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FIRST SEMIANNUAL 2010 GROUNDWATER MONITORING AND PRODUCT EXTRACTION REPORT

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

Prepared for:

**EMERYBAY COMMERCIAL ASSOCIATION
EMERYVILLE, CA 94608**

April 2010

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GROUNDWATER MONITORING AND
PRODUCT EXTRACTION REPORT**

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EMERYVILLE, CALIFORNIA**

Prepared for:

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

Prepared by:

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

April 21, 2010

Project No. 2007-65

April 21, 2010

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

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

Dear Ms. Jakub:

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

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

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

Sincerely,



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



Teal Glass, R.E.A.
Project Manager

cc: Ms. Kathryn Collins, Emerybay Commercial Association



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1.0 INTRODUCTION

PROJECT BACKGROUND

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

SITE AND VICINITY DESCRIPTION

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

PREVIOUS INVESTIGATIONS

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

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



Image courtesy of the U.S. Geological Survey



SITE LOCATION ON AERIAL PHOTO

**6400 Christie Ave.
Emeryville, CA**

By: MJC

JANUARY 2008

Figure 1



2007-565-01



LEGEND

--- Subject property boundary



SITE PLAN AND ADJACENT LAND USE

6400 Christie Ave.
Emeryville, CA

By: MJC

JANUARY 2008

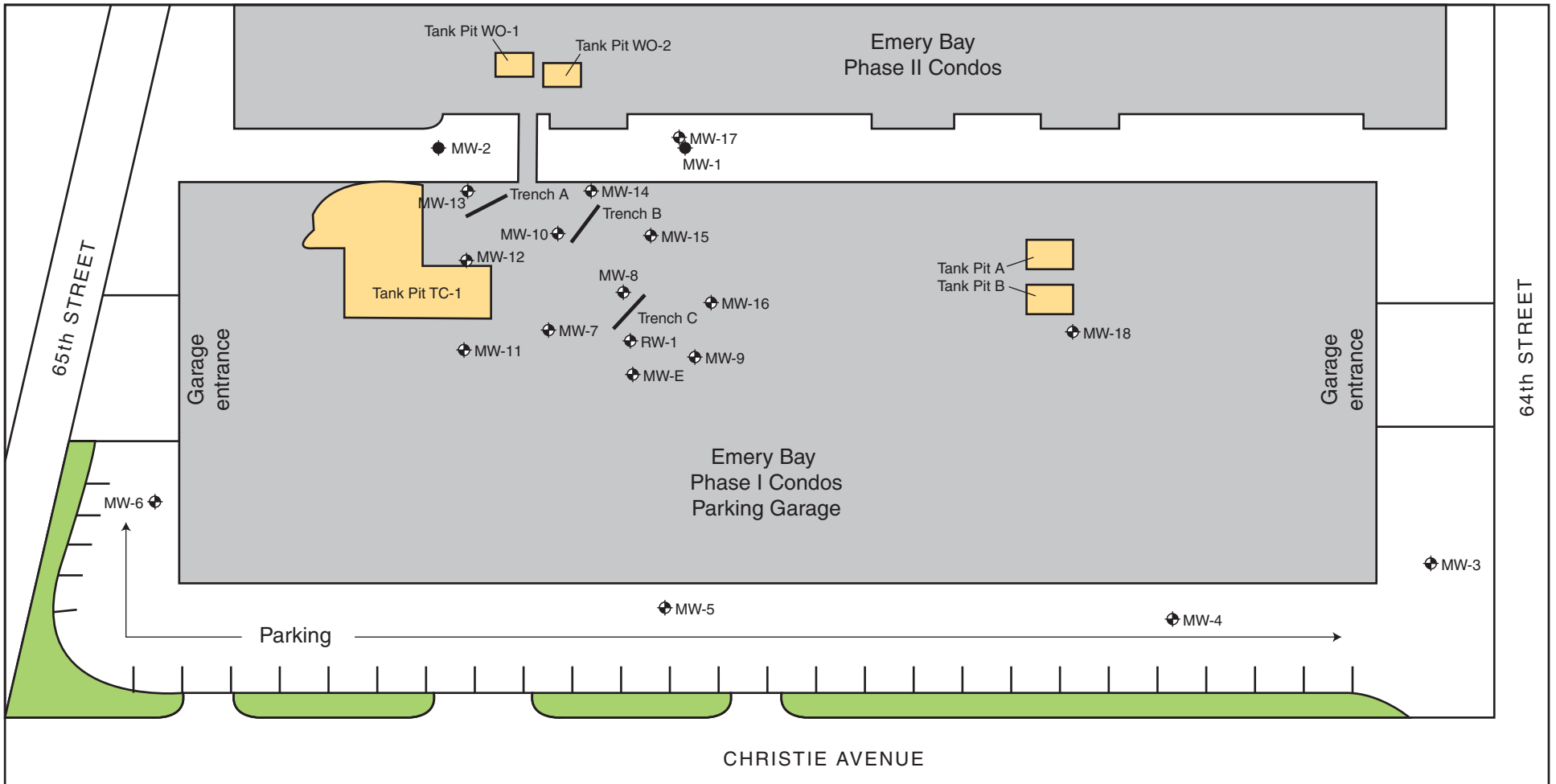
Figure 2



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

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



LEGEND

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

0 60
SCALE: 1/2" = 60 FEET



MONITORING WELL AND TRENCH LOCATIONS
6400 Christie Ave., Emeryville, CA

Figure 3

by: MJC

JANUARY 2008

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

OBJECTIVES AND SCOPE OF WORK

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

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

REGULATORY OVERSIGHT

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

The case has been assigned No. SLT2005561 in the Water Board's GeoTracker system. Electronic uploads of required data/reports are submitted to both agencies.

2.0 PHYSICAL SETTING

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

TOPOGRAPHY AND DRAINAGE

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

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

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

GEOLOGY

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

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

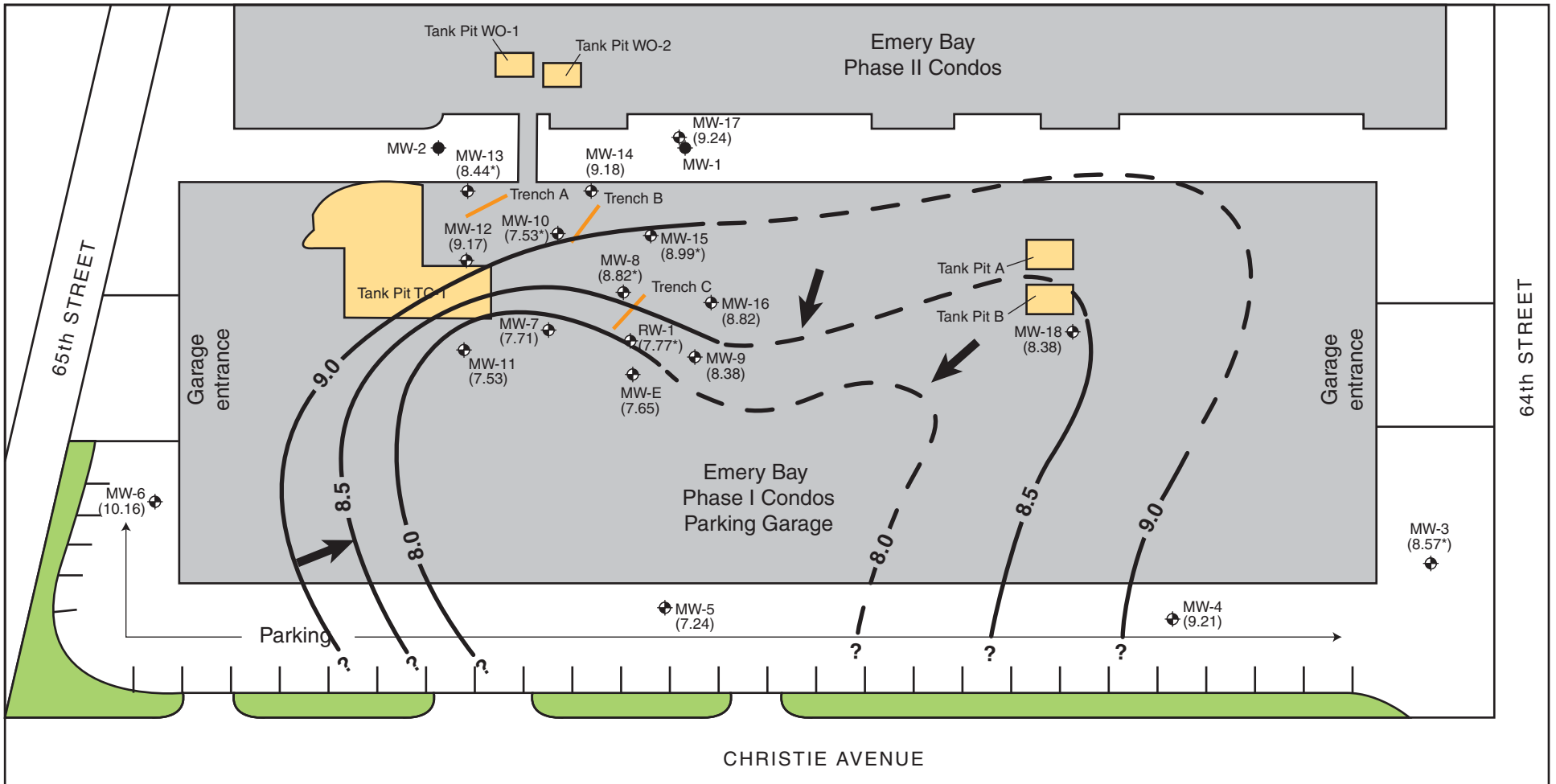
fault zone, the legislatively defined zone of restricted land use 200 feet around an active fault due to the high probability of ground rupture.

GROUNDWATER HYDROLOGY

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

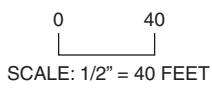
The groundwater gradient measured during the March 2010 monitoring event ranged from the southwest (on the northern portion of the site) to the west (on the central portion of the site) to the northwest (on the southern portion of the site). According to current and historical water level data obtained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

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



LEGEND

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



GROUNDWATER ELEVATION MAP — March 24, 2010
6400 Christie Ave., Emeryville, CA

Figure 4

by: MJC

APRIL 2010

2007-65-38



3.0 MARCH 2010 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

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

SAMPLING METHODS AND ACTIVITIES

Activities for this event include:

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

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

CURRENT MONITORING EVENT

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

Table 1
Groundwater Monitoring Well Construction and Groundwater Elevation Data
6400 Christie Avenue, Emeryville, California

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

Notes:

^(a) Relative to mean sea level.

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

bgs = below ground surface

TOC = below top of casing

NA = not applicable (no free product in well)

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

MW-3 through MW-6 and MW-E are 2-inch PVC. MW-7 through MW-18 are ¾-inch PVC. RW-1 is 10-inch PVC.

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

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

4.0 REGULATORY CONSIDERATIONS, ANALYTICAL RESULTS, AND DISCUSSION OF FINDINGS

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

REGULATORY CONSIDERATIONS

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

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

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

GROUNDWATER SAMPLE RESULTS

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

Table 2
Groundwater Sample Analytical Results – March 24, 25, and 26, 2009
6400 Christie Avenue, Emeryville, California

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

Notes:

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

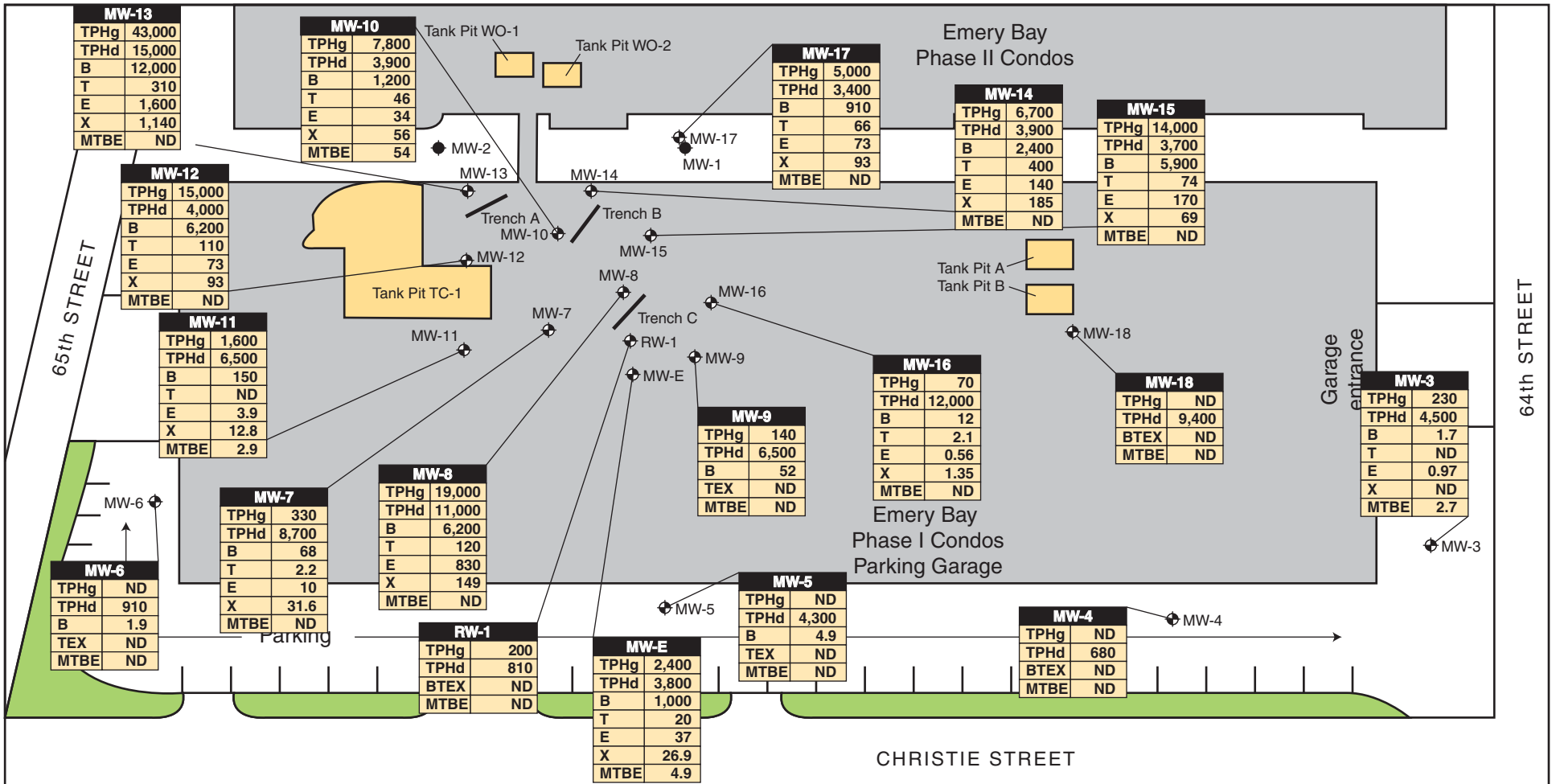
MTBE = methyl tertiary-butyl ether

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

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

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

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



LEGEND

- ◆ Monitoring well
 - ◆ Monitoring well (presumed abandoned)
 - Trench location
 - Historical tank pit area
 - Landscaping
- TPHg = Total petroleum hydrocarbons as gasoline
 TPHd = Total petroleum hydrocarbons as diesel
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Total xylenes
 ND = Below the laboratory detection limit
 MTBE = Methyl Tertiary Butyl Ether
- All concentrations in micrograms per liter (µg/L)



GROUNDWATER MONITORING WELL ANALYTICAL RESULTS

6400 Christie Ave., Emeryville, CA

Figure 5

by: MJC

APRIL 2010

Hydrocarbon Contaminants

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

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

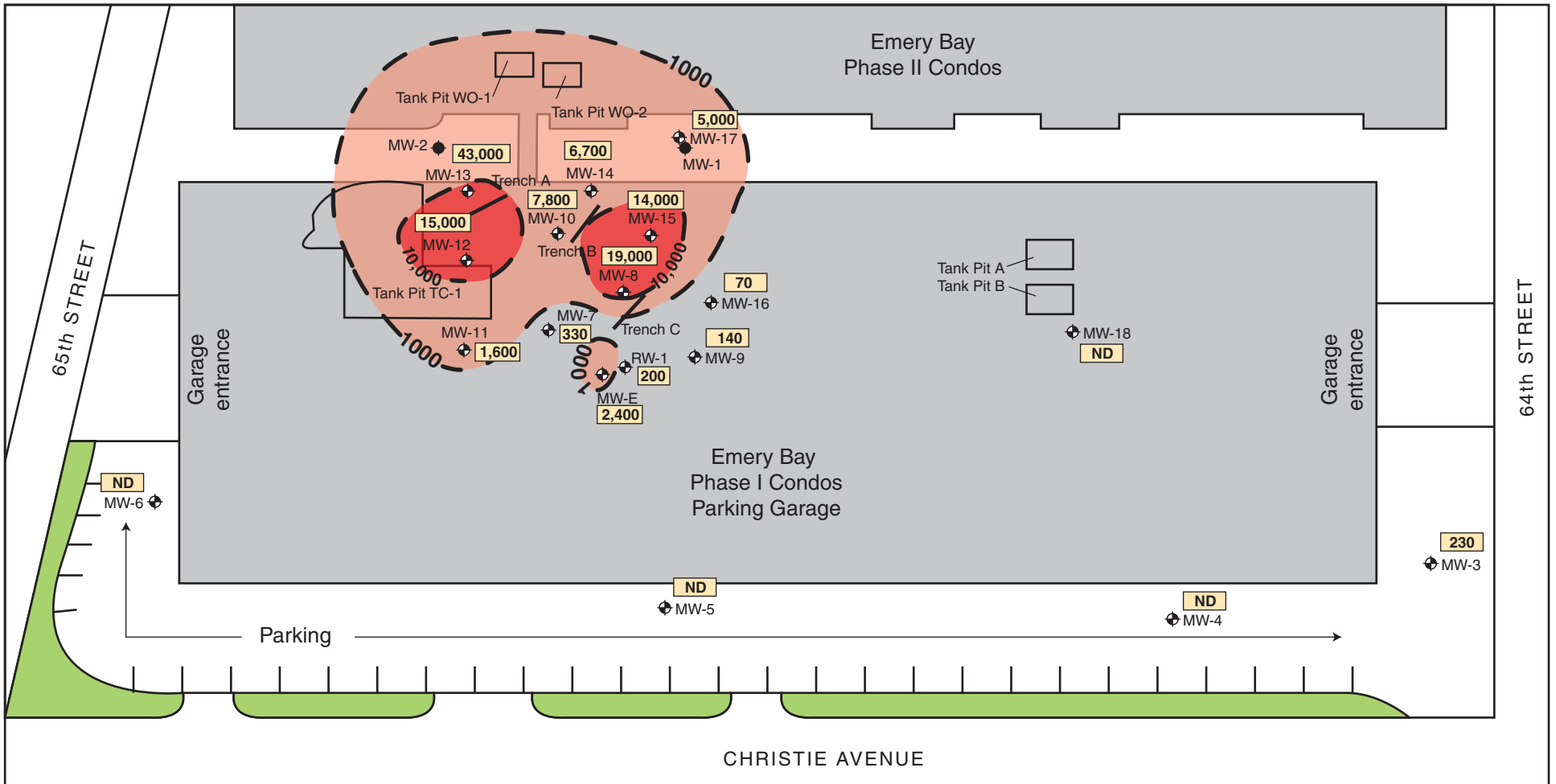
Figure 6 shows an isoconcentration contour map of TPHg concentrations in groundwater based on the March 2010 monitoring well analytical results. Increases compared to the March 2009 monitoring event were observed in wells MW-9, MW-11, MW-12, and MW-E. The remaining wells either remained below laboratory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

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

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

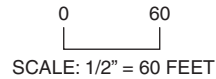
While not nearly as significant in percent reduction as observed in MW-13, all of the monitoring wells, with the exception of MW-3, MW-14, and MW-17 showed decreased hydrocarbon concentrations in March 2010 as compared to March 2009. The concentrations in MW-3, MW-14, and MW-17, while above the March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

