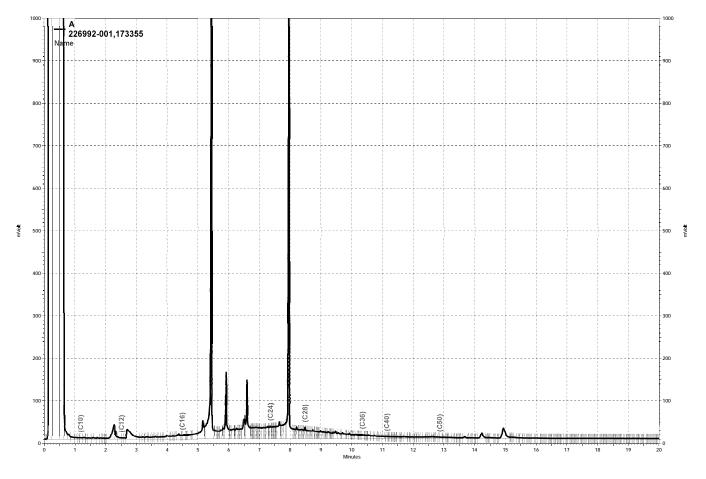
	r	Cotal Extracta	able Hydrocar	bons	
Lab #: Client: Project#:	226992 Stellar Environmenta 2007-65		Location: Prep: Analysis:	Bay Center Apts EPA 3520C EPA 8015B	
Matrix: Units: Diln Fac: Batch#:	Water ug/L 1.000 173355		Sampled: Received: Prepared:	03/30/11 03/31/11 04/01/11	
Field ID: Type:	MW-15 SAMPLE		Lab ID: Analyzed:	226992-016 04/05/11	
Diesel Cl	Analyte 0-C24	<b>Result</b> 3,200	R	50	
o-Terphen	Surrogate yl	<b>%REC Limits</b> 101 60-129			
Field ID: Type:	MW-E SAMPLE		Lab ID: Analyzed:	226992-017 04/05/11	
	Analyte	Demult		· -	
Diesel Cl	0-C24	<u>Result</u> 5,900	R	50	
Diesel Clo o-Terpheny	0-C24 Surrogate	Result           5,900           %REC         Limits           109         60-129	H		
	0-C24 Surrogate	5,900 %REC Limits	Lab ID: Analyzed:		
o-Terpheny Field ID:	0-C24 Surrogate yl RW-1 SAMPLE Analyte	5,900 %REC Limits	Lab ID: Analyzed:	226992-018	
o-Terpheny Field ID: Type:	0-C24 Surrogate yl RW-1 SAMPLE Analyte 0-C24 Surrogate	5,900 <b>%REC Limits</b> 109 60-129 <b>Result</b>	Lab ID: Analyzed:	50 226992-018 04/05/11	
o-Terpheny Field ID: Type: Diesel C10	0-C24 Surrogate yl RW-1 SAMPLE Analyte 0-C24 Surrogate	5,900 <b>%REC Limits</b> 109 60-129 Result 740 <b>%REC Limits</b>	Lab ID: Analyzed:	50 226992-018 04/05/11 50	
o-Terpheny Field ID: Type: Diesel Clu o-Terpheny Type:	0-C24 Surrogate yl RW-1 SAMPLE Analyte 0-C24 Surrogate yl BLANK QC586114 Analyte	5,900 <b>%REC Limits</b> 109 60-129 Result 740 <b>%REC Limits</b>	Lab ID: Analyzed: R Analyzed:	50 226992-018 04/05/11 50	

ND= Not Detected RL= Reporting Limit Page 4 of 4

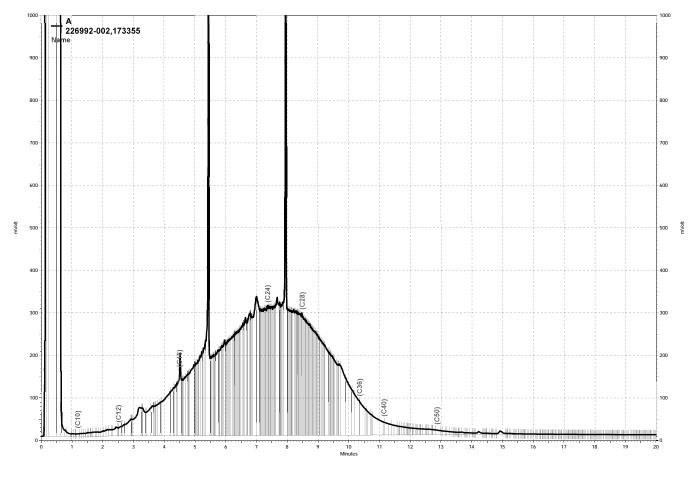


#### Batch QC Report

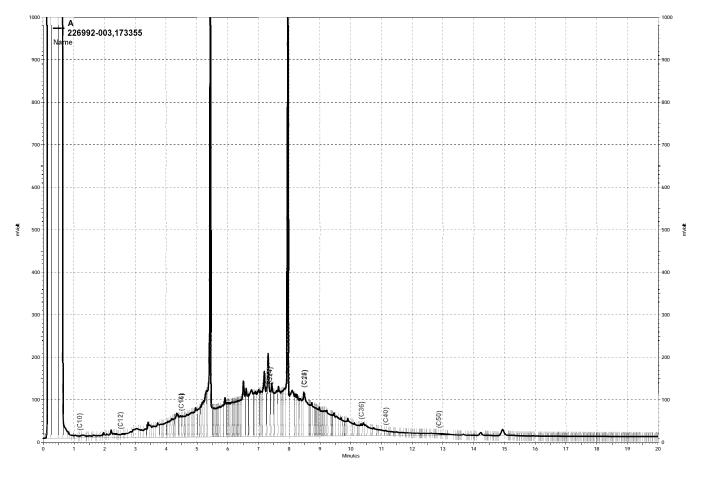
	Total Extractable Hydrocarbons								
Lab #:	226992			Location:		Bay Center Ap	ts		
Client: Stellar Environmental		al Solut	cions	Prep:		EPA 3520C			
Project#:	2007-65			Analysis:		EPA 8015B			
Matrix:	Water			Batch#:		173355			
Units:	ug/L			Prepared:		04/01/11			
Diln Fac:	1.000			Analyzed:		04/04/11			
Туре:	BS			Lab ID:		QC586115			
	Analyte		Spiked		Result	%REC	Limits		
Diesel Cl	0-C24		2,500		1,939	78	53-128		
	Surrogate	%REC	Limits						
o-Terphen	yl	98	60-129						
Туре:	BSD			Lab ID:		QC586116			
	Analyte		Spiked		Result	%REC	Limits	RPD	Lim
Diesel C1	0-C24		2,500		1,935	77	53-128	0	48
	Surrogate	%REC	Limits						
o-Terphen	yl	97	60-129						



