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SECOND SEMIANNUAL 2010 GROUNDWATER MONITORING, ANNUAL SUMMARY, AND PRODUCT EXTRACTION REPORT

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

Prepared for:

EMERYBAY COMMERCIAL ASSOCIATION EMERYVILLE, CA 94608

January 2011



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Prepared for:

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

Prepared by:

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

January 4, 2011

Project No. 2007-65



GEOSCIENCE & ENGINEERING CONSULTING

January 4, 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: Second Semiannual 2010 Groundwater Monitoring, Annual Summary, & Product Extraction

Report--EmeryBay Phase I Condo Parking Garage 6400 Christie Avenue,

Emeryville, California

Dear Mr. Detterman:

Enclosed is the Stellar Environmental Solutions, Inc. report summarizing the site activities conducted between May 2010 and December 2010 at the above referenced site. This report is being submitted on behalf of the owner and Responsible Party, Emerybay Commercial Association. The subject site activities included an active product extraction event, three quarterly passive product removal events, and the second semiannual 2010 groundwater monitoring event.

While historical monitoring at the subject site had been sporadic, quarterly sampling conducted in 2008 firmly established hydrological and contaminant trends; therefore, in November 2009, the Alameda County Department of Environmental Health (ACEH) and the Responsible Party agreed that the sampling schedule would be reduced to semiannual events. This report summarizes the 13th sampling event conducted at the site since 1988. In accordance with regulatory requirements, an electronic copy of this report has been uploaded to ACEH and to the State Water Resources Control Board's GeoTracker system.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report are true and correct to the best of my knowledge. If you have any questions regarding this report, please contact us at (510) 644-3123.

Sincerely,

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

Brush S. Mpkdin

Ms. Kathryn Collins Emerybay Commercial Association



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1.0 INTRODUCTION

PROJECT BACKGROUND

The subject property, located at 6400 Christie Avenue in Emeryville, California, is owned by the Emerybay Commercial Association, for which Stellar Environmental Solutions, Inc. (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 65th Avenue, beyond Christie Avenue and to the west by the Bay Center Offices, and to the south by 64th Avenue. The surrounding area is developed with apartment complexes, offices, and commercial stores.

PREVIOUS INVESTIGATIONS

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

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







SITE PLAN AND ADJACENT LAND USE

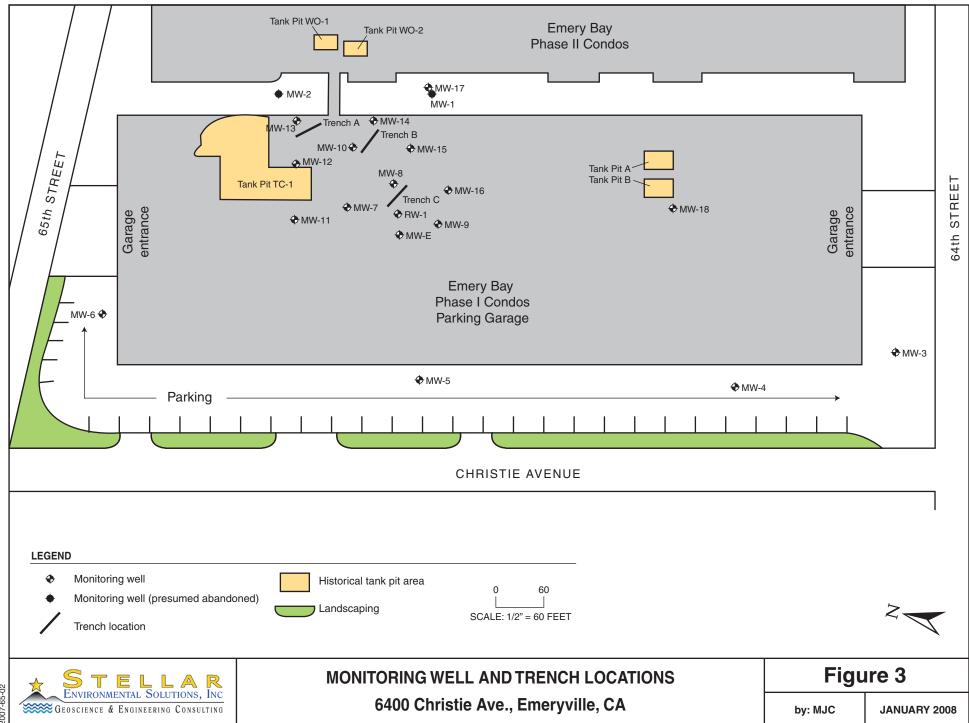
6400 Christie Ave. Emeryville, CA By: MJC JANUARY 2008
Figure 2



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

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

No groundwater monitoring events had occurred at the site between 1991 and 2004, when PES Environmental, Inc. (PES) was retained to evaluate and implement remediation of the residual contamination at the TC-1 (former location of seven UFSTs) Emery Bay Phase I Condo complex area. (Note: Harding Lawson Associates conducted soil and groundwater sampling on the Phase II Apartment complex area during this time, but not for the purpose of product extraction or remediation.) In 2004, PES installed an additional 10 groundwater monitoring wells (monitoring wells MW-1 and MW-2 were either abandoned or paved over with asphalt during construction), bringing the current total to 17 monitoring wells and 1 extraction well in the Phase I parking garage area. The first groundwater monitoring event for the current wells was conducted in March 2004, and the second event was conducted in December 2006.



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 Appendix A.

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

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 was Ms. Barbara Jakub. 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 April 6, 2009. An additional Indoor Air Survey was conducted in March 2010 and submitted to ACEH in April 2010 to document the conditions observed in the February 2009 survey. On April 21, 2010, Stellar Environmental was informed that a new case officer, Mark Detterman, had been assigned to the site.

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, 64th, and 65th Streets discharges into San Francisco Bay. Stellar Environmental has noted several storm drains, in the parking lot area and on the surrounding streets.

GEOLOGY

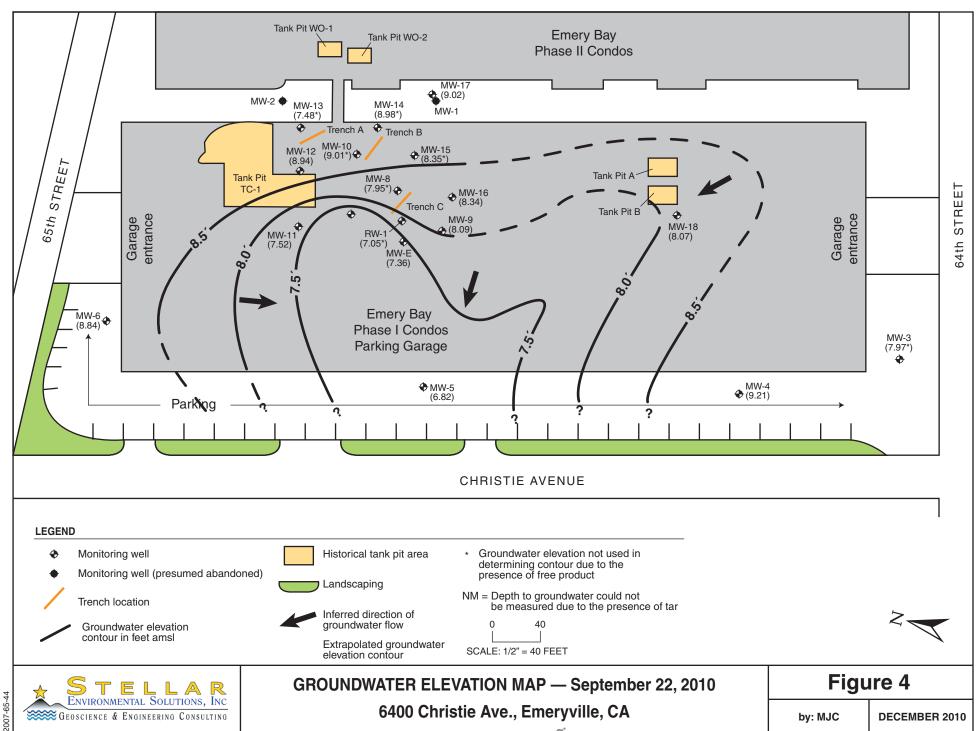
The subject property area is underlain with material mapped "Qhbm," designated early pleistocene alluvium, that is moderately consolidated, deeply weathered, poorly sorted, irregularly interbedded clay, silt, sand, and gravel. A geotechnical survey conducted in 1985 revealed that the upper 15 to 20 feet of soil consists of a combination of fill and soft bay sediment. The upper 1 to $2\frac{1}{2}$ 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, and the groundwater gradient measured during the September 2010 monitoring event ranged from the southwest (on the northern portion of the site) to the west (on the central portion of the site) to the northwest (on the southern portion of the site). The apparent "sink" around monitoring well MW-5 may also possibly be a result of the top of casing vertical elevation reflecting a slight survey error. 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 September 2010 event ranged from 6.82 to 9.21 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).



3.0 SEPTEMBER 2010 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

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

SAMPLING METHODS AND ACTIVITIES

Activities for this event include:

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

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

CURRENT MONITORING EVENT

Blaine Tech Services conducted groundwater monitoring well water level measurements, purging, sampling, and field analyses on September 22, 23, and 24 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
Groundwater Monitoring Well Construction and Groundwater Elevation Data 6400 Christie Avenue, Emeryville, California

Well	Well Depth (feet bgs)	Screened Interval	Top of Well Casing Elevation (a)	Depth to Free Product (TOC)	Thickness of Free Product (feet)	Groundwater Elevation (September 22, 2010)
MW-3	25	5 to 20	16.65	(b)	(b)	7.97
MW-4	25	5 to 20	16.29	NA	NA	9.21
MW-5	25	5 to 20	16.72	NA	NA	6.82
MW-6	25	5 to 20	16.82	NA	NA	8.84
MW-7	20	5 to 20	17.73	NA	NA	7.14
MW-8	16	5 to 16	17.84	9.75	0.14	7.95
MW-9	20	5 to 20	17.84	NA	NA	8.09
MW-10	20	5 to 20	17.83	8.76	0.06	9.01
MW-11	20	5 to 20	17.76	NA	NA	7.52
MW-12	20	5 to 20	17.83	NA	NA	8.94
MW-13	20	5 to 20	17.66	9.40	0.78	7.48
MW-14	20	5 to 20	17.60	8.56	0.06	8.98
MW-15	20	5 to 20	17.80	9.42	0.03	8.35
MW-16	20	5 to 20	17.74	NA	NA	8.34
MW-17	20	5 to 20	18.17	NA	NA	9.02
MW-18	20	5 to 20	16.35	NA	NA	8.07
MW-E	47	7 to 40	17.47	NA	NA	7.36
RW-1	30	unknown	16.70	9.50	0.15	7.05
ТА-Е	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
ТВ-Е	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
ТС-Е	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:

bgs = below ground surface

TOC = below top of casing

NA = not applicable (no free product in well)

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

MW-3 through MW-6 and MW-E are 2-inch PVC. MW-7 through MW-18 are 3/4-inch PVC. RW-1 is 10-inch PVC.

⁽a) Relative to mean sea level.

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

Approximately 40 gallons of purge water and equipment decontamination rinse water from the current groundwater sampling event was containerized onsite in a labeled 55-gallon drum. In addition, approximately 1,050 gallons of groundwater yielding approximately 19.6 gallons of free product was removed during the September 2010 active product removal event as wells as 0.45 gallon removed passively from the skimmers. All purged groundwater and free product from the active product removal event were containerized in the 1,100-gallon onsite aboveground storage tank (AST). On September 30, 2010, Evergreen Oil, Inc. vacuumed and transported all of the water and product to its recycling facility under manifest number 006400294 (EPA Generator ID No. CAL000331636). 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 potential drinking water resource. As stipulated in the ESL document (Water Board, 2008), ESLs are not cleanup criteria; rather, they are conservative screening-level criteria designed to be protective of both drinking water resources and aquatic environments. The groundwater ESLs are composed of one or more components—including ceiling value, human toxicity, indoor air impacts, and aquatic life protection. Exceedance of ESLs suggests that additional remediation and/or investigation (e.g., monitoring plume stability to demonstrate no risk to sensitive receptors where drinking water is not threatened) may be warranted. Because the subject property is a residential property where groundwater <u>is not</u> a potential drinking water resource, the contaminant levels at the site will be compared to the ESLs for these criteria.

Contaminants detected above the ESLs during this sampling event include gasoline, diesel, benzene, toluene, ethylbenzene, and total xylenes. In general, concentrations of gasoline have decreased in the majority of the wells from the last sampling event; however, concentrations of

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

GROUNDWATER SAMPLE RESULTS

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

Table 2
Groundwater Sample Analytical Results – September 22, 23, and 24, 2010
6400 Christie Avenue, Emeryville, California

	Analytical Results						
Well ID	ТРНд	TPHd	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
MW-3	470	5,100	< 0.5	0.64	<0.5	1.6	2.9
MW-4	71	770	< 0.5	< 0.5	< 0.5	< 0.5	<2.0
MW-5	<50	4,500	0.58	<0.5	< 0.5	<0.5	2.0
MW-6	72	1,200	1.0	< 0.5	<0.5	< 0.5	<2.0
MW-7	1,300	10,000	580	54	35	163	<20
MW-8	7,800	7,600	8,800	110	620	212	<100
MW-9	170	6,400	4.8	0.77	< 0.5	< 0.5	<2.0
MW-10	3,400	3,500	1,500	47	18	44	<40
MW-11	1,300	5,500	330	15	9.2	17.3	<2.0
MW-12	4,900	3,100	5,900	97	47	73	<100
MW-13	1,700,000	3,100,000	21,000	2,300	30,000	17,200	7,000
MW-14	2,000	2,500	1,700	44	98	89	<40
MW-15	5,800	3,500	8,100	95	170	71	<100
MW-16	77	9,800	12	1.9	<0.5	0.55	2.0
MW-17	3,500	2,800	1,400	62	46	76	<40
MW-18	<50	6,400	<0.5	< 0.5	< 0.5	< 0.5	<2.0
MW-E	1,800	6,600	2,200	45	64	78	<50
RW-1	860	980	170	4.0	5.6	2.76	8.0
ESLs (a)	100 / 210	100 / 210	1.0 / 46	40 / 130	30 / 43	20 / 100	5.0 / 1,800

Notes:

MTBE = methyl tertiary-butyl ether

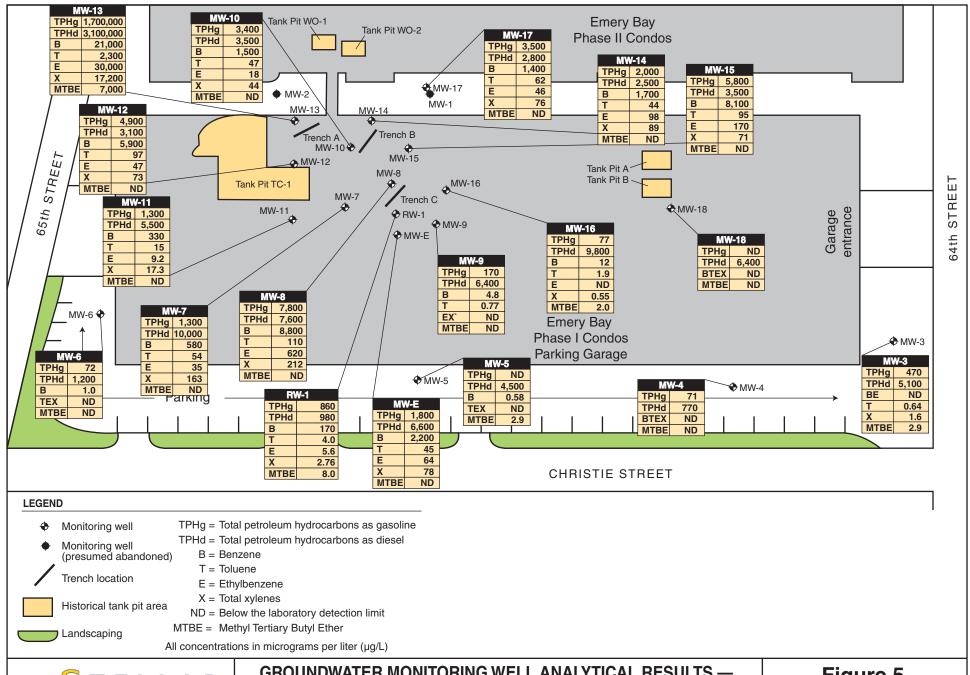
TPHd = total petroleum hydrocarbons – diesel range (equivalent to total extractable hydrocarbons – diesel range)

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

All concentrations are expressed in micrograms per liter (µg/L), equivalent to parts per billion (ppb).

Results listed in **bold-face type** are at or above the ESLs where groundwater is not a drinking water resource.

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



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Petroleum Hydrocarbon Contaminants

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

Gasoline was detected in MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1 above the ESL where groundwater <u>is not</u> a drinking water resource (210 micrograms per liter [μ g/L]). Gasoline was also detected in MW-4, MW-6, MW-9 and MW-16, but at concentrations below the ESL. The highest concentration (1,700,000 μ g/L) was observed in MW-13. This concentration is well below the 2,700,000 μ g/L maximum concentration observed during the December 2008 event, but above both the 43,000 μ g/L observed last quarter (March 2010) and the 1,400,000 μ g/L observed the same time last year.

Figure 6 shows an isoconcentration contour map of TPHg concentrations in groundwater based on the September 2010 monitoring well analytical results. Figure 8 plots the change in diesel concentrations in the two downgradient wells (MW-5 and MW-6) from February 1991 (the terminus of the pump-and-treat system) to the September 2010 sampling event. Figure 9 plots the change in diesel concentrations in source area wells MW-11 and MW-12 from their first sampling event in December 2006 to the September 2010 sampling event. Figure 10 plots the change in crossgradient wells MW-18 and MW-3 from December 2006 to date.

Increases in gasoline concentrations compared to the previous March 2010 monitoring event were observed in wells MW-3, MW-4, MW-6, MW-7, MW-9, MW-13, MW-16, MW-18, and RW-1; and decreases were observed in wells MW-8, MW-10, MW-11, MW-12, MW-14, MW-15, MW-17, and MW-E. The concentrations in perimeter well MW-5 remained the same. When comparing the concentrations to the September 2009 sampling event, wells MW-8 and MW-11 had showed decreases and perimeter well MW-5 remained the same. The remaining 15 wells had increases in the gasoline concentration.

Diesel was detected in all site wells above the ESL of 210 μg/L (where groundwater <u>is not</u> a drinking water resource). The highest concentration (3,100,000 μg/L) was observed in MW-13. This is a new historic maximum for this well. Increased diesel concentrations compared to the previous March 2010 monitoring event were observed in wells MW-3, MW-4, MW-5, MW-6, MW-7, MW-13, MW-E, and RW-1; and decreases were observed in wells MW-8, MW-9, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, and MW-18. When comparing the concentrations to the September 2010 sampling event, wells MW-3, MW-4, MW-7, MW-12, MW-13, MW-14, MW-15, MW-E, and RW-1 exhibited increases; wells MW-5, MW-6, MW-8, MW-9, MW-10, MW-

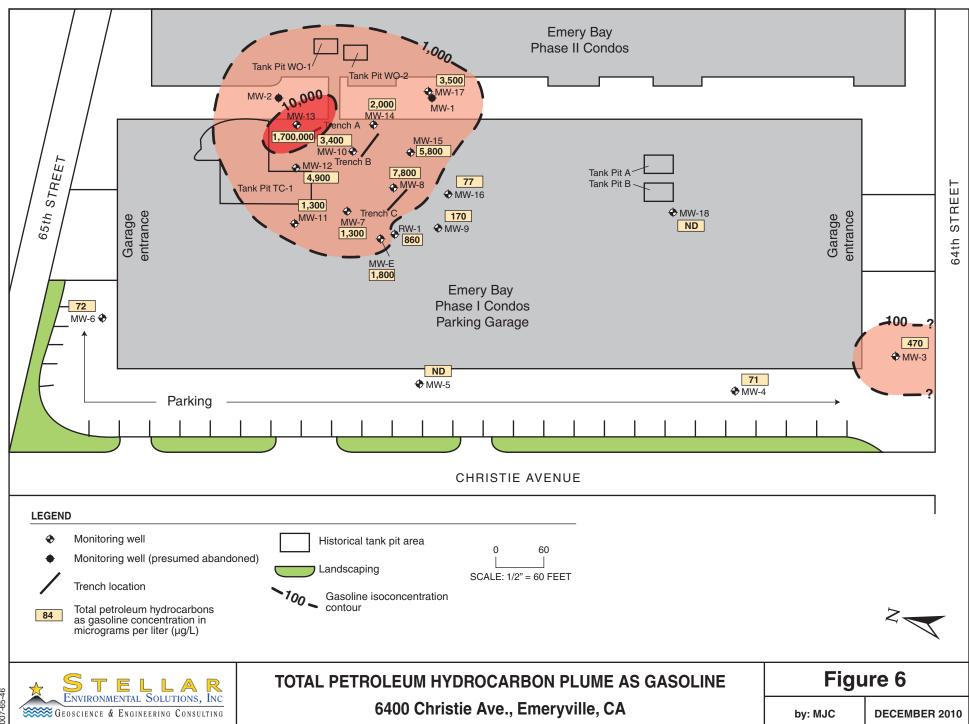
11, MW-16, MW-17, and MW-18 showed decreases. Figure 7 is an isoconcentration contour map of TPHd concentrations in groundwater based on the September 2010 monitoring well analytical results.

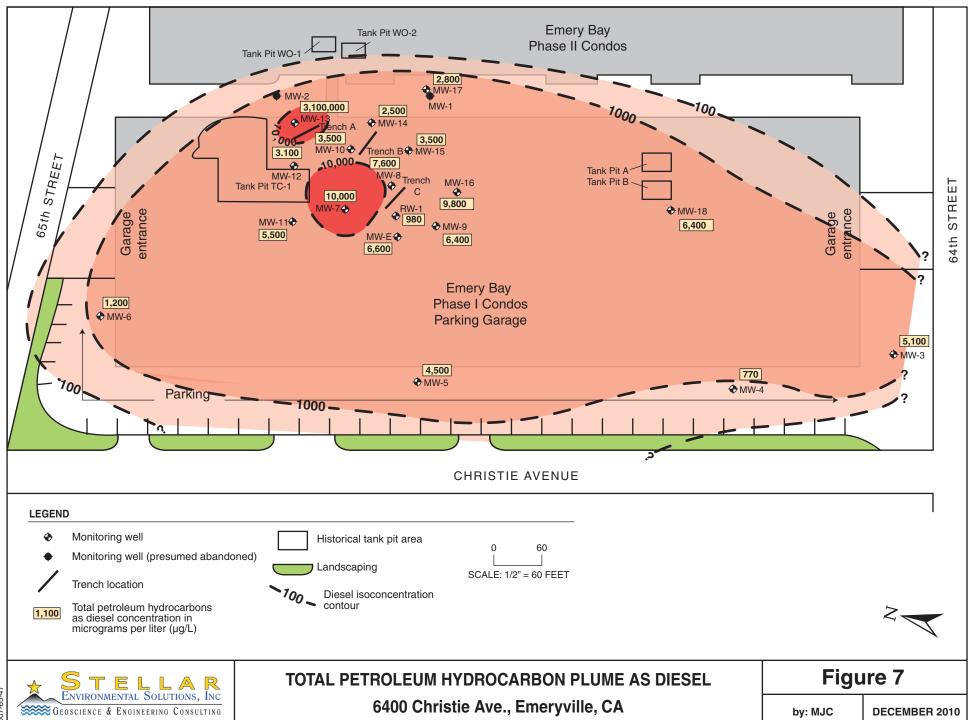
Benzene concentrations exceeded the benzene ESL of $46 \mu g/L$ (where groundwater is not a likely drinking water resource) in MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1. Benzene was also reported in MW-5, MW-6, MW-9, and MW-16, but at concentrations below the ESL.

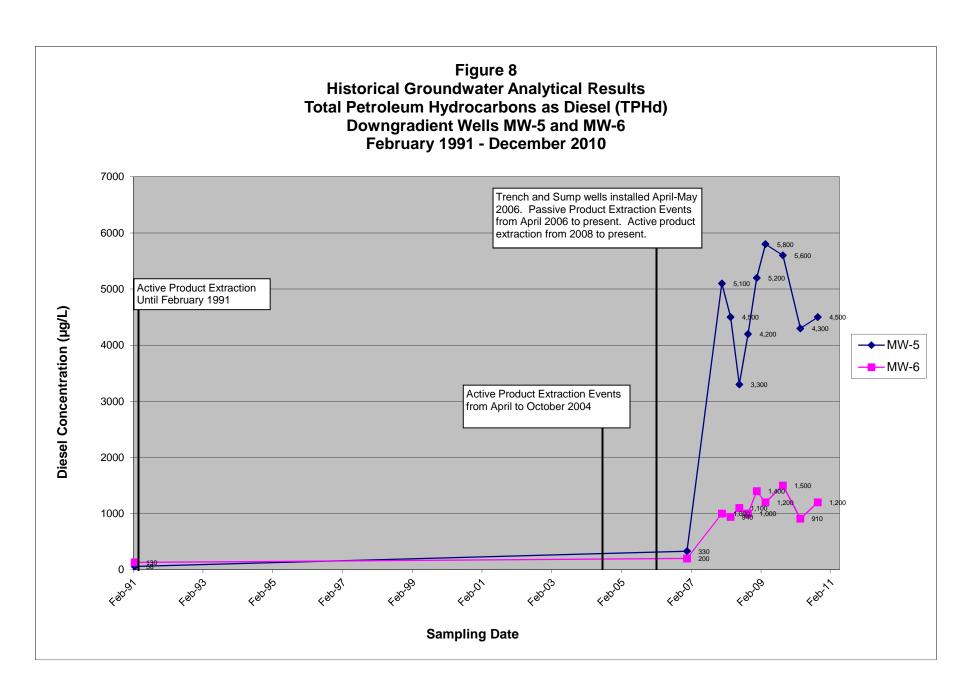
Toluene was detected above the ESL of 130 μ g/L in monitoring well MW-13. Ethylbenzene was detected above the 43- μ g/L ESL (where groundwater <u>is not</u> a drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1. Total xylene concentrations in monitoring wells MW-7, MW-8, MW-13, and MW-17 were above the 100- μ g/L ESL where groundwater <u>is not</u> a drinking water resource. MTBE was detected above the ESL of 1,800 μ g/L in MW-13.