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



LEGEND

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



2007-65-43

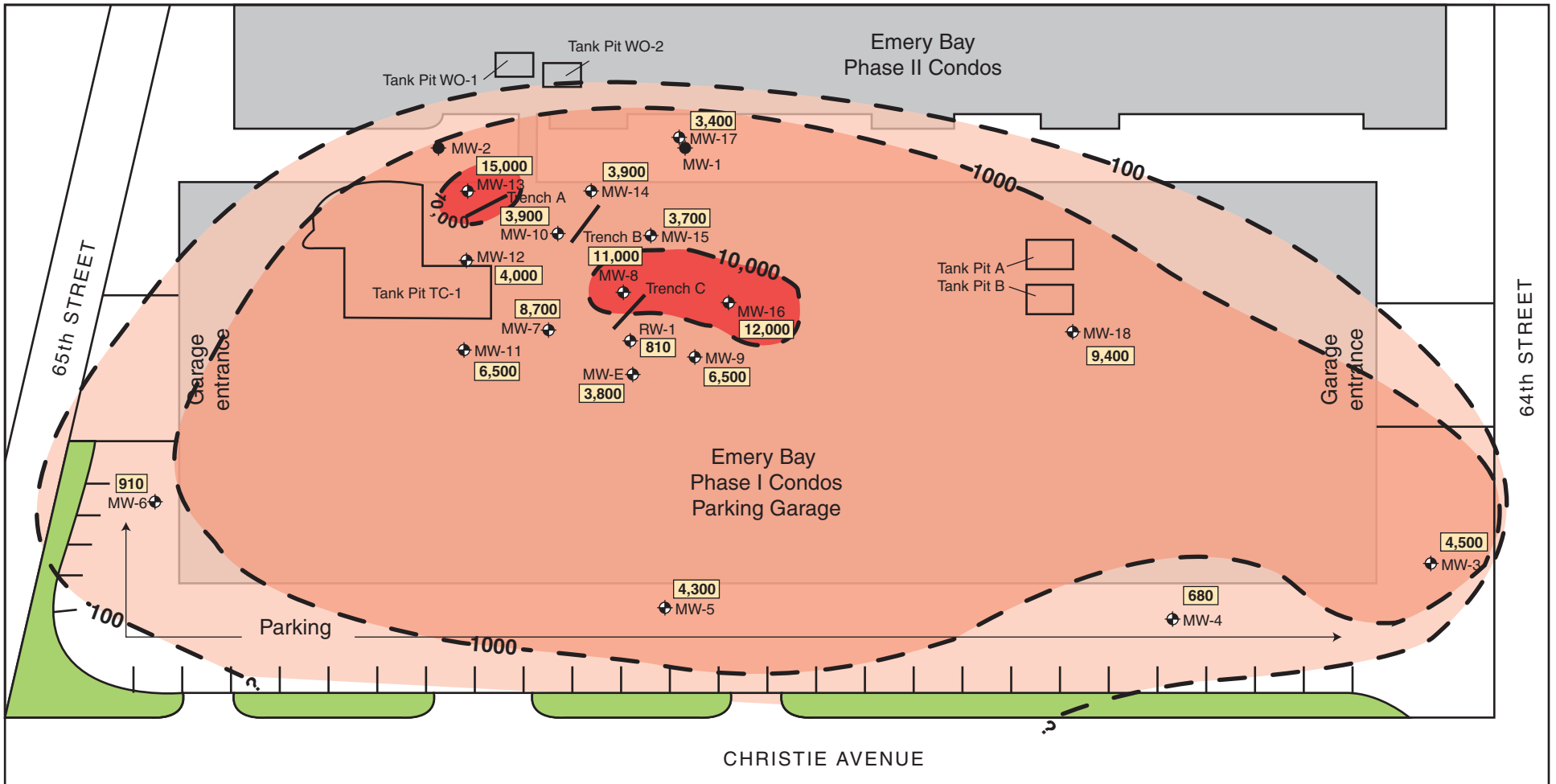


TOTAL PETROLEUM HYDROCARBON PLUME AS GASOLINE
6400 Christie Ave., Emeryville, CA

Figure 6

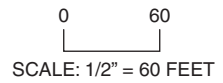
by: MJC

APRIL 2010



LEGEND

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



TOTAL PETROLEUM HYDROCARBON PLUME AS DIESEL
6400 Christie Ave., Emeryville, CA

Figure 7

by: MJC

APRIL 2010

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

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

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

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

Quality Control Sample Analytical Results

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

5.0 FREE-PHASE HYDROCARBON PRODUCT REMEDICATION SYSTEM

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

LNAPL REMEDIATION SYSTEM CONSTRUCTION

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

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

Table 3
Passive Trench Product Extraction – March 22, 2010

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

Note:

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

HISTORICAL FREE PRODUCT EXTRACTION

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

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

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

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

MARCH 2010 PRODUCT REMOVAL EVENT

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

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

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

The removal activities occurred as follows:

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

Table 4
Active Product Extraction – March 2010

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

Notes:

NP = not purged

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

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

DISCUSSION

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

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

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

6.0 SUMMARY, CONCLUSIONS, AND PROPOSED ACTIONS

FINDINGS AND CONCLUSIONS

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

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

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

RECOMMENDATIONS

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

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

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8.0 LIMITATIONS

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

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

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

APPENDIX A

Historical Groundwater Well Analytical Results

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MW-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

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

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

Spill or Purge Water Drum Log

Client: STELLAR

Site Address: SM CENTER APTS. EMERYVILLE

STATUS OF DRUM(S) UPON ARRIVAL

Date	3/24/10				
Number of drum(s) empty:	4				
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:					
Total drum(s) on site:	4				
Are the drum(s) properly labeled?	—				
Drum ID & Contents:	—				
If any drum(s) are partially or totally filled, what is the first use date:	—				

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.
- If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.
- All BTS drums MUST be labeled appropriately.

STATUS OF DRUM(S) UPON DEPARTURE

Date	3/24/10				
Number of drums empty:	3				
Number of drum(s) 1/4 full:					
Number of drum(s) 1/2 full:					
Number of drum(s) 3/4 full:					
Number of drum(s) full:	1				
Total drum(s) on site:	4				
Are the drum(s) properly labeled?	Y				
Drum ID & Contents:	Purge H ₂ O				

LOCATION OF DRUM(S)

Describe location of drum(s): IN corner near large black baker bank underground parking

FINAL STATUS

Number of new drum(s) left on site this event	0				
Date of inspection:	3/24/10				
Drum(s) labelled properly:	Y				
Logged by BTS Field Tech:	EM				
Office reviewed by:	NS				

WELLHEAD INSPECTION CHECKLIST

Date 3/24/10 Client STELLAR

Site Address BAY CENTER APTS. EMERYVILLE

Job Number 100324-RM1 Technician R.M./PE/SP

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
Mw-3	x							
Mw-4	x	CHRISTY BOX ⁿ						
Mw-5	x							
Mw-6	x							
Mw-7		1/2 bolts missing						
Mw-8	x							
Mw-9		2/2 bolts missing						
Mw-10		1/2 bolts missing						
Mw-11	x							
Mw-12	x							
Mw-13	x							
Mw-14	x							
Mw-15	x							
Mw-16	x							
Mw-17		1/2 bolts missing						
Mw-18	x							

NOTES:

WELL GAUGING DATA

Project # 100324-EM1

Date 3/24/10

Client STELLAR

Site BAY CENTER APTS. EMERYVILLE

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-3	0926	2		8.08			UNABLE TO GAUGE 8.11	24.55		
MW-4	0922	2		NO SPH DETECTED			7.08	24.89		
MW-5	0926	2					9.48	24.82		
MW-6	0918	2					6.66	23.31		
MW-7	0856	3/4					10.02	19.88		
MW-8	0853	3/4		9.02			UNABLE TO GAUGE	—		
MW-9	0850	3/4					9.46	19.68		
MW-10	905	3/4		8.58			10.30	—		
MW-11	0900	3/4					10.23	19.68		
MW-12	0910	3/4					8.66	18.96		
MW-13	0908	3/4		9.22			UNABLE TO GAUGE	19.50		
MW-14	0900	3/4					8.42	19.50		
MW-15	0858	3/4		8.81			UNABLE TO GAUGE	—		
MW-16	0846	3/4					8.92	19.55		
MW-17	0925	3/4					8.93	19.50		
MW-18	0850	3/4					7.97	19.55		
MW-E	0848	2					9.82	44.90		

WELL MONITORING DATA SHEET

Project #: 100324-RM	Client: STEUAR
Sampler: RM	Date: 3/24/10
Well I.D.: MW-3	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 24.55	Depth to Water (DTW): —
Depth to Free Product: 8.08	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other: <u> </u>	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: <u>NEW TUBING</u>
--	--	---

6 MIN PURGE @ 200 ml/min

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1320	BEGIN	PURGE				
1326	END	PURGE	1.2 L REMOVED			

Did well dewater? Yes No Gallons actually evacuated: 1.2 L

Sampling Date: 3/24/10 Sampling Time: 1330 Depth to Water: 8.11

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

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

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

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

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

WELL MONITORING DATA SHEET

Project #: <u>100324-RMU</u>	Client: <u>Stellar</u>
Sampler: <u>PC</u>	Date: <u>2/24/10</u>
Well I.D.: <u>MU-4</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>24.89</u>	Depth to Water (DTW): <u>7.08</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.64</u>	

Purge Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	--	---

$\underline{2.8} \text{ (Gals.)} \times \underline{3} = \underline{8.4} \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	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
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1335	14.6	7.26	1194	107	2.8	
1342	14.9	7.10	1054	110	5.6	
1350	14.9	7.04	1041	45	8.4	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>8.4</u>	
Sampling Date: <u>2/24/10</u>	Sampling Time: <u>1402</u>	Depth to Water: <u>7.11</u>
Sample I.D.: <u>MU-4</u>	Laboratory: Kiff CalScience Other <u>C&T</u>	
Analyzed for: <u>TPH-G BTEX MTBE TPH-D</u> Oxygenates (5) Other:		
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: <u>100324-RM1</u>	Client: <u>Stellar, Bay Center Apts</u>
Sampler: <u>BP</u>	Date: <u>3/24/10</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>24.82</u>	Depth to Water (DTW): <u>9.48</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>12.55</u>	

Purge Method: Bailer	Waterra	Sampling Method: Bailer
Disposable Bailer	<input checked="" type="checkbox"/> Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		<input checked="" type="checkbox"/> Other: <u>New tubing</u>

<u>UC: 15.34</u>																	
$\frac{2.5 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = 7.5 \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td><u>0.16</u></td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	<u>0.16</u>	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	<u>0.16</u>	6"	1.47														
3"	0.37	Other	radius ² * 0.163														
1 Case Volume	Calculated Volume																

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1337	17.1	8.30	2855	58	2.5	DTW: 13.07
1347	16.7	8.37	2917	14	5.0	DTW: 14.21
1359	16.8	8.38	3031	09	7.5	DTW: 14.37

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>7.5</u>	
Sampling Date: <u>3/24/10</u>	Sampling Time: <u>1406</u>	Depth to Water: <u>12.54</u>
Sample I.D.: <u>MW-5</u>	Laboratory: Kiff CalScience Other <u>CTI</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>SEE COC</u>		
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u> </u>		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: 100324-EM1	Client: STELLAR
Sampler: R.M.	Date: 3/24/10
Well I.D.: MW-8	Well Diameter: 2 3 4 6 8 3/4
Total Well Depth (TD): —	Depth to Water (DTW): —
Depth to Free Product: 9.02	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer	Watera	Sampling Method: Bailer
Disposable Bailer	Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		Other: <u>NEW TURBINE</u>

6 min Purge @ 200 ml/min

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1136	BEGIN	PURGE				
1142	END	PURGE	1.2 L	REMOVED		

Did well dewater? Yes No Gallons actually evacuated: 1.2 L

Sampling Date: 3/24/10 Sampling Time: 1150 Depth to Water: —

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

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

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

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

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

Project #: 100324-LM1	Client: STELLAR
Sampler: RM	Date: 3/24/10
Well I.D.: MW-10	Well Diameter: 2 3 4 6 8 10 <u>3/4"</u>
Total Well Depth (TD):	Depth to Water (DTW): 1030
Depth to Free Product: <u>8.43</u> 8.58	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer ~~Aeristaltic~~ Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing
 Other: NEW TUBING

6 min Purges @ 200 ml/min

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1054	BEGIN PURGE	PURGE				
1100	END PURGE		1.2 L REMOVED			

Did well dewater? Yes No Gallons actually evacuated: 1.2 L

Sampling Date: 3/24/10 Sampling Time: 1105 Depth to Water: —

Sample I.D.: MW-10 Laboratory: Kiff CalScience Other: CT

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

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

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

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

WELL MONITORING DATA SHEET

Project #: <u>1003 24-RM1</u>	Client: <u>Stellar</u>
Sampler: <u>BP</u>	Date: <u>3/24/10</u>
Well I.D.: <u>MW-11</u>	Well Diameter: 2 3 4 6 8 <u>3/4</u>
Total Well Depth (TD): <u>19.68</u>	Depth to Water (DTW): <u>10.23</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>12.12</u>	

Purge Method: Bailer	Watterra	Sampling Method: Bailer
Disposable Bailer	<input checked="" type="checkbox"/> Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		<input checked="" type="checkbox"/> Other: <u>New tubing</u>

WC: 9.45

$0.19 \text{ (Gals.)} \times \underline{3} = \underline{0.57} \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	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
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														
1 Case Volume	Specified Volumes	Calculated Volume	<u>3/4" = 0.02</u>														

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1010</u>	<u>14.8</u>	<u>7.11</u>	<u>2853</u>	<u>57</u>	<u>0.19</u>	
<u>1013</u>	<u>14.8</u>	<u>7.88</u>	<u>2866</u>	<u>19</u>	<u>0.38</u>	
<u>1016</u>	<u>14.9</u>	<u>7.85</u>	<u>2802</u>	<u>9</u>	<u>0.57</u>	

Did well dewater? Yes <input type="radio"/> No <input checked="" type="radio"/>	Gallons actually evacuated: <u>0.60</u>	
Sampling Date: <u>3/24/10</u>	Sampling Time: <u>1025</u>	Depth to Water: <u>10.22</u>
Sample I.D.: <u>MW-11</u>	Laboratory: Kiff CalScience Other <u>C&T</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>SEE COL</u>		
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: 100824-RM	Client: STEWAR
Sampler: RM	Date: 3/24/10
Well I.D.: MW-13	Well Diameter: 2 3 4 6 8 3/4"
Total Well Depth (TD): 19.50	Depth to Water (DTW): —
Depth to Free Product: 9.22	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer	Watterra	Sampling Method: Bailer
Disposable Bailer	Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		Other: <u>NEW TUBING</u>

6 MIN PURGE @ 200 ml/min

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

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

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1028	BEGIN	PURGE				
1034	WELL DEWATERED; STARTED PULLING OUT SPH, 1.2 L REMOVED					
1400	RETURNED TO WELL TO SAMPLE					

Did well dewater? Yes ~~No~~ Gallons actually evacuated: 1.2 L REMOVED

Sampling Date: 3/24/10 Sampling Time: 1400 Depth to Water: —

Sample I.D.: MW-13 Laboratory: Kiff CalScience Other CLT

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

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

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

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

WELL MONITORING DATA SHEET

Project #: <u>100324-RM1</u>	Client: <u>Stellar</u>
Sampler: <u>BP</u>	Date: <u>3/24/10</u>
Well I.D. <u>MU-E</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>44.90</u>	Depth to Water (DTW): <u>9.82</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>16.84</u>	

Purge Method: Bailer	Watterra	Sampling Method: Bailer
Disposable Bailer	<input checked="" type="checkbox"/> Peristaltic	Disposable Bailer
Positive Air Displacement	Extraction Pump	Extraction Port
Electric Submersible	Other _____	Dedicated Tubing
		<input checked="" type="checkbox"/> Other: <u>New tubing</u>

$\frac{5.6 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{16.8 \text{ Gals.}}{\text{Calculated Volume}}$	W.C.: <u>35.08</u>																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td><u>0.16</u></td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	<u>0.16</u>	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	<u>0.16</u>	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1112	15.7	7.64	4018	21	5.6	DTW: 14.21
1132	15.3	7.92	4085	78	11.2	DTW: 15.62
1155	15.1	7.89	4074	78	16.8	DTW: 18.71

Did well dewater? Yes No Gallons actually evacuated: 17.0

Sampling Date: 3/24/10 Sampling Time: 1210 Depth to Water: 22.60

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

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

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

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

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

O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV
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APPENDIX C

Analytical Laboratory Report and Chain-of-Custody Record



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



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

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

Laboratory Job Number 219028
ANALYTICAL REPORT

Stellar Environmental Solutions
2198 6th Street
Berkeley, CA 94710

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

Table with 2 columns: Sample ID and Lab ID. Lists 18 samples from MW-14 to MW-6 and RW-1.

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: [Handwritten Signature]
Project Manager

Date: 04/06/2010

NELAP # 01107CA

CASE NARRATIVE

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

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

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

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

TPH-Extractables by GC (EPA 8015B):

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

Chain of Custody Record

219028

Lab job no. _____
Date _____
Page 1 of 2

Laboratory CIT
Address 2323 FIFTH ST
BERKELEY, CA

Method of Shipment LAB COURIER

Project Owner _____
Site Address 6400 CHRISTIE AVE
BERKELEY, CA

Shipment No. _____

Cooler No. _____

Project Manager TEAL GLASS

Telephone No. (510) 644-3123

Project Name BAY CENTER APARTMENT

Fax No. (510) 644-3859

Project Number 2007-65

Samplers: (Signature) _____

Filtered	No. of Containers	Analysis Required										Remarks
		TEH-D (BOLSON)	TPH-G (BOLSON)	BTEX (MTR)								
		X	X	X								
		X	X	X								
		X	X	X								
		X	X	X								
		X	X	X								
		X	X	X								
		X	X	X								

1
2
3
4
5
6
7
8

Field Sample Number	Location/Depth	Date	Time	Sample Type	Type/Size of Container	Preservation		N	S	X	X	X
						Cooler	Chemical					
MW-14		3/24/10	1018	U	340ml Voa 1x16 Amber	✓	HCl None					
MW-17			958			✓				X	X	X
MW-12			1044			✓				X	X	X
MW-7			1104			✓				X	X	X
MW-16			1132			✓				X	X	X
MW-9			1200			✓				X	X	X
MW-18			1320			✓				X	X	X
MW-4			1402			✓				X	X	X

Relinquished by: <u>[Signature]</u> Signature _____ Printed <u>R. Gombh</u> Company <u>BT</u>	Date <u>3/24/10</u> Time <u>1500</u>	Received by: <u>[Signature]</u> Signature _____ Printed <u>Pat Gonzalez</u> Company <u>CIT</u>	Date <u>3/24/10</u> Time <u>3:00</u>	Relinquished by: _____ Signature _____ Printed _____ Company _____	Date _____ Time _____	Received by: _____ Signature _____ Printed _____ Company _____	Date _____ Time _____		
Turnaround Time: <u>STANDARD</u> Comments: <u>EDF REQUIRED</u> <u>GLOBAL ID # SLT 2005561</u>				Relinquished by: _____ Signature _____ Printed _____ Company _____				Date _____ Time _____	

2000-00-01

Chain of Custody Record

219028

Lab job no. _____

Laboratory CYT
 Address 2323 FIFTH ST
BERKELEY, CA

Method of Shipment LAB COURIER

Date _____

Page 2 of 2

Project Owner _____
 Site Address 6400 CHRISTIE AVE
BERKELEY, CA

Shipment No. _____

Airbill No. _____

Cooler No. _____

Project Manager TEAL GLASS

Telephone No. (510) 644-3123

Project Name BAY CENTER APARTMENT

Fax No. (510) 644-3859

Project Number 2007-65

Samplers: (Signature) *[Signature]*

Filtered	No. of Containers	Analysis Required										Remarks		
		TEH-D (BOIS ^m)	TPH-G (BOIS ^m)	BTEX Y M TBE										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										
		X	X	X										

Field Sample Number	Location/Depth	Date	Time	Sample Type	Type/Size of Container	Preservation																	
						Cooler	Chemical																
9	RW-1	3/24/10	1015	W	3 40ml HCL VIAL 12 HCL Amber	X	HCL H2O2	N	S	X	X	X											
10	MW-10		1105			X				X	X	X											
11	MW-15		1125			X				X	X	X											
12	MW-8		1150			X				X	X	X											
13	MW-3		1330			X				X	X	X											
14	MW-13		1400			X				X	X	X											
15	MW-11		1025			X				X	X	X											
16	MW-5		1400			X				X	X	X											
17	MW-E		1210			X				X	X	X											
18	MW-6		1445			X				X	X	X											

Relinquished by: Signature <i>[Signature]</i> Printed <u>Pat Gonzalez</u> Company <u>BTS</u>	Date <u>3/24</u> Time <u>1500</u>	Received by: Signature <i>[Signature]</i> Printed <u>Pat Gonzalez</u> Company <u>CYT</u>	Date <u>3/24/10</u> Time <u>3:00</u>	Relinquished by: Signature _____ Printed _____ Company _____	Date _____ Time _____	Received by: Signature _____ Printed _____ Company _____	Date _____ Time _____
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Turnaround Time: <u>STANDARD</u> Comments: <u>EDF REQUIRED</u> <u>GLOBAL ID # SLT 2005561</u>	Relinquished by: Signature _____ Printed _____ Company _____	Date _____ Time _____	Received by: Signature _____ Printed _____ Company _____	Date _____ Time _____
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2000-00-01

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 219028 Date Received 3/24/10 Number of coolers 2
Client STELLAR Project BAY CENTER APARTMENT

Date Opened 3/24/10 By (print) M. VILLANUEVA (sign) [Signature]
Date Logged in 3-25 By (print) Elms Tsadie (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
Shipping info _____

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

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

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

6. Indicate the packing in cooler: (if other, describe) _____
 Bubble Wrap Foam blocks Bags None
 Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation:
Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank
 Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

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

If YES, Who was called? _____ By _____ Date: _____

COMMENTS
Sample # 7 "mw-18" 1/4 VOA's received broken.