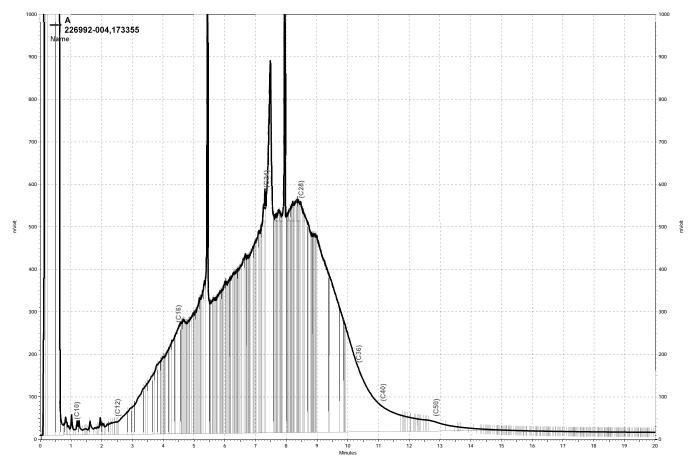
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a019, A



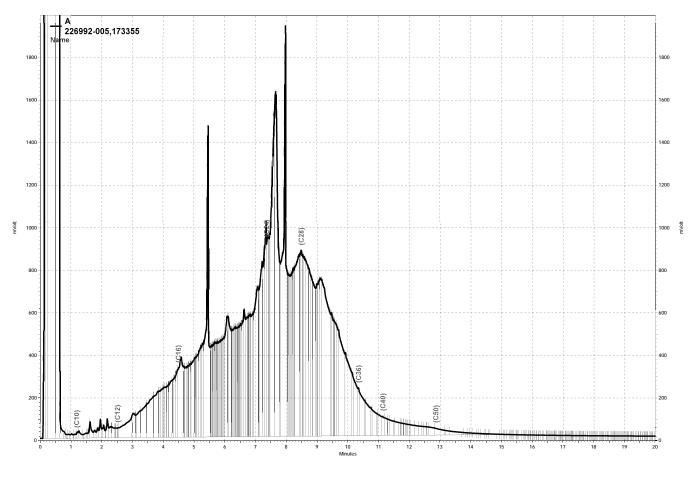
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a020, A



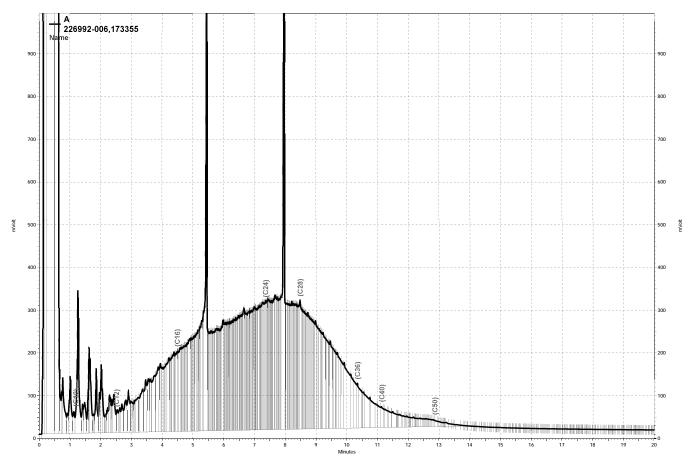
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a021, A



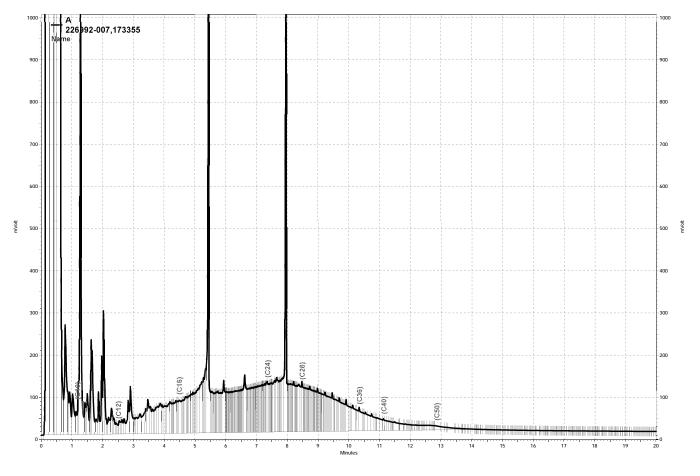
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a022, A