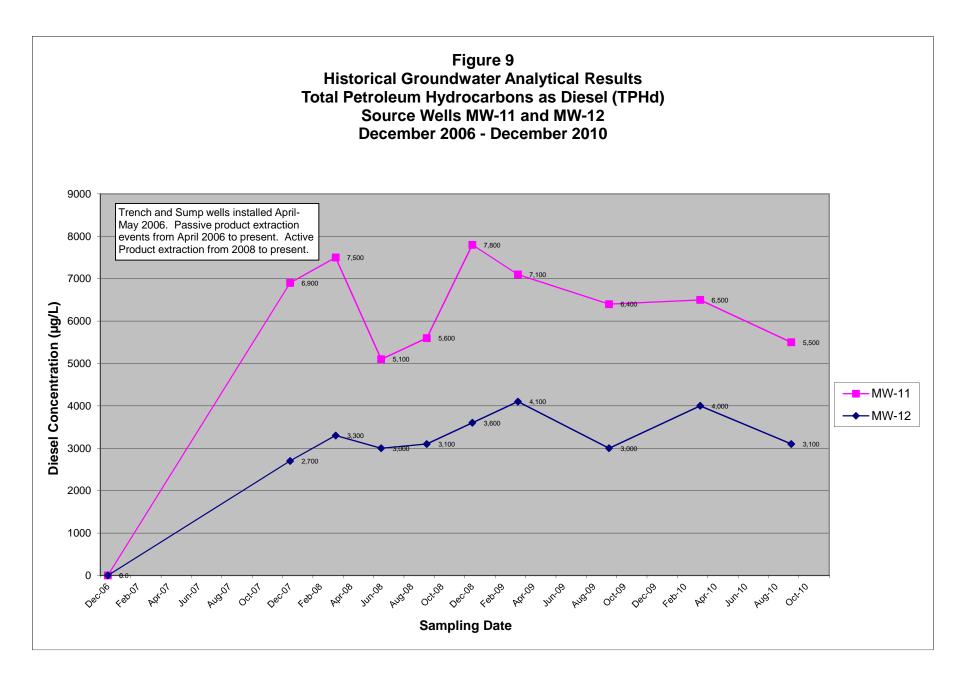
Quality Control Sample Analytical Results

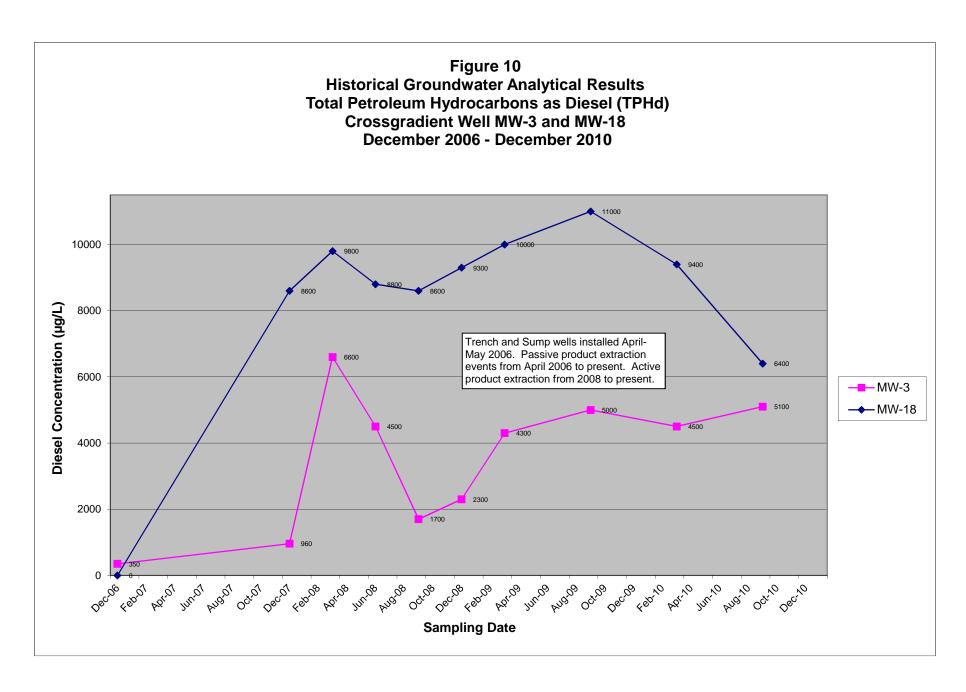
Laboratory quality control (QC) samples (e.g., method blanks, matrix spikes, surrogate spikes, etc.) were analyzed by the laboratory in accordance with the requirements of each analytical method. All laboratory QC sample results and sample holding times were within the acceptance limits of the methods (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 June 18, 2010; September 20 and 21, 2010 (immediately prior to the sampling event); and December 17, 2010. Tables 3 and 4 summarize the product removed during the passive and active product removal events, respectively. Appendix E summarizes historical product removal.

LNAPL REMEDIATION SYSTEM CONSTRUCTION

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

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

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) in one day—although it appears to be clear by the better defined recovery in 2008 and 2009 that the volume of free product indicated to have been recovered at that well appears unrealistically high, most likely reflecting a mixture of hydrocarbon product mixed with water. To attempt 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. Figure 11 graphs the comparison of free product extraction on a yearly basis.

It should be noted that no historical product extraction reports were provided to 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. Based on better defined recovery in 2008 and 2009 the volume of free product indicated to have been recovered by the system during 2004 and 2006 appears unrealistically high, suggesting again that free-phase project mixed with water was reported as free-phase product recovery.

ACTIVE AND PASSIVE PRODUCT REMOVAL EVENTS

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

A total of 0.75 gallon of free product was removed passively from one of the skimmers located in TA-M on June 18, 2010. The other skimmer was filled with water. The skimmers located in trench well TA-W were both empty. The skimmers located in trench wells TA-E and TC-E were all filled with water. Stellar Environmental conducted both passive and active product removal events during the 2 days prior (September 20 and 21) to the groundwater sampling event (September 22, 23, and 24) to determine the recharge rate of free product in wells. A total of approximately 828.25 gallons of groundwater yielding approximately 19.6 gallons (Table 4) of free product were removed during the September 2010 active product removal event, in addition to 0.45 gallons (Table 3) removed passively from the skimmers. A sample taken from the AST on September 22, 2010 contained TVHg at $10,000 \,\mu\text{g/L}$; TEHmo at $2,800 \,\mu\text{g/L}$, and TEHd at $14,000 \,\mu\text{g/L}$.

Table 3
Passive Trench Product Extraction – June 18, September 20, and December 17, 2010

Number of Skimmers i		Total Product Removed (gallons)				
Trench ID	Well	June 18, 2010	September 20, 2010	December 17, 2010		
TA-E	2	NM	0.1	0.1		
TA-M	2	0.75	0.1	0.0		
TA-W	2	NM	0.25	0.05		
TB-E	0	NM	NM	NM		
TB-M	0	NM	NM	NM		
TB-W	0	NM	NM	NM		
ТС-Е	1	NM	0.0	0.0		
TC-M	0	NM	NM	NM		
TC-W	0	NM	NM	NM		
Total Product Removed		0.75	0.45	0.15		

Notes:

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

Table 4
Active Product Extraction – September 2010

Well	Total Gallons of Product Removed	Well	Total Gallons of Product Removed
MW-3	0.30	MW-17	1.00
MW-4	0.20	MW-18	0.02
MW-5	0.40	MW-E	0.10
MW-6	0.50	RW-1	6.90
MW-7	0.01	TA-E	1.00
MW-8	0.50	TA-M	1.00
MW-9	0.01	TA-W	1.00
MW-10	0.50	ТВ-Е	0.30
MW-11	NP	TB-M	0.30
MW-12	1.60	TB-W	0.40
MW-13	0.02	TC-E	1.00
MW-14	0.01	TC-M	0.50
MW-15	1.50	TC-W	0.50
MW-16	0.02		
		Total	19.59

Notes:

NP = not purged

Product removal estimates are based on the total amount of free product measured in the purge tank (19 gallons) per total amount of groundwater purged (828.25 gallons), which yields 0.023 gallon of product per 1 gallon of purge water

Based on the total amount of groundwater removed, 828.25 gallons, Stellar Environmental calculated that approximately 0.069 pound of gasoline, 0.019 pound of motor oil, and 0.059 pound of diesel were removed with the purged groundwater. Stellar Environmental removed an additional 0.15-gallon of free product passively during the December 17, 2010 event.

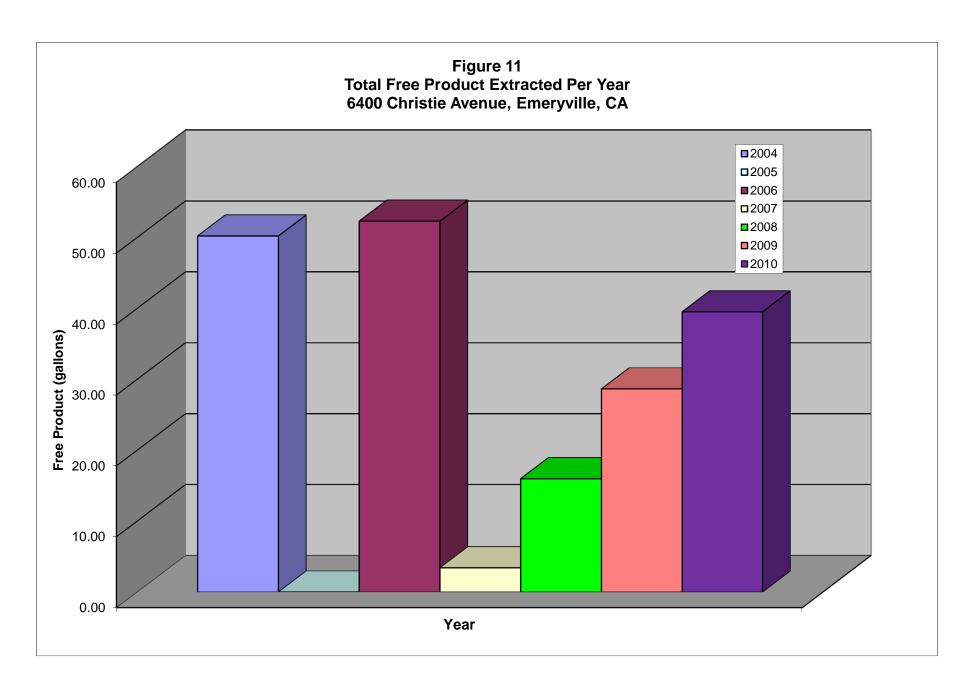
The active removal activities occurred as follows:

- On September 20, 2010, Stellar Environmental removed a total of 0.25 gallon from the skimmer in trench well TA-W (the second skimmer was empty) and then 50 gallons of groundwater actively. One of the skimmers contained 0.1 gallon in trench well TA-M. The remaining liquid in both skimmers was water; however, Stellar Environmental removed 50 gallons actively. One skimmer in trench well TA-E contained 0.1 gallon of project but the other was filled with only water. Fifty gallons were removed actively from this well. Stellar Environmental removed 20 gallons actively from trench TB-W and 15 gallons from trenches TB-M and TB-E. There are no skimmers in these trenches. The only skimmer in the TC trench wells is in TC-E; this was filled with only water. Stellar Environmental removed 50 gallons actively from TC-E and 25 gallons each from trench wells TC-W and TC-M. Stellar Environmental removed 200 gallons from RW-1, 10 gallons from MW-3, 0.5 gallon from MW-13, 23 gallons from MW-12, 15 gallons from MW-15, 1 gallon from MW-16, and 20 gallons from MW-8.
- On September 21, 2010 Stellar Environmental removed 0.5 gallon from well MW-13, 50 gallons from MW-12, 25 gallons from MW-10, 0.25 gallon from MW-14, 23 gallons from MW-8, 1 gallon from MW-16, 50 gallons from MW-15, 0.5 gallon from MW-7, 5 gallons from MW-E, 0.5 gallon from MW-9, 1 gallon from MW-18, 45 gallons from MW-17, 4 gallons from MW-13, 100 gallons from RW-1, 25 gallons from MW-6, 18 gallons from MW-5, 10 gallons from MW-4.

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 September 30, 2010, Evergreen Oil vacuumed and transported the water to its recycling facility in Newark, California. The waste manifest and recycling certificate are included in Appendix F. A table containing the amount of product removed per well to date is included in Appendix E.

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 indicated to have been 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 "product" is likely to have been a mixture of water and hydrocarbons. Figure 11 is bar graph showing the total amount of product removed per date.

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. Only 3.36 gallons were removed in 2009. Approximately 10.34 gallons were removed by active pumping on wells during 2008. Approximately 25.44 gallons of free product were removed by active pumping on wells in 2009. Approximately 38.62 gallons of free product were removed by active pumping on wells in 2010.

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

6.0 SUMMARY, CONCLUSIONS, AND PROPOSED ACTIONS

FINDINGS AND CONCLUSIONS

- The subject property parcel was developed as early as 1958 with the Motor Freight Station, associated with Delta Lines, Inc. The Delta Lines complex contained an "Oil and Gas" building, located at the site of the present-day Emery Bay Phase I Condo complex and parking garage. In 1986, the building was demolished, and 12 UFSTs containing diesel and gasoline were removed from the Emery Bay Phase I and Phase II Condo complex parcels. Soil and groundwater contamination was discovered.
- In response to the contamination, a LNAPL groundwater pump-and-treat system was installed in 1989, but failed in 1991. Active pumping of free product began again in 2004, and a product extraction system consisting of passive product removal was installed in 2006. Groundwater monitoring events have been sporadically conducted since 1988; quarterly groundwater monitoring events were conducted for the first time in 2008. The quarterly sampling was reduced to semiannual frequency in 2009.
- The site currently contains 17 monitoring wells, 1 recovery well, and 9 product extraction trench wells. This is the 14th sampling event conducted since 1988.
- Site geological conditions consist of a combination of fill and soft bay sediment to between 15 and 20 feet bgs, covered by approximately 1 to 2½ feet of pavement and imported fill. This is underlain by approximately 20 feet of firm soil consisting of primarily dense silty sand with intermittent layers of silty and sandy clay. Stiff to very stiff clay extends from a depth of approximately 40 feet to approximately 102 feet.
- The groundwater direction during this monitoring event was found to range from the southwest (on the northern portion of the site) to the west (on the central portion of the site) to the northwest (on the southern portion of the site).
- Groundwater elevations during the September 2010 event ranged from 6.82 to 9.21 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.
- Gasoline was detected in MW-3, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1 above the ESL where groundwater is not a

drinking water resource (210 micrograms per liter [μ g/L]). Gasoline was also detected in MW-4, MW-6, MW-9 and MW-16, but at concentrations below the ESL. The highest concentration (1,700,000 μ g/L) was observed in MW-13. This concentration is well below the 2,700,000 μ g/L maximum concentration observed during the December 2008 event, but above both the 43,000 μ g/L observed last quarter (March 2010) and the 1,400,000 μ g/L observed the same time last year.

- Increases in gasoline concentrations compared to the previous March 2010 monitoring event were observed in wells MW-3, MW-4, MW-6, MW-7, MW-9, MW-13, MW-16, MW-18, and RW-1; and decreases were observed in wells MW-8, MW-10, MW-11, MW-12, MW-14, MW-15, MW-17, and MW-E. The concentrations in perimeter well MW-5 remained the same. When comparing the concentrations to the September 2009 sampling event, wells MW-8 and MW-11 had showed decreases and perimeter well MW-5 remained the same. The remaining 15 wells had increases in the gasoline concentration.
- Diesel was detected in all site wells above the ESL of 210 μg/L (where groundwater is not a drinking water resource). The highest concentration (3,100,000 μg/L) was observed in MW-13. This is a new historic maximum for this well. Increased diesel concentrations compared to the previous March 2010 monitoring event were observed in wells MW-3, MW-4, MW-5, MW-6, MW-7, MW-13, MW-E, and RW-1; and decreases were observed in wells MW-8, MW-9, MW-10, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, and MW-18. When comparing the concentrations to the September 2010 sampling event, wells MW-3, MW-4, MW-7, MW-12, MW-13, MW-14, MW-15, MW-E, and RW-1 exhibited increases; wells MW-5, MW-6, MW-8, MW-9, MW-10, MW-11, MW-16, MW-17, and MW-18 showed decreases.
- Benzene concentrations exceeded the benzene ESL of 46 µg/L (where groundwater is not a likely drinking water resource) in MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1. Benzene was also reported in MW-5, MW-6, MW-9, and MW-16, but at concentrations below the ESL.
- Toluene was detected above the ESL of 130 µg/L in monitoring well MW-13.
- Ethylbenzene was detected above the 43-µg/L ESL (where groundwater is not a drinking water resource) in monitoring wells MW-8, MW-12, MW-13, MW-14, MW-15, MW-17, MW-E, and RW-1.
- Total xylene concentrations in monitoring wells MW-7, MW-8, MW-13, and MW-17 were above the 100-µg/L ESL where groundwater is not a drinking water resource.
- MTBE was detected above the ESL of 1,800 μ g/L in MW-13.

- Stellar Environmental conducted passive skimmer product removal on the trench wells during the June, September, and December 2010 removal events. A total of approximately 1.35 gallons were removed from trench wells TA-E, TA-M, TA-W, and TC-E.
- A total of approximately 828.25 gallons of groundwater yielding approximately 19.6 gallons (Table 4) of free product were removed during the September 2010 active product removal event, in addition to 0.45 gallons (Table 3) removed passively from the skimmers. A sample taken from the AST on September 22, 2010 contained TVHg at 10,000 μg/L; TEHmo at 2,800 μg/L, and TEHd at 14,000 μg/L. Based on the total amount of groundwater removed, 828.25 gallons, Stellar Environmental calculated that approximately 0.069 pound of gasoline, 0.019 pound of motor oil, and 0.059 pound of diesel were removed with the purged groundwater.
- The trench recovery system, where free product is designed to collect in 1-liter skimmers, is effective in removing small amounts of free product, but is not effective in decreasing the size of the plume overall. Active pumping at various wells appears to have some effect in lowering gasoline concentrations; however, it does not appear to be affecting the concentrations of diesel (which appear to be steadily increasing).

RECOMMENDATIONS

- Groundwater monitoring should be continued on a semiannual basis to document plume stability and manage contaminant concentrations over time.
- Both active and passive free product removal events should be continued to ascertain their effectiveness in managing the plume on site and reducing the plume size over time. Active product removal is being conducted on a semiannual basis immediately prior to the sampling event. Passive product removal from the skimmers is being conducted on a quarterly basis.
- Emergent best available technologies shall 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, 64th 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, 64th 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 64th 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 64th Streets, Emeryville, CA. October 31.
- Groundwater Technology, Inc. (GTI), 1991a. Quarterly Report, Bay Center Project, Christie and 64th 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 64th 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 64th 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), 2010a. Indoor Air Survey.

 EmeryBay Condo Phase I Parking Garage 6400 Christie Avenue, Emeryville, CA. April 5.
- 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.

8.0 LIMITATIONS

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

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

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

APPENDIX A

Historical Groundwater Well Analytical Results

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

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

	MW-2												
Sampling Event No.	Event No. Date Sampled TEH-d TVH-g TEH-mo Benzene Toluene Ethylbenzene Xylenes MTBE												
1	1 Dec-88 72 22 NA <0.5 <0.5 <0.5 NA												
2	May-89	40	18	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA				
3	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

				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

				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

				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

				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

				MW	-8				
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	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

				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

				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

				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

				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

				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

				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			

				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

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

				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

				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

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

				RW	-1				
Sampling Event No.	Date Sampled	TEH-d	TVH-g	TEH-mo	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
1	Dec-88	NS	NS	NS	NS	NS	NS	NS	NS
2	May-89	NS	NS	NS	NS	NS	NS	NS	NS
3	Feb-91	NS	NS	NS	NS	NS	NS	NS	NS
4	Mar-04	NS	NS	NS	NS	NS	NS	NS	NS
5	Dec-06	<50	640	<200	100	1.3	2	1.6	<1.0
6	Dec-07	2,100	770	NA	110	< 0.5	3.8	1.96	<2.0
7	Mar-08	11,000	890	NA	100	4.2	4.4	2.0	<2.0
8	Jun-08	1,500	1,200	NA	290	4.8	10	4.8	<2.0
9	Sep-08	1,900	1,400	NA	280	9.8	10	6.7	<2.0
10	Dec-08	54,000	1,100,000	NA	500	<250	3,200	530	<1,000
11	Mar-09	2,800	950	NA	180	3.6	13	3	<2.0
12	Sep-09	770	350	NA	120	3.1	11	2	<2.0
13	Mar-10	810	200	<300	< 0.5	< 0.5	< 0.5	< 0.5	<2.0
14	Sep-10	980	860	NA	170	4.0	5.6	2.8	8.0

Notes:

The 1988, 1989, and 1991 sampling events were conducted by Groundwater Technology, Inc.
The 2004 and 2006 sampling events were conducted by PES Environmental.

NS = Not sampled

NA = Not analyzed for this constituent

All concentrations shown in µg/L

APPENDIX B

Groundwater Monitoring Field Data Sheets

WELLHEAD INSPECTION CHECKLIST

Date <u>9-2</u>	2 - 10	Client	57	ELLAR				
Site Address _	65th 8	BAY	<u>57.</u>	Er	16 R 4 V	1665	CA	
Job Number _	100922	- FSI	•		chnician	F		-
Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Actio Taken (explain below)	N Well Not Inspected (explain below)
MW-3					-			- Sciowy:
MW-4				٨		·		
MW-5	8							
MN-6				•				
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	·		-				A	
MW-8								-
MW-9								1
MW-10							*	
MW-11			•					1.
MW-12	wis						*/	
MW-13								
M W - KJ								
MW-15								
MW-16			·					
MW-17							×	
MW-18								
NOTES: 🛕	1/2 800	·T S	MISSIN	·	MW-	9	2/2	2 1.55
MISSING				*	1 000		12_	80675
The state of the s			÷					-

WELLHEAD INSPECTION CHECKLIST

Page 2 of 2

Date 9-	22-10	_ Client	57	TELLAR				
Site Address	62 44 S	BAY	57.	EME	24VIL	LE,	ч	
Job Number	100922	<u>- FSI</u>	·		chnician	F		
Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-E					·	·		
RW-1				*			*	
				-				
						·		
		·						
					*		·	
							. /	,
						.		
	·				:			
	·							
NOTES: *	PN-1	1/2	TABS				L	
MN-E	2/2 31		M15511		STRIPF	'ED		
								· · · · · · · · · · · · · · · · · · ·
			/			*************************************		
			•					

WELL GAUGING DATA

Project # 100922-F31	Date 9-22-10 Client	STELLAR

Site 65th \$ BAY ST. EMERYVILLE, CA

Well ID	Time	Well Size (in.)	Sheen / Odor		Thickness of Immiscible Liquid (ft.)			Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-3	942	2	SPH *	24.10	TEM 0:	f weu	8.68		TPC	
MW-H	845	2					7.08	24,82		
MW-5	851	2					9.90	24.70		
MW-6	१८९	2					7.98	23.07		
MW-7	850	3/4					(0.59	19.88		
Nn-8	931	7/4		9,75			9.89			
mn-9	859	3/4					9.75	19,68		
MW -10	936	3/4	,	8.76			8,82			
mw-11	909	3/4					10,24	19.75		
AW-12	715	74					8.89	18.90		
MW-13	941	3/4		9:40			10.18			
M~- H	925	3/4		V. 56			8,62			
nw 15	927	3/4	*	9.42			9.45			
MW-16	920	3/4					9.40	19.58		
MW-17	911	3/4					9.15	19.53		
Mm.18	9 15	3/4					8.28	19.60		
44.39 MW-E	920	2					(0-11	y4.87	V	

WELL GAUGING DATA

Project # 10 69 22 - FS1 Date 9 - 22 - 10	Client	STELLAR	
Site 65th & BAT ST. EMERYVILLE	_		

Time	Well Size (in.)		Liquid (ft.)	of Immiscible	Immiscibles Removed		Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
10 15	10	SMEEN	9.55			965		700	
				, , , , , , , , , , , , , , , , , , , 					
		Time Size (in.)	Time Size Sheen/Odor Odor Odor	Time (in.) Sheen / Immiscible Liquid (ft.) 10 15 10 Sport 9.50	Time (in.) Sheen / Immiscible Immiscible Liquid (ft.) Liquid (ft.) 10 15 10 10 10 10 10 10	Time (in.) Sheen / Odor Immiscible Liquid (ft.) Immiscible Liquid (ft.) (ml) 10 15 10 15 10 10 10 10	Time Size (in.) Sheen / Odor (in.) Odor (in.) Sheen / Odor (in.) Sheen	Well Size Sheen Odor Immiscible Removed Chiquid (ft.) Liquid (ft.) Liquid (ft.) Liquid (ft.) Chiquid (ft	Time Size Circle Circl

W _ L MONITORING DATA SHI

Project #:	1009	2-9 -	FSI	Client			AD @	BAY CENTER - APTS.	
Sampler:	<i>T</i>	-	\$ - V	Date:			2 - 1		
Well I.D.:		-3			 Diameter	-	3 4	6 8	
Total Well				Depth to Water (DTW): 8.68					
Depth to Fr		<u> </u>	4.10	Thickness of Free Product (feet):					
Referenced		PVC			Meter (if		auct (10.	YSI HACH	
DTW with	80% Rech:		Height of Water			· · · · · · · · · · · · · · · · · · ·			
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	ailer Displaceme nersible		Waterra Peristaltic)	Sampli	ng Method:	Disposable Bailer Extraction Port Dedicated Tubing NEW すいないへ	
(I Case Volume	Gals.) X	646	= nes Calculated Vo	_ Gals. olume	Well Diamete 1" 2" 3"	0.04 0.16 0.37	ier Well [4" 6" Other	Diameter Multiplier 0.65 1.47 radius ² * 0.163	
Time	Temp (°F or	рН	Cond. (mS or us)	i	oidity ΓUs)	Gals. F	Removed	Observations	
(046	STA R	. T	PUPGE	e	490	nL	/min	ODOR	
1052	END	70	الإرد	2.4	<u></u>	251	<u>C</u> 3von		
					ż				
Did well dev	water?	Yes (No	Gallon	s actuall	y evacu	ated:	2.4 L	
Sampling D	ate: 9- 22	- 10	Sampling Time	e: 10 5	5	Depth	to Water	r: 8.68	
Sample I.D.	: MW	-3		Labora	tory:	Kiff (CalScience	Other CFT	
Analyzed fo	or: (PH-G)	(BTEX	MTBB (TPH-D)	Oxygena	ites (5)	Other:			
EB I.D. (if a	ipplicable):		Time	Duplica	ate I.D. (if appli	cable):		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygena	ites (5)	Other:			
D.O. (if req'	d): Pre	e-purge:		mg/L	P	ost-purge		nig/L	
O.R.P. (if re	q'd): Pre	e-purge:		тV	P	ost-purge	: :	mV	

W. J. MONITORING DATA SHI

Project #:	1009	122 -	FS (Client:	STELLAR (BAY CENTER			
Sampler:	30			Date:	9 - 22 -				
Well I.D.:	MW-	4		Well Diam	eter: ② 3 4	6 8			
Total Well	Depth (T)	· · · · · · · · · · · · · · · · · · ·	4.82			······································			
Depth to F	ree Produc	· · · · · · · · · · · · · · · · · · ·		Thickness of Free Product (feet):					
Reference	d to:	PVC	Grade	D.O. Meter		YSI HACH			
DTW with	80% Rech	narge [(H	Height of Water	Column x (0.20) + DTW]: (0.63			
Purge Method:	Bailer Disposable I Positive Air Electric Sub	Displaceme	ent Extra Other		Sampling Metho	d: Bailer Disposable Baile Extraction Port Dedicated Tubing			
2.0 (I Case Volume	(Gals.) X	3 ified Volun	$= \frac{3}{4}$ Calculated Vo	Gals. 1"	tiameter Multiplier Wel 0.04 4" 0.16 6" 0.37 Oth	Diameter Multiplier 0.65 1.47 er radius ² * 0.163			
Time	Temp	pН	Cond. (mS or us)	Turbidity (NTUs)	Gals. Removed	Observations			
1044	18.8	7.61	1437	42	2.8				
1046	18.9	7.32	1434	38	5.6				
1048	18,8	7.28	1428	37	9.4				
				ż					
D'1 11 1			^>						
Did well de			No)		ually evacuated:	8.4			
Sampling D	Pate: 9- 2;	2-10	Sampling Time	e: 1050	Depth to Wate	er: 7.72			
Sample I.D.	: MW.L			Laboratory:	Kiff CalScienc	e Other C#T			
Analyzed fo	or: (PH-G)	(BTEX	MTBB (TPH-D)	Oxygenates (5	Other:				
EB I.D. (if a	applicable)	:	@ Time	Duplicate I.	D. (if applicable):				
Analyzed fo	or: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5	o) Other:				
O.O. (if req'	'd): Pr	e-purge:		mg/L	Post-purge:	nng/L			
).R.P. (if re	eg'd): Pr	e-purge:		mV	Post-purge:	mV			