Curtis & Tompkins Laboratories Analytical Report

Lab #: 219028	Location: Bay Center Apts
Client: Stellar Environmental Solutions	Prep: EPA 5030B
Project#: 2007-65	
Matrix: Water	Sampled: 03/24/10
Units: ug/L	Received: 03/25/10

Field ID: RW-1 Diln Fac: 1.000
 Type: SAMPLE Batch#: 161372
 Lab ID: 219028-009 Analyzed: 03/28/10

Analyte	Result	RL	Analysis
Gasoline C7-C12	200	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	143	48-162	EPA 8015B
Bromofluorobenzene (FID)	134	52-158	EPA 8015B
Trifluorotoluene (PID)	121	21-180	EPA 8021B
Bromofluorobenzene (PID)	121	26-167	EPA 8021B

Field ID: MW-10 Lab ID: 219028-010
 Type: SAMPLE

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	7,800	50	1.000	161372	03/28/10	EPA 8015B
MTBE	54 C	20	10.00	161615	04/04/10	EPA 8021B
Benzene	1,200	5.0	10.00	161615	04/04/10	EPA 8021B
Toluene	46	0.50	1.000	161372	03/28/10	EPA 8021B
Ethylbenzene	34	5.0	10.00	161615	04/04/10	EPA 8021B
m,p-Xylenes	41	0.50	1.000	161372	03/28/10	EPA 8021B
o-Xylene	15	0.50	1.000	161372	03/28/10	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	142	48-162	1.000	161372	03/28/10	EPA 8015B
Bromofluorobenzene (FID)	198 *	52-158	1.000	161372	03/28/10	EPA 8015B
Trifluorotoluene (PID)	130	21-180	1.000	161372	03/28/10	EPA 8021B
Bromofluorobenzene (PID)	126	26-167	1.000	161372	03/28/10	EPA 8021B

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

Curtis & Tompkins Laboratories Analytical Report

Lab #: 219028	Location: Bay Center Apts
Client: Stellar Environmental Solutions	Prep: EPA 5030B
Project#: 2007-65	
Matrix: Water	Sampled: 03/24/10
Units: ug/L	Received: 03/25/10

Field ID: MW-11 Diln Fac: 1.000
 Type: SAMPLE Batch#: 161372
 Lab ID: 219028-015 Analyzed: 03/28/10

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,600	50	EPA 8015B
MTBE	2.9 C	2.0	EPA 8021B
Benzene	150	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	3.9 C	0.50	EPA 8021B
m,p-Xylenes	8.6	0.50	EPA 8021B
o-Xylene	4.2 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	181 *	48-162	EPA 8015B
Bromofluorobenzene (FID)	136	52-158	EPA 8015B
Trifluorotoluene (PID)	151	21-180	EPA 8021B
Bromofluorobenzene (PID)	123	26-167	EPA 8021B

Field ID: MW-5 Diln Fac: 1.000
 Type: SAMPLE Batch#: 161372
 Lab ID: 219028-016 Analyzed: 03/28/10

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	4.9	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	113	48-162	EPA 8015B
Bromofluorobenzene (FID)	122	52-158	EPA 8015B
Trifluorotoluene (PID)	113	21-180	EPA 8021B
Bromofluorobenzene (PID)	115	26-167	EPA 8021B

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

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

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	161372
MSS Lab ID:	219085-007	Sampled:	03/26/10
Matrix:	Water	Received:	03/26/10
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537918

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	24.13	2,000	1,896	94	49-129

Surrogate	%REC	Limits
Trifluorotoluene (FID)	150	48-162
Bromofluorobenzene (FID)	132	52-158

Type: MSD Lab ID: QC537919

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,852	91	49-129	2	19

Surrogate	%REC	Limits
Trifluorotoluene (FID)	160	48-162
Bromofluorobenzene (FID)	137	52-158

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

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

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	161600
MSS Lab ID:	219056-002	Sampled:	03/23/10
Matrix:	Water	Received:	03/25/10
Units:	ug/L	Analyzed:	04/02/10
Diln Fac:	1.000		

Type: MS Lab ID: QC538852

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	58.34	2,000	2,094	102	49-129

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	48-162
Bromofluorobenzene (FID)	111	52-158

Type: MSD Lab ID: QC538853

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,083	101	49-129	1	19

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

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

Type: BS Lab ID: QC538854

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	10.34	103	69-121

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	21-180
Bromofluorobenzene (PID)	91	26-167

Type: BSD Lab ID: QC538855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.70	107	69-121	3	24

Surrogate	%REC	Limits
Trifluorotoluene (PID)	92	21-180
Bromofluorobenzene (PID)	93	26-167

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

Type: BS Lab ID: QC538913

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

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

Type: BSD Lab ID: QC538914

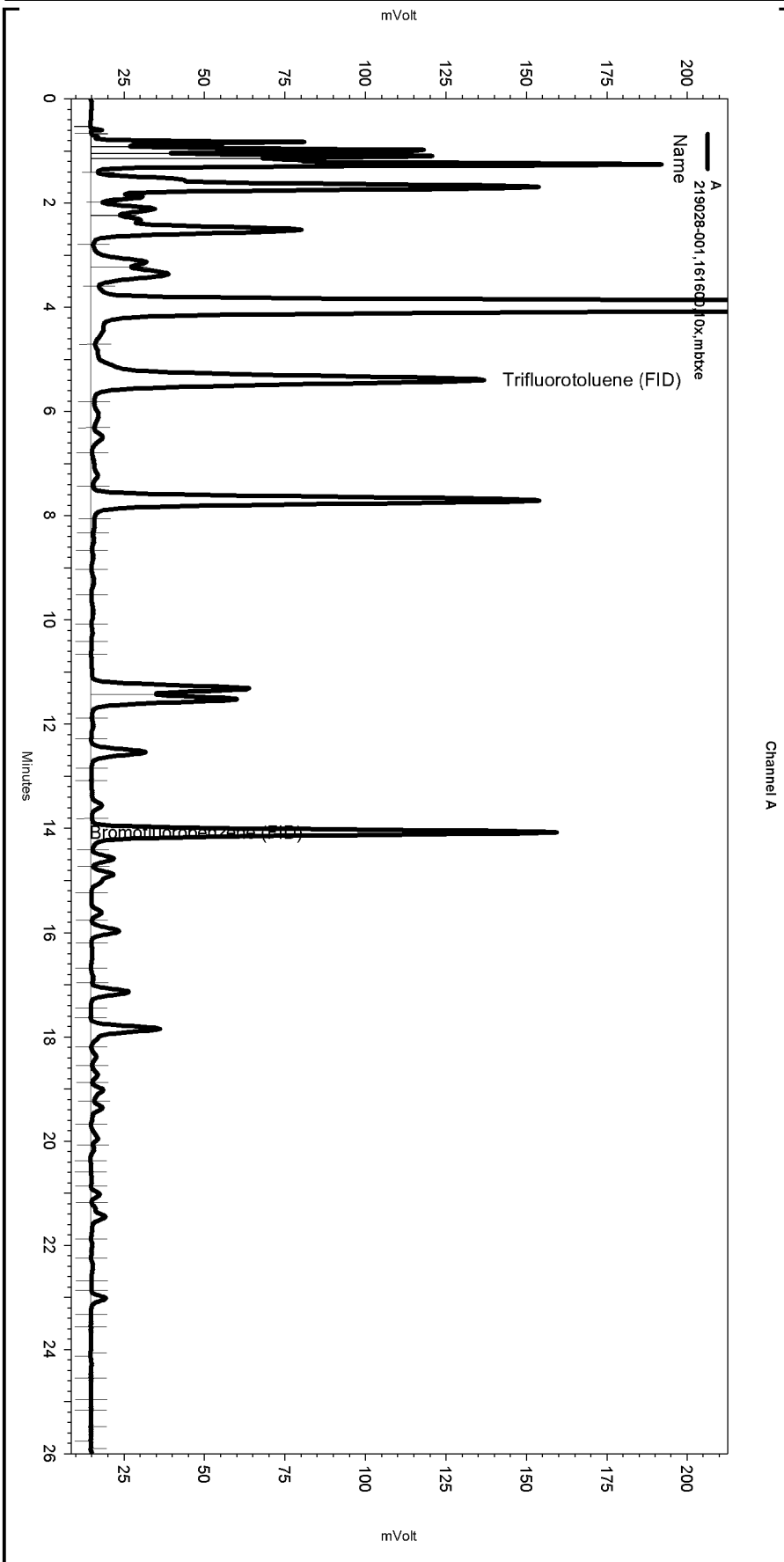
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	11.75	117	36-168	2	35
Benzene	10.00	10.59	106	69-121	2	24
Toluene	10.00	10.95	109	64-132	2	27
Ethylbenzene	10.00	10.48	105	64-136	1	27
m,p-Xylenes	10.00	11.47	115	63-138	4	32
o-Xylene	10.00	11.05	111	64-135	2	27

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	21-180
Bromofluorobenzene (PID)	101	26-167

RPD= Relative Percent Difference

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 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_009
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lms2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE091.met

Software Version 3.1.7
 Run Date: 4/2/2010 8:42:03 PM
 Analysis Date: 4/3/2010 3:06:39 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0 hs<1.0ml



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

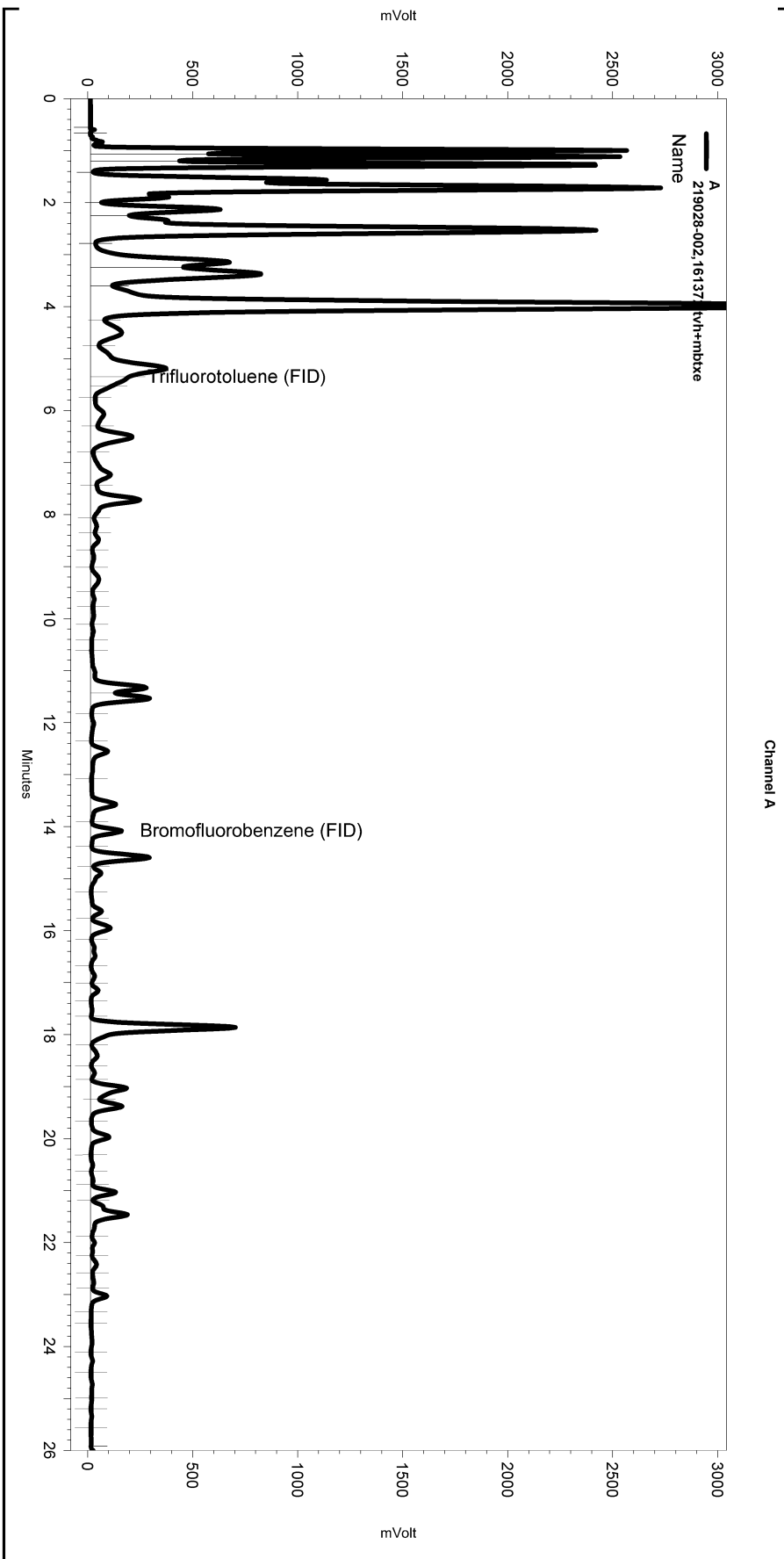
Manual Integration Fixes

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 Sample Name: 219028-002,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_014
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbx084.met

Software Version 3.1.7
 Run Date: 3/28/2010 12:41:31 AM
 Analysis Date: 3/30/2010 2:52:59 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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Integration Events

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

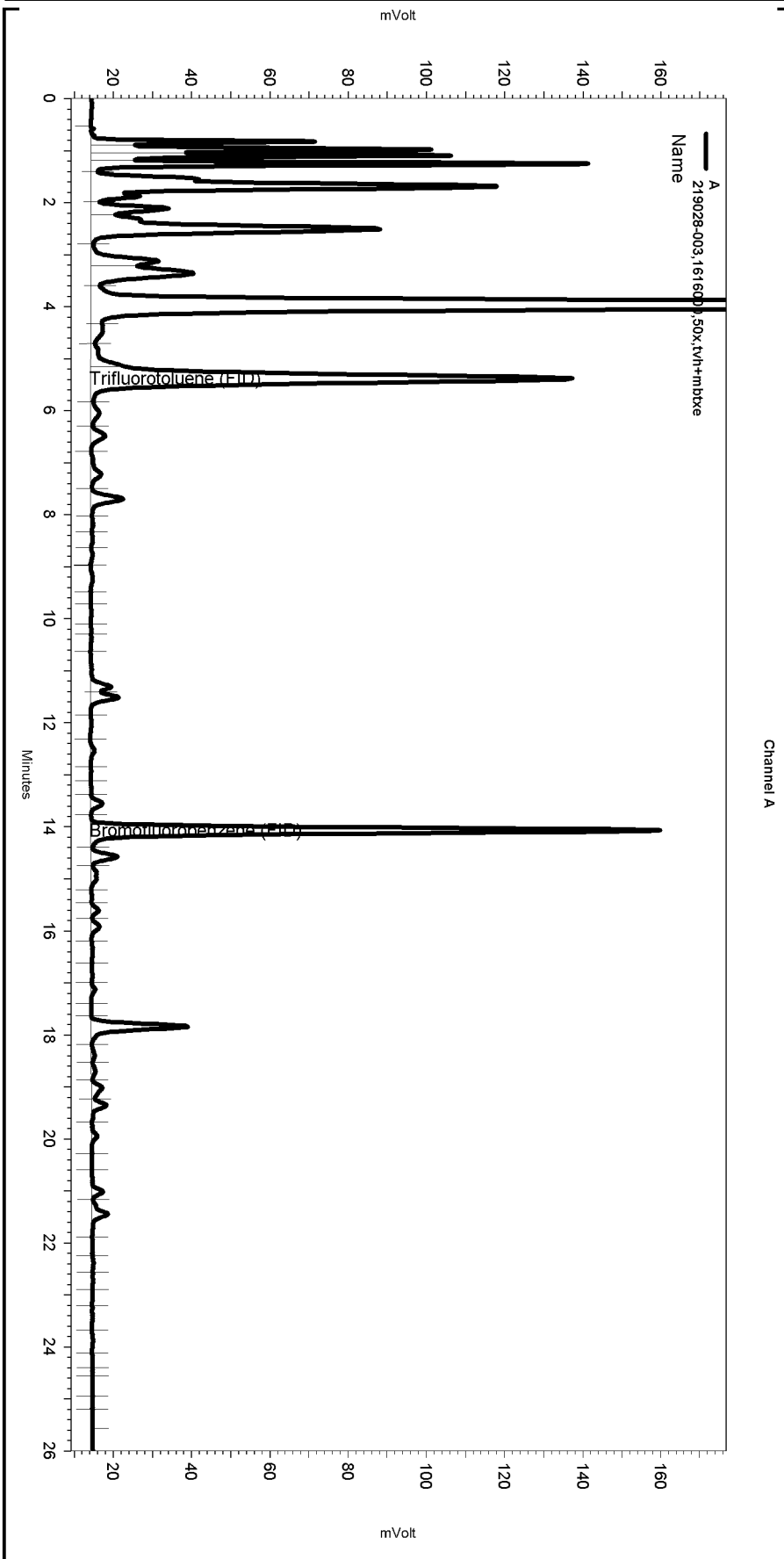
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseline	0	26.017	0
Yes	Split Peak	5.35	0	0
Yes	Split Peak	5.533	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\092.seq
 Sample Name: 219028-003,1616000,50x,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_014
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lms2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/2/2010 11:50:15 PM
 Analysis Date: 4/3/2010 3:19:55 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0 hs<1.0ml



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Integration Events

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

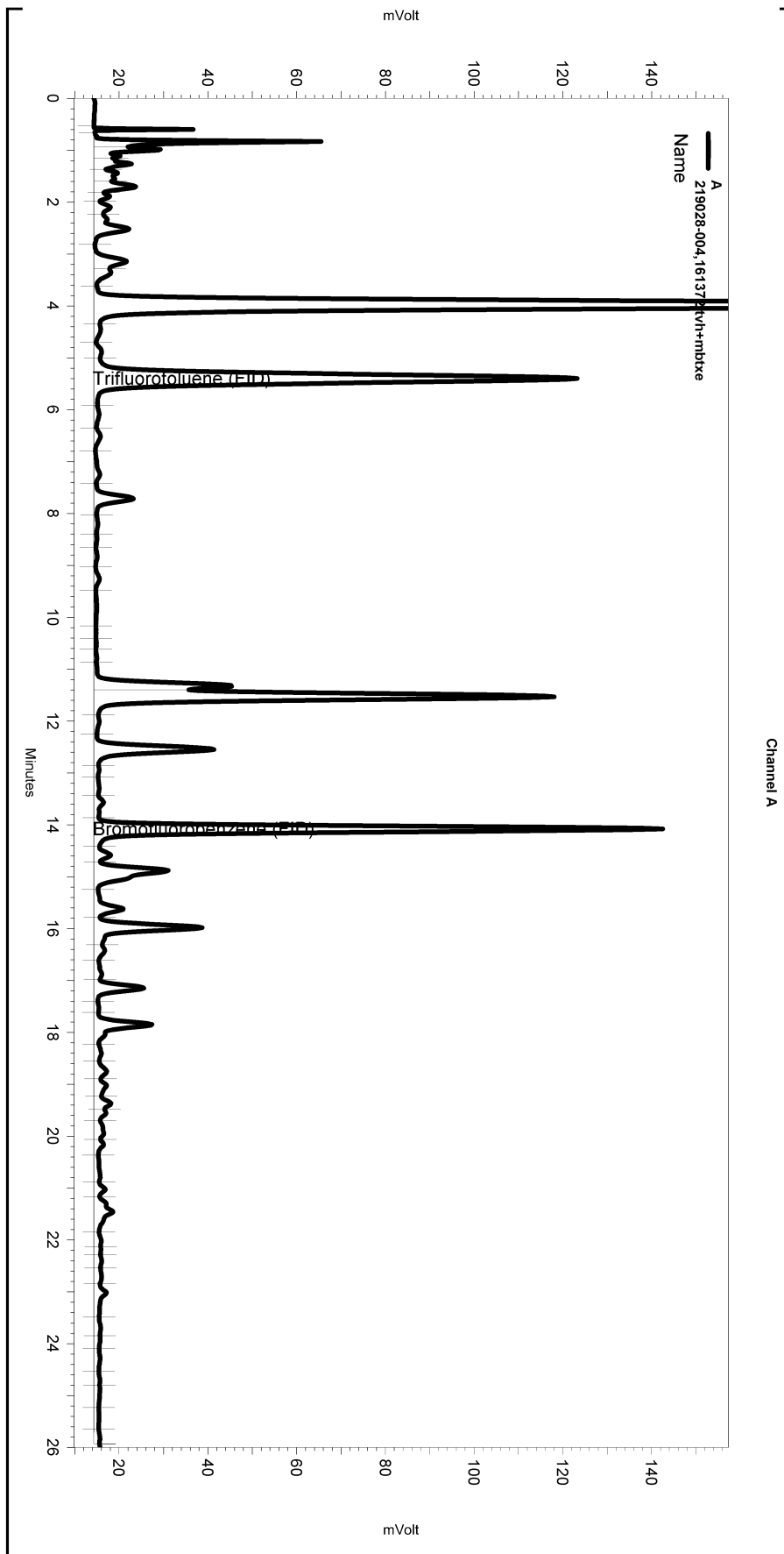
Manual Integration Fixes

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Enabled Event Type		Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.146	0	0