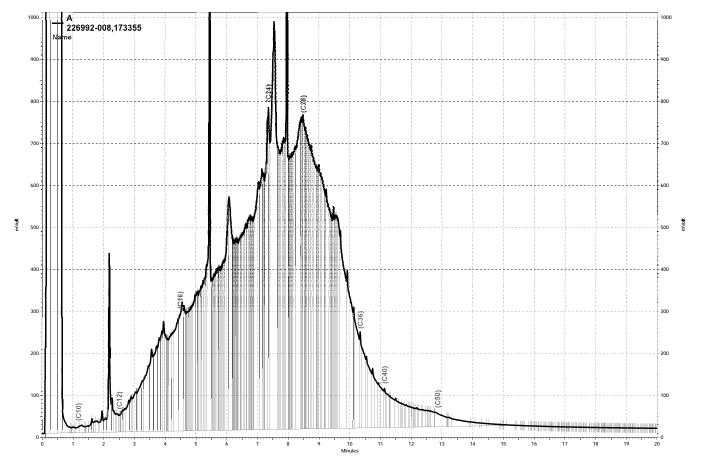
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a023, A



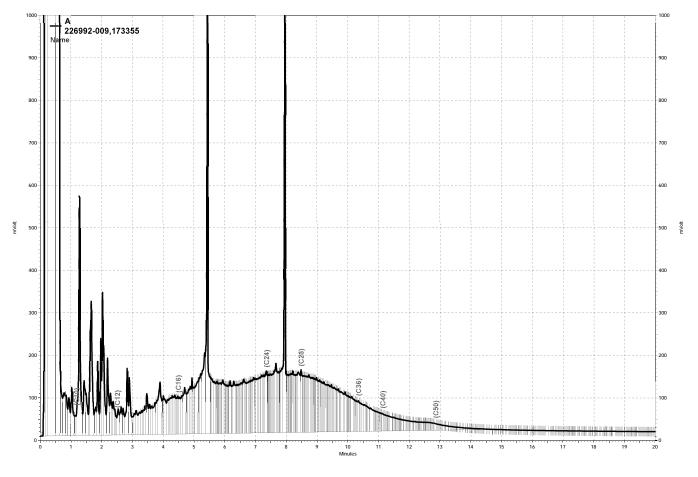
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a024, A



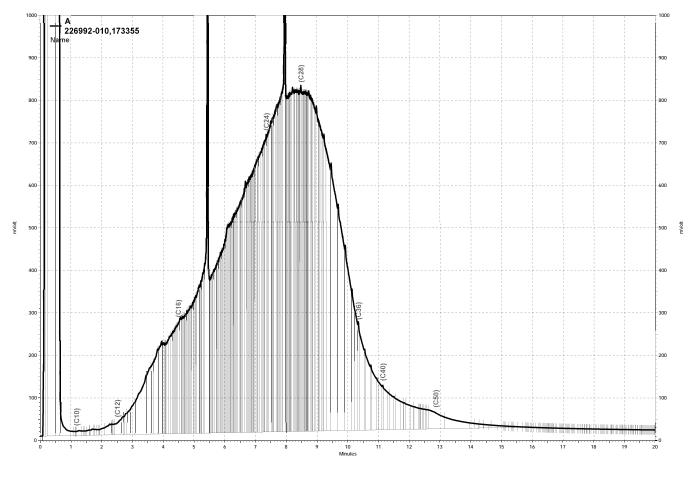
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a025, A



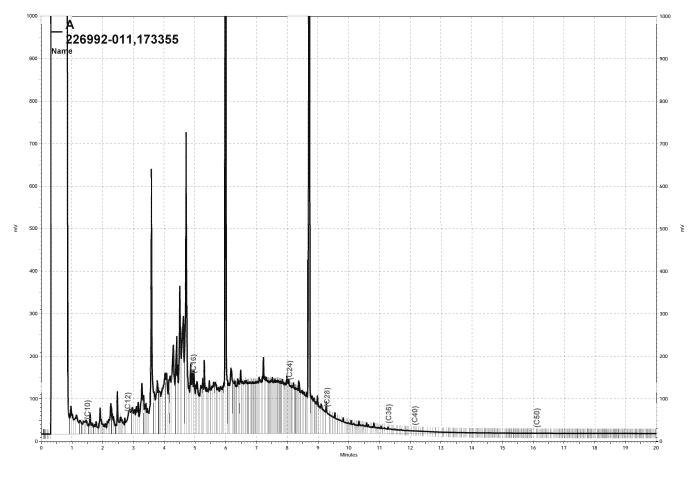
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a026, A



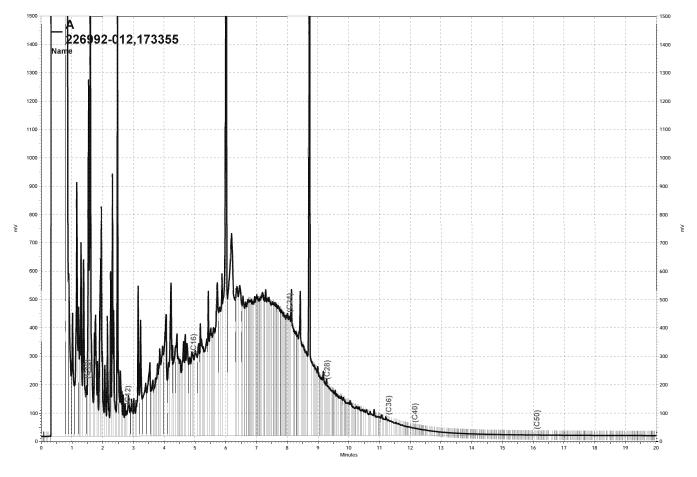
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a027, A