W L MONITORING DATA SHI

					<u></u>				
Project #:	1009	22-	FSI	Client: \$	TELLAR C	BAY CENTER - APTS.			
Sampler:	<u> </u>			Date:	9 - 22 - 1				
Well I.D.:	MN	v-5		Well Diameter	r: 2 3 4	6 8			
Total Well	Depth (TI)):	24.70	Depth to Wate	er (DTW): 9	',90			
Depth to Fr	ee Produc	:t:	-	Thickness of Free Product (feet):					
Referenced	to:	PVC	Grade	D.O. Meter (if	req'd):	YSI HACH			
DTW with	80% Rech	narge [(F	Height of Water	Column x 0.20)) + DTW]:	12.86			
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Bailer Displaceme		Waterra Peristaltic ction Pump	Sampling Method Other	l: Bailer Disposable Bailer Extraction Port Dedicated Tubing :			
1 Case Volume	Gals.) XSpec	ified Volun	mes Calculated Vo	Gals. Gals.	ter Multiplier Well 0.04 4" 0.16 6" 0.37 Other	Diameter Multiplier 0.65 1.47 r radius² * 0.163			
Time	Temp	рН	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations			
1117	19-4	7.44	2742	71000	2.3	Boun / dada			
114	10.5	7.29	2703	>1000	4.6	11 11			
1116	19.3	7.72	2683	>1001)	6.9	ez l			
				*					
Did well dev	water?	Yes (No)	Gallons actuall	y evacuated:	6.9			
Sampling Da	ate: 9- 27	1-10	Sampling Time	e: 1120	Depth to Wate	r: 12, 72			
Sample I.D.:	: Mu-	-5		Laboratory:	Kiff CalScience				
Analyzed fo	r: (PH-G)	(BTE)	MTBB (TPH-D)	Oxygenates (5)	Other:				
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D. ((if applicable):				
Analyzed for	r: TPH-G	BTEX			Other:				
O.O. (if req'o	d): Pr	e-purge:	AND AND AND THE REAL PROPERTY AND	mg/ _L Po	ost-purge:	mg/L			
O.R.P. (if red	g'd): Pr	e-purge:		mV Po	ost-purge:	mV			

W _ L MONITORING DATA SHI

Project #:	1009	22 -	FSI	Client: \$	TELLAR C	BAY CENTER			
Sampler:		F >	,	Date:	7 - 22 - 1				
Well I.D.:	MW-	· · · · · · · · · · · · · · · · · · ·		Well Diameter	:: ② 3 4	6 8			
Total Well	Depth (TI)): 2	23.07	Depth to Wate		.98			
Depth to Fr	ree Produc			Thickness of Free Product (feet):					
Referenced	l to:	PVC	Grade	D.O. Meter (if	`req'd):	YSI HACH			
DTW with	80% Rech	arge [(H	leight of Water	Column x 0.20) + DTW]: 1	0.19			
	Bailer Disposable B Positive Air I Electric Subn Gals.) X	Displaceme mersible	ent Extrac Other	Well Diamete	Other Other Multiplier Well 0.04 4" 0.16 6"	Disposable Bailer Extraction Port Dedicated Tubing			
1 Case Volume		ified Volum		11 7"	0.37 Other	2			
Time	Temp	pН	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations			
1250	64.4	10.94	1724	75	. 2.5				
1255	64.2	11.22	1721	138	5.0				
(300	63.7	11.26	1715	(77	7.5				
				÷					
Did well de	water?	Yes (No	Gallons actuall	y evacuated:	7.5			
Sampling D	ate: 9-2:	2-10	Sampling Time	2: [319	Depth to Wate	r: %.0%			
Sample I.D.	.: M	W-6		Laboratory:	Kiff CalScience	Other C#T			
Analyzed fo	or: (PH-G)	(BTEX)	MTBB (TPH-D)	Oxygenates (5)	Other:				
EB I.D. (if a	applicable)		@ Time	Duplicate I.D.	(if applicable):				
Analyzed fo			MTBE TPH-D	Oxygenates (5)	Other:				
D.O. (if req'	'd): Pr	e-purge:	polygoneening (1994) de de eeu een gewegen een de eelde de 1994 van de de eeu de eelde begeen de	mg/L P	ost-purge:	^{nrg} /L			
O.R.P. (if re	eg'd): Pr	e-purge:		mV P	ost-purge:	mV			

W L MONITORING DATA SHI

Project #: /00922 - FS 1	Client: STELLAR C APTS.					
Sampler: 10	Date: 9 - 22 - 10					
Well I.D.: Mu-t	Well Diameter: 2 3 4 6 8 3/4					
Total Well Depth (TD): 19.88	Depth to Water (DTW): 10, 59					
Depth to Free Product:	Thickness of Free Product (feet):					
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH					
DTW with 80% Recharge [(Height of Wa	nter Column x 0.20) + DTW]: \2.46					
Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Other	Waterra Sampling Method: Bailer Peristaltic Disposable Bailer xtraction Pump Extraction Port Dedicated Tubing Other:					
$\frac{CO \cdot C}{ Case \ Volume} = \frac{CO \cdot C}{ Case \ Volume} = \frac{CO \cdot C}{ Calculated}$	Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65 2" 0.16 6" 1.47 3" 0.37 Other radius ² * 0.163					
Temp Cond. Time (°F or pH (mS or as	Turbidity (NTUs) Gals. Removed Observations					
Heavy sheen During o	purge start: 504 1364					
No parameters taken	End: 1310					
purged nell for 6 m	urs					
· V	*					
mable to take DTW	During parge 3/4" well					
Did well dewater? Yes No	Gallons actually evacuated: O. C					
Sampling Date: 9-22-10 Sampling T	ime: 1316 Depth to Water: 10,83					
Sample I.D.: Mw-Z	Laboratory: Kiff CalScience Other C#T					
Analyzed for: (PH-G) (BTEX) (MTBB) (TPH-I	Oxygenates (5) Other:					
EB I.D. (if applicable):	Duplicate I.D. (if applicable):					
Analyzed for: TPH-G BTEX MTBE TPH-G	D Oxygenates (5) Other:					
D.O. (if req'd): Pre-purge:	mg/L Post-purge: mg/L					
O.R.P. (if reg'd): Pre-purge:	mV Post-purge mV					

W L MONITORING DATA SHI.

Project #:	1009	22 -	FSI	Client:	STE	LLAI	(@	BAY CE APTS.	NTER
Sampler:	F	>		Date:	9.	- 23	- 10		
Well I.D.:	MW	- 8	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Well Diam	eter: 2	2 3	4	6 8 3	4)
Total Well	Depth (TI	D):		Depth to Water (DTW): 9.89					
Depth to F	ree Produc	t: 9	1.75	Thickness of Free Product (feet): 0.14					
Referenced	l to:	PVC	> Grade	D.O. Meter (if req'd): YSI HACH					
DTW with	80% Rech	arge [(]	Height of Water	Column x 0	0.20) +	DTW]:			
Purge Method: (1 Case Volume	Bailer Disposable B Positive Air I Electric Subr Gals.) X Speci	Displacem	eent Extrac Other	Gals. Well D	iameter M 0 0	Aultiplier .04 .16	Other: Well Diam 4" 6" Other		Bailer Port Tubing
Time	Temp	рН	Cond. (mS oras)	Turbidity (NTUs)	- 1	ıls. Rem	oved	Observat	ions
11152	BEGI	P-1	PURUS @	4.50	ML/	MIN		OD	OR
1108	PUL	ઉ E	ENDER	711111111111111111111111111111111111111					
				ż					
Did well de	water?	Yes ((1)	Gallons actı	ıally ev	/acuate	<u> </u>	***************************************	
Sampling D	ate: 9- 23	3-10	Sampling Time	: 1115	De	pth to V	Vater:	THICK	(CoD
Sample I.D.	: Mh	1-8		Laboratory:	Kiff	CalSo	cience	Other C	¢T_
Analyzed fo	r: (PH-G)	(BTE)	MTBB (TPH-D)	Oxygenates (5	5) Oth	er:	**************************************		**************************************
EB I.D. (if a	ipplicable)		@ Time	Duplicate I.	D. (if a	pplicab	le):	**************************************	
analyzed fo	r: TPH-G	BTEX		Oxygenates (5					
O.O. (if req'	d): Pre	e-purge:	e de la constante constante de la constante de	mg/L	Post-p	ourge:		ANNE ANNE AND ELECTRICAL STATE OF THE STATE	mg/L
).R.P. (if re	q'd): Pre	e-purge:		mV	Post-p	ourge:	· •	est flore in the second section of the second continuency of the second continuency of the second continuency	mV

W. L MONITORING DATA SH

		. **	I PE MONIT	ORIN	GUALA					
Project #:	1009	22 -	FSI	Client	: S 7	TEL	LAR	e	BAY	CENTER
Sampler:	Je	2		Date:	0	7 -	22.	- 15		
Well I.D.:	MW	- 9		Well I	Diameter	r: 2	3	4	6 8	7/4
Total Well	Depth (TI)): [9	1.68	Depth	to Wate	r (DT	`W):	9	.75	
Depth to Fr	ee Produc	t:		Thickness of Free Product (feet):						
Referenced	to:	(PVC)	Grade	D.O. N	Meter (if	req'd):		YSI	НАСН
DTW with	80% Rech	Height of Water	Colum	n x 0.20) + D'	TW]:		1.73		
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displaceme		Waterra Peristaltic etion Pump				Other:	Ext Dedi	Bailer posable Bailer praction Port practicated Tubing Tubing
A			-	1	Well Diamete	er <u>Mult</u> 0.04		Well Di 4"		ultiplier 65
	Gals.) X	3	= 0.6	_ Gals.	2"	0.16		6"	ł.	47
1 Case Volume	Speci	ified Volum	nes Calculated Vo	olume	3"	0.37		Other	ra	dius ² * 0.163
Time	Temp	pН	Cond. (mS or us)	ı	bidity TUs)	Gals	. Remo	ved	Ob	servations
1334	(6.0	H.F	2338	6	-(0:	2		· · · · · · · · · · · · · · · · · · ·	
1336	16-0	911	2280	58	3	0.	4		59494-A4AAAAA	(TANO)
(338	16-3	9.34	2277	57	7	0,1	<u> </u>			
					ż					
Did well dev	water?	Yes (No	Gallon	s actuall	y eva	cuated	•	0.6	
Sampling Da	ate: 9-2 7	- 10	Sampling Time	e: 13°	t5	Dept	h to W	ater:	9.91	d
Sample I.D.:	P-WM:			Labora	tory:	Kiff	CalSci	ence	Other	CET
Analyzed for	r: (PH-G	(BTEX)	MTBB (TPH-D)	Oxygena	ates (5)	Other:				ii
EB I.D. (if a	pplicable)	•	@ Time	Duplica	ate I.D. ((if app	olicabl	e):		
Analyzed for	r: TPH-G	BTEX	MTBE TPH-D	Oxygena	ates (5)	Other:				
O.O. (if req'o	d): Pr	e-purge:	State of the state	mg/ _L	Po	ost-pui	rge:			กาย

mV

Post-purge:

O.R.P. (if req'd):

Pre-purge:

W L MONITORING DATA SHI

r			JE INOTHE					
Project #:	1009	22 -	FSI	Client:	S:	TELLA	(@	BAY CENTER APTS.
Sampler:	5			Date:		7 - 23		
Well I.D.:	MW-	- (0	·	Well D)iamete	r: 2 3	4	6 8 3/4
Total Well	Depth (TD)): <u> </u>	THE REAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY	Depth	to Wate	er (DTW):	8	\$.82.
Depth to Fr	ee Produc	t: 8	.76	Thickn	less of F	Free Produc	t (feet): 0.08
Referenced	to:	PVC	• Grade	D.O. M	leter (if	req'd):		YSI HACH
DTW with	80% Rech	arge [(F	Height of Water	· Columi	n x 0.20) + DTW]:	622	
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Bailer Displaceme		Waterra Peristaltic		Sampling M		Bailer Disposable Bailer Extraction Port Dedicated Tubing
(Case Volume	Gals.) XSpeci	fied Volun	e Calculated Vo	_ Gals.	Well Diamet 1" 2" 3"	er Multiplier 0.04 0.16 0.37	Well Dia 4" 6" Other	<u>Multiplier</u> 0.65 1.47 radius ² * 0.163
Time	Temp	pН	Cond. (mS or uS)	1	oidity (Us)	Gals. Rem	oved	Observations
1129	STAR	-T	PURGE	e	460	mL/MI		odor
1135	E-0	P	1205					
		:			¥			
Did well dev	water?	Yes (No	Gallons	actuall	y evacuate	d: 2	2.4 _
Sampling Da	ate: 9- 23	- 10	Sampling Time	e: 4	. 2	Depth to V	*****	26 H
Sample I.D.:	: Mr	v-10		Laborat	ory:	Kiff CalSo	cience	Other C#T
Analyzed fo	r: (PH-G)	BTEX	MTBB (TPH-D)	Oxygena	tes (5)	Other:		
EB I.D. (if a	pplicable):		@ Time	Duplica	te I.D.	(if applicab	le):	
Analyzed for	r: TPH-G	BTEX	· · · · · · · · · · · · · · · · · · ·	Oxygena		Other:		
D.O. (if req'o	d): Pre	e-purge:	Managari Angara (Managari ang managari ang pengungan kalabanan ng papa andaré apanda	mg/L	P	ost-purge:		mg/L
D.R.P. (if red	q'd): Pre	e-purge:		mV	P.	ost-purge:		mV

W L MONITORING DATA SHI

Duningt #	1					BAY CENTER			
Project #:	1009	22 -	FS 1	Client: \$	TELLAR C	APTS.			
Sampler:	ها	NEWWANT - Townson		Date:	9 - 22 - 1	0			
Well I.D.:	MW	- 11		Well Diameter: 2 3 4 6 8 3/4					
Total Well	Depth (TI	D): 10	7.75	Depth to Water (DTW): [8.24					
Depth to Fi	ree Produc	t:		Thickness of Free Product (feet):					
Referenced	to:	PVC	• Grade	D.O. Meter (i	f req'd):	YSI HACH			
DTW with	80% Rech	arge [(F	Height of Water	Column x 0.20)) + DTW]:	17.14			
Purge Method:	Bailer Disposable E Positive Air Electric Subi	Displaceme	ent Extrac Other	Waterra Peristaltic ction Pump	Sampling Method	Disposable Bailer Extraction Port Dedicated Tubing			
O2 (Gals.) XSpec	3 ified Volum	$\frac{1}{10000000000000000000000000000000000$	Gals. Well Diame 1" 2" 3"	ter Multiplier Well 0.04 4" 0.16 6" 0.37 Othe	Diameter Multiplier 0.65 1.47 r radius² * 0.163			
Time	Temp	pН	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations			
1427	15.6	8.07	2761	>(000	0.7				
1429	15.7	7.63	27(2	7 (000	1 3 A 0.4	:			
1431	156	7.64	2711	71000	0.6				
				¥					
Did well de	water?	Yes (No	Gallons actual	ly evacuated:	0.6			
Sampling D	ate: 9- 2 2	- 10	Sampling Time	e: 1435	Depth to Wate	r: 10.72			
Sample I.D.	: MW-II			Laboratory:	Kiff CalScience	Other C#T			
Analyzed fo	r: (PH-G)	BTEX	MTBB (TPH-D)	Oxygenates (5)	Other:	44.4			
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'o	d): Pr	e-purge:	entrante egit i julijaki da umanin kaj plusko-Braken krista uma pre en julija predali	mg/L P	ost-purge:	mg/L			
D.R.P. (if re	q'd): Pr	e-purge:	**************************************	mV P	ost-purge:	mV			

		Y	V JUINIOIAII	ORING DATA	A SHI .				
Project #:	1009	22-	FSI	Client: \$	TELLAR C	BAY CENTER - APTS.			
Sampler:	E			Date:	7 - 22 - 1				
Well I.D.:	MN	- 12		Well Diameter	:: 2 3 4	6 8 3/4)			
Total Well	Depth (TI	D): (8,90	Depth to Water (DTW): 8.87					
Depth to Fr	ee Produc	t:		Thickness of Free Product (feet):					
Referenced	to:	PVC	• Grade	D.O. Meter (if	· · · · · · · · · · · · · · · · · · ·	YSI HACH			
DTW with	80% Rech	arge [(H	Height of Water	Column x 0.20	·	(0,89			
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme		Waterra Peristaltic etion Pump	Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing TOMAN			
O.2 ((3 ified Volum	nes Calculated Vo	Gals. Well Diameter 1" 2" 3"	er <u>Multiplier</u> <u>Well</u> 0.04 4" 0.16 6" 0.37 Othe	Diameter Multiplier 0.65 1.47 r radius² * 0.163			
Time	Temp (°F or	pН	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations			
1419	60.0	7.85	1569	5	0.2				
1425	59.6	7.61	1523	2-	0.4				
1431	55H	7.55	1495	3	0.6				
				æ					
					·				
Did well dev	water?	Yes (NO	Gallons actuall	y evacuated:	6.6			
Sampling Da	ate: 9-21	L-10	Sampling Time	1435	Depth to Wate	r:8,90			
Sample I.D.:	: Mv	Y- 12		Laboratory:	Kiff CalScience	Other C#T			
Analyzed fo	r: (PH-G)	(BTEX)	MTBB (TPH-D)	Oxygenates (5)	Other:				
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D. ((if applicable):				
Analyzed for	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:				
D.O. (if req'o	d): Pr	e-purge:	AMERICAN POLITICA DE CONTROL DE SANCIO CONTROL DE CONTROL DE CONTROL DE CONTROL DE CONTROL DE CONTROL DE CONTR	mg/L Po	ost-purge:	mg/r			

mV

Post-purge:

mV

O.R.P. (if req'd):

Pre-purge:

W_L MONITORING DATA SHI_.

			<u> </u>			\$			
Project #:	1009	22 -	FSI	Client:	5	TELLA	RC	BAY	CENTER
Sampler:	=	5		Date:	C	7 - 23			
Well I.D.:	Mv	v- 13		Well Dia	ameter	r: 2 3	4	6 8	(3/4)
Total Well	Depth (TI)):		Depth to	Wate	er (DTW)		81.0	**************************************
Depth to Fi	ree Produc	t:	7 .40	Thickne	ss of F	ree Prod	uct (fee	t): 0	.78
Referenced	l to:	PVC	> Grade	D.O. Me	ter (if	req'd):		YSI	HACH
DTW with	80% Rech	arge [(I	Height of Water	Column	x 0.20) + DTW	1:		
Purge Method: (1 Case Volume	Bailer Disposable E Positive Air I Electric Subr Gals.) X Speci	Displacem	Other	_ Gals.	ell Diametell 1" 2" 3"	Sampling er Multiplier 0.04 0.16 0.37	Method: Other: Well Di 4" 6" Other	Dispos Extra Dedica ameter Mult 0.65 1.47	<u>ciplier</u>
Time	Temp	pН	Cond. (mS or uS)	Turbic (NTU	Js)	Gals. Re	moved	Obse	ervations
1242	STAR		PURCE		<u> 40</u>	o ml	MIN	·	
1642	END	~	UPGS						
								Planting	
•				بّ -	r				
Did well de	water?	Yes (No	Gallons a	ıctuall	y evacuat	ted:	2,4	L
Sampling D	ate: 9- 23	3 - 10	Sampling Time	e: 13 4	5	Depth to	Water:	58	rt
Sample I.D.	: MW	-13		Laborato	ry:	Kiff Cal	Science	Other	C¢T
Analyzed fo	r: (PH-G)	BTEX	(MTBB) (TPH-D)	Oxygenate	s (5)	Other:			
EB I.D. (if a	pplicable)		@ Time	Duplicate	: I.D. (if applica	able):		
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenate:		Other:		WANT OF THE PARTY	***************************************
).O. (if req'	d): Pro	e-purge:		mg/L	Po	ost-purge:		MARIPORTATION AND AND AND AND AND AND AND AND AND AN	mg/L
).R.P. (if re	a'd): Pre	e-purge:		mV		ost-nurge:		Membrinepapaulomme de 1946 (Africano	na V

		M	L MONT	OKIN	G DATA	1 SHI	-	
Project #:	10092	-2 - FS	(Client	: 57	TELLA	IR C	BAY CENTER APTS.
Sampler:	f	<u> </u>		Date:	c	7 - 23		
Well I.D.:	MW	- (4		Well I	Diameter	:: 2 3	3 4	6 8 34
Total Well	Depth (TD)	•	· ·	Depth	to Wate	r (DTW)):	.62
Depth to Fi	ree Product:	8.54	5	Thick	ness of F	ree Prod	uct (fee	t): 0.08
Referenced	l to:	PVC	Grade		Meter (if	~ ~~~		YSI HACH
DTW with	80% Recha	rge [(Heig	ght of Water	Colum	n x 0.20) + DTW	7]:	
Purge Method:	Bailer Disposable Bai Positive Air Di Electric Subme	splacement	Extrac Other	Waterra Peristaltic ction Pump		Sampling	g Method: Other:	Bailer Disposable Bailer Extraction Port Dedicated Tubing
((1 Case Volume	Gals.) XSpecific	ed Volumes	= Calculated Vo	_ Gals. olume	Well Diamete 1" 2" 3"	0.04 0.16 0.37	Well Di 4" 6" Other	ameter Multiplier 0.65 1.47 radius ² * 0.163
Time	Temp	рН	Cond. (mS or us)	į.	bidity TUs)	Gals. Re	emoved	Observations
(0 11	STAR	1	PURGE	@	400	mL/m	w .	
1017	576	9	PVPGE	<u> </u>				
					¥			
Did well de	water? Y	es No	>	Gallon	s actuall	y evacua	ted:	2.4 L
Sampling D	ate: 9- 23	- 10 Sai	npling Time	e: [o	20	Depth to	Water:	8.70
Sample I.D.	: Mv	v-14		Labora	tory:	Kiff Ca	IScience	Other C#T
Analyzed fo	r: (PH-G)	STEX (MT	BB (TPH-D)	Oxygena	ates (5)	Other:		
EB I.D. (if a	pplicable):		(a)	Duplica	ate I.D. (if applic	able):	
analyzed fo	r: TPH-G I	BTEX MT	BE TPH-D	Oxygena		Other:		
O.O. (if req'	d): Pre-	purge:	and the state of t	^{mg} /L	Po	ost-purge:		mg/
).R.P. (if re	q'd): Pre-	purge:		mV	Po	ost-purge:		m\

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Disposable Bailer Positive Air Displacement Electric Submersible Temp (Gals.) X Temp (PF or O pH (mS or S)) In 44 ENT PURISE Calculated Volume Cond. Turbidity (NTUs) Gals. Removed Observations Observatio	,			<u> </u>				. T			
Sampler: Fy Well I.D.: Mou-15 Well Diameter: 2 3 4 6 8 Well Diameter: 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Project #:	1009	22 -	FSI	Client	: S-	TELL	ARC	BAY CENTER - APTS.		
Depth to Water (DTW): 9,45 Depth to Free Product (feet): 5.63 Referenced to: PVC Grade D.O. Meter (if req'd): YSI HACH DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Positive Air Displacement Electric Submersible Temp Cond. Turbidity (MS or Substitute Volume) Temp Time Temp Time Temp Time Temp Time Temp Cond. Turbidity (Port) PH (MS or Substitute Volume) Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Time Temp Time Temp Cond. Turbidity (NTUs) Temp Time Temp Time Temp Temp Time Temp Temp Temp Temp Temp Temp Temp Te	Sampler:	5			Date:	(_				
Thickness of Free Product (feet): 0.63	Well I.D.:	MW	- 15		Well Diameter: 2 3 4 6 8 (3/4)						
Thickness of Free Product (feet): 0.63	Total Well	Depth (TI	D):		Depth	to Wate	er (DTW	/): 9	45		
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Temp Time Temp Temp Cond. ("For O" pH (mS or OS) ("For O" pH (mS or OS) To deliver a physical ph	Depth to Fi	ree Produc	t: 9,	42							
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Disposable Bailer Extraction Fump Other Other Waterra Positive Air Displacement Electric Submersible Extraction Fump Other Other Waterra Waterra Waterra Waterra Sampling Method: Extraction Port Dedicated Tubing Note Tubing	Referenced	l to:	PVC	> Grade	D.O. N	Aeter (if	freq'd):		YSI HACH		
Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible Disposable Bailer Positive Air Displacement Electric Submersible Extraction Pump Other Disposable Bailer Extraction Port Dedicated Tubing New Tubing	DTW with	80% Rech	arge [(I	Height of Wate				 W1:			
Temp (°F or O pH (mS or O) (NTUs) Gals. Removed Observations 10.38 BEGIN PURGE UNDER HOLD MIN 10.44 END PURGE UNDER HOLD MIN 2.44 END PURGE UNDER HOLD MIN Sampling Date: 9-23-10 Sampling Time: (050 Depth to Water: 9.53 Sample I.D.: Laboratory: Kiff CalScience Other St. Time BI.D. (if applicable): Time Duplicate I.D. (if applicable): Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: 2.44 Oxygenates (5) Other: 2.55 Oxygenates (5) Other: 3.65 Oxygenates (5) Other: 3.66 Oxygenates (5) Other: 3.76 Oxygenates (5) Other: 3.77 Oxygenates (5) Other: 3.78 Oxygenates (5) Oxygenates (5) Other: 3.78 Oxygenates (5)	Purge Method:	Disposable B Positive Air I Electric Subn	Displacem		Peristalitie	Well Diamet 1" 2"	ter <u>Multipl</u> 0.04 0.16	Qther: Well I 4" 6"	Disposable Bailer Extraction Port Dedicated Tubing NEW TUBIC Diameter Multiplier 0.65 1.47		
Time (°F or O pH (mS or D) (NTUs) Gals. Removed Observations O 38 BE GIN PURGE Gallons actually evacuated: 2.4 L O 2	I Case Volume	Speci	fied Volur	nes Calculated V	olume	3"	0.37	Other	radius ² * 0.163		
Did well dewater? Yes No Gallons actually evacuated: 2.4 L Sampling Date: 9-23-10 Sampling Time: (050 Depth to Water: 9.53 Sample I.D.: Laboratory: Kiff CalScience Other C+7 Analyzed for: (PH-G) (FTE) (MTB) (TPH-D) Oxygenates (5) Other: BI.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: Post-purge: D.D. P. C. (Cont. 1) Pre-purge: Post-purge: D.D. P. C. (Cont. 1) Pre-purge: Post-purge: D.D. P. C. (Cont. 1) Pre-purge: Post-purge: Post		(°F or 🗘		(mS or uS)	(N	ΓUs)	-	1			
Oid well dewater? Yes No Gallons actually evacuated: 2.4 L Sampling Date: 9-23-10 Sampling Time: (050 Depth to Water: 9.53 Sample I.D.: Laboratory: Kiff CalScience Other C+7 Analyzed for: PH-G BTE MTB TPH-D Oxygenates (5) Other: BB I.D. (if applicable): Duplicate I.D. (if applicable): Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: O.O. (if req'd): Pre-purge: Post-purge:	IA N.S.	be c	164	FO FGE	-	<u> 46</u>	OML	-/MIN	2		
Campling Date: 9-23-10 Sampling Time: (050 Depth to Water: 9.53 Cample I.D.: Analyzed for: PH-G &TE MTB TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:	10 44	ENO	9	PURGE							
Campling Date: 9-23-10 Sampling Time: (050 Depth to Water: 9.53 Cample I.D.: Analyzed for: PH-G &TE MTB TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Canalyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:											
Sampling Date: 9-23-10 Sampling Time: 1050 Depth to Water: 9,53 Sample I.D.: Laboratory: Kiff CalScience Other C+T Analyzed for: PH-G BTE MTBB TPH-D Oxygenates (5) Other: BB 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: Post-purge: Oxygenates (7) Post-purge: Oxygenates (8) Post-purge: Oxygenates (8) Post-purge: Oxygenates (9)						<i>*</i>					
Sampling Date: 9-23-10 Sampling Time: 1050 Depth to Water: 9,53 Sample I.D.: Laboratory: Kiff CalScience Other C+T Analyzed for: PH-G BTE MTBB TPH-D Oxygenates (5) Other: BB 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: Post-purge: Oxygenates (7) Post-purge: Oxygenates (8) Post-purge: Oxygenates (8) Post-purge: Oxygenates (9)											
Eample I.D.: Laboratory: Kiff CalScience Other C*7 Analyzed for: PH-G TEX MTB TPH-D Oxygenates (5) Other: EB I.D. (if applicable): Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: O.O. (if req'd): Pre-purge: D.D. P. Ciff and Ither the company of	Did well de	water?	Yes	No	Gallon	s actuall	ly evacu	ated:	2-46		
Analyzed for: (PH-G) (BTE) (MTBL) (TPH-D) Oxygenates (5) Other: EB I.D. (if applicable): Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: O.O. (if req'd): Pre-purge: D.D. (if applicable): Post-purge: O.D. (if req'd): Pre-purge: O.D.	Sampling D	ate: 9- 23	3 - 10	Sampling Tim	ie: (0	20	Depth	to Wate	r: 9,53		
EB I.D. (if applicable): Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: D.O. (if req'd): Pre-purge: D.D. D. D. (if applicable): Property of the purge of the pu	Sample I.D.	· ~v	V-15		Labora	tory:	Kiff (CalScience	Other C#T		
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: O.O. (if req'd): Pre-purge: O.D. D. D. (if applicable): Duplicate I.D. (if applicable): Duplicate I.D. (if applicable): Post-purge: O.D. D. D. (if applicable): O.D. D. D. (if applicable): Duplicate I.D. (if applicable): O.D. D. D. (if applicable): O.D. D. D. (if applicable): O.D. D. D. (if applicable): O.D. D. (if applicable): O.D. D.	Analyzed fo	r: (PH-G)	(BTEX)	MTBB (TPH-D)	Oxygena	ates (5)	Other:				
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: O.O. (if req'd): Pre-purge: Market MTBE TPH-D Oxygenates (5) Other: Post-purge: Market MTBE TPH-D Oxygenates (5) Other: Market MTBE TPH-D Oxygenates (5) Other:	EB I.D. (if a	pplicable):			Duplica	ate I.D.	(if appli	cable):			
	Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	······································						
O.R.P. (if req'd): Pre-purge: mV Post-purge: mV	D.O. (if req'	d): Pre	e-purge:	ndelik kilon da	mg/ _L	P	ost-purge	ż:	nig/L		
	D.R.P. (if re	q'd): Pre	e-purge:		mV	P	ost-purge	: :	mV		