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 Sample Name: 219028-004,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_016
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 1:56:40 AM
 Analysis Date: 3/30/2010 2:53:15 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a7.0



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

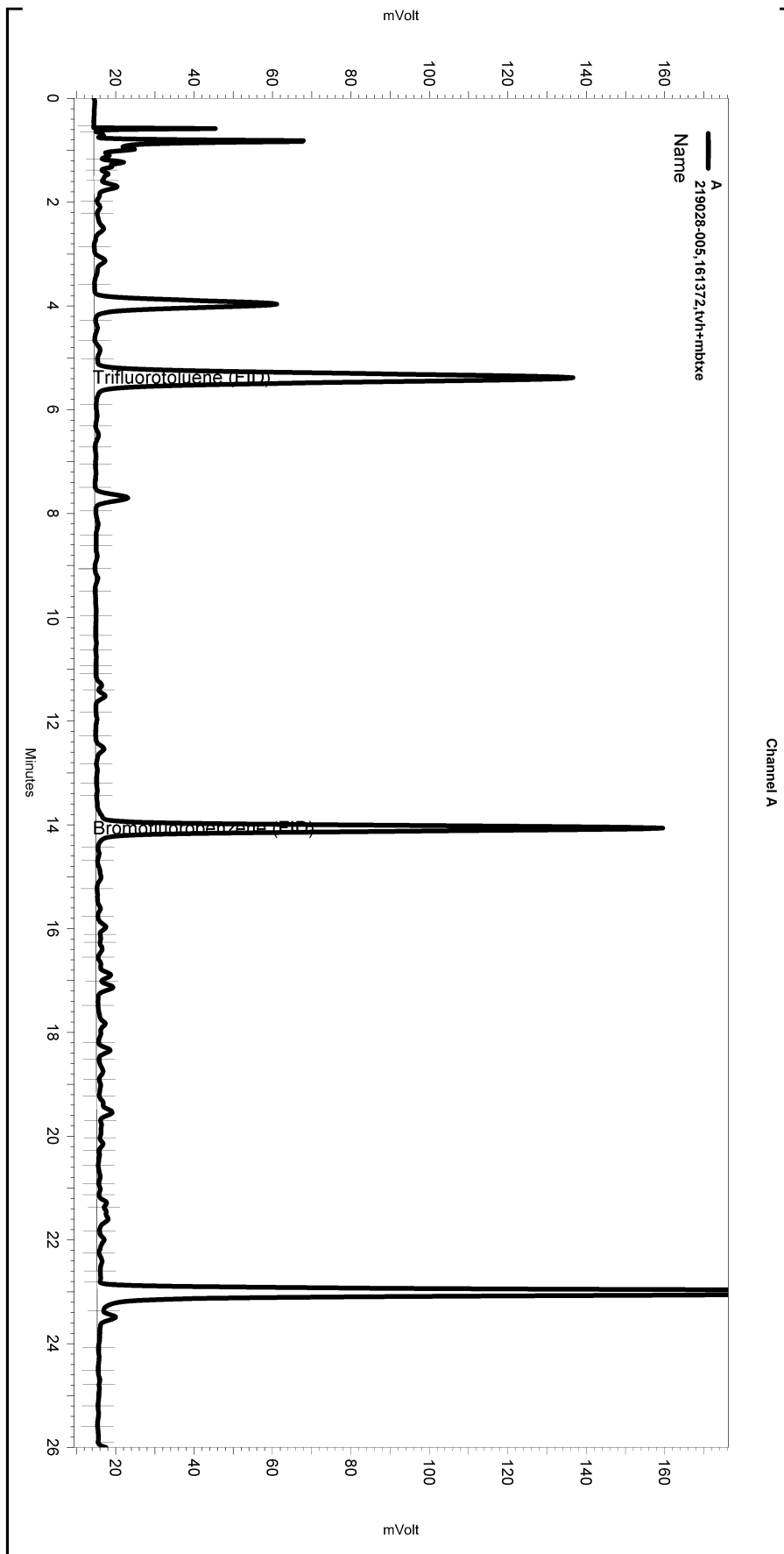
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseline	0	26.017	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-005,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_017
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE084.met

Software Version 3.1.7
 Run Date: 3/28/2010 2:34:15 AM
 Analysis Date: 3/30/2010 2:53:22 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0, hs<=1mL



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

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

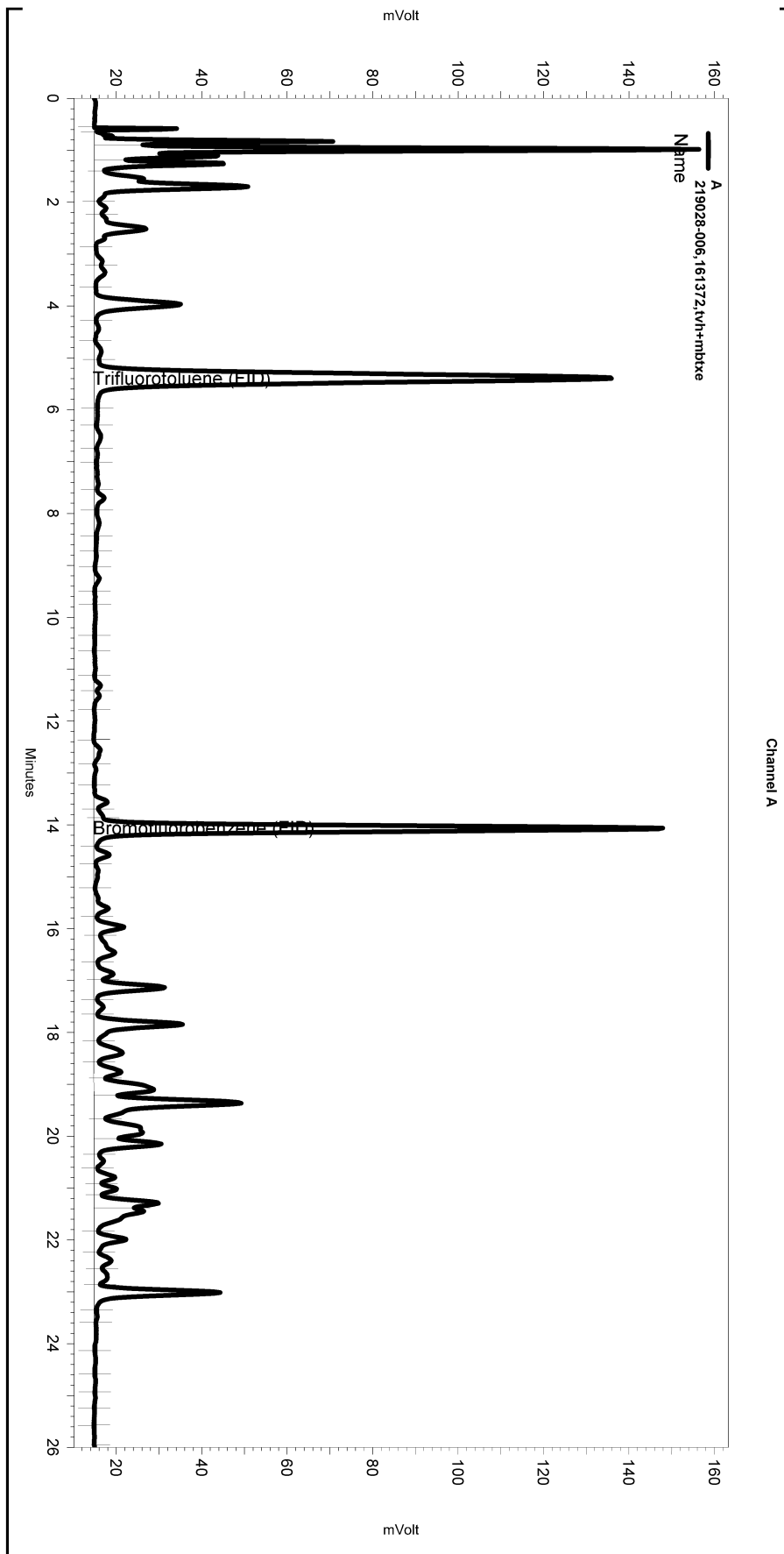
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_017

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-006,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_018
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE084.met

Software Version 3.1.7
 Run Date: 3/28/2010 3:11:48 AM
 Analysis Date: 3/30/2010 2:53:30 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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Integration Events

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

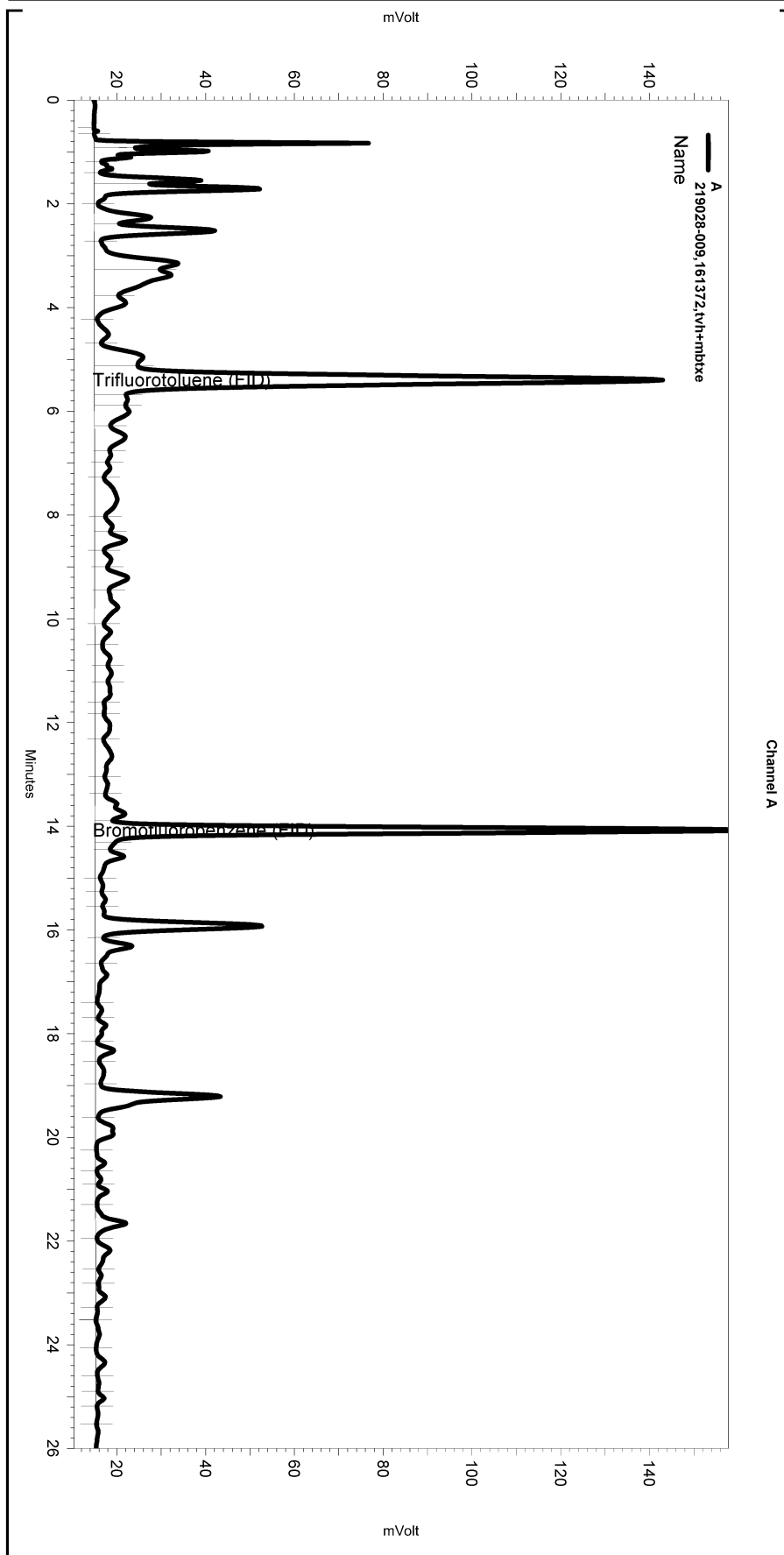
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	13.865	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-009,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_021
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 5:04:42 AM
 Analysis Date: 3/30/2010 2:53:52 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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No items selected for this section

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Integration Events

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

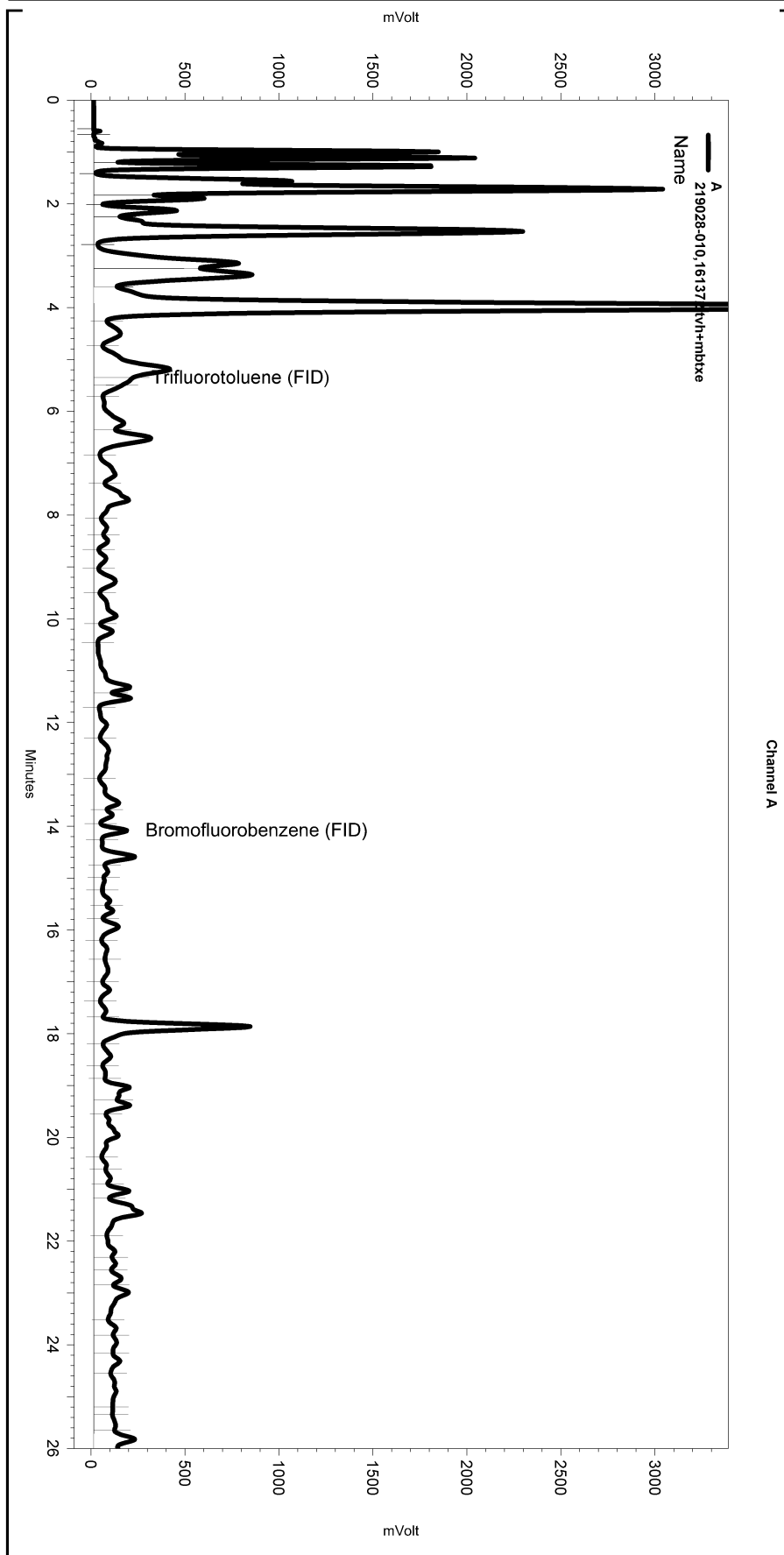
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_021

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	14.324	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-010,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_022
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 5:42:16 AM
 Analysis Date: 4/6/2010 7:50:06 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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No items selected for this section

Integration Events

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

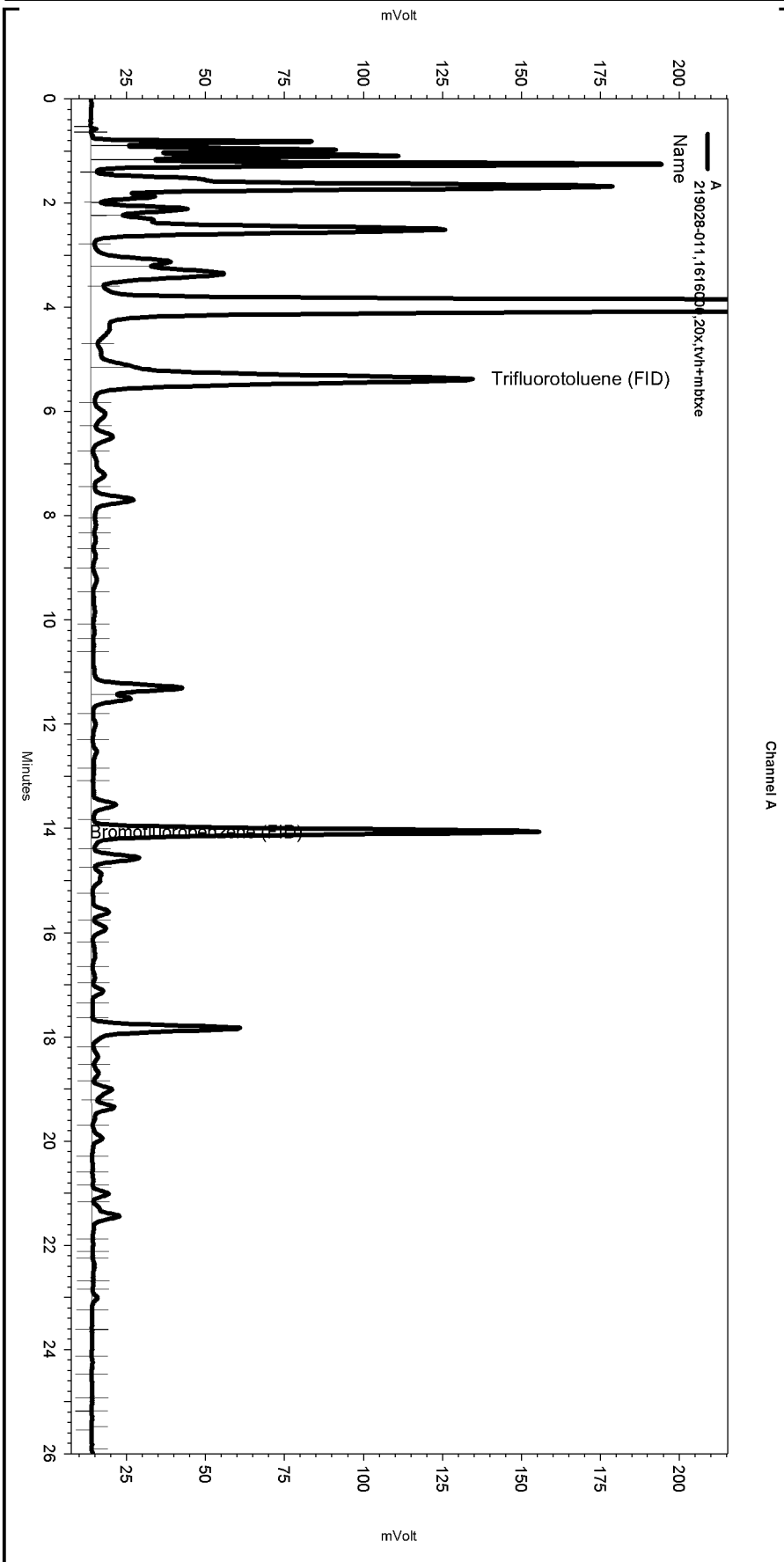
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	5.35	0	0
Yes	Split Peak	5.502	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\092.seq
 Sample Name: 219028-011,1616000,20x,tvh+mbtixe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_018
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/3/2010 2:20:44 AM
 Analysis Date: 4/3/2010 3:20:21 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0