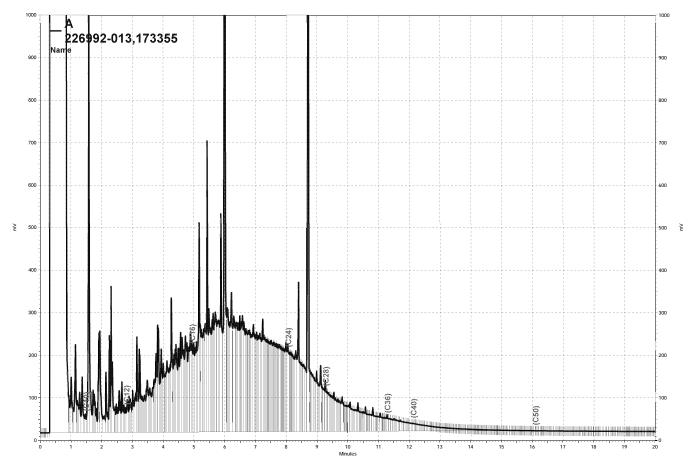
-\\Lims\gdrive\ezchrom\Projects\GC26\Data\094a028, A



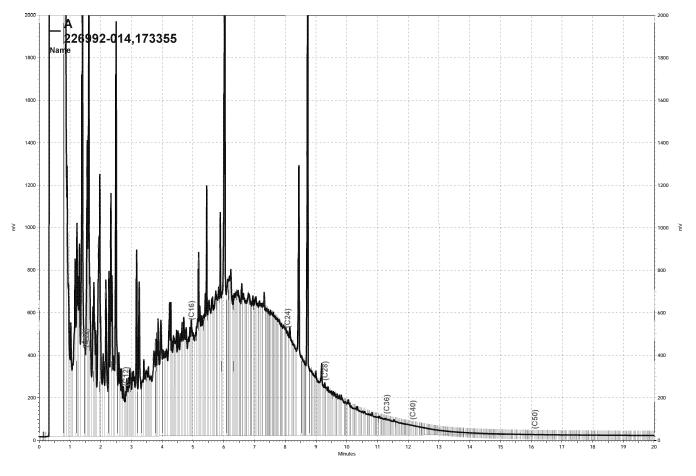
-\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a038, A



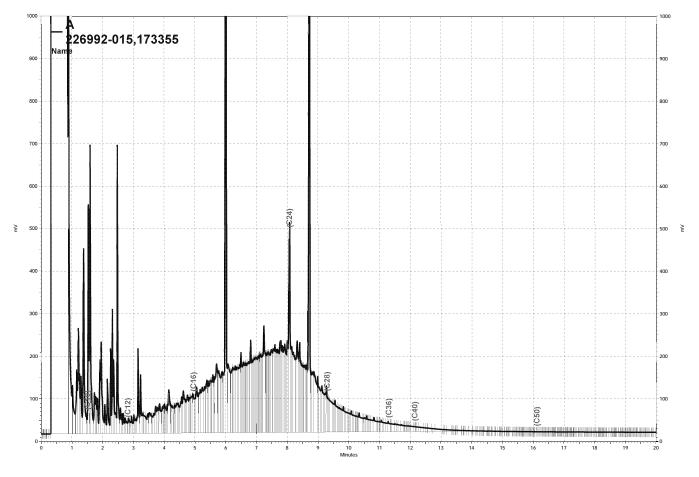
-\\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a039, A



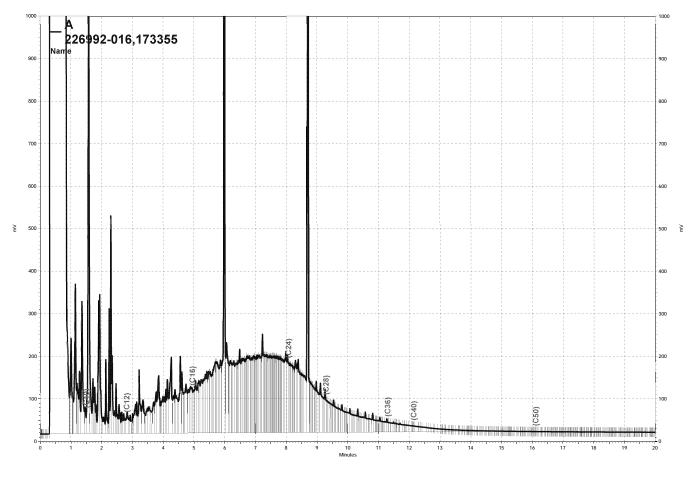
-\\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a040, A



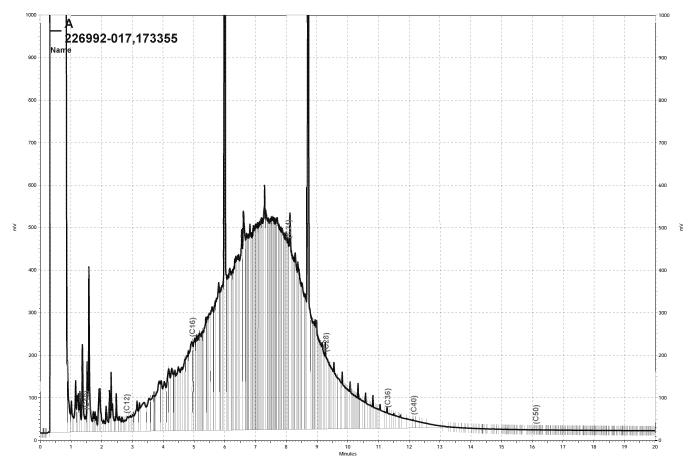
-\\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a041, A



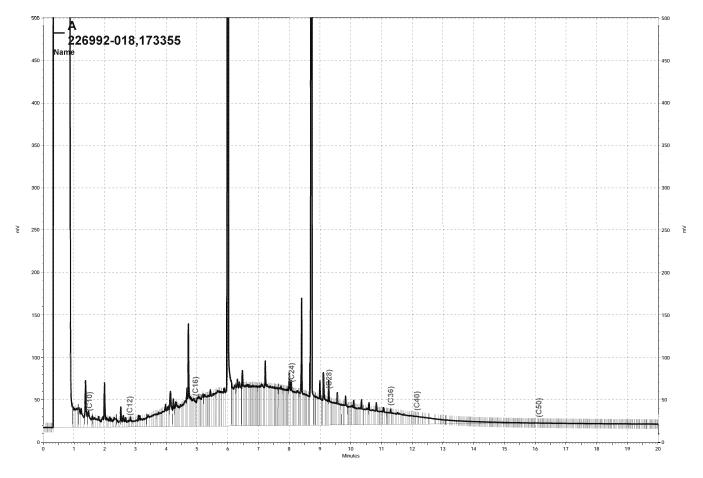
-- \\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a043, A