		V	L MONIT	TORING DAT	A SHI				
Project #:	1009	22 -	FS I	Client: \$	TELLAR C	BAY CENTER			
Sampler:	5			Date:	9 - 23 - 10				
Well I.D.:	MW.	. 16		Well Diameter: 2 3 4 6 8 36					
Total Well	Depth (TI	D):	19.58	Depth to Wate	er (DTW): 9	.40			
Depth to Fi	ree Produc	t:	ν.	Thickness of l	Free Product (fee	t):			
Referenced	to:	(PVC)	Grade	D.O. Meter (i	freq'd):	YSI HACH			
Purge Method:	Bailer Disposable E Positive Air Electric Subi	Bailer Displaceme	ent Extrac Other	Waterra Peristaltic ction Pump Well Diame 1" 2"	Sampling Method: Qther:	Bailer Disposable Bailer Extraction Port Dedicated Tubing TOBIA iameter Multiplier 0.65 1.47			
I Case Volume	,	ified Volum		 11 2"	0.37 Other	radius ² * 0.163			
Time	Temp (°F or 🕥	р́Н	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations			
329	61.3	10.26	302125	12	0.3	LIGHT			
832	66.4	10,28	3538	7	0.6	BROWN			
836	66.3	(0,28	3606	6	0.9	714			
				*					
Did well dev	water?	Yes (No	Gallons actual	y evacuated:	0.9			
Sampling Da	ate: 9 - 23	3 - 10	Sampling Time	e: 84 5	Depth to Water:	9,65			
Sample I.D.:	: Mw	- (b		Laboratory:	Kiff CalScience	Other C#T			
Analyzed fo	r: (PH-G)	BTEX (MTBB (TPH-D)	Oxygenates (5)	Other:				
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D. (if applicable):					
Analyzed for	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	·			

mV

Post-purge:

Post-purge:

D.O. (if req'd):

O.R.P. (if req'd):

Pre-purge:

Pre-purge:

mg/L

mV

		M.	L MONIT	CORING DATA	A SHI	
Project #:	1009	22 - 1	FS (Client: 5	TELLAR C	BAY CENTER - APTS
Sampler:	8	F		-	7 - 22 - 1	
Well I.D.:	MW.			Well Diameter	r: 2 3 4	6 8 (3/4)
Total Well	Depth (TI	D): 19	.53	Depth to Wate	er (DTW):	9.15
Depth to F	ree Produc			Thickness of I	Free Product (fe	et):
Referenced	l to:	PVC	Grade	D.O. Meter (if	reg'd):	YSI HACH
DTW with	80% Rech	arge [(H	eight of Water	Column x 0.20		(1.22
Purge Method:	Bailer Positive Air Electric Subi	Displacemer	nt Extrac Other	Waterra Peristaltic ction Pump	Sampling Method Other	Bailer Disposable Barler Extraction Port Dedicated Tubing
***************************************				Well Diamet		Diameter Multiplier
0 (1 Case Volume	Gals.) XSpec	3 ified Volume	es Calculated Vo	7"	0.04 4" 0.16 6" 0.37 Other	0.65 1.47 radius ² * 0.163
Time	Temp	рН	Cond. (mS orus)	Turbidity (NTUs)	Gals. Removed	Observations
1344	62.6	8.66	1345	22	0.2	
1346	62.5	4.38	1384	6	0.4	
1348	62.7	8.29	(397	4	0.6	
Did well de	water?	Yes (1	VO)	Gallons actuall	y evacuated:	0.6
Sampling D	ate: 9. 2	2-10	Sampling Time	: 1355	Depth to Wate	r: 9.25 (POST
Sample I.D.	: ^	w-17		Laboratory:	Kiff CalScience	Other C#T
Analyzed fo	r: (PH-G)	BTEX (MTBB (TPH-D)	Oxygenates (5)	Other:	
EB I.D. (if a	ipplicable)		@ Time	Duplicate I.D.	(if applicable):	
Analyzed fo	r: TPH-G	BTEX N	MTBE TPH-D	Oxygenates (5)	Other:	
D.O. (if reg'	d): Pr	e-nurge:	NACON BANCONICO MENTE LOS CONTRACTOS DE SENTENCIA DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE C	mg/, p	ost-nurge:	mg/

mV

Post-purge:

O.R.P. (if req'd):

Pre-purge:

W L MONITORING DATA SHI.

Project #: 100922 - FS1	Client: STELLAR C APTS.
Sampler: 5	Date: 9 - 23 - 10
Well I.D.: MW- 18	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 19.60	Depth to Water (DTW): 8.28
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Wate	er Column x 0.20) + DTW]: (0.54

Purge Method:

Bailer

Disposable Bailer

Positive Air Displacement

Electric Submersible

Waterra Peristaltie

Extraction Pump Other

Sampling Method:

Bailer

Disposable Bailer Extraction Port

Dedicated Tubing

Other:

NEW TUBING

	Well Diameter	Multiplier	Well Diameter	Multiplier
	1"	0.04	4"	0.65
$Gals.) X \qquad = \qquad Gals.$	2"	0.16	6"	1.47
l Case Volume Specified Volumes Calculated Volume	3"	0.37	Other	radius ² * 0.163

Time	Temp	pН	Cond. (mS or uS)	1	oidity (Us)	Gals. Removed	Observations
903	65.0	7.95	7106	2-5	8	0-3	
904	59.6	7.25	7372	12	7	0.6	
968	59.5	7.13	7507	(6)		0.9	
					ÿ.		
* 301	FUR	OPO	R WHE	~	knp	LING	
Did well dev	water?	Yes (No	Gallons	actuall	ly evacuated:	0.9
Sampling Da	ate: 9-23	3 - 10	Sampling Time	e: 9 1	5	Depth to Wate	r: 8.84
Sample I.D.:	M	W-18	3	Laborat	ory:	Kiff CalScience	Other C#T
Analyzed for	r: (PH-G)	BTEX	MTBB (TPH-D)	Oxygena	tes (5)	Other:	
EB I.D. (if a	pplicable)		@ Time	Duplica	te I.D.	(if applicable):	
Analyzed for	T: TPH-G	BTEX	MTBE TPH-D	Oxygena	tes (5)	Other:	
D.O. (if req'o	i): Pro	e-purge:	And the contract of the state o	mg/L	P	'ost-purge:	mg/L
O.R.P. (if red	q'd): Pro	e-purge:		mV	Р	ost-purge:	mV

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

A HCL REACTED WITH SAMPLE, VOAS RINSED,

		V	L MONIT	ORING DAT	A SHI	
Project #:	1009	22 -	FS (Client: S	TELLAR C	BAY CENTER
Sampler:	F	•		į.	9 - 23 - 1	
Well I.D.:	MW	- 6		Well Diamete	er: 2 3 4	6 8
Total Well	Depth (TI	D): 4.	1.87	Depth to Wate	er (DTW):	18.11
Depth to Fi	ree Produc	t:		Thickness of 1	Free Product (fe	et):
Referenced	l to:	PVC	Grade	D.O. Meter (in		YSI HACH
DTW with	80% Rech	arge [(F	leight of Water	Column x 0.20)) + DTW]:	17.06
Purge Method:	Bailer Disposable E Positive Air Electric Subr	Displaceme	ent Extrac Other	Waterra Peristaltic ction Pump Well Diame	Sampling Method Other	Disposable Bailer Extraction Port Dedicated Tubing
5.6 (Case Volume	Gals.) XSpec	3 ified Volun			0.04 4" 0.16 6" 0.37 Othe	0.65 1.47
Time	Temp	pН	Cond. (mS oras)	Turbidity (NTUs)	Gals. Removed	Observations
945	61.5	₹.20	3383	323	5.6	34.10
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1320	62.2	8.13	3594	988	American State of the State of	
Did well de	water?	Yes	No	Gallons actual	ly evacuated:	9
Sampling D	ate: 9- 23	3 - 10	Sampling Time	e: 13 20	Depth to Wate	r: (0 (3
Sample I.D.	: / / / / / / / / / /	/=E		Laboratory:	Kiff CalScience	
Analyzed fo	r: (PH-G)	(BTEX	MTBB (TPH-D)	Oxygenates (5)	Other:	
EB I.D. (if a	pplicable)		@ Time	Duplicate I.D.	(if applicable):	***************************************
Analyzed fo	r: TPH-G	BTEX	MTBE TPH-D	Oxygenates (5)	Other:	
0.0. (if rea'	d). Pr	e-purge:		mg/	Ost-nurge:	mg/.

mV

Post-purge:

O.R.P. (if req'd):

Pre-purge:

			M LIMONII	OKIN	JUAIA	SHI				
Project #:	1009	22 -	FSI	Client	S 7	ELL	AR	C	BAY APTS	CENTER
Sampler:		Date:	9	- 2	-3 :	- 10				
Well I.D.:	2~	- 1		Well I)iameter:	2	3	4	6 8	(10)
Total Well	Depth (TD)):	Managara o ga a na ga a	Depth	to Water	(DTV	V):	9.	62	
Depth to Fr	ee Product	: «	9.50	Thickr	ness of Fi	ee Pro	duct	(feet)): 6,	(5
Referenced	to:	PVC	S Grade	D.O. N	Meter (if	req'd):		Y	'SI	НАСН
DTW with	80% Rech	arge [(Height of Water	Colum	n x 0.20)	+ DT	W]:			
Purge Method:	Bailer Disposable B Positive Air I Electric Subn	Displacen	7	Waterra Peristaltic	>	Sampl	ing Me	thod:	Ext Dedi	Bailer psable Bailer raction Port cated Tubing TUBING
((I Case Volume	Gals.) XSpeci	fied Volu	mes Calculated Vo	Gals.	Well Diameter 1" 2" 3"	Multip 0.04 0.16 0.37	lier	Well Dia 4" 6" Other	0.6 1.4	1
Time	Temp (°F or	pН	Cond. (mS or uS)	1	oidity FUs)	Gals.	Remo	ved	Obs	ervations
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1304	800	<u>Lu5</u>	きゃりをり							
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						-				
Did well dev	water?	Yes	W	Gallons	s actually	evacı	ıated	. #	2.46	224
Sampling D	ate: 9-23	- 10	Sampling Time	e: (3	O	Depth	to W	ater:	SP	H
Sample I.D.	: Ph	/ - (@		Labora	tory:	Kiff	CalSci	ence	Other	CŧT
Analyzed fo	r: (PH-G)	(BTEX	MTBB (TPH-D)	Oxygena	ites (5)	Other:				
EB I.D. (if a	pplicable):		@ Time	Duplicate I.D. (if applicable):						
Analyzed fo	r: TPH-G	ВТЕХ	МТВЕ ТРН-D	Oxygena	ites (5)	Other:	***************************************			***************************************

mV

Post-purge:

Post-purge:

mV

D.O. (if req'd):

O.R.P. (if req'd):

Pre-purge:

Pre-purge:

Chain of Custody Record

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APPENDIX C

Analytical Laboratory Report and Chain-of-Custody Record





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 222673 ANALYTICAL REPORT

Stellar Environmental Solutions

2198 6th Street

Berkeley, CA 94710

Project : 2007-65

Location : Bay Center Apts

Level : II

Sample ID	<u>Lab ID</u>
MW-11	222673-001
MW-9	222673-002
MW-4	222673-003
MW-5	222673-004
MW-7	222673-005
MW-12	222673-006
MW-17	222673-007
MW-6	222673-008
MW-3	222673-009
MW-13	222673-010
MW-E	222673-011
RW-1	222673-012
MW-10	222673-013
MW-8	222673-014
MW-15	222673-015
MW-14	222673-016
MW-18	222673-017
MW-16	222673-018

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.

Signature:

Project Manager

Date: <u>10/07/2010</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 222673

Client: Stellar Environmental Solutions

Project: 2007-65

Location: Bay Center Apts

Request Date: 09/23/10 Samples Received: 09/23/10

This data package contains sample and QC results for eighteen water samples, requested for the above referenced project on 09/23/10. The samples were received cold and intact.

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

High surrogate recovery was observed for bromofluorobenzene (FID) in the method blank for batch 167306; no target analytes were detected in the sample. High surrogate recovery was observed for bromofluorobenzene (PID) in the method blank for batch 167306; no target analytes were detected in the sample. MW-7 (lab \sharp 222673-005) and MW-18 (lab \sharp 222673-017) had pH greater than 2. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

MW-13 (lab # 222673-010) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Chain of Custody Record

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Chain of Custody Record

Laboratory C YT Address 2323 FFH 5T BEXILETEY, CA	Chain of (— Method of Shipment — — Shipment No. — — Airbill No. —		Lab Job no. 100922-F3 Date 9-23-10 Page 2 of 2	
Project Owner Site Address 6400 CHKISTIE AVE 8 EXCENT, CA Project Name 844 CENTER ABATM Project Number 2007 - 65	Cooler No	23 S S S S S S S S S S S S S S S S S S S	Analysis Required	Remarks
Field Sample Number Location/ Date Time	Sample Type/Size of Container Co			
MW-13 9-23-9345	W VOATAMBER	Hetrons 6 X x x	-{{{{}	
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Relinquished by: Signature Date Received 9-23-10 Signature Printed F- SRW0~UTO~U	Tat I and 9/	Pate Relinquished by: Signature	Date Received by: Signature	Date
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		Company	Company	

COOLER RECEIPT CHECKLIST



Login # Z Z Z 6 7 3 Date Received 9/23/10 Client SES Project BAY COM	Number of coolers Z
Date Opened 9/23/10 By (print) M. VILL & Orac (sign) Date Logged in By (print) (sign)	Maffle
1. Did cooler come with a shipping slip (airbill, etc) Shipping info	YES ASO
2A. Were custody seals present? YES (circle) on cooler How many Name 2B. Were custody seals intact upon arrival? 3. Were custody papers dry and intact when received? 4. Were custody papers filled out properly (ink, signed, etc)? 5. Is the project identifiable from custody papers? (If so fill out top 6. Indicate the packing in cooler: (if other, describe) Bubble Wrap Foam blocks	
Cloth material Cardboard Styrofoam 7. Temperature documentation:	☐ None ☐ Paper towels
Type of ice used:	Temp(°C)_ (.
☐ Samples Received on ice & cold without a temperature b	
☐ Samples received on ice directly from the field. Cooling p	
8. Were Method 5035 sampling containers present? If YES, what time were they transferred to freezer?	YES NO
9. Did all bottles arrive unbroken/unopened?	PES NO
10. Are samples in the appropriate containers for indicated tests?	TES NO
12. Do the sample labels agree with custody papers?	MES NO
13. Was sufficient amount of sample sent for tests requested?	ATES NO
14. Are the samples appropriately preserved?	MES NO N/A
15. Are bubbles > 6mm absent in VOA samples?	YES NO N/A
16. Was the client contacted concerning this sample delivery? If YES, Who was called? By	YES NO Date:
COMMENTS	Date:

SOP Volume: Client Services

Section:

1.1.2

Page:

1 of 1

Rev. 6 Number 1 of 3 Effective: 23 July 2008

Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc



Curtis & Tompkins Laboratories Analytical Report Bay Center Apts EPA 5030B Lab #: 222673 Location: Stellar Environmental Solutions Client: Prep: Project#: 2007-65 Matrix: Water Received: 09/23/10 Units: ug/L

Field ID: MW-11Batch#: 167306 Type: SAMPLE Sampled: 09/22/10 Lab ID: 222673-001 Analyzed: 09/27/10

Diln Fac: 1.000

Analyte	Result	RL	Analysis	
Gasoline C7-C12	1,300	50	EPA 8015B	
MTBE	ND	2.0	EPA 8021B	J
Benzene	330	0.50	EPA 8021B	ļ
Toluene	15	0.50	EPA 8021B	J
Ethylbenzene	9.2	0.50	EPA 8021B	J
m,p-Xylenes	14	0.50	EPA 8021B	
o-Xylene	3.3	0.50	EPA 8021B	

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	104	70-140	EPA 8015B	
Bromofluorobenzene (PID)	96	54-134	EPA 8021B	

Field ID: MW-9Batch#: 167306 Type: SAMPLE Sampled: 09/22/10 Lāb ID: 222673-002 09/27/10 Analyzed: Diln Fac: 1.000

Analyte	Result	RL	Analysis	
Gasoline C7-C12	170	50	EPA 8015B	
MTBE	ND	2.0	EPA 8021B	
Benzene	4.8	0.50	EPA 8021B	
Toluene	0.77	0.50	EPA 8021B	
Ethylbenzene	ND	0.50	EPA 8021B	
m,p-Xylenes	ND	0.50	EPA 8021B	
o-Xylene	ND	0.50	EPA 8021B	

Surrogate		%REC	Limits	Analysis	
Bromofluorobenzene	(FID) 9	99	70-140	EPA 8015B	
Bromofluorobenzene	(PID) 9	90	54-134	EPA 8021B	

Page 1 of 11

^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report Lab #: 222673 Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 Matrix: Water Received: 09/23/10 Units: ug/L

Field ID: MW-4Batch#: 167306 Type: SAMPLE Sampled: 09/22/10 Lāb ID: 222673-003 09/27/10 Analyzed:

Diln Fac: 1.000

Analyte	Result	RL	Analysis	
Gasoline C7-C12	71 Y	50	EPA 8015B	
MTBE	ND	2.0	EPA 8021B	
Benzene	ND	0.50	EPA 8021B	
Toluene	ND	0.50	EPA 8021B	
Ethylbenzene	ND	0.50	EPA 8021B	
m,p-Xylenes	ND	0.50	EPA 8021B	
o-Xylene	ND	0.50	EPA 8021B	

Surrogate		%REC	Limits	Analysis	
Bromofluorobenzene	(FID)	102	70-140	EPA 8015B	
Bromofluorobenzene	(PID)	93	54-134	EPA 8021B	

Field ID: 167306 MW-5Batch#: 09/22/10 09/27/10 Type: SAMPLE Sampled: 222673-004 Lab ID: Analyzed: Diln Fac: 1.000

Analyte Result RLAnalysis Gasoline C7-C12 ND 50 EPA 8015B MTBE EPA 8021B 2.0 2.0 Benzene 0.58 0.50 EPA 8021B 0.50 Toluene ND EPA 8021B Ethylbenzene ND 0.50 EPA 8021B m,p-Xylenes o-Xylene 0.50 EPA 8021B ND 0.50 EPA 8021B ND

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	87	70-140	EPA 8015B	
Bromofluorobenzene (PID)	81	54-134	EPA 8021B	

ND= Not Detected

Page 2 of 11

^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report Lab #: 222673 Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 Matrix: Water Received: 09/23/10 Units: ug/L

Field ID: MW-7Batch#: 167368 Type: SAMPLE Sampled: 09/22/10 Lāb ID: 09/28/10 222673-005 Analyzed:

Diln Fac: 10.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,300	500	EPA 8015B
MTBE	ND	20	EPA 8021B
Benzene	580	5.0	EPA 8021B
Toluene	54	5.0	EPA 8021B
Ethylbenzene	35	5.0	EPA 8021B
m,p-Xylenes	130	5.0	EPA 8021B
o-Xylene	33	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	90	70-140	EPA 8015B	
Bromofluorobenzene (PID)	84	54-134	EPA 8021B	

Field ID: MW-12Batch#: 167368 09/22/10 09/28/10 Type: SAMPLE Sampled: 222673-006 Lab ID: Analyzed: Diln Fac: 50.00

Analyte Result Analysis 4,900 2,500 Gasoline C7-C12 EPA 8015B MTBE 100 EPA 8021B ND Benzene 5,900 25 EPA 8021B Toluene 97 25 EPA 8021B 47 Ethylbenzene 25 EPA 8021B m,p-Xylenes o-Xylene 73 25 EPA 8021B ND25 EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (1	FID) 103	70-140	EPA 8015B	
Bromofluorobenzene (1	PID) 97	54-134	EPA 8021B	

ND= Not Detected

Page 3 of 11

^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report 222673 Lab #: Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 09/23/10 Matrix: Water Received: Units: ug/L

Field ID: MW-17Batch#: 167368 09/22/10 09/28/10 Type: SAMPLE Sampled: 222673-007 Lab ID: Analyzed:

Diln Fac: 20.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	3,500	1,000	EPA 8015B
MTBE	ND	40	EPA 8021B
Benzene	1,400	10	EPA 8021B
Toluene	62	10	EPA 8021B
Ethylbenzene	46	10	EPA 8021B
m,p-Xylenes	59	10	EPA 8021B
o-Xylene	18	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	103	70-140	EPA 8015B
Bromofluorobenzene (PID)	98	54-134	EPA 8021B

Field ID: MW-6 Batch#: 167368 09/22/10 09/29/10 Type: SAMPLE Sampled: Lab ID: 222673-008 Analyzed: Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	72 Y	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	1.0	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	94	70-140	EPA 8015B	
Bromofluorobenzene (PID)	86	54-134	EPA 8021B	

ND= Not Detected

Page 4 of 11

^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report 222673 Lab #: Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 Water 09/23/10 Matrix: Received: Units: ug/L

Field ID: MW-3Batch#: 167368 09/22/10 09/29/10 SAMPLE Type: Sampled: Lab ID: 222673-009 Analyzed:

Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	470	50	EPA 8015B
MTBE	2.9	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.64 C	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	1.6 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	100	70-140	EPA 8015B	
Bromofluorobenzene (PID)	87	54-134	EPA 8021B	

Field ID: MW-13Batch#: 167368 09/23/10 09/29/10 Type: SAMPLE Sampled: Lab ID: 222673-010 Analyzed: Diln Fac: 2,000

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,700,000	100,000	EPA 8015B
MTBE	7,000	4,000	EPA 8021B
Benzene	21,000	1,000	EPA 8021B
Toluene	2,300	1,000	EPA 8021B
Ethylbenzene	30,000	1,000	EPA 8021B
m,p-Xylenes	15,000	1,000	EPA 8021B
o-Xylene	2,200	1,000	EPA 8021B

Surrogate		%REC	Limits	Analysis	
Bromofluorobenzene	(FID)	101	70-140	EPA 8015B	
Bromofluorobenzene	(PID)	92	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report 222673 Lab #: Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 09/23/10 Matrix: Water Received: Units: ug/L

Field ID: MW-EBatch#: 167368 09/23/10 09/29/10 SAMPLE Type: Sampled: 222673-011 Lab ID: Analyzed:

Diln Fac: 25.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,800	1,300	EPA 8015B
MTBE	ND	50	EPA 8021B
Benzene	2,200	13	EPA 8021B
Toluene	45	13	EPA 8021B
Ethylbenzene	64	13	EPA 8021B
m,p-Xylenes	63	13	EPA 8021B
o-Xylene	15	13	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	99	70-140	EPA 8015B	
Bromofluorobenzene (PID)	95	54-134	EPA 8021B	

Field ID: RW-1Batch#: 167307 09/23/10 09/27/10 Type: SAMPLE Sampled: Lab ID: 222673-012 Analyzed: Diln Fac: 1.000

Analyte	Result	RL	Analysis	
Gasoline C7-C12	860	50	EPA 8015B	
MTBE	8.0 C	2.0	EPA 8021B	
Benzene	170	0.50	EPA 8021B	
Toluene	4.0	0.50	EPA 8021B	
Ethylbenzene	5.6	0.50	EPA 8021B	
m,p-Xylenes	1.9	0.50	EPA 8021B	
o-Xylene	0.86	0.50	EPA 8021B	

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	111	70-140	EPA 8015B	
Bromofluorobenzene (PID)	92	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



EPA 8021B

10

Curtis & Tompkins Laboratories Analytical Report Lab #: 222673 Location: Bay Center Apts EPĀ 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 Matrix: Water Received: 09/23/10 Units: ug/L