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Integration Events

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

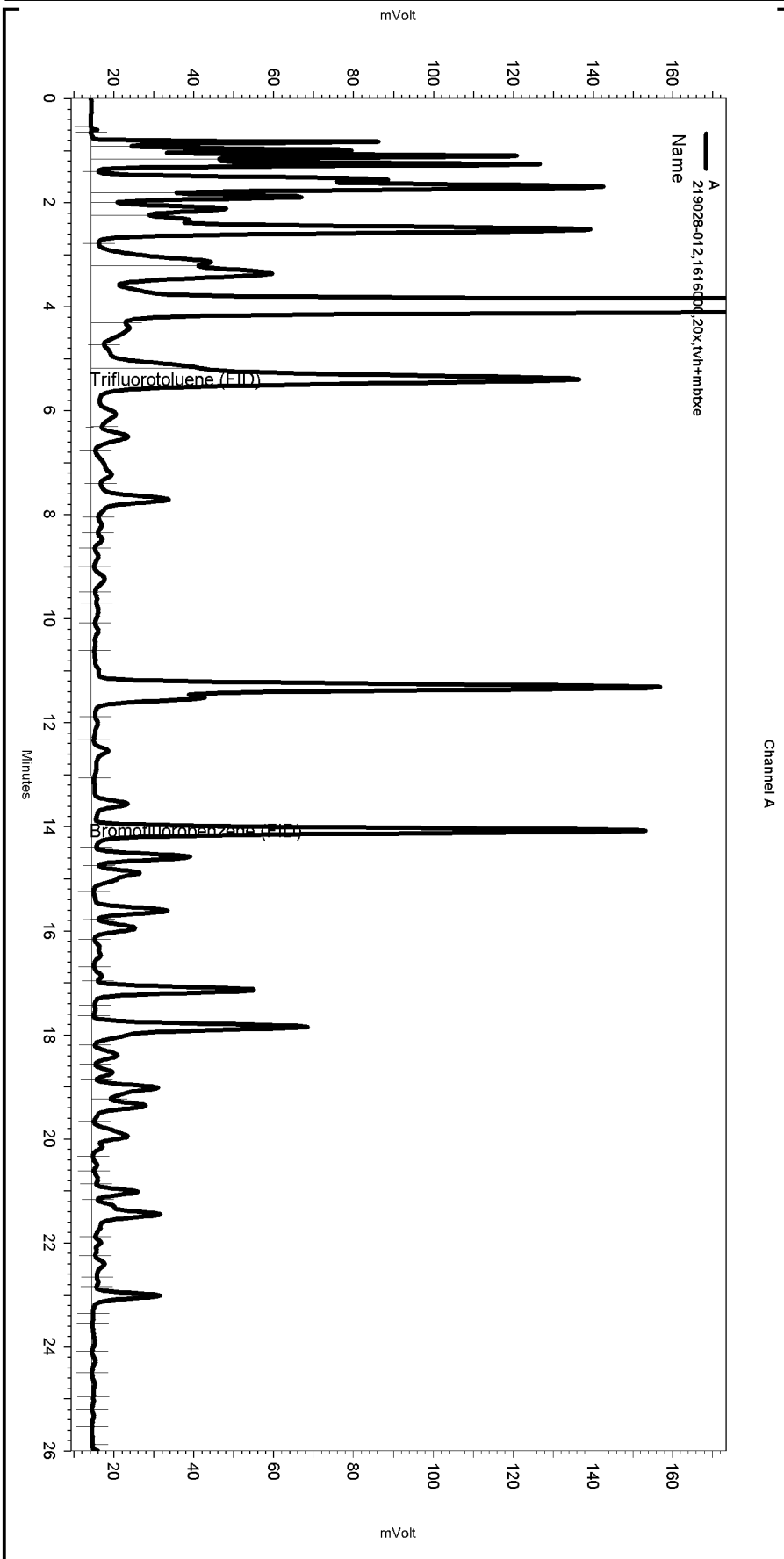
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.153	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\092.seq
 Sample Name: 219028-012,1616000,20x,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_019
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/3/2010 2:58:22 AM
 Analysis Date: 4/3/2010 3:20:28 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0



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Integration Events

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

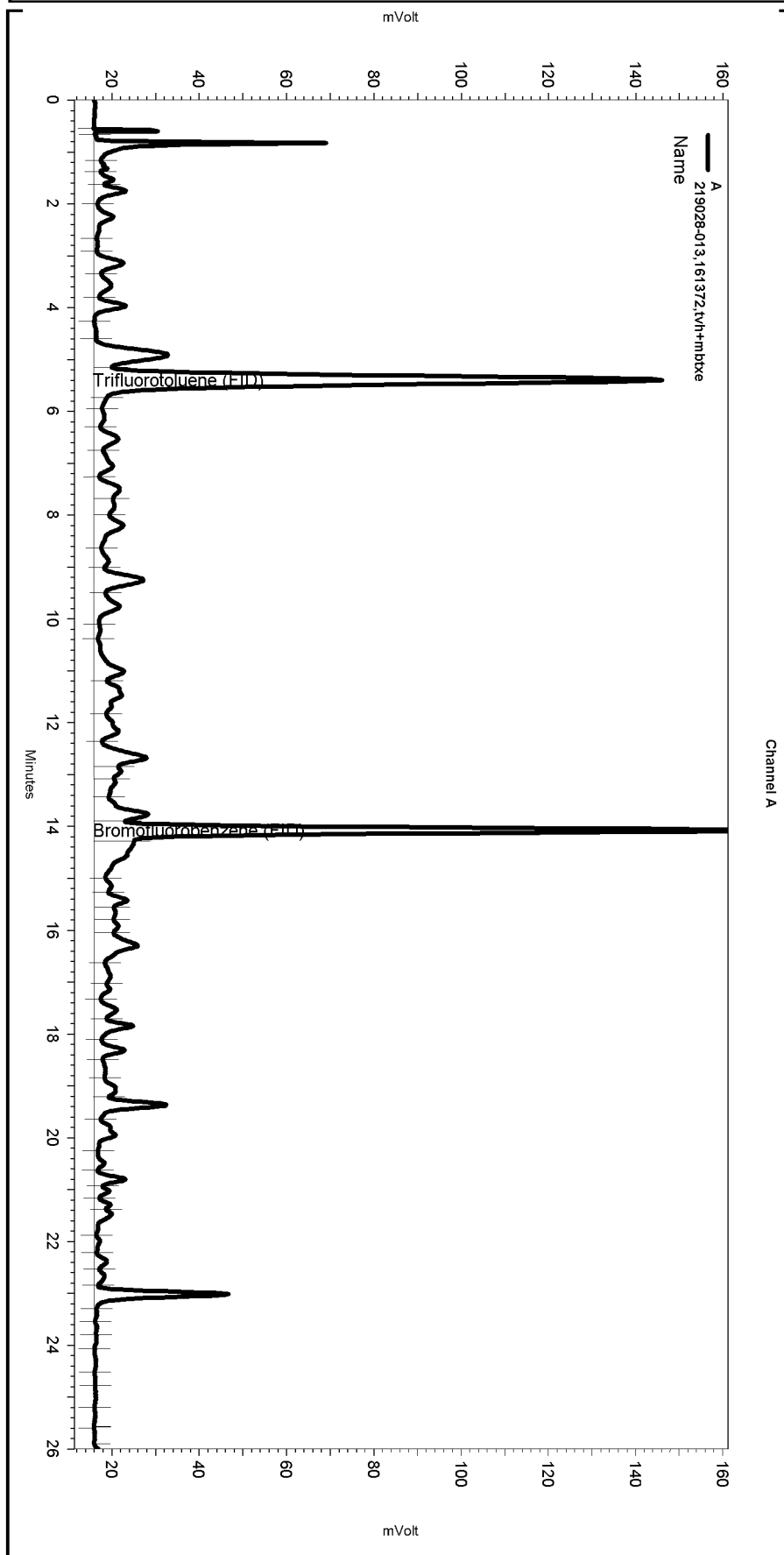
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_019

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.185	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-013,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_028
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 9:27:38 AM
 Analysis Date: 4/6/2010 3:34:49 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



---< General Method Parameters >---

No items selected for this section

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Integration Events

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

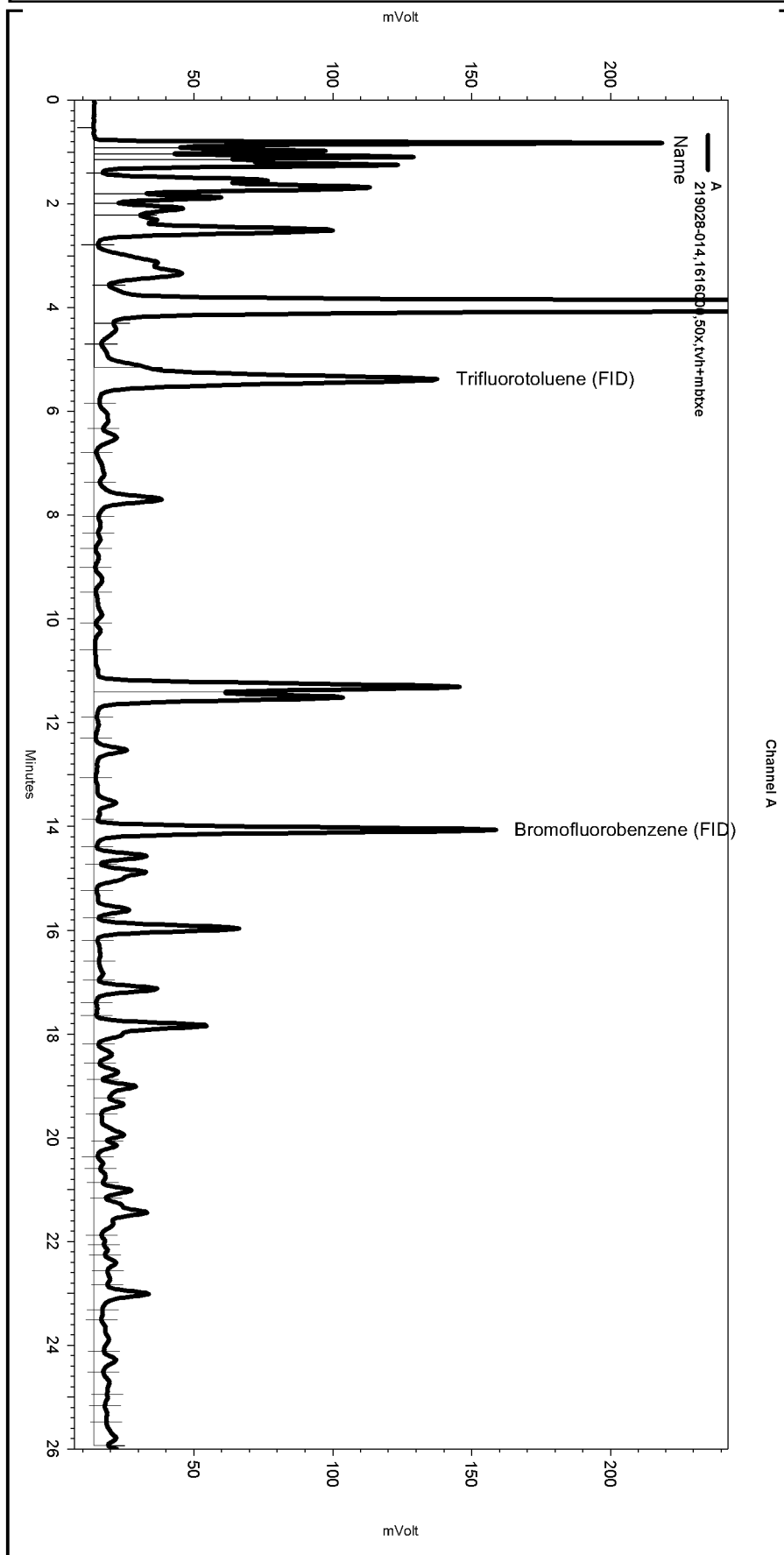
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.733	0	0
Yes	Split Peak	14.284	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\092.seq
 Sample Name: 219028-014,1616000,50x,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_021
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/3/2010 4:13:37 AM
 Analysis Date: 4/3/2010 3:20:41 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0



---< General Method Parameters >---

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Integration Events

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

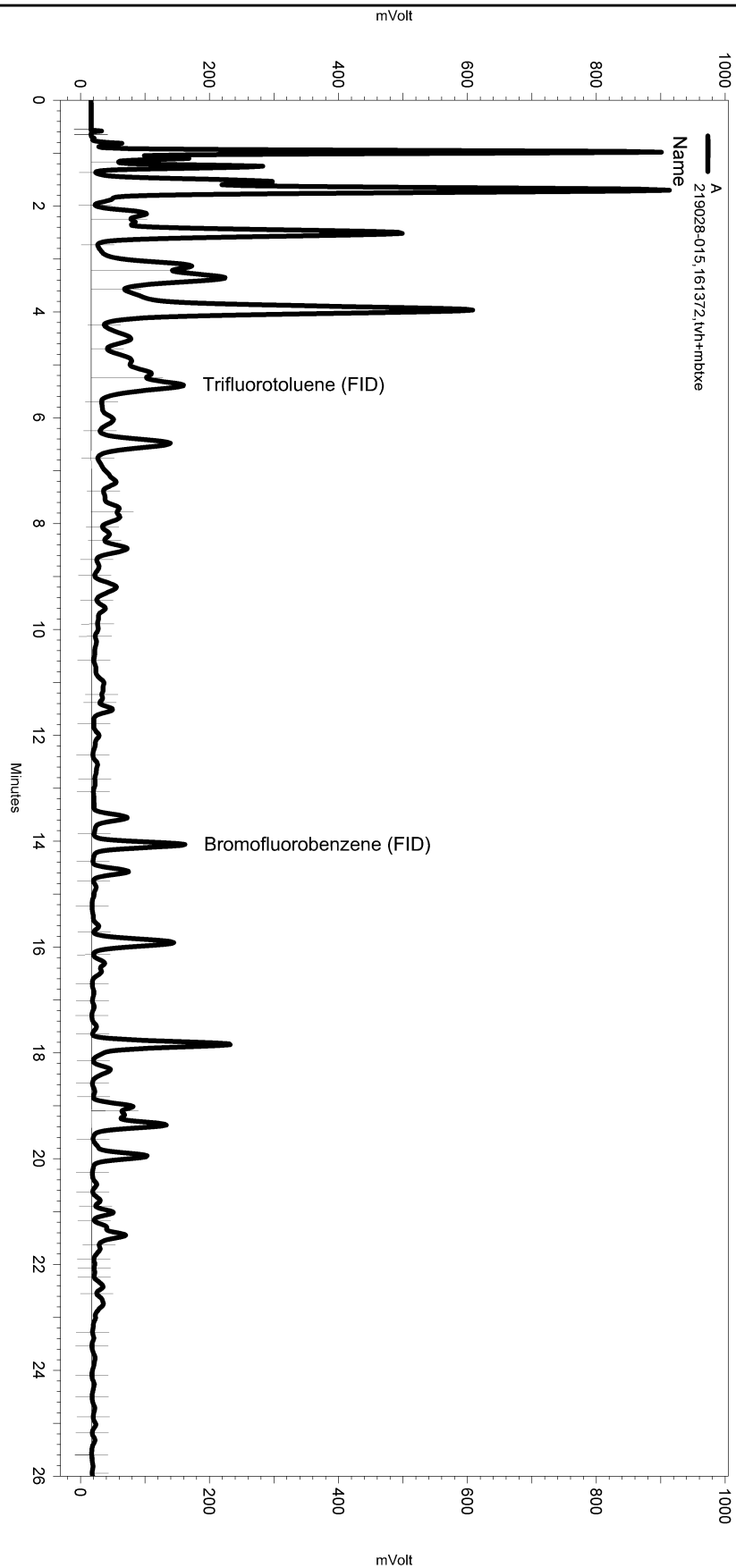
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\092_021

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseline	0	26.017	0
Yes	Split Peak	5.149	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-015,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_030
 Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 10:42:51 AM
 Analysis Date: 3/28/2010 11:11:55 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10050\086_030_8970.tmp

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

Channel A

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: 219028-017,161372,tvh+mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_032
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/28/2010 11:57:59 AM
 Analysis Date: 4/6/2010 2:29:17 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0

---< General Method Parameters >---

No items selected for this section

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No items selected for this section

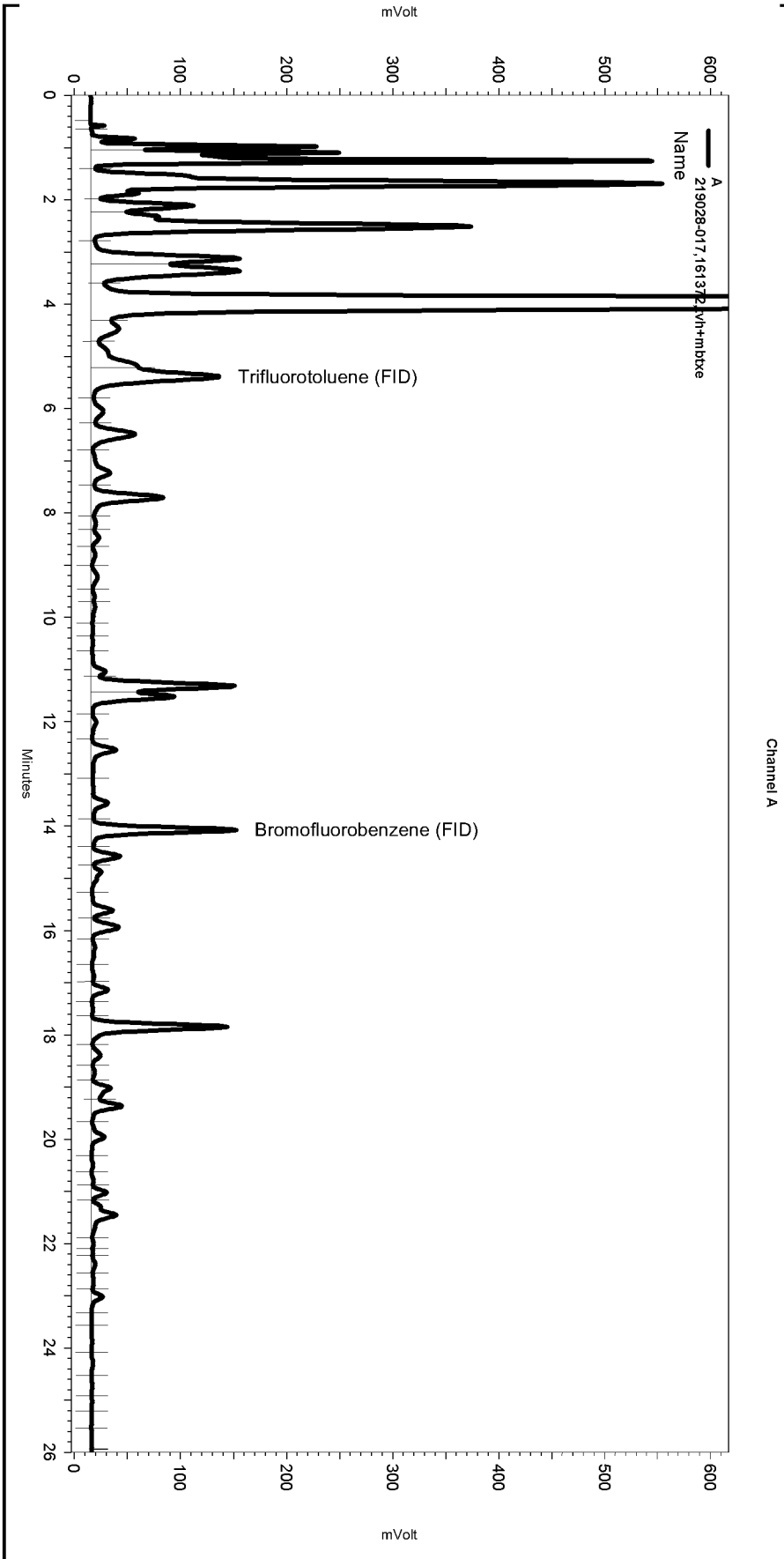
Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_032