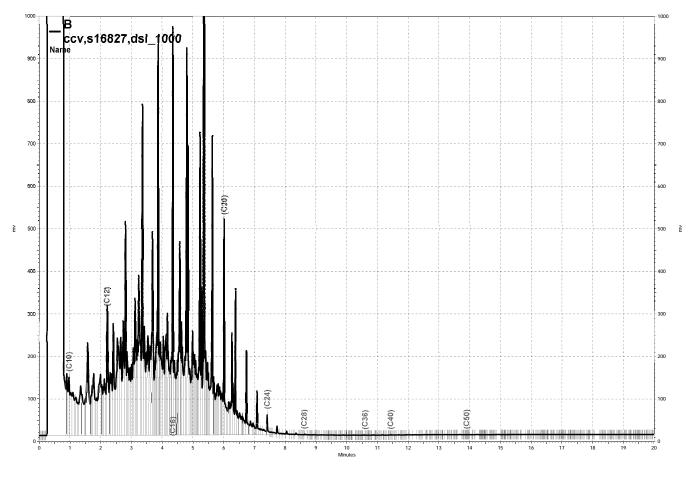
-- \\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a044, A



-\\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a045, A



\\Lims\gdrive\ezchrom\Projects\GC17A\Data\094a046, A



-\\Lims\gdrive\ezchrom\Projects\GC15B\Data\094b007, B

## **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 <sup>(a)</sup>	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 <sup>(a)</sup>	8.78	NP	5.50		
3	Feb-91	14.28	9.61	NP	4.67		
		Monitoring well	abandoned - dat	e unclear	-		

			MW-3		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
1	Dec-88	14.53	8.93	trace	5.60
2	May-89	14.43 <sup>(a)</sup>	8.69	NP	5.74
3	Feb-91	14.43	8.31	NP	6.12
4	Mar-04	16.96 <sup>(b)</sup>	9.47	NP	7.49
5	Dec-06	NA	NA	NA	NA
6	Dec-07	16.65 <sup>(c)</sup>	7.76 <sup>(e)</sup>	7.76	8.89
7	Mar-08	16.65	8.72	8.70	7.93
8	Jun-08	16.65	8.56	NP	8.09
9	Sep-08	16.65	9.27	7.95	7.38
10	Dec-08	16.65	8.36	7.49	8.29
11	Mar-09	16.65	7.94	NP	8.71
12	Sep-09	16.65	8.58	NP	8.07
13	Mar-10	16.65	8.08 <sup>(e)</sup>	8.08	8.57
14	Sep-10	16.65	8.68 <sup>(e)</sup>	8.68	7.97
15	Mar-11	16.65	10.40	NM	6.25

	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 <sup>(a)</sup>	7.75	NP	6.37				
3	Feb-91	14.12	8.04	NP	6.08				
4	Mar-04	16.74 <sup>(b)</sup>	6.90	NP	7.49				
5	Dec-06	NA	NA	NA	NA				
6	Dec-07	16.29 <sup>(c)</sup>	6.61	NP	9.68				
7	Mar-08	16.29	7.24	NP	9.05				
8	Jun-08	16.29	6.94	NP	9.35				
9	Sep-08	16.29	6.85	NP	6.85				
10	Dec-08	16.29	7.42	NP	8.87				
11	Mar-09	16.29	6.90	NP	9.39				
12	Sep-09	16.29	7.40	NP	8.89				
13	Mar-10	16.29	7.08	NP	9.21				
14	Sep-10	16.29	7.08	NP	9.21				
15	Mar-11	16.29	7.02	NP	9.27				

	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 <sup>(a)</sup>	9.29	NP	5.27				
3	Feb-91	14.56	10.04	NP	4.52				
4	Mar-04	17.11 <sup>(b)</sup>	9.10	NP	8.01				
5	Dec-06	NA	NA	NA	NA				
6	Dec-07	16.72 <sup>(c)</sup>	9.66	NA	7.06				
7	Mar-08	16.72	9.72	NP	7.00				
8	Jun-08	16.72	9.72	NP	7.00				
9	Sep-08	16.72	8.56	NP	8.16				
10	Dec-08	16.72	9.75	NP	6.97				
11	Mar-09	16.72	9.31	NP	7.41				
12	Sep-09	16.72	9.79	NP	6.93				
13	Mar-10	16.72	9.48	NP	7.24				
14	Sep-10	16.72	9.90	NP	6.82				
15	Mar-11	16.72	9.29	NP	7.43				

	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 <sup>(a)</sup>	7.58	NP	7.09			
3	Feb-91	14.67	7.05	NP	7.62			
4	Mar-04	17.22 <sup>(b)</sup>	6.51	NP	10.71			
5	Dec-06	NA	NA	NA	NA			
6	Dec-07	16.82 <sup>(c)</sup>	6.61	NP	10.21			
7	Mar-08	16.82	7.02	NP	9.80			
8	Jun-08	16.82	7.55	NP	9.27			
9	Sep-08	16.82	6.06	NP	10.76			
10	Dec-08	16.82	6.91	NP	9.91			
11	Mar-09	16.82	6.45	NP	10.37			
12	Sep-09	16.82	8.05	NP	8.77			
13	Mar-10	16.82	6.66	NP	10.16			
14	Sep-10	16.82	7.98	NP	8.84			
15	Mar-11	16.82	5.91	NP	10.91			