Field ID: MW - 10Batch#: 167368 Type: SAMPLE Sampled: 09/23/10 09/29/10 Lab ID: 222673-013 Analyzed: Diln Fac: 20.00

Result RL Analysis Analyte Gasoline C7-C12 3,400 1,000 EPA 8015B MTBE ND 40 EPA 8021B 1,500 Benzene 10 EPA 8021B Toluene 47 10 EPA 8021B Ethylbenzene 18 10 EPA 8021B m,p-Xylenes o-Xylene 44 10 EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	102	70-140	EPA 8015B	
Bromofluorobenzene (PID)	90	54-134	EPA 8021B	

Field ID: 8-WMBatch#: 167368 Sampled: SAMPLE 09/23/10 Type: Lab ID: 222673-014 09/29/10 Analyzed: Diln Fac: 50.00

ND

Analyte Result Analysis 2,500 Gasoline C7-C12 EPA 8015B 7,800 MTBE ND 100 EPA 8021B Benzene 8,800 25 EPA 8021B Toluene 110 25 EPA 8021B Ethylbenzene 620 25 EPA 8021B m,p-Xylenes o-Xylene 180 25 EPA 8021B 25 EPA 8021B 32

Surrogate		%REC	Limits	Analysis	
Bromofluorobenzene	(FID)	103	70-140	EPA 8015B	
Bromofluorobenzene	(PID)	101	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report 222673 Lab #: Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 09/23/10 Matrix: Water Received: Units: ug/L

Field ID: MW-15 Batch#: 167368 09/23/10 09/29/10 Type: SAMPLE Sampled: Lab ID: 222673-015 Analyzed: Diln Fac: 50.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	5,800	2,500	EPA 8015B
MTBE	ND	100	EPA 8021B
Benzene	8,100	25	EPA 8021B
Toluene	95	25	EPA 8021B
Ethylbenzene	170	25	EPA 8021B
m,p-Xylenes	71	25	EPA 8021B
o-Xylene	ND	25	EPA 8021B

Surrogate		%REC	Limits	Analysis	
Bromofluorobenzene	(FID)	107	70-140	EPA 8015B	
Bromofluorobenzene	(PID)	97	54-134	EPA 8021B	

Field ID: MW-14Batch#: 167368 09/23/10 09/29/10 Type: SAMPLE Sampled: Lab ID: 222673-016 Analyzed: Diln Fac: 20.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	2,000	1,000	EPA 8015B
MTBE	ND	40	EPA 8021B
Benzene	1,700	10	EPA 8021B
Toluene	44	10	EPA 8021B
Ethylbenzene	98	10	EPA 8021B
m,p-Xylenes	70	10	EPA 8021B
o-Xylene	19	10	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	99	70-140	EPA 8015B	
Bromofluorobenzene (PID)	91	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report 222673 Lab #: Location: Bay Center Apts EPA 5030B Client: Stellar Environmental Solutions Prep: Project#: 2007-65 09/23/10 Matrix: Water Received: Units: ug/L

Field ID: MW - 18Batch#: 167368 09/23/10 09/29/10 Type: SAMPLE Sampled: Lab ID: 222673-017 Analyzed:

Diln Fac: 1.000

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

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	94	70-140	EPA 8015B	
Bromofluorobenzene (PID)	85	54-134	EPA 8021B	

Field ID: MW-16 Batch#: 167307 09/23/10 09/28/10 Type: SAMPLE Sampled: Lab ID: 222673-018 Analyzed: Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	77	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	12	0.50	EPA 8021B
Toluene	1.9	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	0.55 C	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID) 108	70-140	EPA 8015B	
Bromofluorobenzene (PID) 88	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report Bay Center Apts Lab #: 222673 Location: EPA 5030B Stellar Environmental Solutions Client: Prep: Project#: 2007-65 Matrix: 09/23/10 Water Received: Units: ug/L

Type: BLANK Batch#: 167306 QC561758 1.000 Lab ID: 09/27/10 Analyzed: Diln Fac:

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

Surrogate	9(REC	Limits	Analysis	
Bromofluorobenzene ((FID) 18	35 *	70-140	EPA 8015B	
Bromofluorobenzene (PID) 17	74 *	54-134	EPA 8021B	

Type: BLANK Batch#: 167307 Batcn#: 167307 Analyzed: 09/27/10 Lab ID: QC561764 Diln Fac: $\tilde{1}.000$

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

Surrogate	%RE	C Limits	Analysis	
Bromofluorobenzene (FID) 106	70-140	EPA 8015B	
Bromofluorobenzene (PID) 89	54-134	EPA 8021B	

ND= Not Detected

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report Bay Center Apts EPA 5030B Lab #: 222673 Location: Stellar Environmental Solutions Client: Prep: Project#: 2007-65 09/23/10 Matrix: Water Received: Units: ug/L

Type: BLANK Batch#: 167368 QC562011 1.000 Lab ID: 09/28/10 Analyzed: Diln Fac:

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

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	101	70-140	EPA 8015B	
Bromofluorobenzene (PID)	95	54-134	EPA 8021B	

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^{*=} Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report					
Lab #:	222673	Location:	Bay Center Apts		
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B		
Project#:	2007-65				
Matrix:	Water	Batch#:	167306		
Units:	ug/L	Analyzed:	09/27/10		
Diln Fac:	1.000				

Type: BS Lab ID: QC561759

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	11.37	114	57-150	EPA 8021B
Benzene	10.00	10.06	101	70-122	EPA 8021B
Toluene	10.00	10.26	103	72-125	EPA 8021B
Ethylbenzene	10.00	10.67	107	72-126	EPA 8021B
m,p-Xylenes	10.00	10.35	103	73-126	EPA 8021B
o-Xylene	10.00	10.81	108	71-127	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	105	70-140	EPA 8015B	
Bromofluorobenzene (PID)	99	54-134	EPA 8021B	

Type: BSD Lab ID: QC561760

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	l	Analysis
MTBE	10.00	12.27	123	57-150	8	46	EPA	8021B
Benzene	10.00	9.497	95	70-122	6	33	EPA	8021B
Toluene	10.00	9.656	97	72-125	6	25	EPA	8021B
Ethylbenzene	10.00	9.649	96	72-126	10	26	EPA	8021B
m,p-Xylenes	10.00	9.778	98	73-126	6	25	EPA	8021B
o-Xylene	10.00	9.963	100	71-127	8	25	EPA	8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	98	70-140	EPA 8015B
Bromofluorobenzene (PID)	95	54-134	EPA 8021B



Curtis & Tompkins Laboratories Analytical Report								
Lab #:	222673	Location:	Bay Center Apts					
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B					
Project#:	2007-65							
Type:	LCS	Diln Fac:	1.000					
Lab ID:	QC561761	Batch#:	167306					
Matrix:	Water	Analyzed:	09/27/10					
Units:	ug/L							

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	1,146	115	73-127	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	103	70-140	EPA 8015B
Bromofluorobenzene (PID)	99	54-134	EPA 8021B

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Curtis & Tompkins Laboratories Analytical Report								
Lab #: 222673	3	Location:	Bay Center Apts					
Client: Stella	ar Environmental Solutions	Prep:	EPA 5030B					
Project#: 2007-6	55							
Field ID:	MW-11	Batch#:	167306					
MSS Lab ID:	222673-001	Sampled:	09/22/10					
Matrix:	Water	Received:	09/23/10					
Units:	ug/L	Analyzed:	09/27/10					
Diln Fac:	1.000							

Type: MS Lab ID: QC561762

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,298	2,000	3,019	86	68-120 E	EPA 8015B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	100	70-140	EPA 8015B	
Bromofluorobenzene (PID)	88	54-134	EPA 8021B	

Type: MSD Lab ID: QC561763

	Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
G	asoline C7-C12	2,000	3,041	87	68-120	1	20	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	101	70-140	EPA 8015B
Bromofluorobenzene (PID)	90	54-134	EPA 8021B



Curtis & Tompkins Laboratories Analytical Report								
Lab #:	222673	Location:	Bay Center Apts					
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B					
Project#:	2007-65							
Matrix:	Water	Batch#:	167307					
Units:	ug/L	Analyzed:	09/27/10					
Diln Fac:	1.000							

Type: BS Lab ID: QC561765

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	9.337	93	57-150	EPA 8021B
Benzene	10.00	10.01	100	70-122	EPA 8021B
Toluene	10.00	9.301	93	72-125	EPA 8021B
Ethylbenzene	10.00	9.543	95	72-126	EPA 8021B
m,p-Xylenes	10.00	9.521	95	73-126	EPA 8021B
o-Xylene	10.00	9.676	97	71-127	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	103	70-140	EPA 8015B
Bromofluorobenzene (PID)	87	54-134	EPA 8021B

Type: BSD Lab ID: QC561766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim		Analysis
MTBE	10.00	10.62	106	57-150	13	46	EPA	8021B
Benzene	10.00	10.81	108	70-122	8	33	EPA	8021B
Toluene	10.00	10.08	101	72-125	8	25	EPA	8021B
Ethylbenzene	10.00	9.891	99	72-126	4	26	EPA	8021B
m,p-Xylenes	10.00	10.09	101	73-126	6	25	EPA	8021B
o-Xylene	10.00	9.982	100	71-127	3	25	EPA	8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	105	70-140	EPA 8015B	
Bromofluorobenzene (PID)	89	54-134	EPA 8021B	



Curtis & Tompkins Laboratories Analytical Report						
Lab #:	222673	Location:	Bay Center Apts			
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B			
Project#:	2007-65					
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC561767	Batch#:	167307			
Matrix:	Water	Analyzed:	09/27/10			
Units:	ug/L					

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	1,070	107	73-127	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	107	70-140	EPA 8015B
Bromofluorobenzene (PID)	87	54-134	EPA 8021B

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	Curtis & Tompkins Labo	ratories Analy	ytical Report
Lab #: 222673	3	Location:	Bay Center Apts
Client: Stella	ar Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	55		
Field ID:	ZZZZZZZZZ	Batch#:	167307
MSS Lab ID:	222687-003	Sampled:	09/23/10
Matrix:	Water	Received:	09/24/10
Units:	ug/L	Analyzed:	09/27/10
Diln Fac:	1.000		

Type: MS Lab ID: QC561768

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	26.30	2,000	1,801	89	68-120	EPA 8015B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	108	70-140	EPA 8015B	
Bromofluorobenzene (PID)	91	54-134	EPA 8021B	

Type: MSD Lab ID: QC561769

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
Gasoline C7-C12	2,000	1,848	91	68-120	3	20	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	107	70-140	EPA 8015B
Bromofluorobenzene (PID)	92	54-134	EPA 8021B



Curtis & Tompkins Laboratories Analytical Report						
Lab #:	222673	Location:	Bay Center Apts			
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B			
Project#:	2007-65					
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC562012	Batch#:	167368			
Matrix:	Water	Analyzed:	09/28/10			
Units:	ug/L					

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	970.9	97	73-127	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	105	70-140	EPA 8015B
Bromofluorobenzene (PID)	97	54-134	EPA 8021B

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	Curtis & Tompkins Labor	ratories Analyt	ical Report
Lab #: 222673		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 5030B
Project#: 2007-6	5		
Field ID:	ZZZZZZZZZZ	Batch#:	167368
MSS Lab ID:	222668-002	Sampled:	09/22/10
Matrix:	Water	Received:	09/24/10
Units:	ug/L	Analyzed:	09/28/10
Diln Fac:	1.000		

Type: MS Lab ID: QC562013

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	66.28	2,000	2,014	97	68-120 E	EPA 8015B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	110	70-140	EPA 8015B	
Bromofluorobenzene (PID)	102	54-134	EPA 8021B	

Type: MSD Lab ID: QC562014

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
Gasoline C7-C12	2,000	1,965	95	68-120	2	20	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	109	70-140	EPA 8015B
Bromofluorobenzene (PID)	100	54-134	EPA 8021B



	Curtis & Tompkins Labo	oratories Anal	Lytical Report
Lab #:	222673	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Batch#:	167368
Units:	ug/L	Analyzed:	09/28/10
Diln Fac:	1.000		

Type: BS Lab ID: QC562015

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	10.00	100	57-150	EPA 8021B
Benzene	10.00	10.30	103	70-122	EPA 8021B
Toluene	10.00	9.547	95	72-125	EPA 8021B
Ethylbenzene	10.00	9.501	95	72-126	EPA 8021B
m,p-Xylenes	10.00	9.954	100	73-126	EPA 8021B
o-Xylene	10.00	9.944	99	71-127	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	102	70-140	EPA 8015B
Bromofluorobenzene (PID)	95	54-134	EPA 8021B

Type: BSD Lab ID: QC562016

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
MTBE	10.00	9.852	99	57-150	1	46 1	EPA 8021B
Benzene	10.00	10.84	108	70-122	5	33	EPA 8021B
Toluene	10.00	10.63	106	72-125	11	25	EPA 8021B
Ethylbenzene	10.00	11.27	113	72-126	17	26	EPA 8021B
m,p-Xylenes	10.00	11.46	115	73-126	14	25	EPA 8021B
o-Xylene	10.00	11.70	117	71-127	16	25 1	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	106	70-140	EPA 8015B
Bromofluorobenzene (PID)	97	54-134	EPA 8021B

Sample Name: 222673-001,167306,tvh+mbtxe

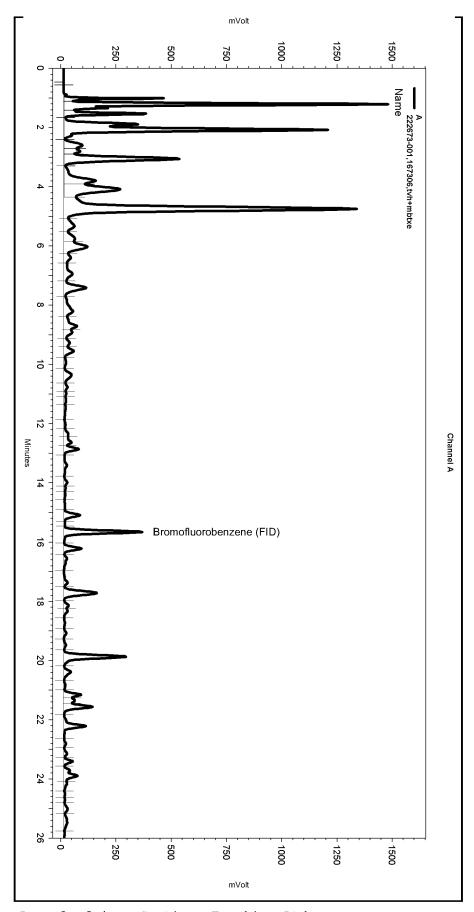
Data File: \\Lims\\gdrive\ezchrom\Projects\GC05\Data\270-006

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe267.met

Software Version 3.1.7 Run Date: 9/27/2010 7:42:29 PM Analysis Date: 9/28/2010 5:08:39 PM Sample Amount: 5 Multiplier: 5

Vial & pH or Core ID: a1.0



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No items selected for this section				
Integration Events				
Start Stop Enabled Event Type (Minutes) (Minutes) Value				
Yes Width 0 0 0.2 Yes Threshold 0 0 50				
Manual Integration Fixes				
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\270-006 Start Stop				
Enabled Event Type (Minutes) (Minutes) Value				
Yes Lowest Point Horizontal Baseli 0.371 26.017 0				

Sample Name: 222673-002,167306,tvh+mbtxe

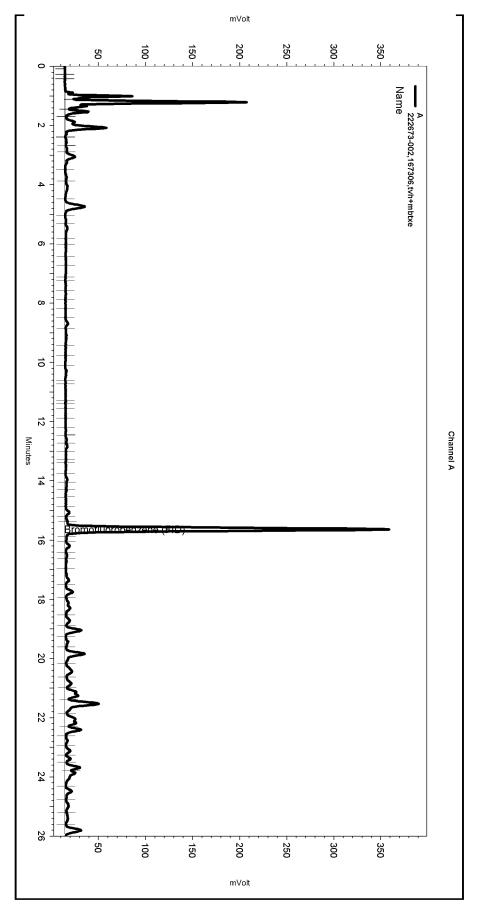
Data File: \\Lims\\gdrive\ezchrom\Projects\GC05\Data\270-009

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe267.met

Software Version 3.1.7 Run Date: 9/27/2010 9:32:12 PM Analysis Date: 9/28/2010 5:14:15 PM Sample Amount: 5 Multiplier: 5

Vial & pH or Core ID: a1.0



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Integration Events				
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Manual Integration Fixes				
Data File: \\Lims\gdrive\ezchrom\\			Data\27	0-009
Enabled Event Type			inutes)	Value
Yes Lowest Point Horizontal B	aseli 15.383		25.939 0	0

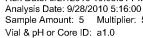
Sample Name: 222673-003,167306,tvh+mbtxe

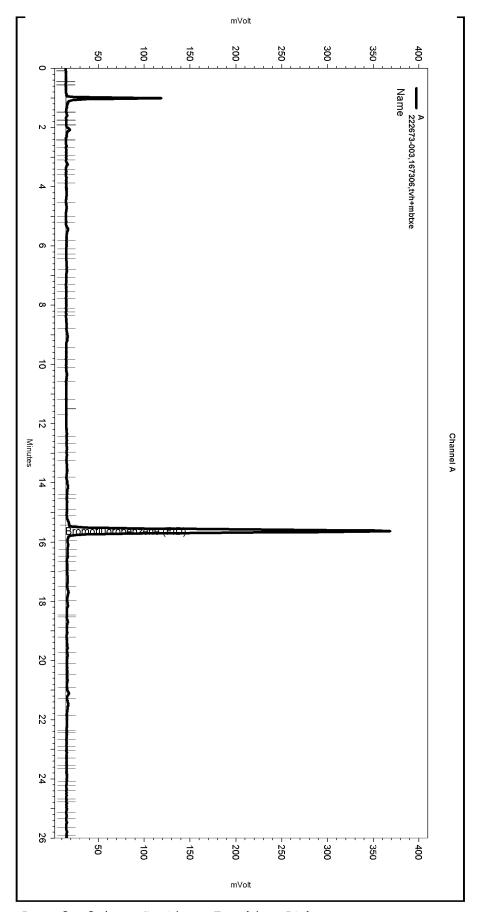
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Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\\Projects\GC05\Method\tvhbtxe267.met

Software Version 3.1.7 Run Date: 9/27/2010 10:08:51 PM Analysis Date: 9/28/2010 5:16:00 PM Sample Amount: 5 Multiplier: 5



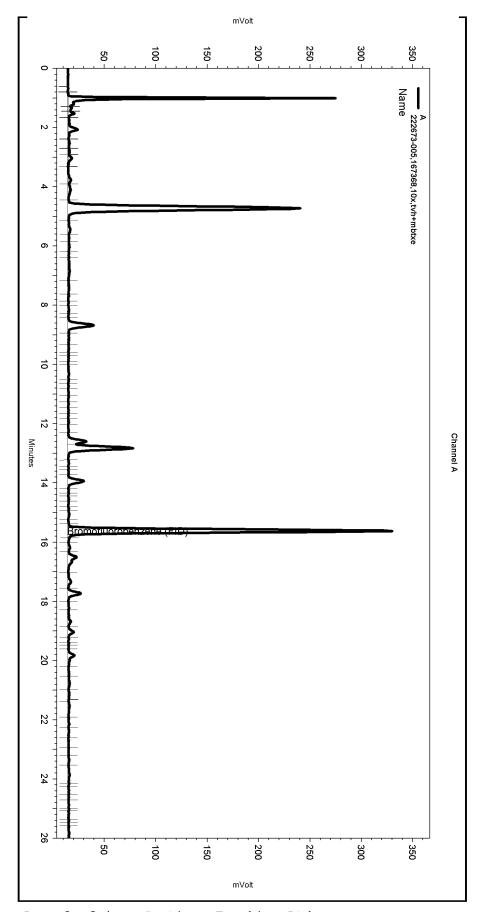


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Manual Integration Fixes	
Data File: \\Lims\gdrive\ezchrom\F	
Enabled Event Type	(Minutes) (Minutes) Value
Yes Lowest Point Horizontal Bi	

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\271.seq Sample Name: 222673-005,167368,10x,tvh+mbtxe

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-010 |
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) |
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/28/2010 9:48:21 PM Analysis Date: 9/29/2010 2:57:00 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: c7.0



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Integration Events
Start Stop
Enabled Event Type (Minutes) (Minutes) Value
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Yes Threshold 0 0 50
Manual Integration Fixes
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-010
Start Stop Enabled Event Type (Minutes) (Minutes) Value
Yes Lowest Point Horizontal Baseli 0.047 26.017 0 Yes Split Peak 15.391 0 0

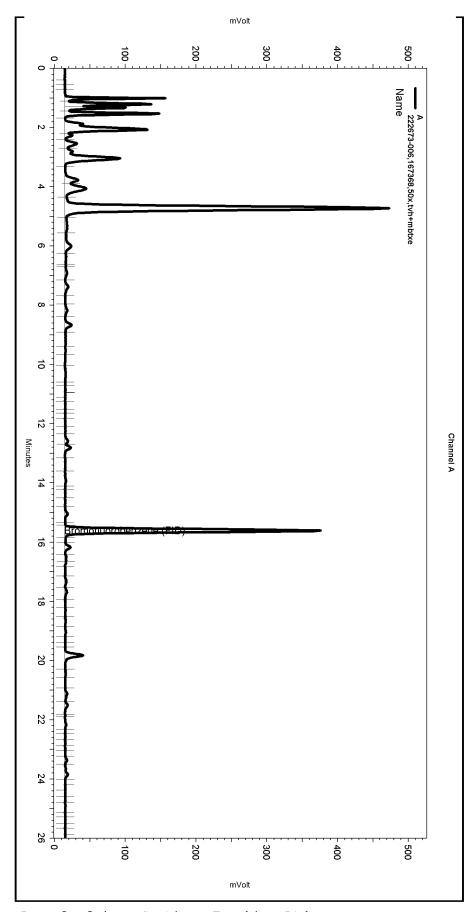
Sample Name: 222673-006,167368,50x,tvh+mbtxe

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-011

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/28/2010 10:24:59 PM Analysis Date: 9/29/2010 3:00:15 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: c1.0



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Integration Events			
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Yes Width 0 0 0.2 Yes Threshold 0 0 50			
Manual Integration Fixes			
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-011 Start Stop			
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Yes Lowest Point Horizontal Baseli 0.317 25.953 0 Yes Split Peak 15.43 0 0 Yes Split Peak 15.853 0 0			

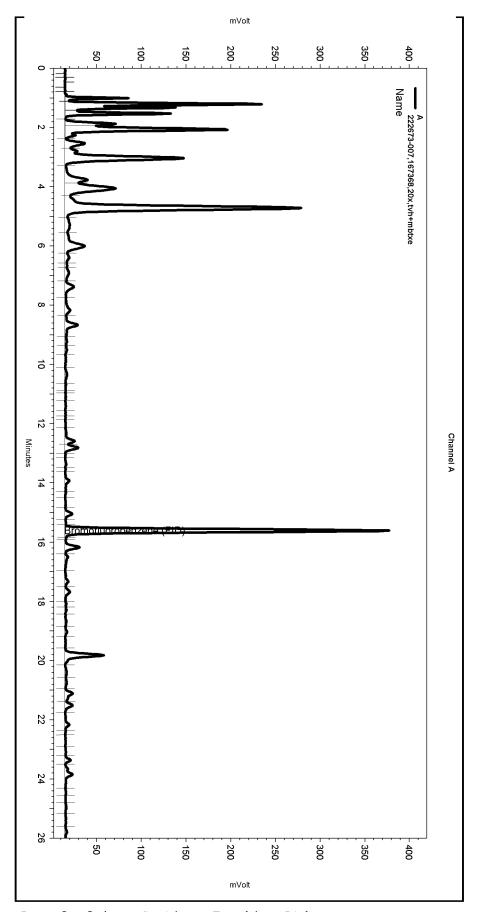
Sample Name: 222673-007,167368,20x,tvh+mbtxe

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-012

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/28/2010 11:01:36 PM Analysis Date: 9/29/2010 3:04:07 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: c1.0



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Manual Integration Fixes				
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-012				
Enabled Event Type (Minutes) (Minutes) Value				
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Sample Name: 222673-008,167368,tvh+mbtxe

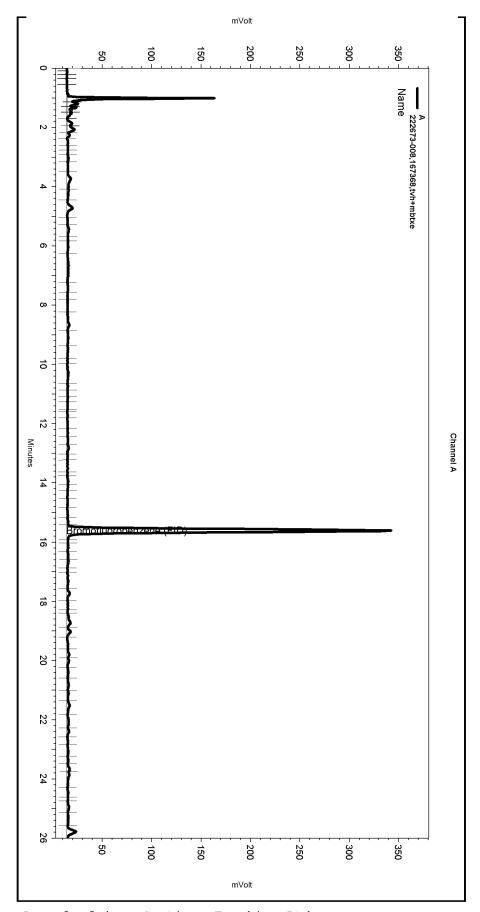
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Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 1:27:50 AM Analysis Date: 9/29/2010 3:15:03 PM Sample Amount: 5 Multiplier: 5

Vial & pH or Core ID: c1.0



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Manual Integration Fixes
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Sample Name: 222673-009,167368,tvh+mbtxe

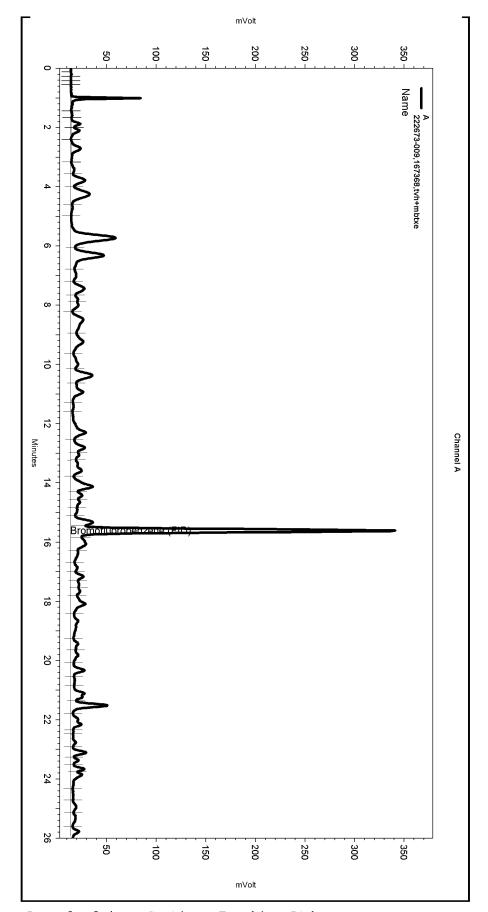
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Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 2:04:22 AM Analysis Date: 9/29/2010 3:17:11 PM Sample Amount: 5 Multiplier: 5