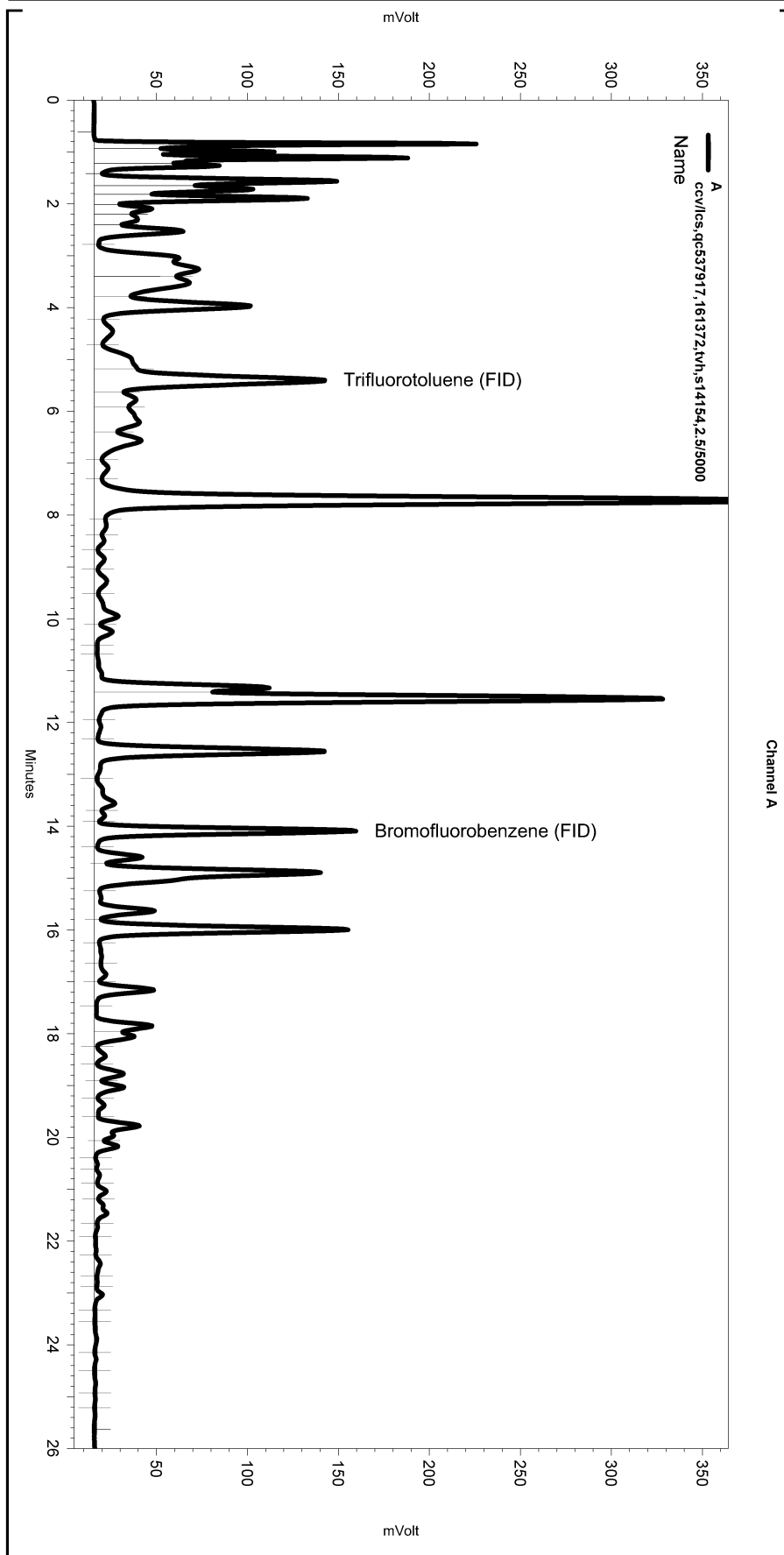
Enabled Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes Split Peak	5.216	0	0



Channel A

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\086.seq
 Sample Name: ccv/lcs,qc537917,161372,tvh,s14154,2.5/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_003
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 1. Analyst (lims2k3\tvh1)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe084.met

Software Version 3.1.7
 Run Date: 3/27/2010 12:34:45 PM
 Analysis Date: 3/30/2010 2:10:36 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\086_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.182	0	0

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/24/10
Units:	ug/L	Received:	03/25/10
Batch#:	161311	Prepared:	03/25/10

Field ID: MW-14 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-001

Analyte	Result	RL
Diesel C10-C24	3,900 Y	50
Motor Oil C24-C36	3,100	300

Surrogate	%REC	Limits
o-Terphenyl	121	39-150

Field ID: MW-17 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-002

Analyte	Result	RL
Diesel C10-C24	3,400 Y	50
Motor Oil C24-C36	1,900	300

Surrogate	%REC	Limits
o-Terphenyl	111	39-150

Field ID: MW-12 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-003

Analyte	Result	RL
Diesel C10-C24	4,000 Y	50
Motor Oil C24-C36	1,800	300

Surrogate	%REC	Limits
o-Terphenyl	115	39-150

Field ID: MW-7 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-004

Analyte	Result	RL
Diesel C10-C24	8,700 Y	50
Motor Oil C24-C36	6,800	300

Surrogate	%REC	Limits
o-Terphenyl	97	39-150

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

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/24/10
Units:	ug/L	Received:	03/25/10
Batch#:	161311	Prepared:	03/25/10

Field ID: MW-16 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-005

Analyte	Result	RL
Diesel C10-C24	12,000 Y	50
Motor Oil C24-C36	4,700	300

Surrogate	%REC	Limits
o-Terphenyl	109	39-150

Field ID: MW-9 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-006

Analyte	Result	RL
Diesel C10-C24	6,500 Y	50
Motor Oil C24-C36	4,000	300

Surrogate	%REC	Limits
o-Terphenyl	68	39-150

Field ID: MW-18 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-007

Analyte	Result	RL
Diesel C10-C24	9,400 Y	50
Motor Oil C24-C36	2,700	300

Surrogate	%REC	Limits
o-Terphenyl	112	39-150

Field ID: MW-4 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-008

Analyte	Result	RL
Diesel C10-C24	680 Y	50
Motor Oil C24-C36	380	300

Surrogate	%REC	Limits
o-Terphenyl	115	39-150

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

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/24/10
Units:	ug/L	Received:	03/25/10
Batch#:	161311	Prepared:	03/25/10

Field ID: RW-1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-009

Analyte	Result	RL
Diesel C10-C24	810 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	123	39-150

Field ID: MW-10 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-010

Analyte	Result	RL
Diesel C10-C24	3,900 Y	50
Motor Oil C24-C36	960	300

Surrogate	%REC	Limits
o-Terphenyl	117	39-150

Field ID: MW-15 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-011

Analyte	Result	RL
Diesel C10-C24	3,700 Y	50
Motor Oil C24-C36	910	300

Surrogate	%REC	Limits
o-Terphenyl	120	39-150

Field ID: MW-8 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-012

Analyte	Result	RL
Diesel C10-C24	11,000 Y	50
Motor Oil C24-C36	1,900	300

Surrogate	%REC	Limits
o-Terphenyl	114	39-150

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

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/24/10
Units:	ug/L	Received:	03/25/10
Batch#:	161311	Prepared:	03/25/10

Field ID: MW-3 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-013

Analyte	Result	RL
Diesel C10-C24	4,500 Y	50
Motor Oil C24-C36	670	300

Surrogate	%REC	Limits
o-Terphenyl	121	39-150

Field ID: MW-13 Diln Fac: 2.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-014

Analyte	Result	RL
Diesel C10-C24	15,000 Y	100
Motor Oil C24-C36	3,100	600

Surrogate	%REC	Limits
o-Terphenyl	109	39-150

Field ID: MW-11 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/26/10
 Lab ID: 219028-015

Analyte	Result	RL
Diesel C10-C24	6,500 Y	50
Motor Oil C24-C36	6,900	300

Surrogate	%REC	Limits
o-Terphenyl	102	39-150

Field ID: MW-5 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/26/10
 Lab ID: 219028-016

Analyte	Result	RL
Diesel C10-C24	4,300 Y	50
Motor Oil C24-C36	5,400	300

Surrogate	%REC	Limits
o-Terphenyl	101	39-150

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

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/24/10
Units:	ug/L	Received:	03/25/10
Batch#:	161311	Prepared:	03/25/10

Field ID: MW-E Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/26/10
 Lab ID: 219028-017

Analyte	Result	RL
Diesel C10-C24	3,800 Y	50
Motor Oil C24-C36	5,100	300

Surrogate	%REC	Limits
o-Terphenyl	102	39-150

Field ID: MW-6 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/27/10
 Lab ID: 219028-018

Analyte	Result	RL
Diesel C10-C24	910 Y	50
Motor Oil C24-C36	1,500	300

Surrogate	%REC	Limits
o-Terphenyl	96	39-150

Type: BLANK Diln Fac: 1.000
 Lab ID: QC537673 Analyzed: 03/26/10

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

Surrogate	%REC	Limits
o-Terphenyl	108	39-150

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

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	219028	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	161311
Units:	ug/L	Prepared:	03/25/10
Diln Fac:	1.000	Analyzed:	03/26/10

Type: BS Lab ID: QC537674

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,791	112	34-144

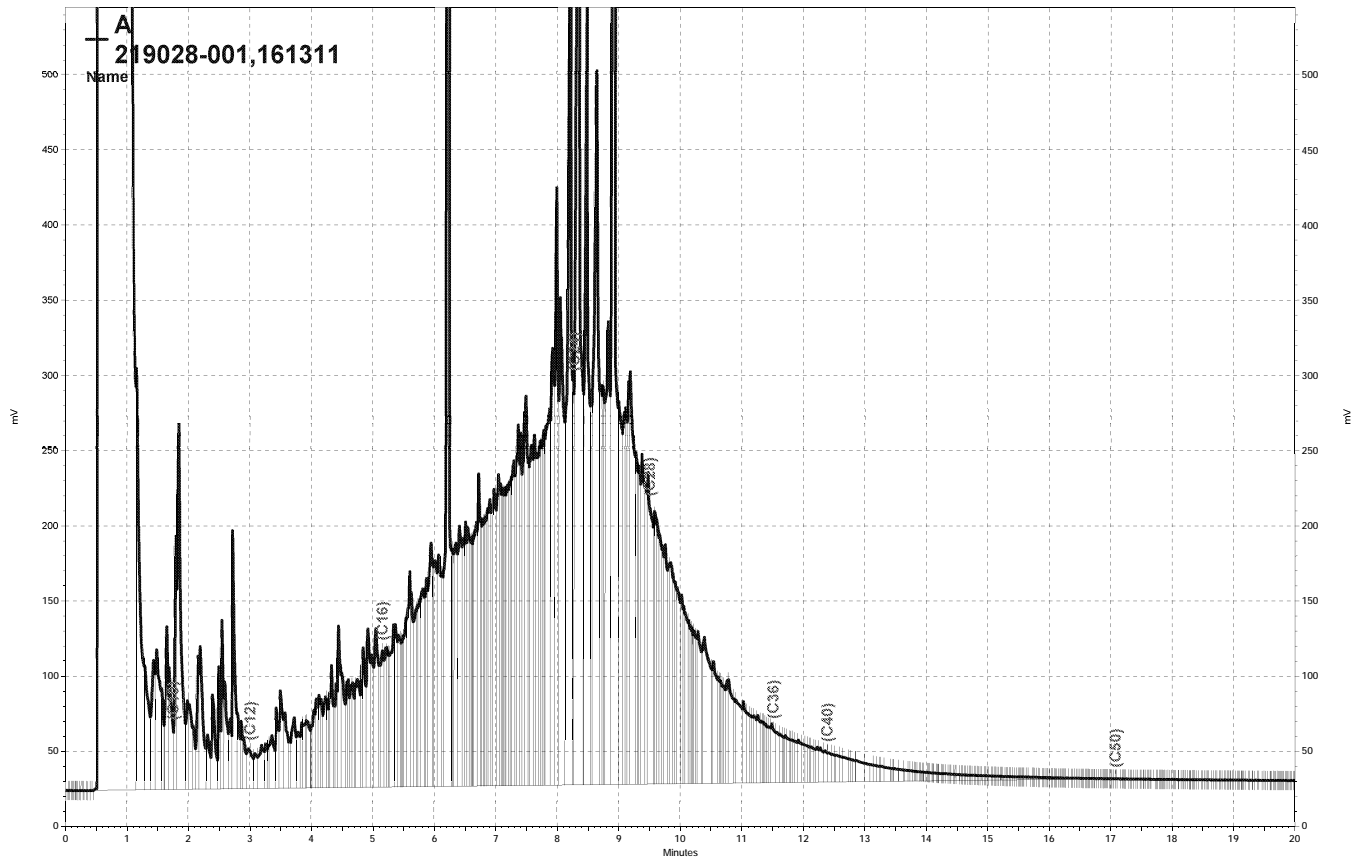
Surrogate	%REC	Limits
o-Terphenyl	115	39-150

Type: BSD Lab ID: QC537675

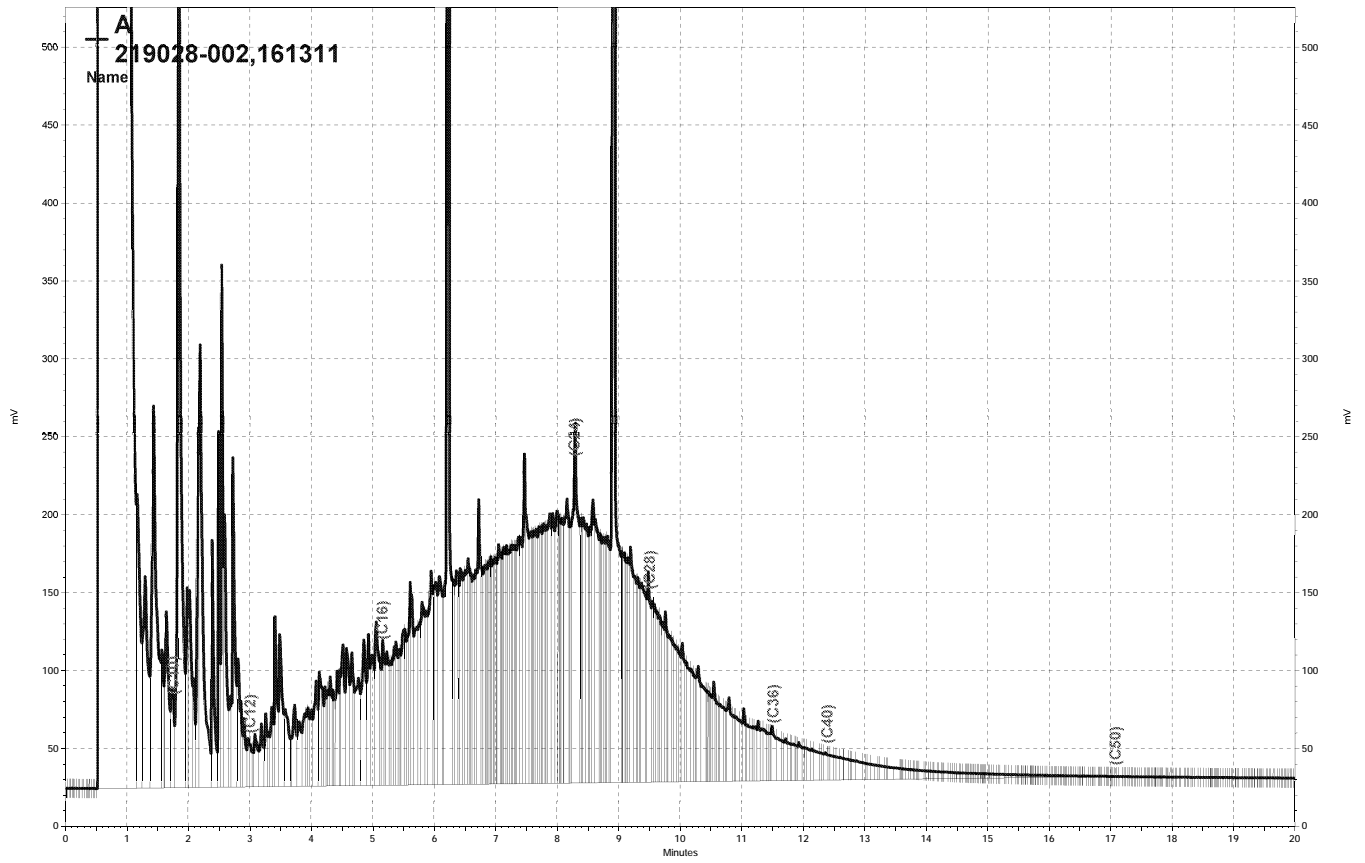
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,571	103	34-144	8	48