			MW-7		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Install	ed March 2004		
1	Mar-04	18.09	9.93	NP	8.16
2	Dec-06	NA	NA	NA	NA
3	Dec-07	17.73 <sup>(c)</sup>	10.30	NP	7.43
4	Mar-08	17.73	10.51	NP	7.22
5	Jun-08	17.73	10.50	NP	7.23
6	Sep-08	17.73	10.37	NP	7.36
7	Dec-08	17.73	10.60	NP	7.13
8	Mar-09	17.73	10.13	NP	7.60
9	Sep-09	17.73	10.61	NP	7.12
10	Mar-10	17.73	10.02	NP	7.71
11	Sep-10	17.73	10.59	NP	7.14
12	Mar-11	17.73	10.14	NP	7.59

	MW-8								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Install	ed March 2004						
1	Mar-04	18.25	9.32	8.15	8.93				
2	Nov-06 <sup>(d)</sup>	16.96	10.59	NP	6.37				
3	Dec-07	17.84 <sup>(c)</sup>	9.42	NP	8.42				
4	Mar-08	17.84	10.50	9.18	7.34				
5	Jun-08	17.84	9.68	9.10	8.16				
6	Sep-08	17.84	9.63	8.89	8.21				
7	Dec-08	17.84	9.58	8.89	8.26				
8	Mar-09	17.84	9.62	8.89	8.22				
9	Sep-09	17.84	8.55 <sup>(e)</sup>	8.55	9.29				
10	Mar-10	17.84	9.02 <sup>(e)</sup>	9.02	8.82				
11	Sep-10	17.84	9.75	9.89	7.95				
12	Mar-11	17.84	8.89	8.99	8.85				

			MW-9		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installe	d March 2004		
1	Mar-04	18.27	9.38	NP	8.89
2	Dec-06	NA	NA	NA	NA
3	Dec-07	17.84 <sup>(c)</sup>	9.54	NP	8.30
4	Mar-08	17.84	9.77	NP	8.07
5	Jun-08	17.84	9.68	NP	9.27
6	Sep-08	17.84	9.30	NP	8.54
7	Dec-08	17.84	9.83	NP	8.01
8	Mar-09	17.84	9.37	NP	8.47
9	Sep-09	17.84	9.70	NP	8.14
10	Mar-10	17.84	9.46	NP	8.38
11	Sep-10	17.84	9.75	NP	8.09
12	Mar-11	17.84	9.52	NP	8.32

			MW-10		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installe	ed March 2004		
1	Mar-04	18.21	9.87	8.24	8.34
2	Dec-06	18.21	9.30	8.86	8.91
3	Dec-07	17.83 <sup>(c)</sup>	8.98 <sup>(e)</sup>	8.98	8.85
4	Mar-08	17.83	9.28	8.98	8.55
5	Jun-08	17.83	8.86	8.78	7.23
6	Sep-08	17.83	8.95	8.84	8.88
7	Dec-08	17.83	8.97	8.74	8.86
8	Mar-09	17.83	9.25	8.54	9.25
9	Sep-09	17.83	8.63	8.52	9.20
10	Mar-10	17.83	10.30	8.58	7.53
11	Sep-10	17.83	8.76	8.82	9.01
12	Mar-11	17.83	8.15	8.14	9.68

MW-11								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Insta	lled May 2004					
1	Nov-06 <sup>(d)</sup>	17.76 <sup>(c)</sup>	10.33	NP	7.43			
2	Dec-07	17.76	10.27	NP	7.49			
3	Mar-08	17.76	10.34	NP	7.42			
4	Jun-08	17.76	10.20	NP	8.16			
5	Sep-08	17.76	10.03	NP	7.73			
6	Dec-08	17.76	10.34	NP	7.42			
7	Mar-09	17.76	10.20	NP	7.56			
8	Sep-10	17.76	10.25	NP	7.51			
9	Mar-10	17.76	10.23	NP	7.53			
10	Sep-10	17.76	10.24	NP	7.52			
11	Mar-11	17.76	10.10	NP	7.66			

MW-12								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Installed b	etween 2004-20	06				
1	Nov-06 <sup>(d)</sup>	17.83 <sup>(c)</sup>	9.37	NP	8.46			
2	Dec-07	17.83	9.15	NP	8.68			
3	Mar-08	17.83	9.11	NP	8.72			
4	Jun-08	17.83	8.86	NP	8.97			
5	Sep-08	17.83	8.76	NP	9.07			
6	Dec-08	17.83	8.98	NP	8.85			
7	Mar-09	17.83	8.50	NP	9.33			
8	Sep-09	17.83	8.95	NP	8.88			
9	Mar-10	17.83	8.66	NP	9.17			
10	Sep-10	17.83	8.89	NP	8.94			
11	Mar-11	17.83	8.18	NP	9.65			

MW-13								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Installed	between 2004-200	16				
1	Dec-06	17.66 <sup>(c)</sup>	9.81	9.44	7.85			
2	Dec-07	17.66	9.95	9.39	7.71			
3	Mar-08	17.66	10.02	9.54	7.64			
4	Jun-08	17.66	9.86	9.45	7.80			
5	Sep-08	17.66	10.34	9.54	7.32			
6	Dec-08	17.66	10.54	9.65	7.12			
7	Mar-09	17.66	9.26	9.14	8.40			
8	Sep-09	17.66	9.91 <sup>(e)</sup>	9.72	7.75			
9	Mar-10	17.66	9.22 <sup>(e)</sup>	9.22	8.44			
10	Sep-10	17.66	9.40	10.18	7.48			
11	Mar-11	17.66	9.90	NM	NM			