Vial & pH or Core ID: c1.0

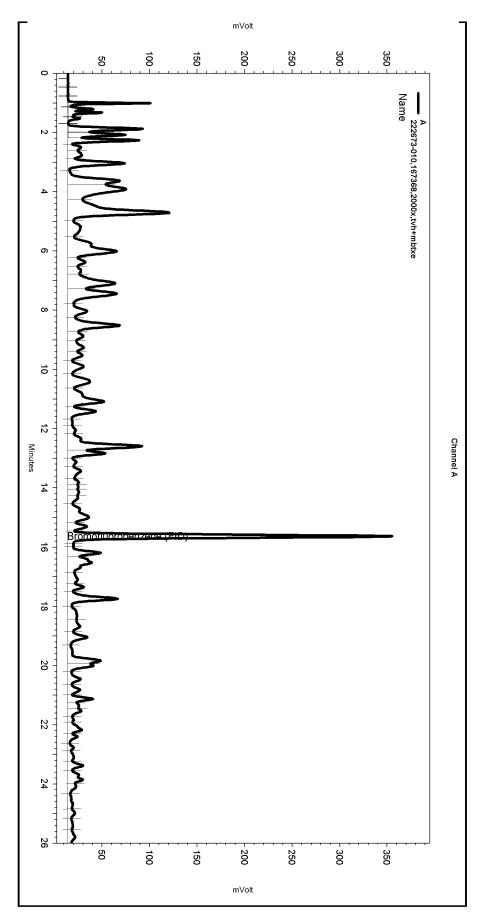


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Data File: \\Lims\gdrive\ezchrom\\	
Enabled Event Type	(Minutes) (Minutes) Value
Yes Lowest Point Horizontal E	Baseli 0.019 25.953 0

Sample Name: 222673-010,167368,2000x,tvh+mbtxe
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-029
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 12:07:39 PM Analysis Date: 9/29/2010 3:41:22 PM Sample Amount: 5 Multiplier: 5

Vial & pH or Core ID: b1.0

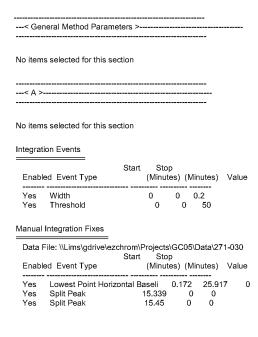


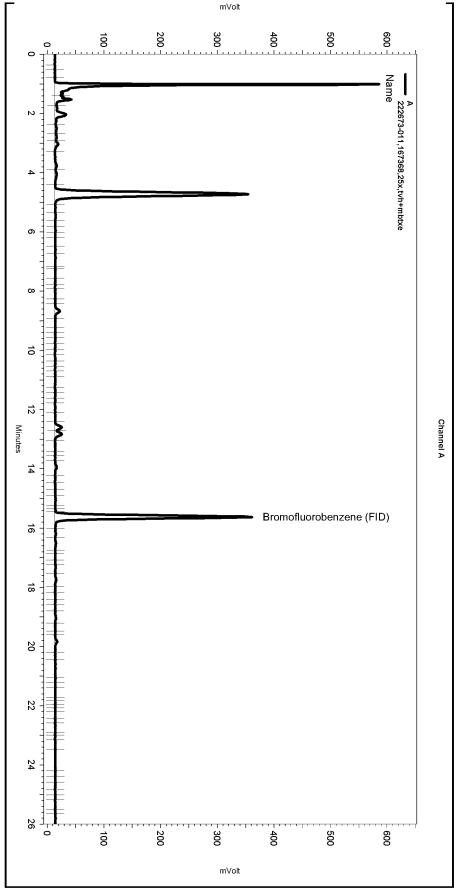
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Manual Integration Fixes	
	rom\Projects\GC05\Data\271-029
Enabled Event Type	Start Stop (Minutes) (Minutes) Value
Yes Lowest Point Horizon	ntal Baseli 0.154 26.007 (

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\271.seq Sample Name: 222673-011,167368,25x,tvh+mbtxe Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-030

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-030 |
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) |
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

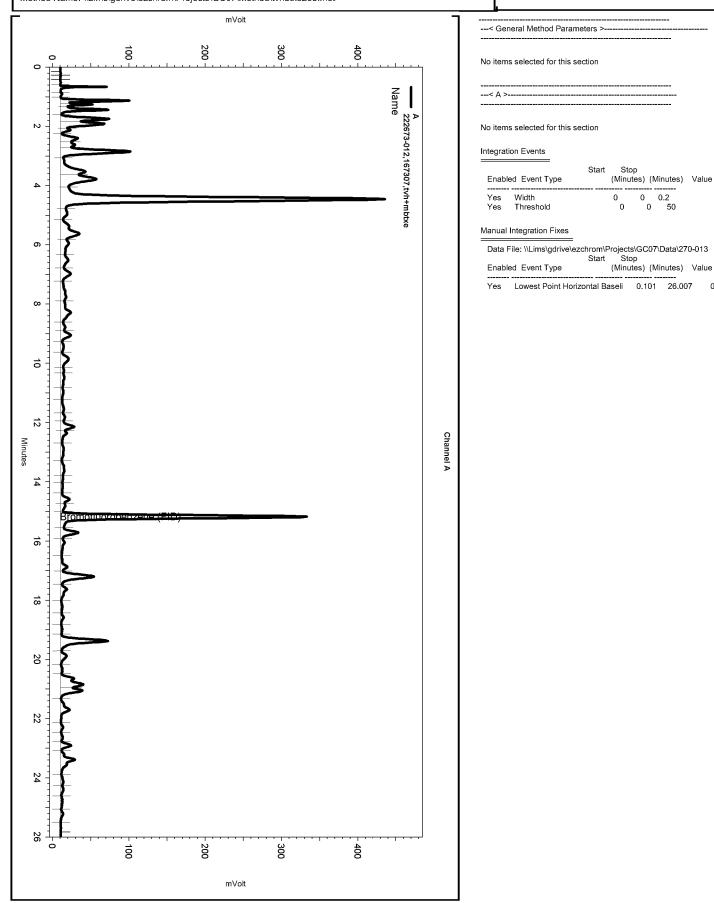
Software Version 3.1.7 Run Date: 9/29/2010 12:44:12 PM Analysis Date: 9/29/2010 3:43:53 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: b1.0





Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\270.seq Sample Name: 222673-012,167307,tvh+mbtxe
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\270-013
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe265.met

Software Version 3.1.7 Run Date: 9/27/2010 11:19:18 PM Analysis Date: 9/28/2010 4:23:47 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: a1.0



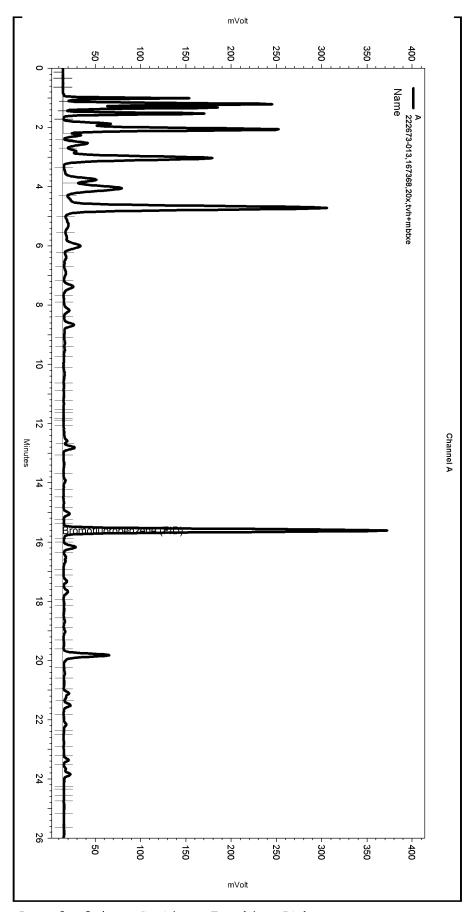
Sample Name: 222673-013,167368,20x,tvh+mbtxe

Data File: \\Lims\\gdrive\ezchrom\\Projects\\GC05\\Data\\271-020

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\\gdrive\ezchrom\\Projects\\GC05\\Method\\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 3:54:13 AM Analysis Date: 9/29/2010 3:23:59 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: c1.0



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Integrat	ion Events	
Enabl	ed Event Type	Start Stop (Minutes) (Minutes) Value
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Manual	Integration Fixes	
Data I	File: \\Lims\gdrive\e:	zchrom\Projects\GC05\Data\271-020 Start Stop
Enabl	ed Event Type	
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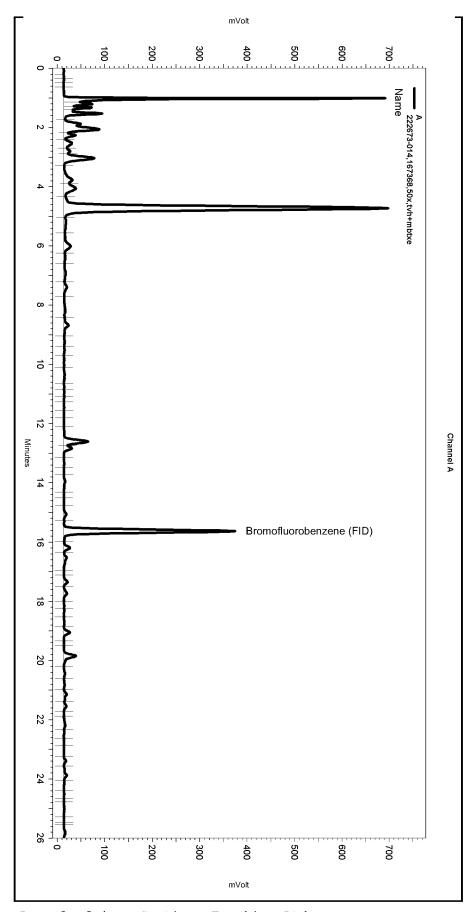
Sample Name: 222673-014,167368,50x,tvh+mbtxe

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Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 1:20:46 PM Analysis Date: 9/29/2010 3:46:13 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: b1.0

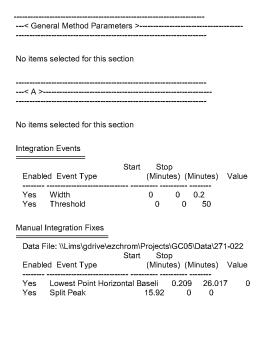


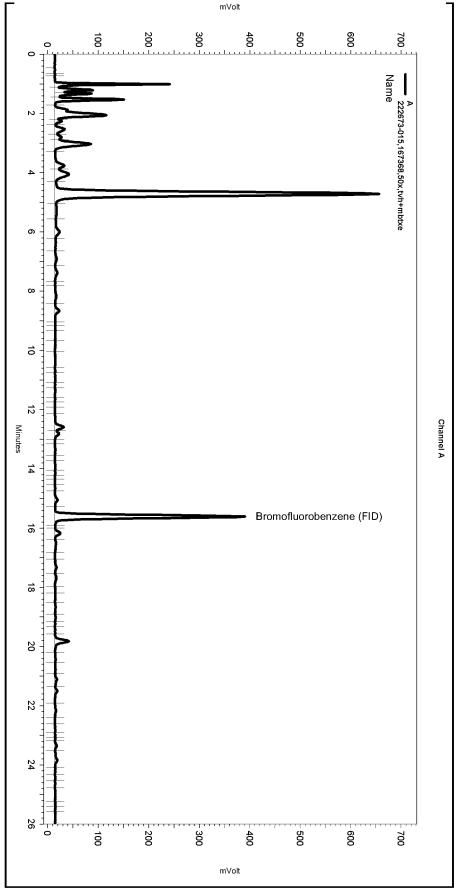
	eral Method Para					
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Integration	on Events					
Enable	ed Event Type	Start	Sto (Minut		/linutes)	Value
Yes Yes	Width Threshold		0	0	0.2 50	
Manual I	ntegration Fixes					
Data F	ile: \\Lims\gdrive\				5\Data\27	1-031
Enable	ed Event Type	Start			/linutes)	Value
Yes	Lowest Point Ho	rizontal Ba	aseli	0	25.953	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\271.seq Sample Name: 222673-015,167368,50x,tvh+mbtxe
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-022

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-022 \\
Instrument: GC05 (Offline) \text{ Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) \\
Method \text{ Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met}

Software Version 3.1.7 Run Date: 9/29/2010 5:07:21 AM Analysis Date: 9/29/2010 3:29:03 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: c1.0





Sample Name: 222673-016,167368,20x,tvh+mbtxe

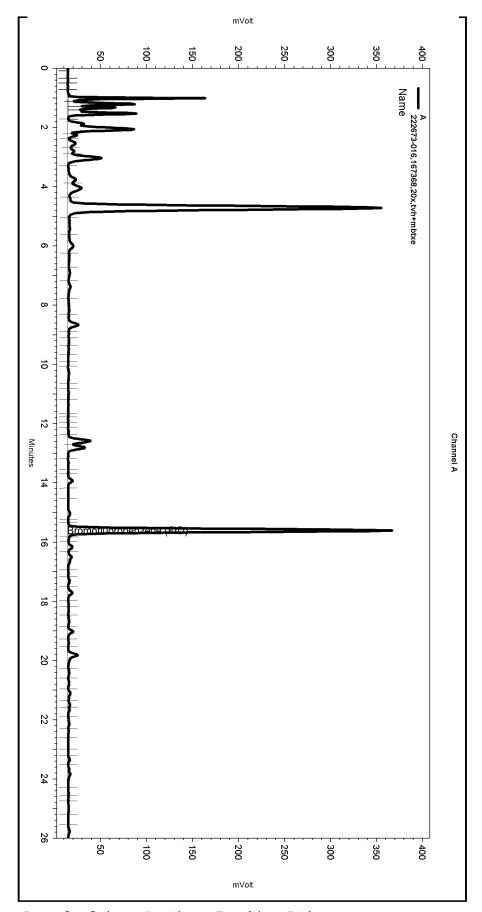
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\271-023

Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe271.met

Software Version 3.1.7 Run Date: 9/29/2010 5:43:54 AM Analysis Date: 9/29/2010 3:31:19 PM Sample Amount: 5 Multiplier: 5

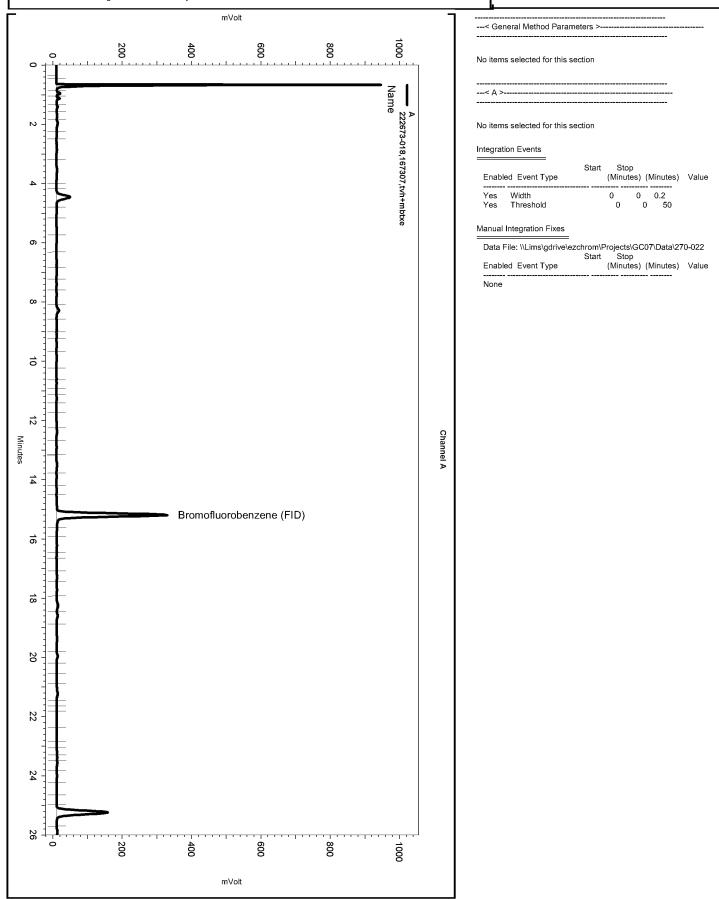
Vial & pH or Core ID: c1.0



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No item	s selected for this	section				
Integrat	ion Events					
Enabl	ed Event Type	Start		o es) (Mi	nutes)	Value
	Width Threshold		0	0 0	50	
Manual	Integration Fixes					
Data	File: \\Lims\gdrive\	: ezchrom\f Start	Projects Sto		Data\27	1-023
Enabl	ed Event Type	Start		es) (Mi	nutes)	Value
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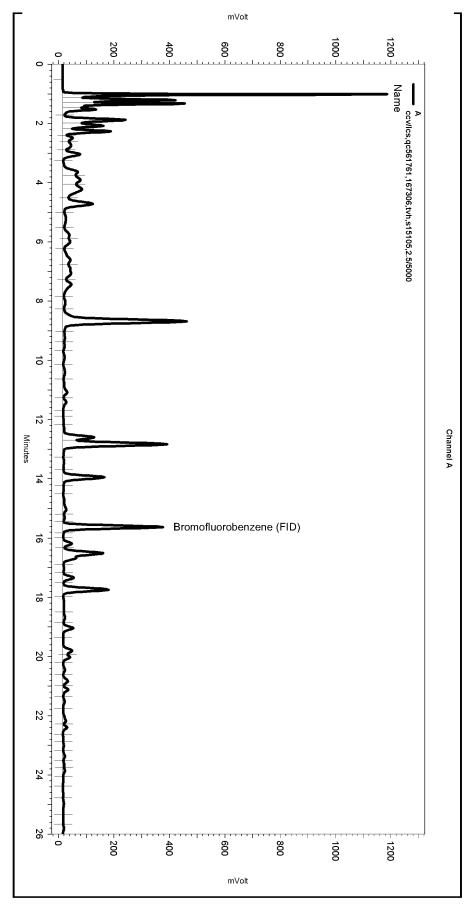
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\270.seq Sample Name: 222673-018,167307,tvh+mbtxe
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\270-022
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe265.met

Software Version 3.1.7 Run Date: 9/28/2010 5:06:43 AM Analysis Date: 9/28/2010 4:40:42 PM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: a1.0



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\270.seq Sample Name: ccv/lcs,qc561761,167306,tvh,s15105,2.5/5000 Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\270-003 Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe267.met

Software Version 3.1.7
Run Date: 9/27/2010 11:30:10 AM
Analysis Date: 9/28/2010 4:58:03 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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Integration Events
Start Stop
Enabled Event Type (Minutes) (Minutes) Value
Enabled Event Type (Minutes) (Minutes) Value Yes Width 0 0 0.2 Yes Threshold 0 50
Yes Width 0 0 0.2
Yes Width 0 0 0.2 Yes Threshold 0 0 50 Manual Integration Fixes Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\270-003
Yes Width 0 0 0.2 Yes Threshold 0 0 50 Manual Integration Fixes



Lab #: 222673 Location: Bay Center Apts Client: Stellar Environmental Solutions Prep: EPA 3520C

Client: Stellar Environmental Solutions Prep: EPĀ 3520C Project#: 2007-65 Analysis: EPA 8015B Matrix: Water Received: 09/23/10

Units: uq/L

Field ID: MW-11Batch#: 167353 Type: SAMPLE Sampled: 09/22/10 Lab ID: 222673-001 09/28/10 Prepared: 09/29/10 Diln Fac: 1.000 Analyzed:

Analyte Result RL

Diesel C10-C24 5,500 50

Surrogate %REC Limits
o-Terphenyl 72 60-129

Field ID: MW - 9Batch#: 167353 SAMPLE Sampled: 09/22/10 Type: 222673-002 Lab ID: Prepared: 09/28/10 Diln Fac: 1.000 Analyzed: 09/29/10

Diesel C10-C24 6,400 50

Surrogate %REC Limits o-Terphenyl 63 60-129

Field ID: MW-4 Batch#: 167353
Type: SAMPLE Sampled: 09/22/10
Lab ID: 222673-003 Prepared: 09/28/10
Diln Fac: 1.000 Analyzed: 09/29/10

Analyte Result RL

Diesel C10-C24 770 Y 50

Surrogate %REC Limits o-Terphenyl 88 60-129

Field ID: MW-5Batch#: 167353 09/22/10 Type: SAMPLE Sampled: Lab ID: 222673-004 Prepared: 09/28/10 Diln Fac: 1.000 09/29/10 Analyzed:

 Analyte
 Result
 RL

 Diesel C10-C24
 4,500
 50

Surrogate %REC Limits
o-Terphenyl 69 60-129

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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14 2



Lab #: 222673 Location: Bay Center Apts

Client: Stellar Environmental Solutions Prep: EPA 3520C Project#: 2007-65 Analysis: EPA 8015B Matrix: Water Received: 09/23/10

Units: ug/L

Field ID: MW-7Batch#: 167573 Type: SAMPLE Sampled: 09/22/10 10/04/10 Lab ID: 222673-005 Prepared: Diln Fac: 1.000 Analyzed: 10/05/10

 Analyte
 Result
 RL

 Diesel C10-C24
 10,000
 50

Surrogate %REC Limits
o-Terphenyl 96 60-129

Field ID: MW-12Batch#: 167353 Type: SAMPLE Sampled: 09/22/10 09/28/10 Lab ID: 222673-006 Prepared: Diln Fac: 1.000 09/30/10 Analyzed:

 Analyte
 Result
 RL

 Diesel C10-C24
 3,100
 50

Surrogate %REC Limits
o-Terphenyl 75 60-129

Field ID: Batch#: 167353 MW-17Type: SAMPLE Sampled: 09/22/10 Lab ID: 222673-007 Prepared: 09/28/10 09/30/10 Diln Fac: 1.000 Analyzed:

 Analyte
 Result
 RL

 Diesel C10-C24
 2,800
 50

Diesel C10-C24 2,800 50

Surrogate %REC Limits
o-Terphenyl 77 60-129

Field ID: MW-6 Batch#: 167353
Type: SAMPLE Sampled: 09/22/10
Lab ID: 222673-008 Prepared: 09/28/10
Diln Fac: 1.000 Analyzed: 09/30/10

 Analyte
 Result
 RL

 Diesel C10-C24
 1,200
 50

Surrogate %REC Limits
o-Terphenyl 70 60-129

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

Page 2 of 5



Lab #: 222673 Location: Bay Center Apts

Client: Stellar Environmental Solutions EPA 3520C Prep: EPA 8015B 09/23/10 Project#: 2007-65 Analysis: Matrix: Water Received:

Units: ug/L

Field ID: MW - 3Batch#: 167353 Type: SAMPLE Sampled: 09/22/10 09/28/10 Lab ID: 222673-009 Prepared: Diln Fac: 1.000 Analyzed: 09/30/10

Analyte Result

Diesel C10-C24 5,100 50

Limits Surrogate %REC o-Terphenyl 76 60-129

Field ID: MW-13Batch#: 167353 Type: SAMPLE Sampled: 09/23/10 09/28/10 Lab ID: 222673-010 Prepared: Diln Fac: 200.0 09/30/10 Analyzed:

Analyte Result RL Diesel C10-C24 3,100,000 40,000

Surrogate %REC Limits o-Terphenyl DO 60-129

Field ID: Batch#: 167353 MW-EType: SAMPLE Sampled: 09/23/10 Lab ID: 222673-011 Prepared: 09/28/10 09/30/10 Diln Fac: 1.000 Analyzed:

Analyte Result RL

Diesel C10-C24 6,600 50

Limits Surrogate %REC o-Terphenyl 60-129

167353 Field ID: RW-1Batch#: Type: SAMPLE Sampled: 09/23/10 222673-012 09/28/10 09/30/10 Lab ID: Prepared: Diln Fac: 1.000 Analyzed:

Analyte Result RL Diesel C10-C24 980 50

Surrogate Limits 60-129 o-Terphenyl 81

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

Page 3 of 5



Lab #: 222673 Location: Bay Center Apts

3,500

Client: Stellar Environmental Solutions EPA 3520C Prep: EPA 8015B 09/23/10 Project#: 2007-65 Analysis:

Matrix: Water Received: Units: ug/L

Field ID: MW - 10Batch#: 167353 Type: SAMPLE Sampled: 09/23/10 09/28/10 Lab ID: 222673-013 Prepared: Diln Fac: 1.000 Analyzed: 09/30/10

Analyte Result

Limits Surrogate %REC o-Terphenyl 78 60-129

50

Field ID: 8-WMBatch#: 167353 09/23/10 09/28/10 Type: SAMPLE Sampled: Lab ID: 222673-014 Prepared: Diln Fac: 1.000 09/30/10 Analyzed:

Analyte Result RL Diesel C10-C24 7,600 50

Surrogate %REC Limits o-Terphenyl 60-129

Field ID: Batch#: 167353 MW-15Type: SAMPLE Sampled: 09/23/10 Lab ID: 222673-015 Prepared: 09/28/10 09/30/10 Diln Fac: 1.000 Analyzed:

Analyte Result RL Diesel C10-C24 3,500 50

Limits Surrogate %REC o-Terphenyl 60-129

167353 Field ID: MW-14Batch#: Type: SAMPLE Sampled: 09/23/10 09/28/10 09/30/10 Lab ID: 222673-016 Prepared:

Diln Fac: 1.000 Analyzed: Analyte Result RL Diesel C10-C24 2,500 50

Surrogate Limits 60-129 o-Terphenyl

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

Diesel C10-C24

RL= Reporting Limit

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Lab #: 222673 Location: Bay Center Apts

Client: Stellar Environmental Solutions EPA 3520C Prep: EPA 8015B 09/23/10 Project#: 2007-65 Analysis: Matrix: Water Received:

Units: ug/L

Field ID: MW-18Batch#: 167353 Type: SAMPLE Sampled: 09/23/10 09/28/10 Lab ID: 222673-017 Prepared: Diln Fac: 1.000 Analyzed: 09/30/10

Analyte Result Diesel C10-C24 6,400 50

Limits Surrogate %REC 60-129 o-Terphenyl 65

Field ID: MW-16 Batch#: 167353 09/23/10 09/28/10 Type: SAMPLE Sampled:

Lab ID: 222673-018 Prepared: Diln Fac: 1.000 09/30/10 Analyzed:

Analyte Result RL Diesel C10-C24 9,800 50

Limits Surrogate %REC o-Terphenyl 60-129

Batch#: 167353 Type: BLANK Lab ID: QC561957 Prepared: 09/28/10 Diln Fac: 1.000 Analyzed: 09/29/10

Analyte Result RL

Diesel C10-C24

Limits Surrogate o-Terphenyl 108 60 - 129

BLANK Batch#: Type: 167573 QC562822 Lab ID: 10/04/10 Prepared: Diln Fac: 1.000 Analyzed: 10/05/10