Surrogate	%REC	Limits
o-Terphenyl	108	39-150

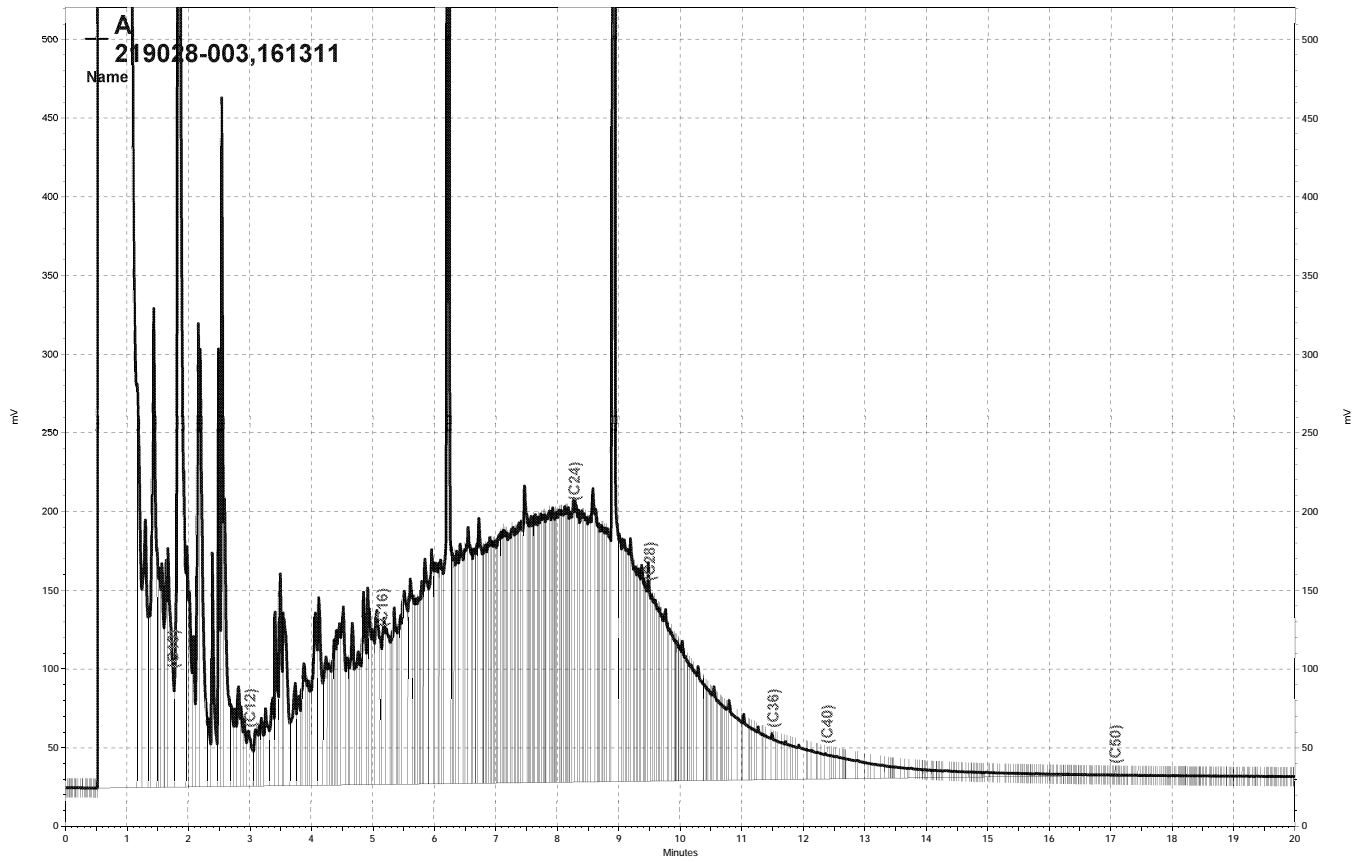
RPD= Relative Percent Difference



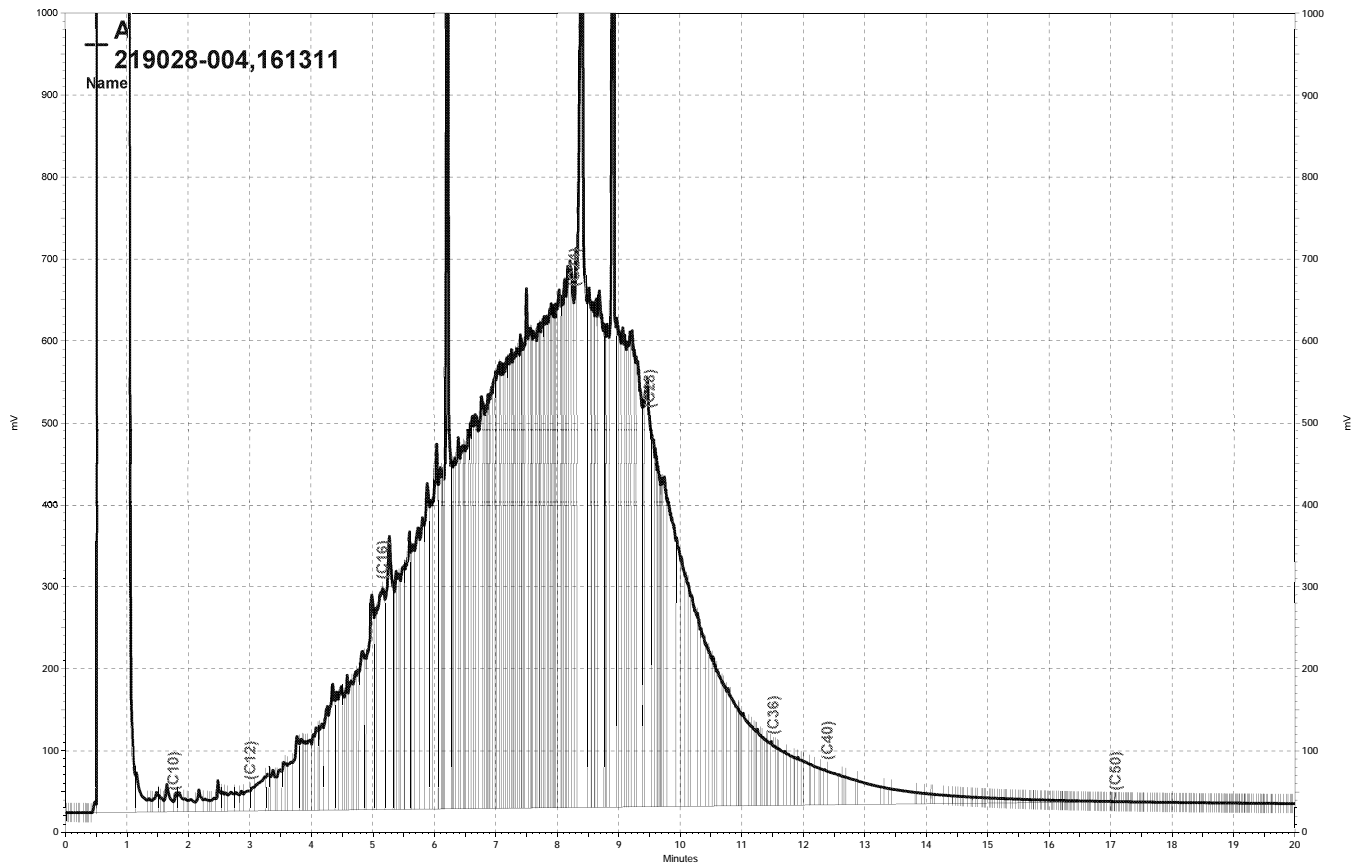
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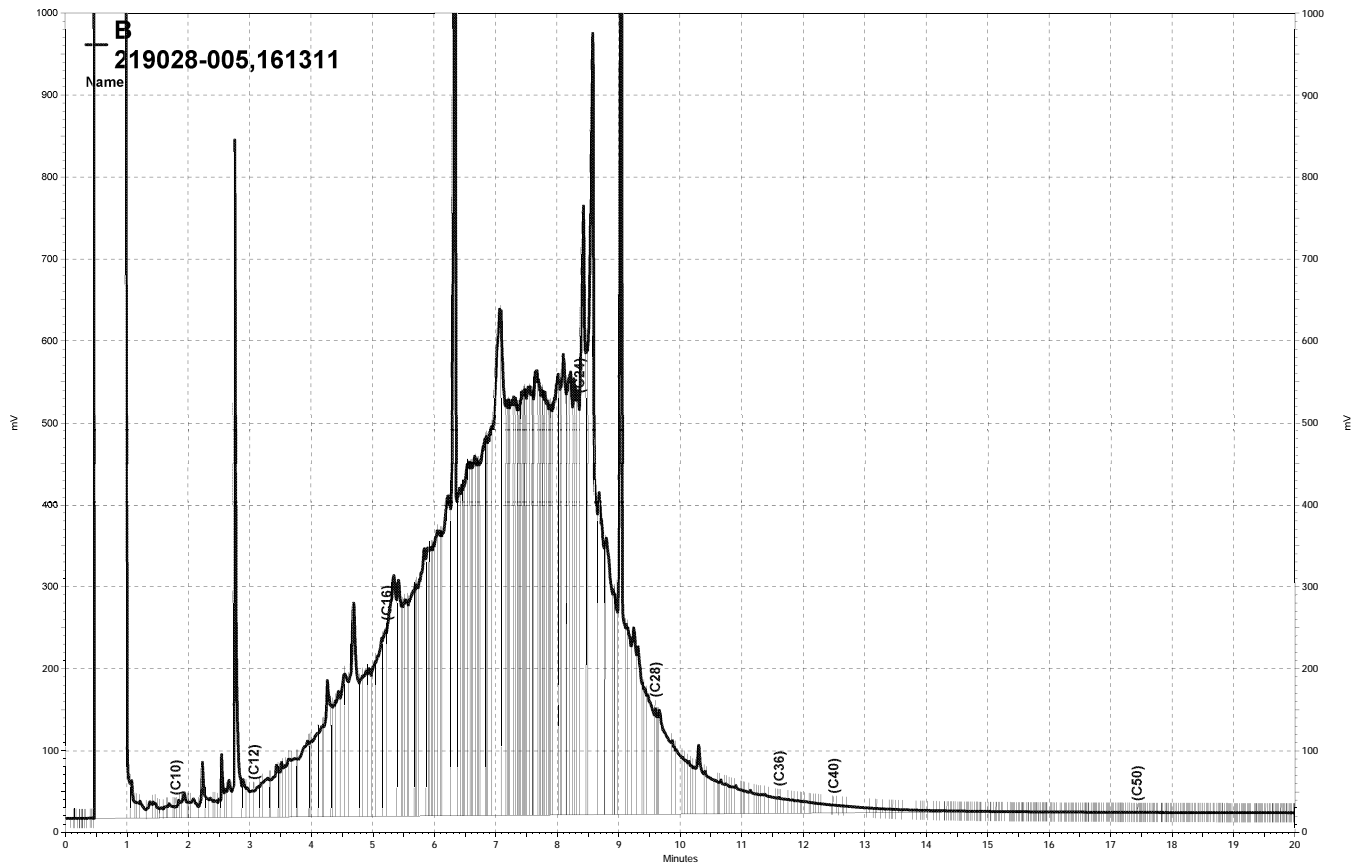
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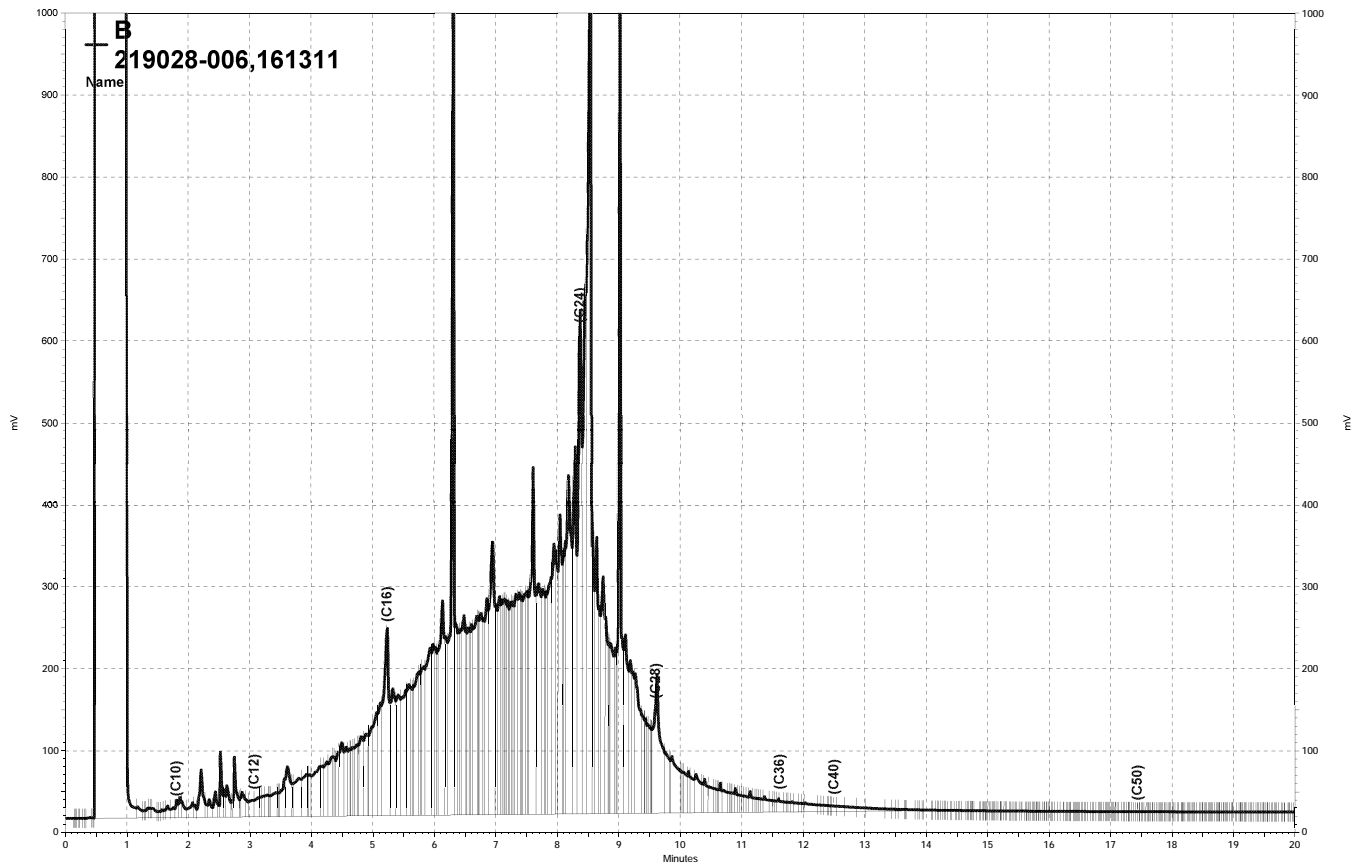
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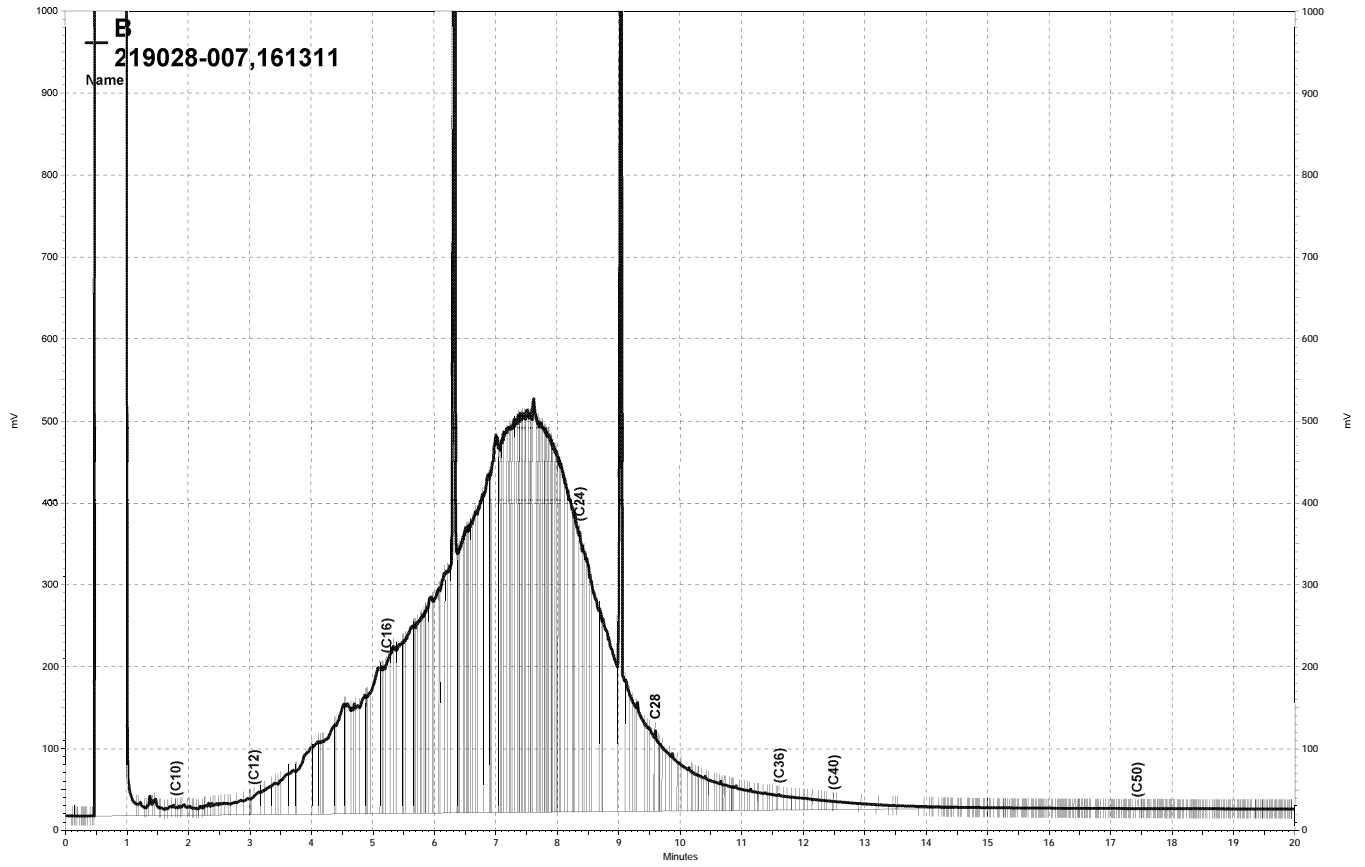
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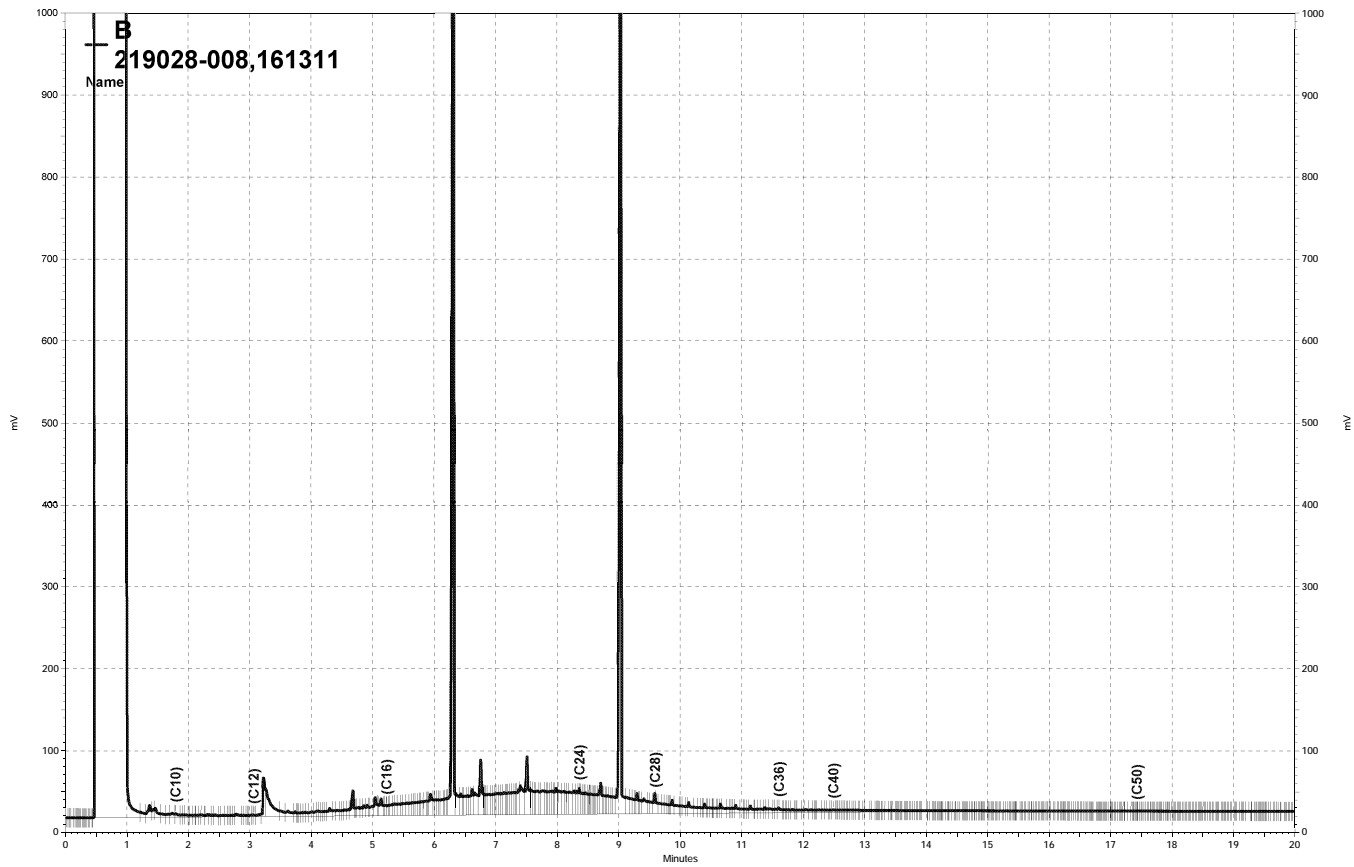
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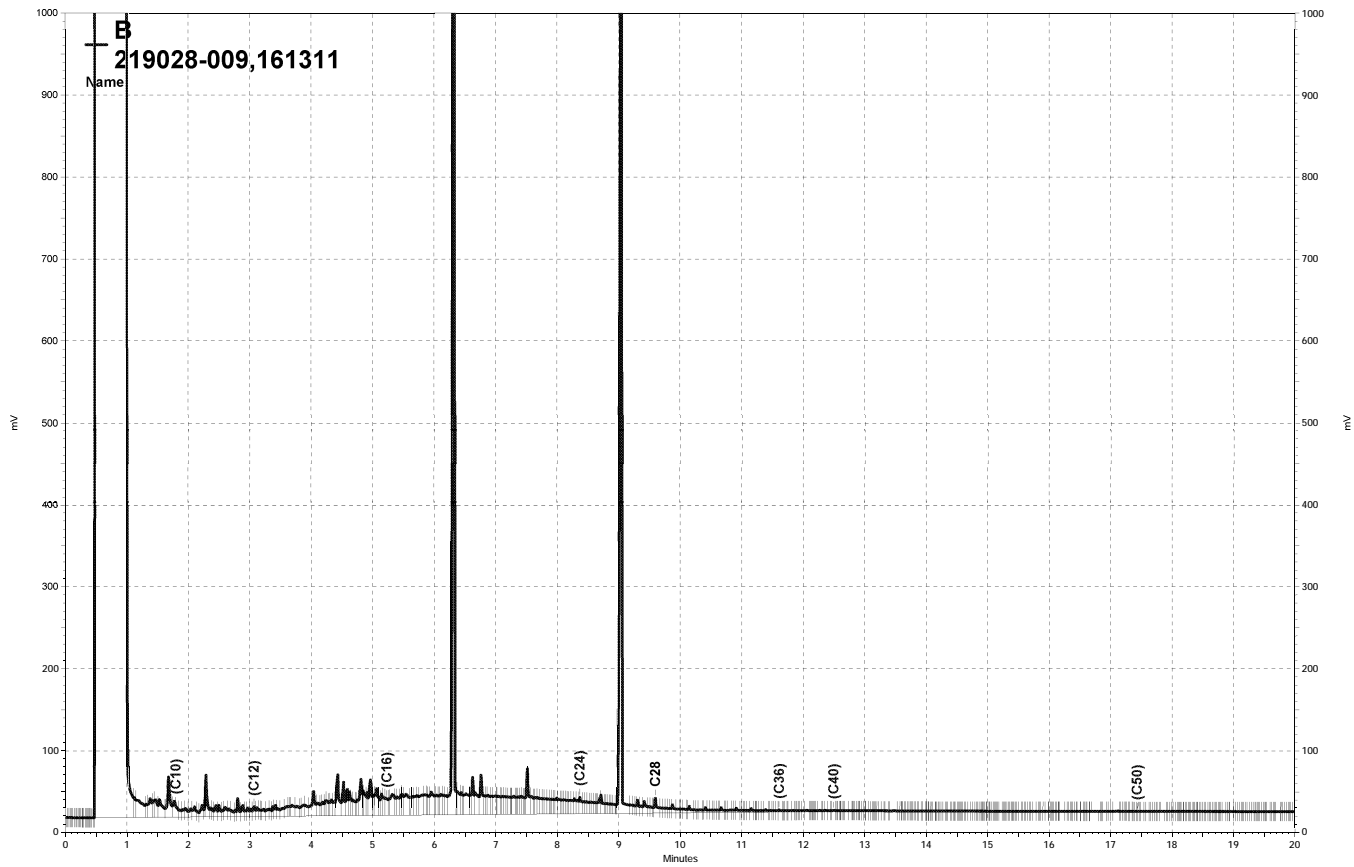