	MW-14								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Installed	between 2004-2	006					
1	Nov-06 <sup>(d)</sup>	17.60 <sup>(c)</sup>	9.11	9.11(sheen)	8.49				
2	Dec-07	17.60	8.86	8.84	8.74				
3	Mar-08	17.60	8.91	8.88	8.69				
4	Jun-08	17.60	8.66	8.62	8.94				
5	Sep-08	17.60	8.64	NP	8.96				
6	Dec-08	17.60	8.70	NP	8.90				
7	Mar-09	17.60	9.25	NP	9.25				
8	Sep-09	17.60	8.80	NP	8.80				
9	Mar-10	17.60	8.42	NP	9.18				
10	Sep-10	17.60	8.56	8.62	8.98				
11	Mar-11	17.60	7.93	7.92	9.67				

MW-15								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Installed b	etween 2004-20	06				
1	Dec-06	17.80 <sup>(c)</sup>	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 <sup>(f)</sup>	8.96			
6	Dec-08	17.80	9.19	8.36	8.61			
7	Mar-09	17.80	8.70	NP	9.10			
8	Sep-09	17.80	9.40 <sup>(e)</sup>	9.22	8.08			
9	Mar-10	17.80	8.81 (e)	8.81	8.99			
10	Sep-10	17.80	9.42	9.45	8.35			
11	Mar-11	17.80	8.50	NM	9.30			

		1	MW-16		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installed b	etween 2004-20	06	
1	Dec-06	NA	NA	NA	NA
2	Dec-07	17.74 <sup>(c)</sup>	9.36	NP	8.38
3	Mar-08	17.74	9.88	NP	7.86
4	Jun-08	17.74	9.25	NP	7.80
5	Sep-08	17.74	9.07	NP	8.67
6	Dec-08	17.74	9.45	NP	8.29
7	Mar-09	17.74	8.88	NP	8.86
8	Sep-09	17.74	9.51	NP	8.23
9	Mar-10	17.74	8.92	NP	8.82
10	Sep-10	17.74	9.40	NP	8.34
11	Mar-11	17.74	9.16	NP	8.57

			MW-17		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installed	between 2004-200	6	
1	Dec-06	NA	NA	NA	NA
2	Dec-07	18.17 <sup>(c)</sup>	9.40	9.32	8.77
3	Mar-08	18.17	9.34	9.18	8.83
4	Jun-08	18.17	8.98	8.97	9.19
5	Sep-08	18.17	9.21	7.92	8.96
6	Dec-08	18.17	9.25	9.11	8.92
7	Mar-09	18.17	8.89	NP	9.28
8	Sep-09	18.17	9.31	NP	8.86
9	Mar-10	18.17	8.93	NP	9.24
10	Sep-10	18.17	9.15	NP	9.02
11	Mar-11	18.17	8.52	8.50	9.65

MW-18								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation			
		Installed b	etween 2004-20	06				
1	Dec-06	NA	NA	NA	NA			
2	Dec-07	16.35 <sup>(c)</sup>	8.30	NP	8.05			
3	Mar-04	16.35	8.34	NP	8.01			
4	Jun-08	16.35	8.34	NP	8.20			
5	Sep-08	16.35	8.48	NP	7.87			
6	Dec-08	16.35	8.61	NP	7.74			
7	Mar-09	16.35	7.75	NP	8.60			
8	Sep-09	16.35	8.50	NP	7.85			
9	Mar-10	16.35	7.97	NP	8.38			
10	Sep-10	16.35	8.28	NP	8.07			
11	Mar-11	16.35	8.63	NP	7.72			

			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 <sup>(d)</sup>	17.80	10.22	NP	7.58
6	Dec-07	17.47 <sup>(c)</sup>	10.03	NP	7.44
7	Mar-08	17.47	10.21	NP	7.26
8	Jun-08	17.47	10.20	NP	7.27
9	Sep-08	17.47	9.55	NP	7.92
10	Dec-08	17.47	10.32	NP	7.15
11	Mar-09	17.47	9.79	NP	7.68
12	Sep-09	17.47	10.22	NP	7.25
13	Mar-10	17.47	9.82	NP	7.65
14	Sep-10	17.47	10.11	NP	7.36
15	Mar-11	17.47	9.10	NP	8.37

			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 <sup>(d)</sup>	18.32	9.15	9.11	9.17
6	Dec-07	16.70 <sup>(c)</sup>	9.53 <sup>(e)</sup>	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 <sup>(c)</sup>	NM <sup>(c)</sup>	NM <sup>(c)</sup>
10	Dec-08	16.70	NM	NM	NM
11	Mar-09	16.70	9.06 <sup>(e)</sup>	9.06	7.64
12	Sep-09	16.70	9.45 <sup>(e)</sup>	9.45	7.25
13	Mar-10	16.70	8.93 <sup>(e)</sup>	8.93	7.77
14	Sep-10	16.70	9.50	9.65	7.05
15	Mar-11	16.70	9.05	9.04	7.65

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

 $\ensuremath{\text{DTW}}\xspace = \ensuremath{\text{Depth}}\xspace$  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

<sup>(b)</sup> New elevation recorded by PES. Date of survey unclear.

(c) Wells resurveyed by PES in April 2007

<sup>(d)</sup> no water level data available for the December 2006 sampling event