Result Analyte RLDiesel C10-C24 ND 50

Surrogate Limits o-Terphenyl 99 60-129

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

Page 5 of 5



Total Extractable Hydrocarbons				
Lab #:	222673	Location:	Bay Center Apts	
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C	
Project#:	2007-65	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC561958	Batch#:	167353	
Matrix:	Water	Prepared:	09/28/10	
Units:	ug/L	Analyzed:	09/29/10	

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,880	75	54-125

Surrogate	%REC	Limits
o-Terphenyl	90	60-129

Page 1 of 1 15.0



Total Extractable Hydrocarbons			
Lab #: 222673		Location:	Bay Center Apts
Client: Stella	r Environmental Solutions	Prep:	EPA 3520C
Project#: 2007-6	5	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	167353
MSS Lab ID:	222562-002	Sampled:	09/21/10
Matrix:	Water	Received:	09/21/10
Units:	ug/L	Prepared:	09/28/10
Diln Fac:	1.000	Analyzed:	09/29/10

Type: MS Cleanup Method: EPA 3630C

Lab ID: QC561959

Analyte	MSS Result	Spiked	Result	%REC Limits
Diesel C10-C24	<12.24	2,500	1,781	71 46-131

Type: MSD Cleanup Method: EPA 3630C

Lab ID: QC561960

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,848	74	46-131	4	61

Surrogat	%REC	Limits
o-Terphenyl	88	60-129



	Total Extractable Hydrocarbons					
Lab #:	222673	Location:	Bay Center Apts			
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C			
Project#:	2007-65	Analysis:	EPA 8015B			
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC562823	Batch#:	167573			
Matrix:	Water	Prepared:	10/04/10			
Units:	ug/L	Analyzed:	10/05/10			

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,374	95	54-125

Surrogate	%REC	Limits	
o-Terphenvl	106	60-129	

Page 1 of 1



Total Extractable Hydrocarbons						
Lab #: 222673	3	Location:	Bay Center Apts			
Client: Stella	ar Environmental Solutions	Prep:	EPA 3520C			
Project#: 2007-6	55	Analysis:	EPA 8015B			
Field ID:	ZZZZZZZZZZ	Batch#:	167573			
MSS Lab ID:	222891-004	Sampled:	09/29/10			
Matrix:	Water	Received:	10/02/10			
Units:	ug/L	Prepared:	10/04/10			
Diln Fac:	1.000	Analyzed:	10/06/10			

Type: MS Cleanup Method: EPA 3630C

Lab ID: QC562824

Analyte	MSS Result	Spiked	Result	%REC Limits
Diesel C10-C24	<12.24	2,500	2,722	109 46-131

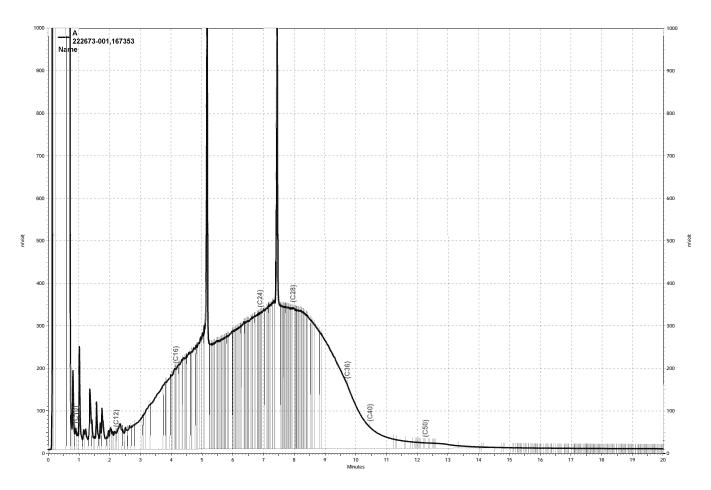
Surrogate	%REC	Limits
o-Terphenyl	93	60-129

Type: MSD Cleanup Method: EPA 3630C

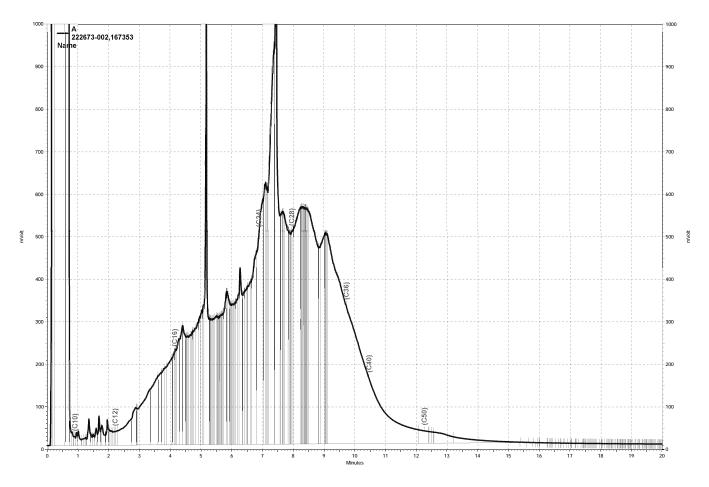
Lab ID: QC562825

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,636	105	46-131	3	61

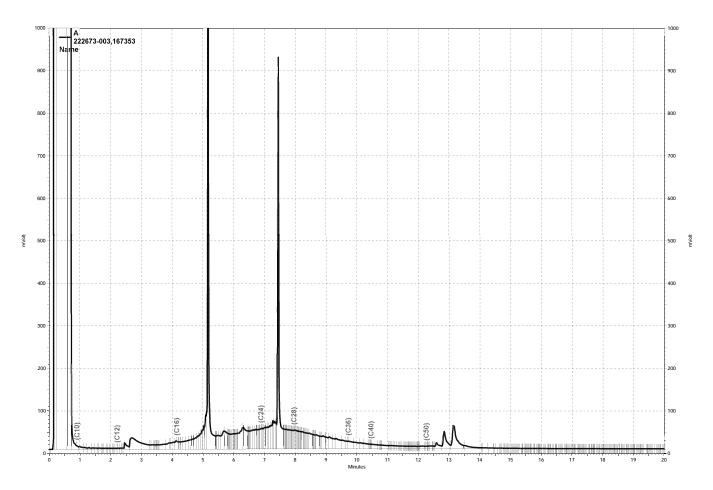
Surrogate	%REC	Limits	
o-Terphenyl	90	60-129	



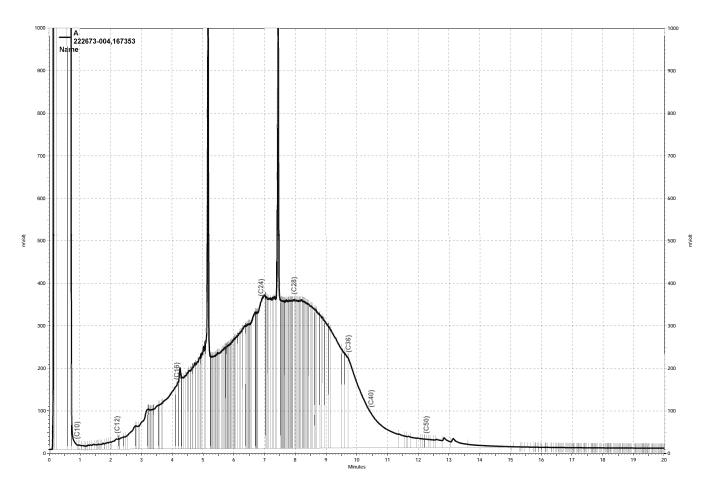
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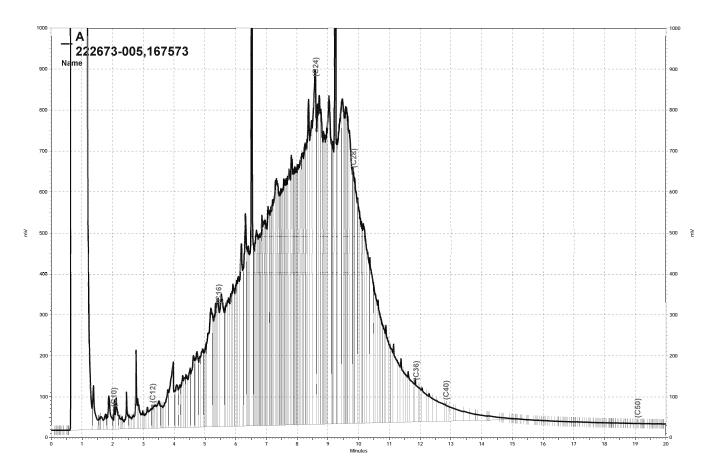
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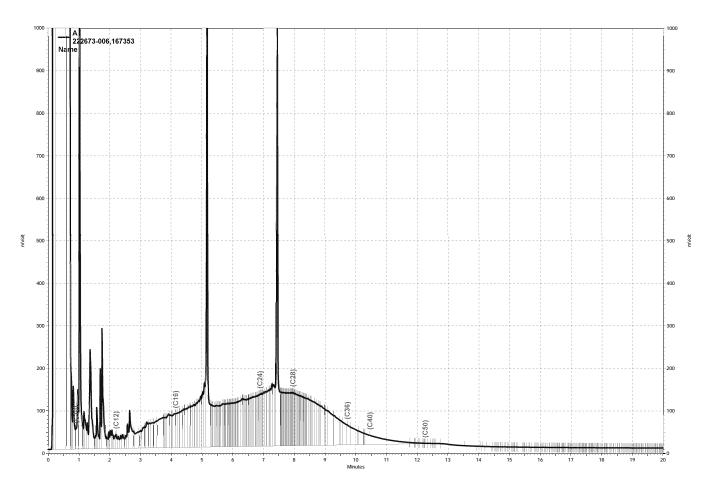
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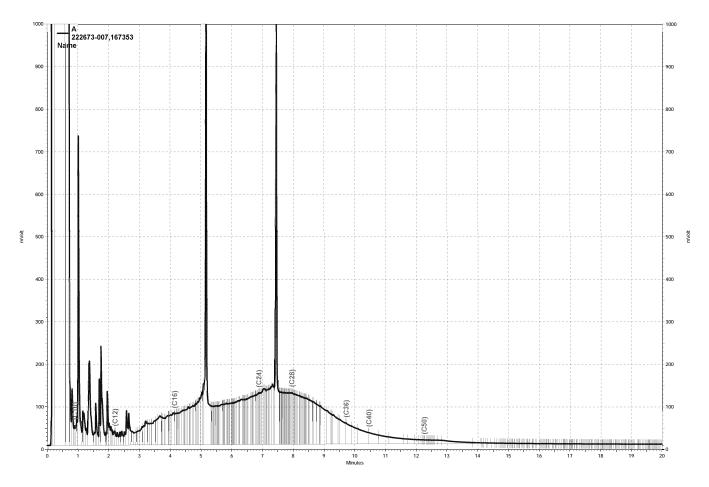
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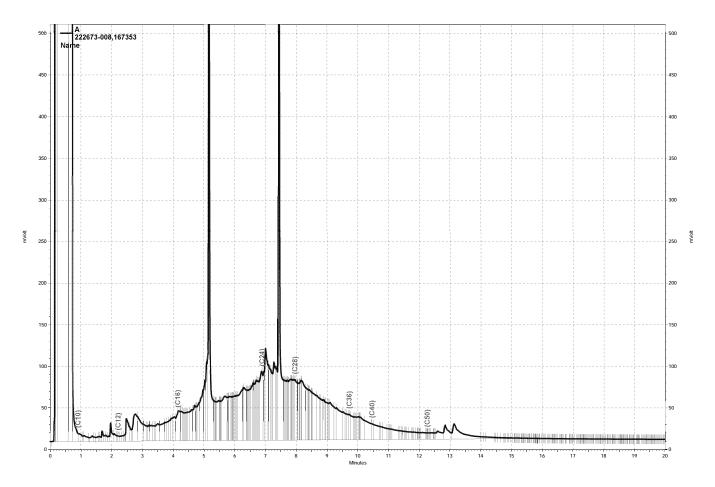
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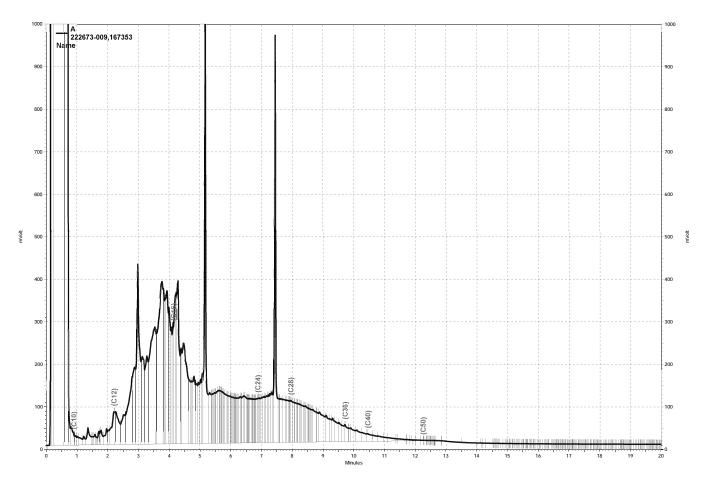
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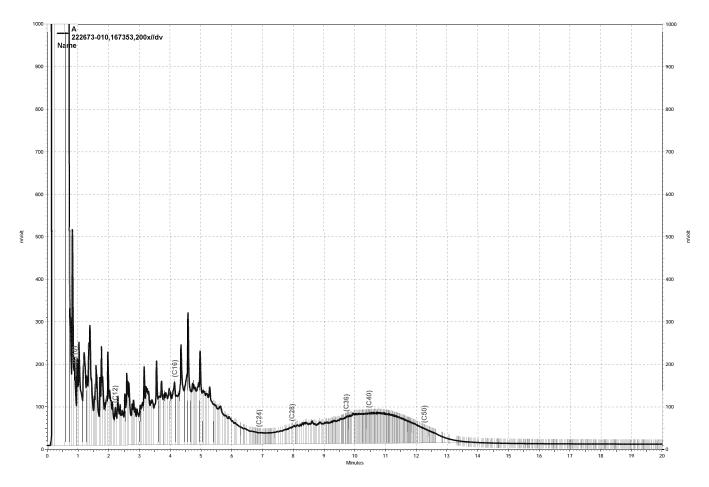
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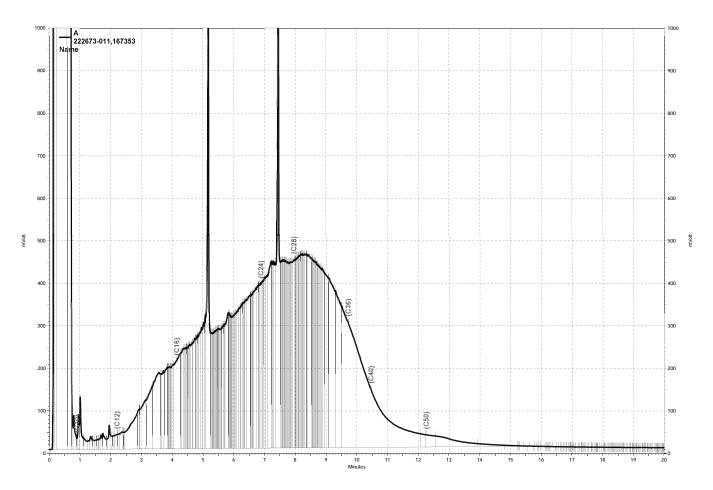
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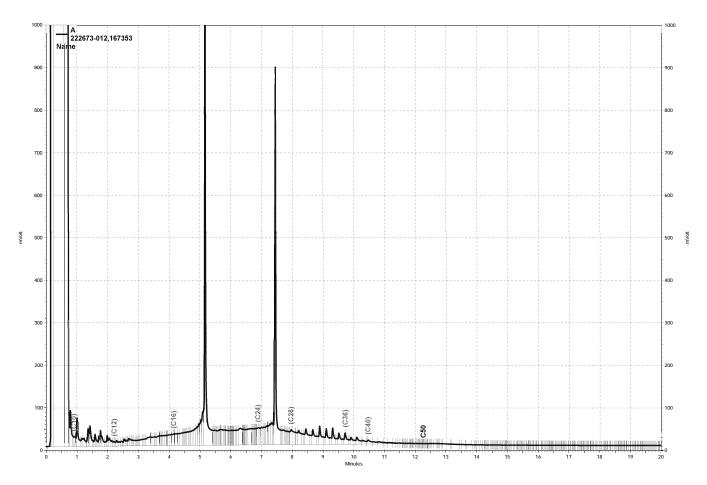
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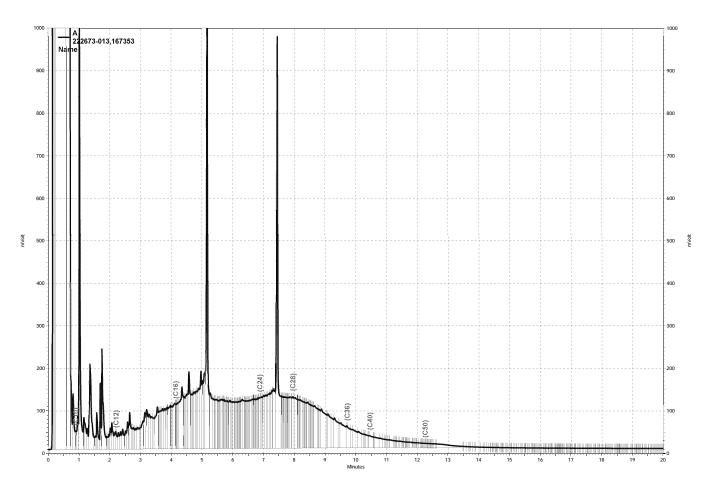
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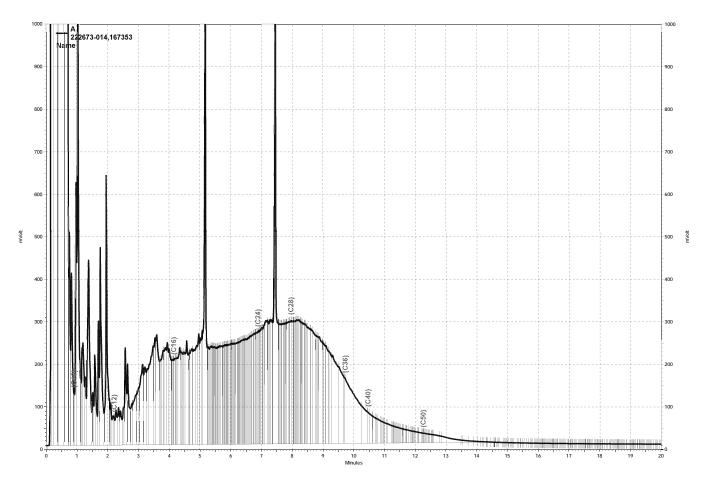
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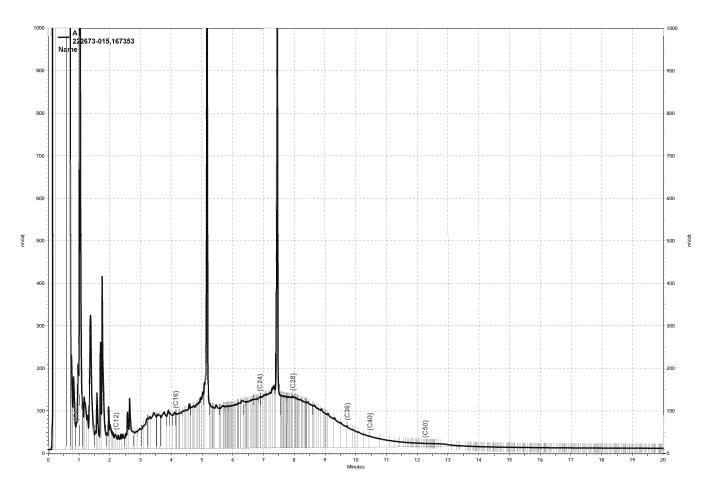
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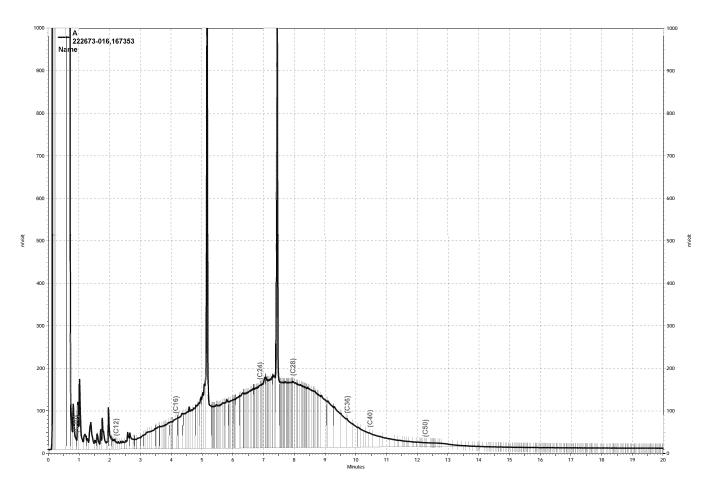
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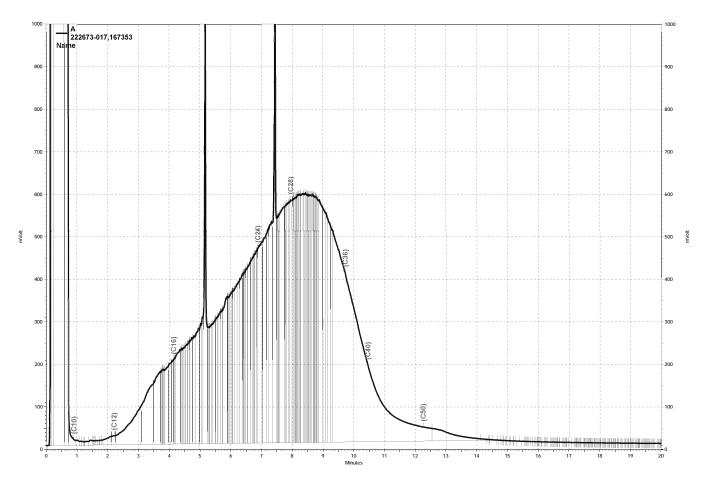
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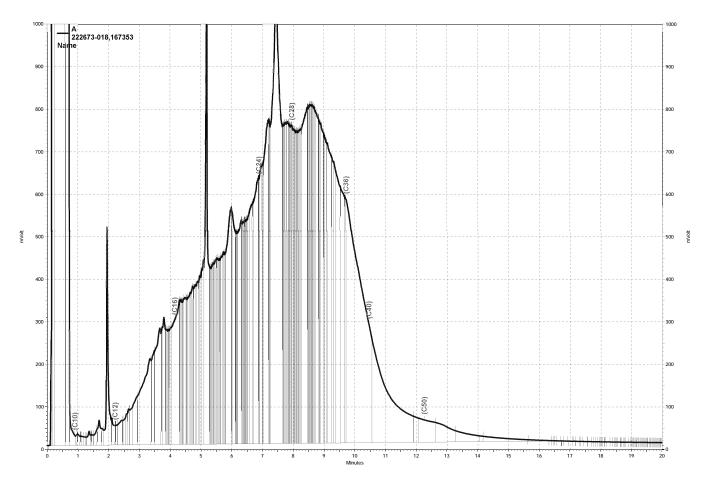
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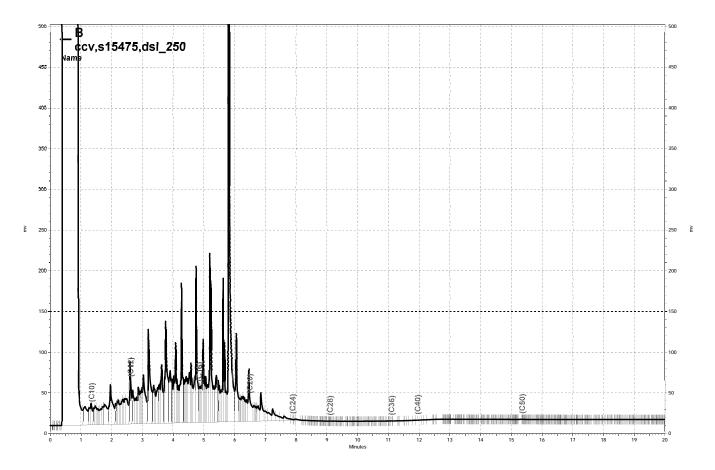
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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 222576 ANALYTICAL REPORT

Stellar Environmental Solutions

2198 6th Street

Berkeley, CA 94710

Project : 2007-65

Location : Emerybay Phase I Condos

Level : II

Sample ID TANK <u>Lab ID</u> 222576-001

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

Signature

Project Manager

Date: <u>09/28/2010</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 222576

Client: Stellar Environmental Solutions

Project: 2007-65

Location: Emerybay Phase I Condos

Request Date: 09/22/10 Samples Received: 09/22/10

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/22/10. The sample was received cold and intact.

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

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Chain of Custody Record

Lab job no.	ws	76
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Laboratory <u>Curtis and Tor</u> Address <u>2323 Fifth Stree</u> Berkeley, Calif	et				ethod of Shipment Ha	ind Del	very	-				•							Date 1 Page	of	1
510-486-0900	Offila 947 I	J		— Aiı	rbill No			_			7	7-	7	•	Anal	ysis Re	equired				
Project Owner Bay Center 6400 Christi Emeryville,	Investor, Lt e Avenue California	_C		— Pr	ooler NoTeal oject ManagerTeal lephone No(510) 644-	Glass 3123		_	/.	No. of C.	ontainers	17 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	9	//	7	7	7	//		7	
Project Name Emerybay Project Number 2007-6	Phase I Co	ndos		Fa	x No(510) 644-		Der	_ _ /				A A		//	/ /	/ /	/ /	//		Remark	ks
Field Sample Number	Location/ Depth	Date	Time	Sample Type	Type/Size of Container	Pre	eservation Chemical	7/		//	- //`	7 /	′ /								
Tank	AST	12)-	082S		500 mL amber, VOA	Y	(a)	N	5	X	X								<u>/</u>		
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Stellar Environi	mental (1700	Compa	any <u>C</u>	rbs+ longths	040	Company	-							Comp	any _					
Turnaround Time: (a) VOA w/ HC Comments:	 L						Relinquished Signature	-	•				Date	- 1	ceived Signat						Date
Comments:							Printed				·		Time	\dashv	Printe	d					Time
							Company								Comp	any _					

COOLER RECEIPT CHECKLIST



Login # 2 72576 D. Client SFS Date Opened 6 22 20 By (pring)	ate Received 9-	2210	Number of coo	olers /
Client SFS	Projec	t Emery BA	Y PHASE /	CIROUS
Date Opened <u>G-22-70</u> By (print Date Logged in By (print	t) S. overs	(sign) (sign)_	for	
1. Did cooler come with a shipping				ES MO
2A. Were custody seals present? How many	Name		Date	NO
2B. Were custody seals intact upon 3. Were custody papers dry and inta 4. Were custody papers filled out properties of 5. Is the project identifiable from c 6. Indicate the packing in cooler: (i	act when received roperly (ink, signe ustody papers? (In	?ed, etc)? f so fill out top	<u> </u>	ES NO ES NO
Bubble Wrap For Cloth material Car 7. Temperature documentation:	dboard [] Styrofoam	•	
Type of ice used: Wet	□ Blue/Gel	□None	Temp(°C)	
Samples Received on ice	& cold without a	temperature b	olank	
☐ Samples received on ice	directly from the	field. Cooling	process had be	gun
8. Were Method 5035 sampling con If YES, what time were they		ezer?		_YES NO
9. Did all bottles arrive unbroken/un	nopened?			CARS NO
10. Are samples in the appropriate11. Are sample labels present, in go	containers for ind	icated tests? _ complete?		MES NO
12. Do the sample labels agree with				NO NO
13. Was sufficient amount of sampl				MES NO
14. Are the samples appropriately p				NO N/A
15. Are bubbles > 6mm absent in V		1-1:0		NO N/A
16. Was the client contacted concer. If YES, Who was called?	ning uns sample (ienvery? Bv	Date	YES NO
COMMENTS			Daw	

SOP Volume:

Client Services

Section:

1.1.2

Page:

1 of 1

Rev. 6 Number 1 of 3

Effective: 23 July 2008 Z:\qc\forms\checklists\Cooler Receipt Checklist_rv6.doc



	Curtis & Tompkins Laboratories Analytical Report										
Lab #:	222576	Location:	Emerybay Phase I Condos								
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B								
Project#:	2007-65										
Field ID:	TANK	Batch#:	167236								
Matrix:	Water	Sampled:	09/22/10								
Units:	ug/L	Received:	09/22/10								

Type: SAMPLE Diln Fac: 5.000 Lab ID: 222576-001 Analyzed: 09/25/10

Analyte	Result	RL	Analysis
Gasoline C7-C12	10,000	250	EPA 8015B
MTBE	15 C	10	EPA 8021B
Benzene	1,400	2.5	EPA 8021B
Toluene	23	2.5	EPA 8021B
Ethylbenzene	6.7	2.5	EPA 8021B
m,p-Xylenes	180	2.5	EPA 8021B
o-Xylene	48	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	113	70-140	EPA 8015B	
Bromofluorobenzene (PID)	93	54-134	EPA 8021B	

Type: BLANK Diln Fac: 1.000 Lab ID: QC561484 Analyzed: 09/24/10

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

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	107	70-140	EPA 8015B	
Bromofluorobenzene (PID)	89	54-134	EPA 8021B	

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

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7.0



	Curtis & Tompkins Laboratories Analytical Report											
Lab #:	222576	Location:	Emerybay Phase I Condos									
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B									
Project#:	2007-65											
Matrix:	Water	Batch#:	167236									
Units:	ug/L	Analyzed:	09/24/10									
Diln Fac:	1.000											

Type: BS Lab ID: QC561479

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	10.00	8.708	87	57-150	EPA 8021B
Benzene	10.00	8.879	89	70-122	EPA 8021B
Toluene	10.00	9.262	93	72-125	EPA 8021B
Ethylbenzene	10.00	9.517	95	72-126	EPA 8021B
m,p-Xylenes	10.00	9.892	99	73-126	EPA 8021B
o-Xylene	10.00	9.778	98	71-127	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	103	70-140	EPA 8015B
Bromofluorobenzene (PID)	87	54-134	EPA 8021B

Type: BSD Lab ID: QC561480

Analyte	Spiked	Result	Result %REC		RPD	Lim	Analysis
MTBE	10.00	9.254	93	57-150	6	46 EP	A 8021B
Benzene	10.00	8.963	90	70-122	1	33 EP	A 8021B
Toluene	10.00	9.121	91	72-125	2	25 EP	A 8021B
Ethylbenzene	10.00	9.227	92	72-126	3	26 EP	A 8021B
m,p-Xylenes	10.00	9.442	94	73-126	5	25 EP	A 8021B
o-Xylene	10.00	9.509	95	71-127	3	25 EP	A 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	102	70-140	EPA 8015B
Bromofluorobenzene (PID)	89	54-134	EPA 8021B



Curtis & Tompkins Laboratories Analytical Report							
Lab #:	222576	Location:	Emerybay Phase I Condos				
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B				
Project#:	2007-65						
Type:	LCS	Diln Fac:	1.000				
Lab ID:	QC561481	Batch#:	167236				
Matrix:	Water	Analyzed:	09/24/10				
Units:	ug/L						

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	988.7	99	73-127	EPA 8015B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	101	70-140	EPA 8015B
Bromofluorobenzene (PID)	87	54-134	EPA 8021B

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Curtis & Tompkins Laboratories Analytical Report							
Lab #: 222576	5	Location:	Emerybay Phase I Condos				
Client: Stella	ar Environmental Solutions	Prep:	EPA 5030B				
Project#: 2007-6	55						
Field ID:	ZZZZZZZZZ	Batch#:	167236				
MSS Lab ID:	222656-008	Sampled:	09/22/10				
Matrix:	Water	Received:	09/23/10				
Units:	ug/L	Analyzed:	09/25/10				
Diln Fac:	1.000						

Type: MS Lab ID: QC561482

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	11.65	2,000	1,922	96	68-120	EPA 8015B

Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	107	70-140	EPA 8015B	
Bromofluorobenzene (PID)	93	54-134	EPA 8021B	

Type: MSD Lab ID: QC561483

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	n Analysis
Gasoline C7-C12	2,000	1,911	95	68-120	1	20	EPA 8015B

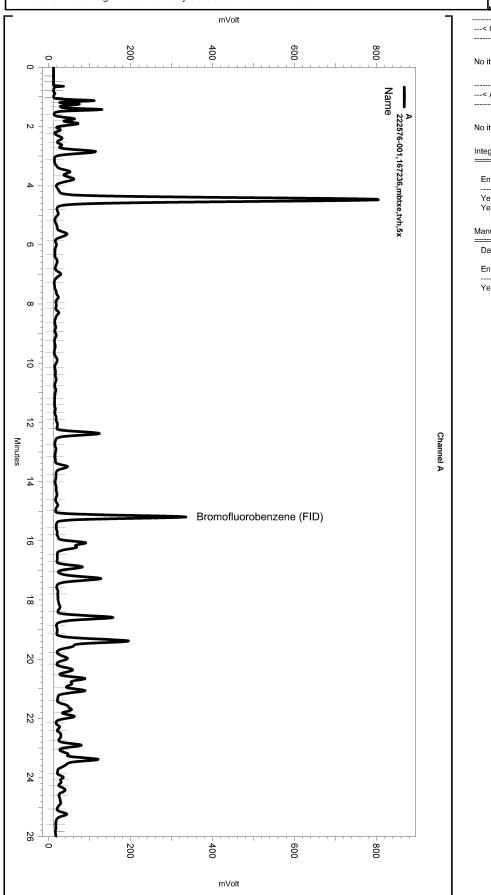
Surrogate	%REC	Limits	Analysis	
Bromofluorobenzene (FID)	111	70-140	EPA 8015B	
Bromofluorobenzene (PID)	96	54-134	EPA 8021B	

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\267.seq

Sample Name: 222576-001,167236,mbtxe,tvh,5x

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\267-021 |
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1) |
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe265.met

Software Version 3.1.7 Run Date: 9/25/2010 5:06:40 AM Analysis Date: 9/26/2010 11:07:22 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: b1.0



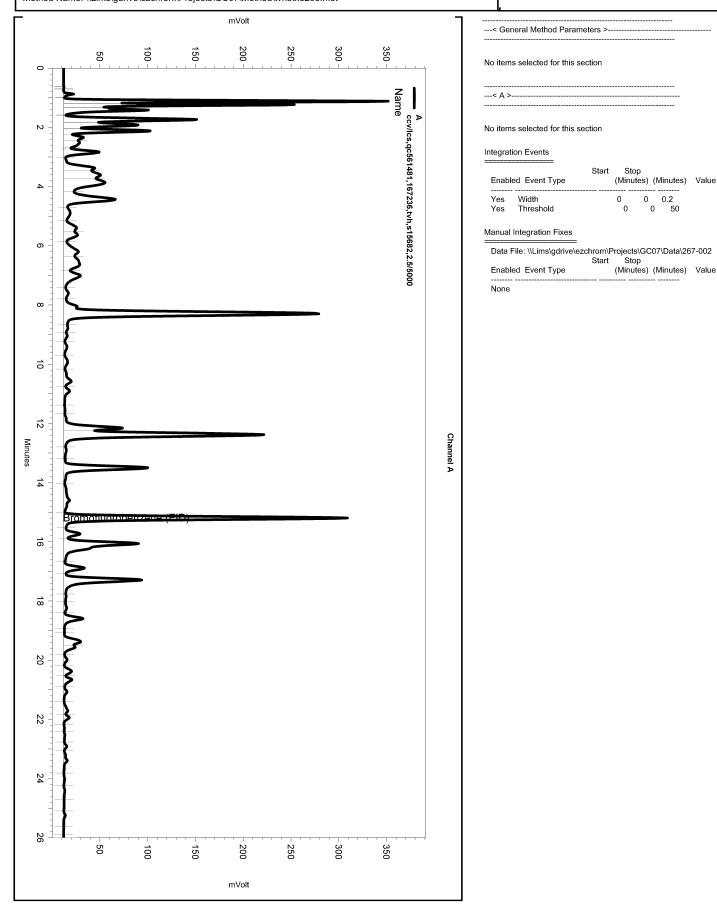
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Integration Events							
Start Stop Enabled Event Type (Minutes) (Minutes) Value							
Yes Width 0 0 0.2 Yes Threshold 0 0 50							
Manual Integration Fixes							
Start Stop Enabled Event Type (Minutes) (Minutes) Value							
Yes Lowest Point Horizontal Baseli 0.338 25.964 0							

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Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\267-002

Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe265.met

Software Version 3.1.7 Run Date: 9/24/2010 1:28:22 PM Analysis Date: 9/26/2010 10:40:43 AM Sample Amount: 5 Multiplier: 5 Vial & pH or Core ID: {Data Description}



Page 2 of 4 (6)



Total Extractable Hydrocarbons							
Lab #:	222576	Location:	Emerybay Phase I Condos				
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C				
Project#:	2007-65	Analysis:	EPA 8015B				
Field ID:	TANK	Sampled:	09/22/10				
Matrix:	Water	Received:	09/22/10				
Units:	ug/L	Prepared:	09/22/10				
Diln Fac:	1.000	Analyzed:	09/24/10				
Batch#:	167150						

Type: SAMPLE Lab ID: 222576-001

Analyte	Result	RL	
Diesel C10-C24	14,000	50	
Motor Oil C24-C36	2,800	300	

Surrogate	%REC	Limits
o-Terphenyl	98	60-129

Type: BLANK Lab ID: QC561120

Analyte	Result	RL	
Diesel C10-C24	ND	50	
Motor Oil C24-C36	ND	300	

Surrogate	%REC	Limits
o-Terphenyl	119	60-129

ND= Not Detected RL= Reporting Limit

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3.0



Total Extractable Hydrocarbons						
Lab #:	222576	Location:	Emerybay Phase I Condos			
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C			
Project#:	2007-65	Analysis:	EPA 8015B			
Type:	LCS	Diln Fac:	1.000			
Lab ID:	QC561121	Batch#:	167150			
Matrix:	Water	Prepared:	09/22/10			
Units:	ug/L	Analyzed:	09/24/10			

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,720	109	54-125

Surrogate	%REC	Limits
o-Terphenyl	107	60-129

Page 1 of 1 4.0



Total Extractable Hydrocarbons						
Lab #: 222576		Location:	Emerybay Phase I Condos			
Client: Stellar Environ	nmental Solutions	Prep:	EPA 3520C			
Project#: 2007-65		Analysis:	EPA 8015B			
Field ID: ZZZZZZZZ	ZZZ	Batch#:	167150			
MSS Lab ID: 222484-	002	Sampled:	09/16/10			
Matrix: Water		Received:	09/17/10			
Units: ug/L		Prepared:	09/22/10			
Diln Fac: 1.000		Analyzed:	09/24/10			

Type: MS Cleanup Method: EPA 3630C

Lab ID: QC561122

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	166.1	2,500	2,520	94	46-131

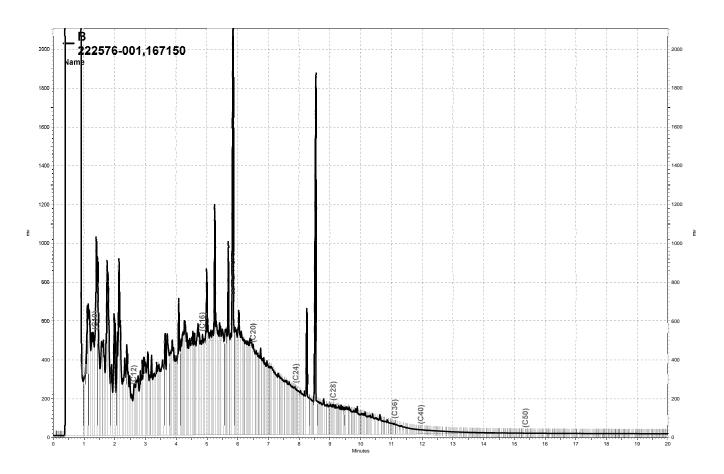
Surrogate	%REC	Limits	
o-Terphenyl	95	60-129	

Type: MSD Cleanup Method: EPA 3630C

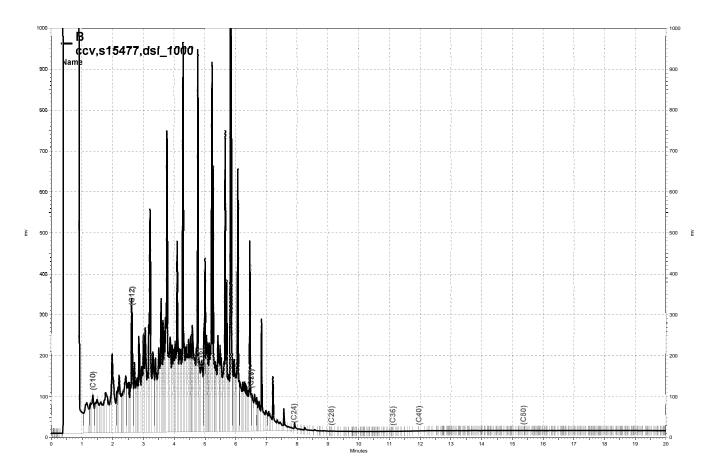
Lab ID: QC561123

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,688	101	46-131	6	61

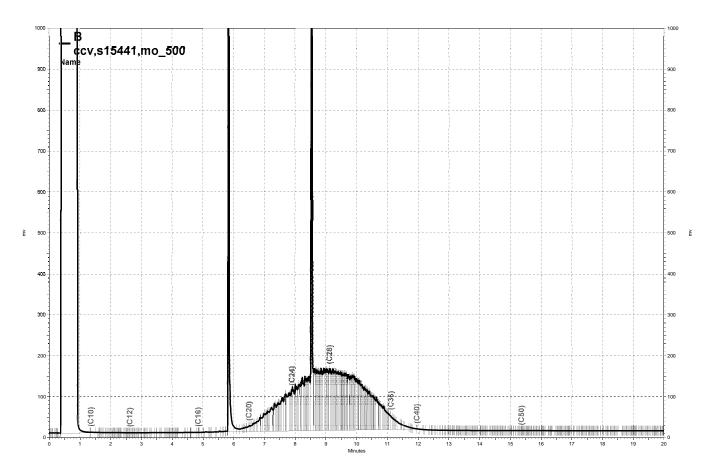
Surrogate	%REC	Limits
o-Terphenyl	99	60-129



\Lims\gdrive\ezchrom\Projects\GC15B\Data\266b050, B



\Lims\gdrive\ezchrom\Projects\GC15B\Data\266b044, B



\Lims\gdrive\ezchrom\Projects\GC15B\Data\266b045, 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 ^(a)	8.73	NP	5.58			
3	Feb-91	14.31	9.18	NP	5.13			
		Monitoring well	abandoned - dat	e unclear				

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

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

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

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

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

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

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

	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 ^(c)	9.54	NP	8.30				
4	Mar-08	17.84	9.77	NP	8.07				
5	Jun-08	17.84	9.68	NP	9.27				
6	Sep-08	17.84	9.30	NP	8.54				
7	Dec-08	17.84	9.83	NP	8.01				
8	Mar-09	17.84	9.37	NP	8.47				
9	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				

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

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

	MW-12								
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Installed b	etween 2004-20	006					
1	Nov-06 ^(d)	17.83 ^(c)	9.37	NP	8.46				
2	Dec-07	17.83	9.15	NP	8.68				
3	Mar-08	17.83	9.11	NP	8.72				
4	Jun-08	17.83	8.86	NP	8.97				
5	Sep-08	17.83	8.76	NP	9.07				
6	Dec-08	17.83	8.98	NP	8.85				
7	Mar-09	17.83	8.50	NP	9.33				
8	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				

MW-13									
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation				
		Installed l	etween 2004-20	06					
1	Dec-06	17.66 ^(c)	9.81	9.44	7.85				
2	Dec-07	17.66	9.95	9.39	7.71				
3	Mar-08	17.66	10.02	9.54	7.64				
4	Jun-08	17.66	9.86	9.45	7.80				
5	Sep-08	17.66	10.34	9.54	7.32				
6	Dec-08	17.66	10.54	9.65	7.12				
7	Mar-09	17.66	9.26	9.14	8.40				
8	Sep-09	17.66	9.91 ^(e)	9.72	7.75				
9	Mar-10	17.66	9.22 ^(e)	9.22	8.44				
10	Sep-10	17.66	9.40	10.18	7.48				

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

	MW-15											
Sampling Event No.	Date	TOC Elevation	TOC Elevation DTW DTP									
•		Installed l	oetween 2004-20	006								
1	Dec-06	17.80 ^(c)	9.15	NP	8.65							
2	Dec-07	17.80	9.30	NP	8.50							
3	Mar-08	17.80	9.20	9.18	8.60							
4	Jun-08	17.80	9.60	9.63	8.20							
5	Sep-08	17.80	8.84	8.84 ^(f)	8.96							
6	Dec-08	17.80	9.19	8.36	8.61							
7	Mar-09	17.80	8.70	NP	9.10							
8	Sep-09	17.80	9.40 ^(e)	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							

		N	MW-16		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
		Installed be	etween 2004-20	006	
1	Dec-06	NA	NA	NA	NA
2	Dec-07	17.74 ^(c)	9.36	NP	8.38
3	Mar-08	17.74	9.88	NP	7.86
4	Jun-08	17.74	9.25	NP	7.80
5	Sep-08	17.74	9.07	NP	8.67
6	Dec-08	17.74	9.45	NP	8.29
7	Mar-09	17.74	8.88	NP	8.86
8	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

	MW-17													
Sampling Event No.	Date	TOC Elevation	DTP	GW Elevation										
	Installed between 2004-2006													
1	Dec-06	NA	NA	NA	NA									
2	Dec-07	18.17 ^(c)	9.40	9.32	8.77									
3	Mar-08	18.17	9.34	9.18	8.83									
4	Jun-08	18.17	8.98	8.97	9.19									
5	Sep-08	18.17	9.21	7.92	8.96									
6	Dec-08	18.17	9.25	9.11	8.92									
7	Mar-09	18.17	8.89	NP	9.28									
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									

		N	MW-18		
Sampling Event No.	Date	TOC Elevation	DTP	GW Elevation	
		Installed be	etween 2004-20	006	
1	Dec-06	NA	NA	NA	NA
2	Dec-07	16.35 ^(c)	8.30	NP	8.05
3	Mar-04	16.35	8.34	NP	8.01
4	Jun-08	16.35	8.34	NP	8.20
5	Sep-08	16.35	8.48	NP	7.87
6	Dec-08	16.35	8.61	NP	7.74
7	Mar-09	16.35	7.75	NP	8.60
8	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

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

			RW-1		
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
1	Dec-88	NM	NM	NM	NM
2	May-89	14.54	10.17	10.14	4.37
3	Feb-91	14.54	11.46	10.85	3.57
4	Mar-04	18.32	7.20	5.62	11.12
5	Nov-06 ^(d)	18.32	9.15	9.11	9.17
6	Dec-07	16.70 ^(c)	9.53 ^(e)	9.53	7.17
7	Mar-08	16.70	8.99	8.92	7.71
8	Jun-08	16.70	8.95	8.87	7.75
9	Sep-08	16.70	NM ^(c)	NM ^(c)	NM ^(c)
10	Dec-08	16.70	NM	NM	NM
11	Mar-09	16.70	9.06 ^(e)	9.06	7.64
12	Sep-09	16.70	9.45 ^(e)	9.45	7.25
13	Mar-10	16.70	8.93 (e)	8.93	7.77
14	Sep-10	16.70	9.50	9.65	7.05

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

The 2004 and 2006 water elevations were measured by PES Environmental. $\label{eq:pessential}$

NS = Not sampled

NP = No product

NM - Not measured

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

TOC Elevation = Top of Casing Elevation

DTW = Depth to water from the top of the casing DTP - Depth to product from the top of the casing

GW Elevation - Groundwater elevation as compared to mean sea level

(a) Wells resurveyed in May 1989

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

(c) Wells resurveyed by PES in April 2007

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

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

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

APPENDIX E

Historical Product Extraction Data Table

Table D Historical Trench and Monitoring Well Product Recovery 6400 Christie Avenue, Emeryville, CA

												W	ell or T	rench L	ocation	1												$\overline{}$
																												Total
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	TA-E	TA-M	TA-W	TB-E	TB-M	TB-W	TC-E	TC-M	TC-W	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	
Feb-08			0.05															0.45	0.15	0.15	0.30							1.10
Mar-08				0.02	0.002	0.02	0.001	0.04	0.02	0.03	0.004	0.01	0.02	0.01	0.01	0.003	0.012	0.3	0.09	0.06	0.09				0.06			0.80
Mar-08																				0.002	0.008							0.01
May-08	0.09							0.075		0.075	0.019	0.009			0.13			1.397	0.866	1.466	1.431							5.56
Jun-08																			0.15	0.11	0.57							0.83
Aug-08	0.12							0.048		0.024	0.009							0.75	0.9	1.6	0.7	0.3	0.3		0.15			4.90
Sep-08																			0.03	0.09	0.048							0.17
Nov-08	0.078					0.009				0.06	0.009			0.003	0.06			0.6	0.1	0.03		0.06	0.06	0.06	0.06	0.09	0.09	1.37
Dec-08																			0.0003	0.08					0.03			0.11
2008 Total																												15.99
Mar-09	0.279					0.378		0.369		0.261	0.007	0.023	0.117		0.342		0.023	1.800	0.750	0.950	1.010	0.153	0.153	0.153	0.653	0.153	0.153	7.73
Jun-09																			0.5									0.50
Sep-09	0.286				0.022	0.418		0.176	0.308	0.176	0.088	0.007	0.176	0.088	0.176	0.022	0.066	7.15	1.4	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	19.46
Dec-09																			0	0.9	0.06				0			0.96
2009 Total																												28.65
Mar-10	0.14				0.01	0.18	0.02	0.60		0.60	0.03	0.10	0.69	0.04	0.30	0.02		8.00	1.30	1.00	1.00	0.50	1.00	0.50	1.00	1.00	1.00	19.03
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
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	21.73	25.17	28.30	2.45	2.97	2.27	4.77	2.89	2.89	190.08

Note

All free product quantities presented in gallons

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

APPENDIX F

Groundwater Disposal Documentation

lea	ise print or type. (Form design	ned for use on elite (12-pitch) typewriter.)		10.5	Deenens (Shann	4. Manifest		Approved, UMB No.	2050-0039
+	UNIFORM HAZARDOUS	1. Generator ID Number	2 Page 1 oi	1	ency Response f				00294 J .	IV
П	WASTE MANIFEST	CA17171727636	11		00-424-93				10234 J	UN
	5. Generator's Name and Mailin	g Address - Apartments		Generator	's Site Address (i	f different th	an mailing addres	55)		
Н	6400 Chri	ci 9460s								Ì
П	Emeryicille	- 594-2010								
П	6 Transporter 1 Company Name	e					U.S. EPA ID I	Number		
П	Everareen F	Environmental Services					CA	D9824	13262	
	7. Transporter 2 Company Name	e					U.S. EPAID N	Number		
1	8. Designated Facility Name an	d Site Address					U.S. EPA ID N	Number		l
	EVERGR 6880 SMITH	REEN OIL, INC. AVE., NEWARK CA. 94560 510-795-4400	l CAI	CAD980887418						
l	Facility's Phone:	on (including Proper Shipping Name, Hazard Class, ID Num	har		10. Containe	are	11. Total	12. Unit		
1	Docking Group (if a	on (повону гюрег энкрыну магле, падаго стаза, то мент вку))	.DE1,	F	No.	Туре	Quantity	Wt./Vol.	13. Waste Code	s
L	HM and Packing Group (in a							1		$\overline{}$
GELERATOR	NON-RCRA	HAZARDOUS WASTE, LIQUID		l	001	TT		G	223	
RA		(Oil & water)				1050]	İ	
	2.			1						[
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П							_	<u> </u>	<u> </u>	
	3.							1		;
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П	[4					,				. 1
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П	ş.									
П	14. Special Handling Instruction							₹ ^£	3640	
Н	PROFILE #	<u> 40173</u>					nvoice #			
П	DOT ERG# 1	171 WEAR PROTECTIVE CLOTHIN	G			S	ales Orde	r#2	98353	
$\ $					 					
	marked and labeled/placa	R'S CERTIFICATION: I hereby declare that the contents or rded, and are in all respects in proper condition for transpor contents of this consignment conform to the terms of the ac-	t according to appli	icable interr	rational and natio					
1	I certify that the waste min	imization statement identified in 40 CFR 262.27(a) (if I am a	a large quantity ger			quantity ge	nerator) is true.			
1	Generator's Offeror's Printed Ty	ped Name of Emalybay L	i O SK	gnature	7) 7	11.	1		Month Day	1
ţ	Fleat Islass	FIGURE OF CIVELLINAS C		Xe	V /	W	2.		105 30	10
딛	16. International Shipments	impert to U.S	Export from	U.S.	Fort of entr	Wexit:		-		
INT	Transporter signature (for expo	·			Date leavin	g U S				
出	17 Transporter Acknowledgmen	·				-				
TRANSPORTER	Transporter 1 Printed/Typed Nar	me C	. Sig	gnature					Month Day	Year
SP	160. L	Powell			٠, ســــــــــــــــــــــــــــــــــــ	45			0930	0 10
Ā	Transporter 2 Printed/Typed Na.	me -	Sig	gnature					Month Day	Year
E										
1	13. Discrepancy									
1	18a. Discrepancy Indication Spa	ace Quantity Type			Residue		Partial Rej	iection	Full Rej	ection
[,							•			
<u> </u>				Mar	nifest Reference	Number:				
FACILITY	18b. Alternate Facility (or Gener	ator)					U.S. EPAID !	Number		
₹CII										
	Facility's Phone									
TED	18c Signature of Alternate Facil	ity (or Generator)							Month Day	y Year
DESIGNAT										
ESK	19. Hazardous Waste Report Ma	anagement Method Codes (i.e., codes for hazardous waste	treatment, disposa	al and recy	cling systems)		1.			
ದ	i.	2.]3.				14			
	00.0									
	20 Designated Facility Owner of Printed/Typed Name	r Operator: Certification of receipt of hazardous materials of			as noted in Item	18a				
$\ \ $	т писси турес мате		Sig I	gnature					Month Day	Year
*										1