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

 $^{(f)}\mbox{Depth}$  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

												W	ell or T	rench L	ocation													
Extraction Date	MW-3	MW-4	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	ТА-Е	ТА-М	TA-W	тв-е	тв-м	TB-W	тс-е	тс-м	TC-W	Total Extracted
Apr-04						1.00		1.00										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																												12.95
Mar-09	0.279					0.378		0.369		0.261	0.007	0.023	0.117		0.342		0.023	1.800	0.750	0.950	1.010	0.153	0.153	0.153	0.653	0.153	0.153	7.73
Jun-09																			0.5									0.50
Sep-09	0.286				0.022	0.418		0.176	0.308	0.176	0.088	0.007	0.176	0.088	0.176	0.022	0.066	7.15	1.4	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	19.46
Dec-09																			0	0.9	0.06				0			0.96
2009 Total																												28.65
Mar-10	0.14				0.01	0.18	0.02	0.60		0.60	0.03	0.10	0.69	0.04	0.30	0.02		8.00	1.30	1.00	1.00	0.50	1.00	0.50	1.00	1.00	1.00	19.03
Jun-10																				0.75								0.75
Sep-10	0.3	0.2	0.4	0.5	0.01	0.5	0.01	0.5		1.6	0.02	0.01	1.5	0.02	1.0	0.02	0.1	6.9	1.00	1.00	1.00	0.3	0.3	0.4	1.00	0.5	0.5	19.59
Dec-10																			0.10	0.00	0.05				0.00			0.15
2010 Total																												39.52
Mar-11						0.002		0.002				0.002			0.003			0.002	0.06	0.06	0.02				0			0.15
2011 Total																												0.15
Total Extracted	1.32	0.20	0.45	0.52	0.04	3.31	0.03	4.41	0.33	2.83	1.39	0.66	2.70	0.16	2.02	0.07	0.20	76.01	21.79	25.23	28.32	2.45	2.97	2.27	4.77	2.89	2.89	190.23

All free product quantities presented in gallons

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

## **APPENDIX F**

Groundwater Disposal Documentation

	and the second diversion of th	Contract of the local division of the second s	Sectors of Sectors of Sectors of Sectors	statement of the local division of the local	and successful division of the successful divisi	Party and the second
J Evoremon Enviro	nmon			RDER/	SERVICE	AGREEMENT
Evergreen Environ			S			№ 581767
To schedule a pickup,	10	Send payme	ent to:		Salaa On	der # 032346
800-596-945		Evergreen Oi			Sales Of	
6880 Smith Ave., Newark, CA EPA# CAD982413	3262	Dept. LA 23	3234		1	1-8-11
16540 S. San Pedro St., Carson, CA EPA# CAD9 GENERATOR/JOB LOCATION	82413262	Pasadena, CA 91 BILLING INFO			Date:	011
NAME		NAME	NMATION	-		CASH CHECK
Bay CEAter afgetu	nenti	JTC	Mar		5 On menter	#
6400 CH ristie	52	ADDRESS 2198	Sixth	SL St	e 201	Se S 007
CITY STATE ZIP		CITY	STATE	-	CO. 1	PO #
PHONE NO.	160V	PHONE NO.	YCA	PROFILE	NO.	CUSTOMER EPA ID NQ.
519 574		( )		31		CAL00033/6
PRODUCT	WASTE CODE	MANIFEST NUMBER	QUANTITY	UNITS	PRICE	AMOUNT
Used oil, Non-RCRA Hazardous Lubricating	CA221			Gal.		
Waste, Liquid Industrial	CA221			Gal.		
Used Automotive Antifreeze, Non-RCRA Hazardous Waste Liquid RO Worke Combustible Liquid N.O.F. NA	CA134			Gal.		
RQ Waste Combustible Liquid, N.O.S. NA 1993 III (Oil contaminated with halogens) Oil & Wotor, Non BCDA Hanardour, Worth Liquid	CA221 F001/F002			Gal.		
Oil & Water, Non-RCRA Hazardous Waste Liquid Non Hazardous Water	CA223 (	2070398514	1 1050	Gal.		C
Waste Solids and Sludges				Gal. Gal.		
Wash Out			1	Each	The stand	C
Pressure Washer/Steam Cleaner	6.00			Day	and the second second	>
						-
Transportation Fuel Surcharge			2	Hrs.	A A A A A A A A A A A A A A A A A A A	C
Glycol Bulk 50/50/Specify Product				% Gal.		
Glycol Bulk Conc./Specify Product				Gal.		
TEST: Clor D Tech 4000ppm	Clor D Te	ech 1000	255	Fail		
Retain sample # Required						Total Charges
Field Service Work Description:						-
Other:						
Other:						
						Contract
CSDF Consolidated M				DR	IVER CHE	CKLIST
Evergreen Oil, Inc. 6880 Smith Ave. Named, CA 04560	41	ergreen Oil, Inc Fres 39 N. Valentine			ime Out	
Newark, CA 94560 Davis, CA 95616 CAD980887418 CAD982446874		esno, CA 93722 AD982446882		um Properly I lation Start D		
Evergreen Env. Svc. Evergreen Oil, Inc Santa 16604 S. San Pedro 745 A West Bettera				eeping - Tank		
Carson, CA 90746 CAD981696420 CAD981696420 CAD982446858						ters/Drums, □ Antifreeze □ Filters/Drums, □ Antifreeze
	Governm	lent	Generator certi	fies that it has	established a pro-	gram to reduce the volume or
☐ Marine ☐ Agricultural			generator to be	economically	practicable.	he degree determined by
			I hereby cer	tify that I I	nave read and	have the authority to
			side of this fo		enerator to the	terms on the reverse
IMPORTANT N	OTICE R	EGARDING TH	E DISPOSIT	TON OF Y	OUR OIL.	
California Health and Safety Code Section ported to a facility that is required to compl ply with the more stringent requirements app re required to meet those more stringent requ e include more stringent leak detection and ure and accidental releases. It is lawful to ser not these more stringent requirements. This	plicable to l uirements, prevention nd used oil	hazardous waste m and some out-of-sta requirements, engi to out-of-state facil	licable to man anagement fac ate facilities th neering certifi lities that com	agement of cilities. Calif nat process u cations of ta	used oil, but the fornia facilities used oil also me	at is not required to that handle or process used set those requirements.
10 )-see Follone	Z2c Route #	<u>4-8-4</u> Date	And	- s Signatur	Stev	e Bitting 4/8/20 t Name Date

Driver Signature Print Name Route # Date Generator's Signature White Copy=Customer Copy - Pink & Yellow Copy=Office Use - Green Copy=Attach to manifest - Golden Copy=Driver Copy