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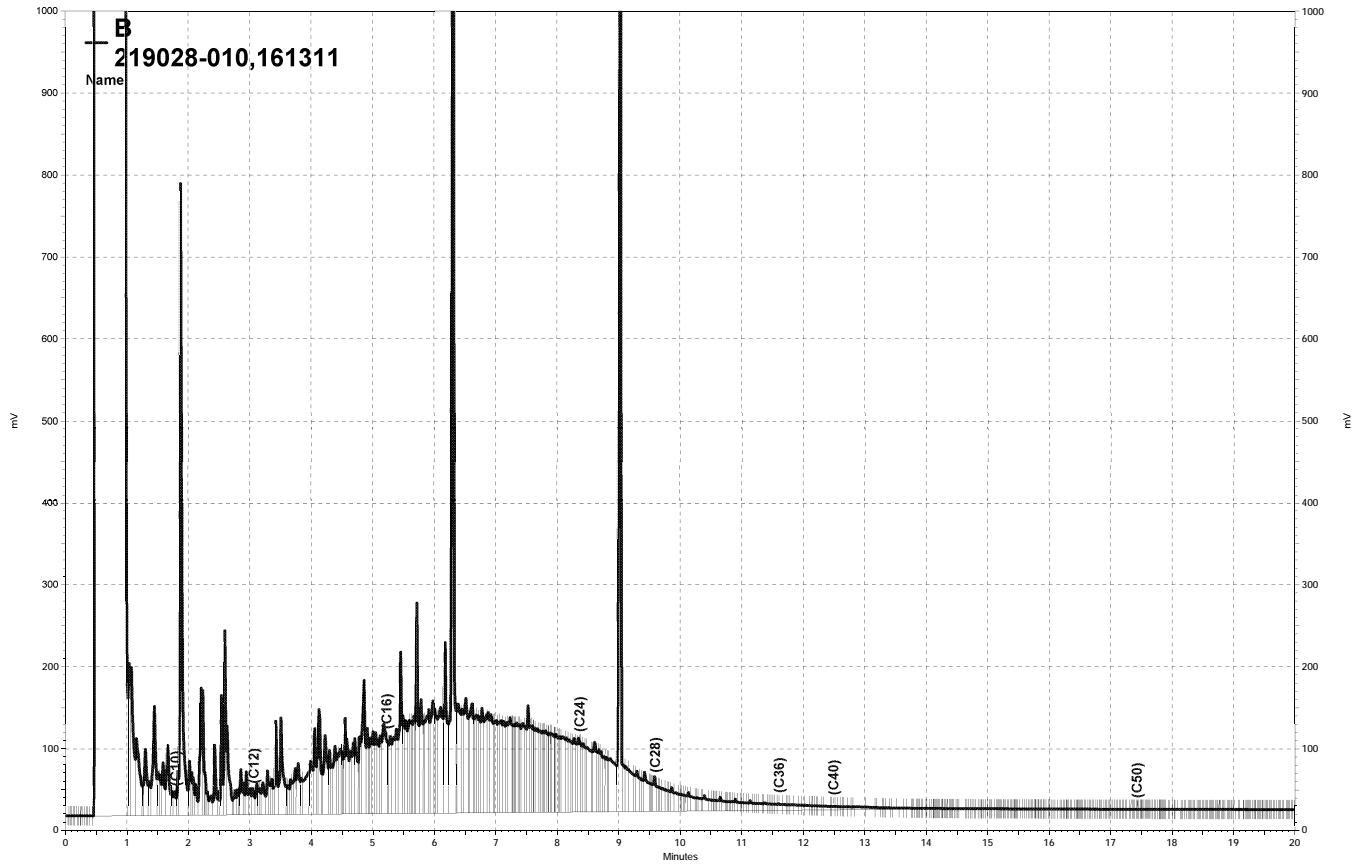
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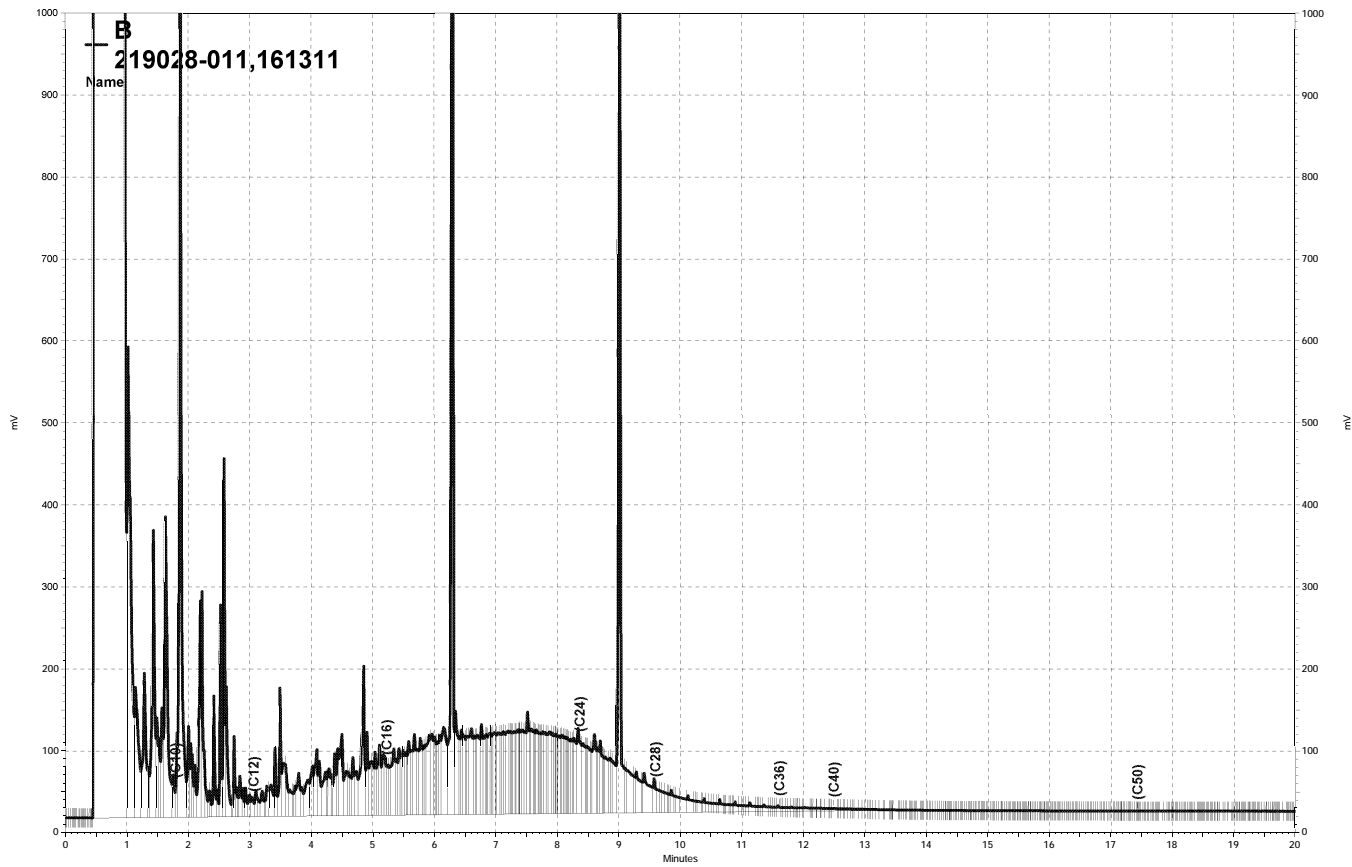
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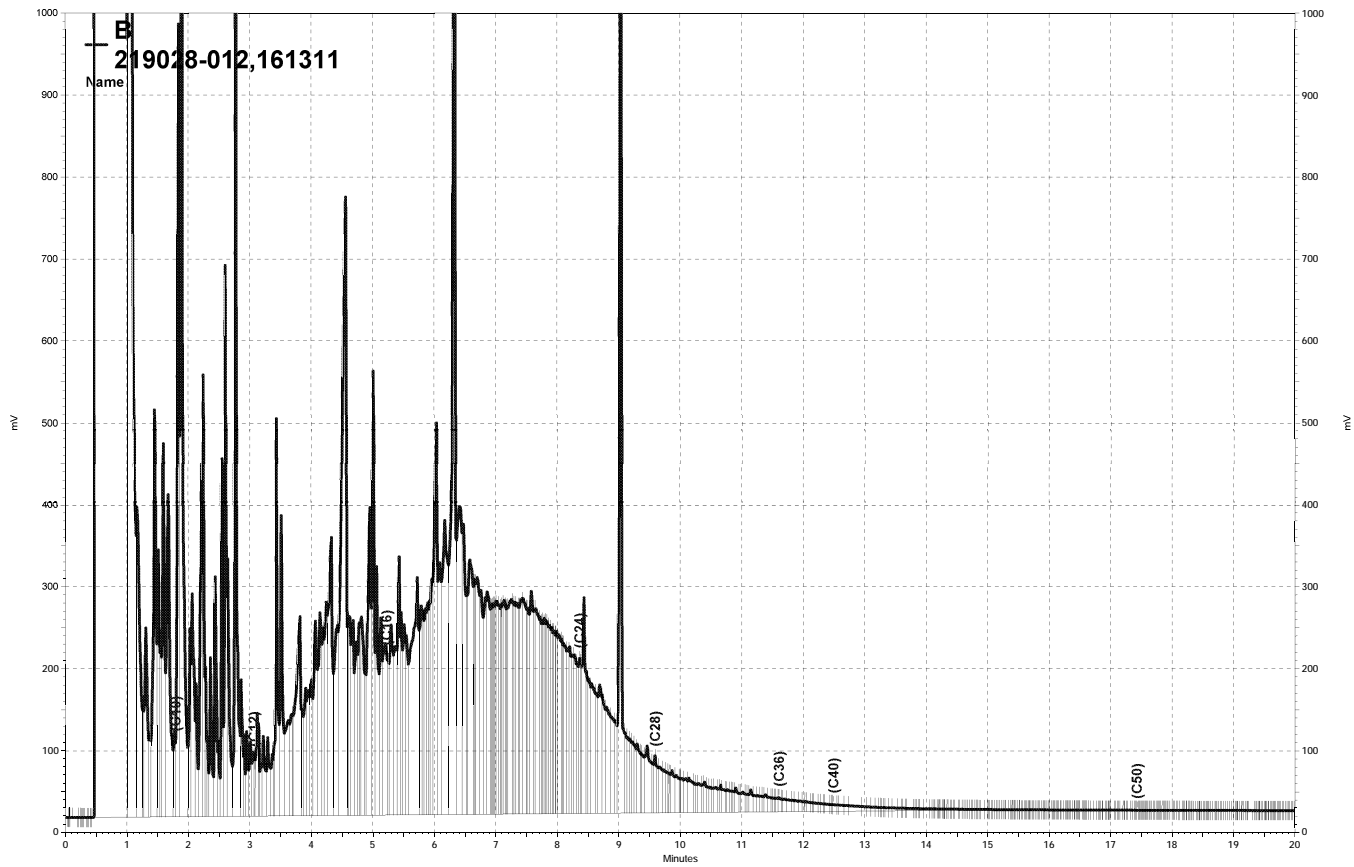
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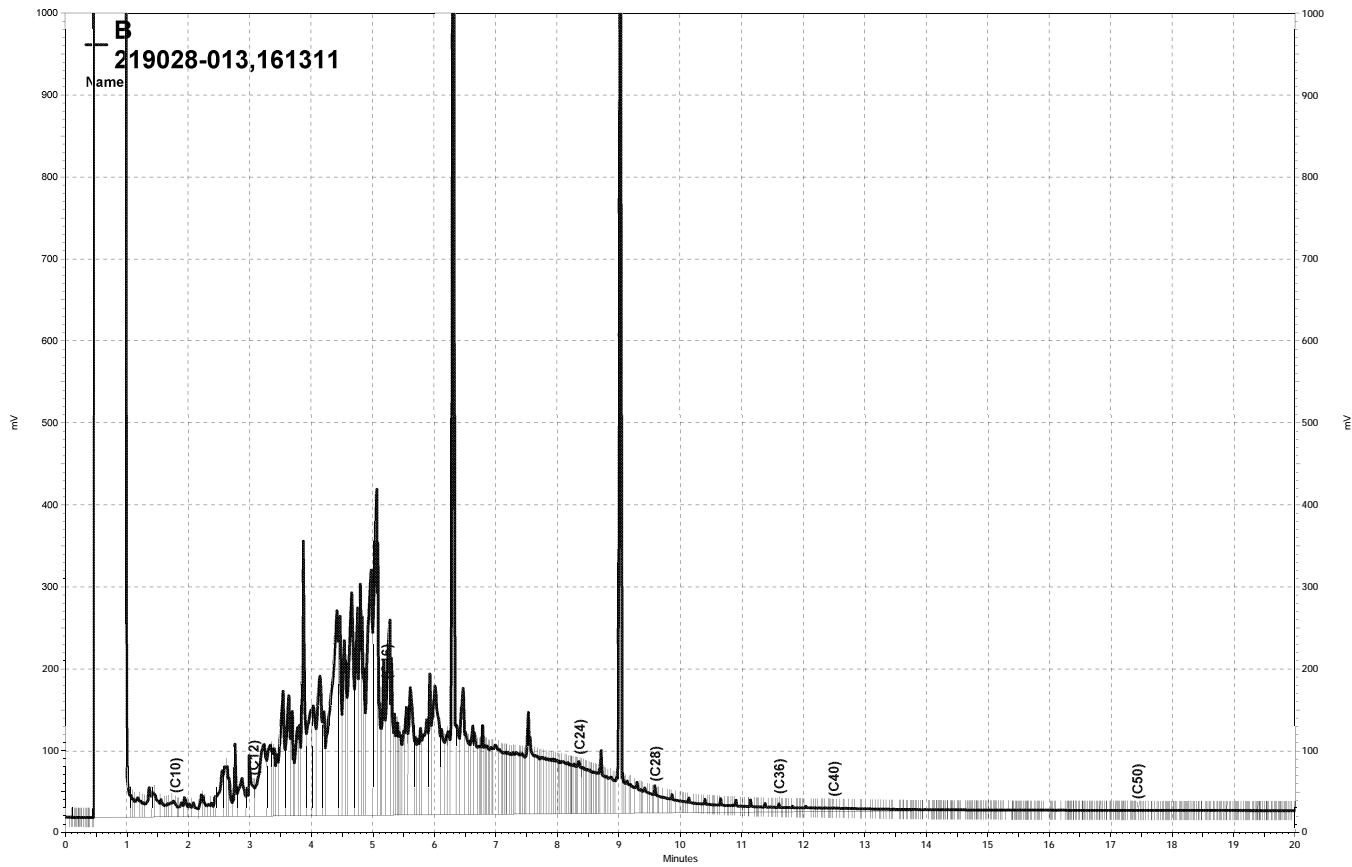
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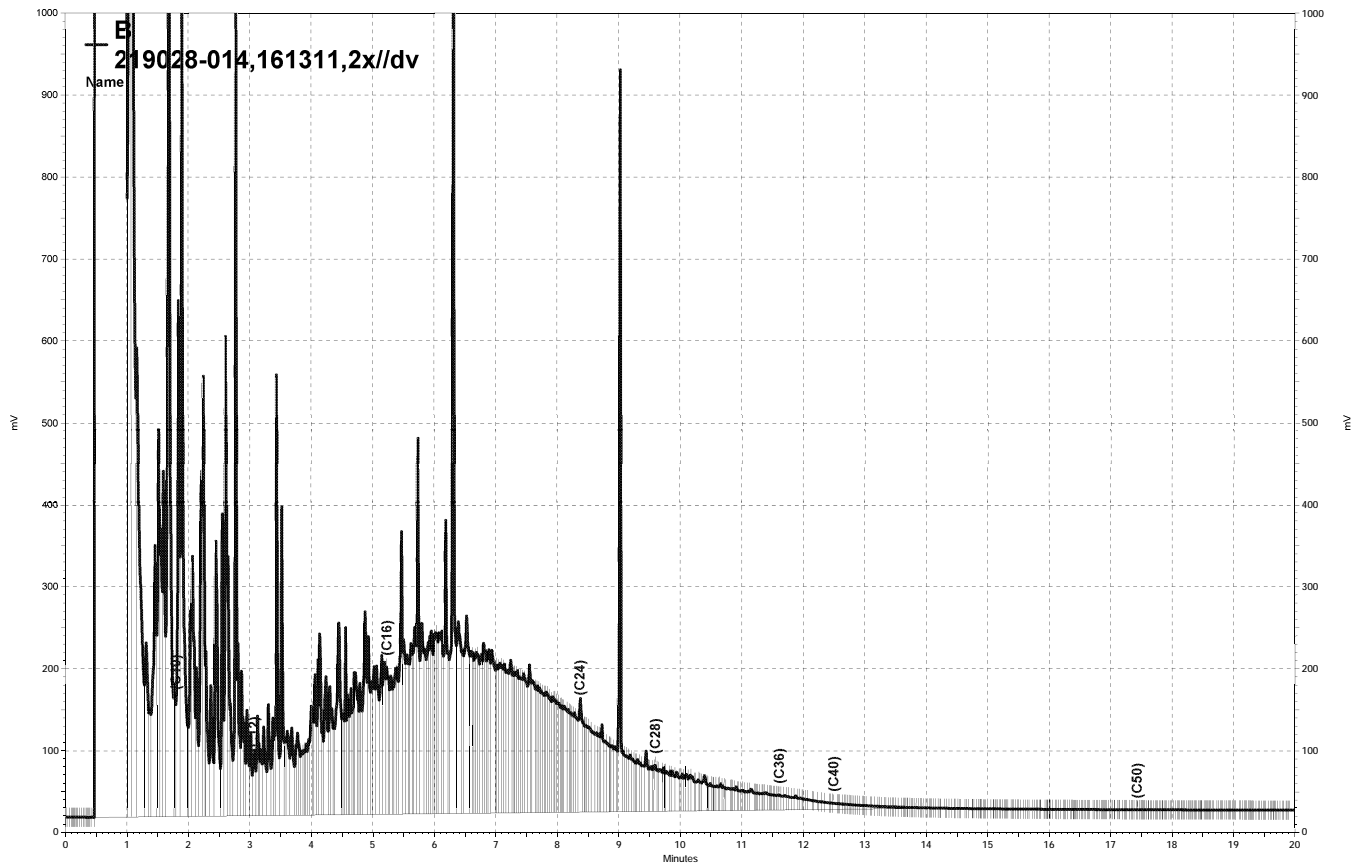
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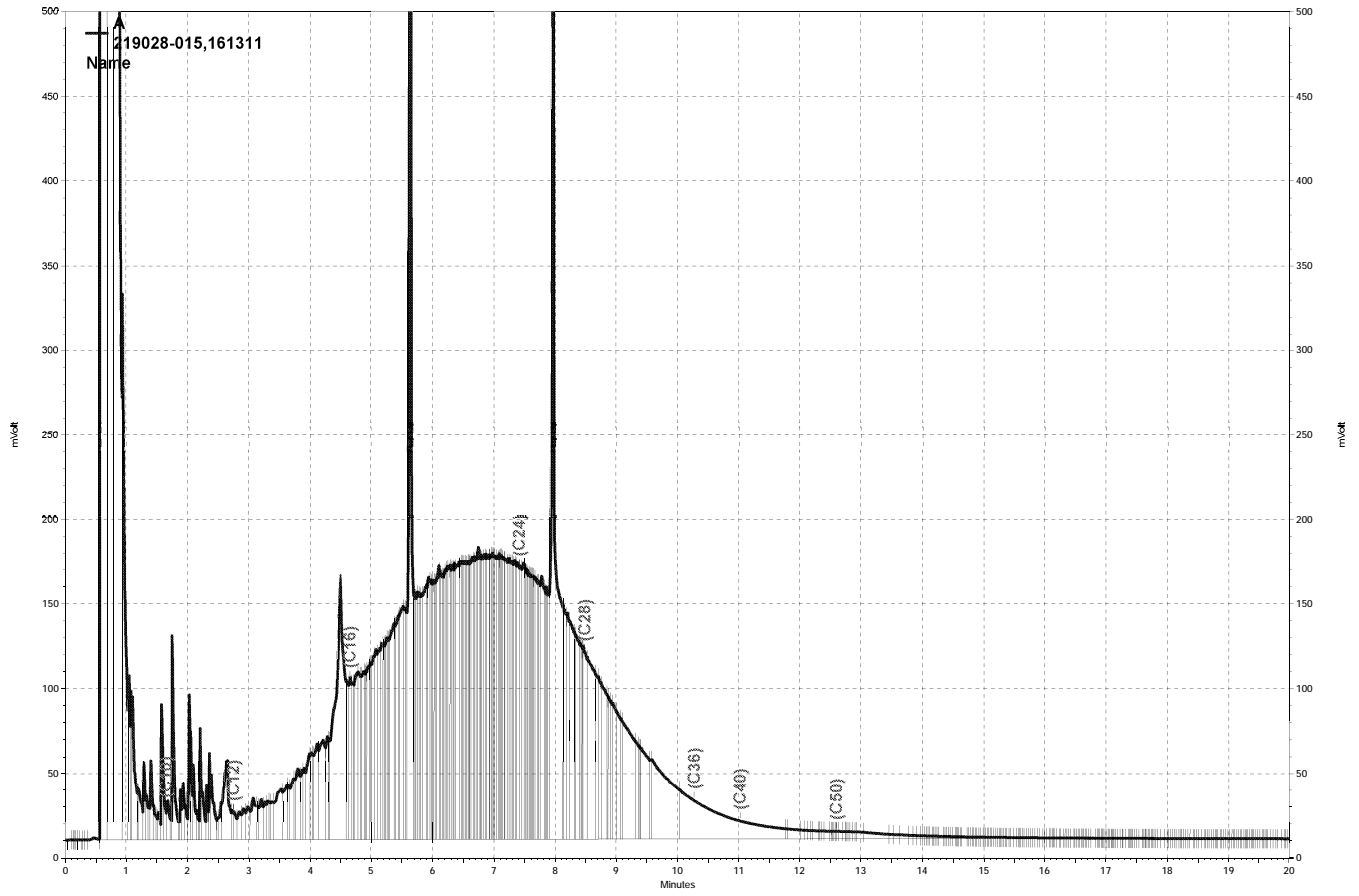
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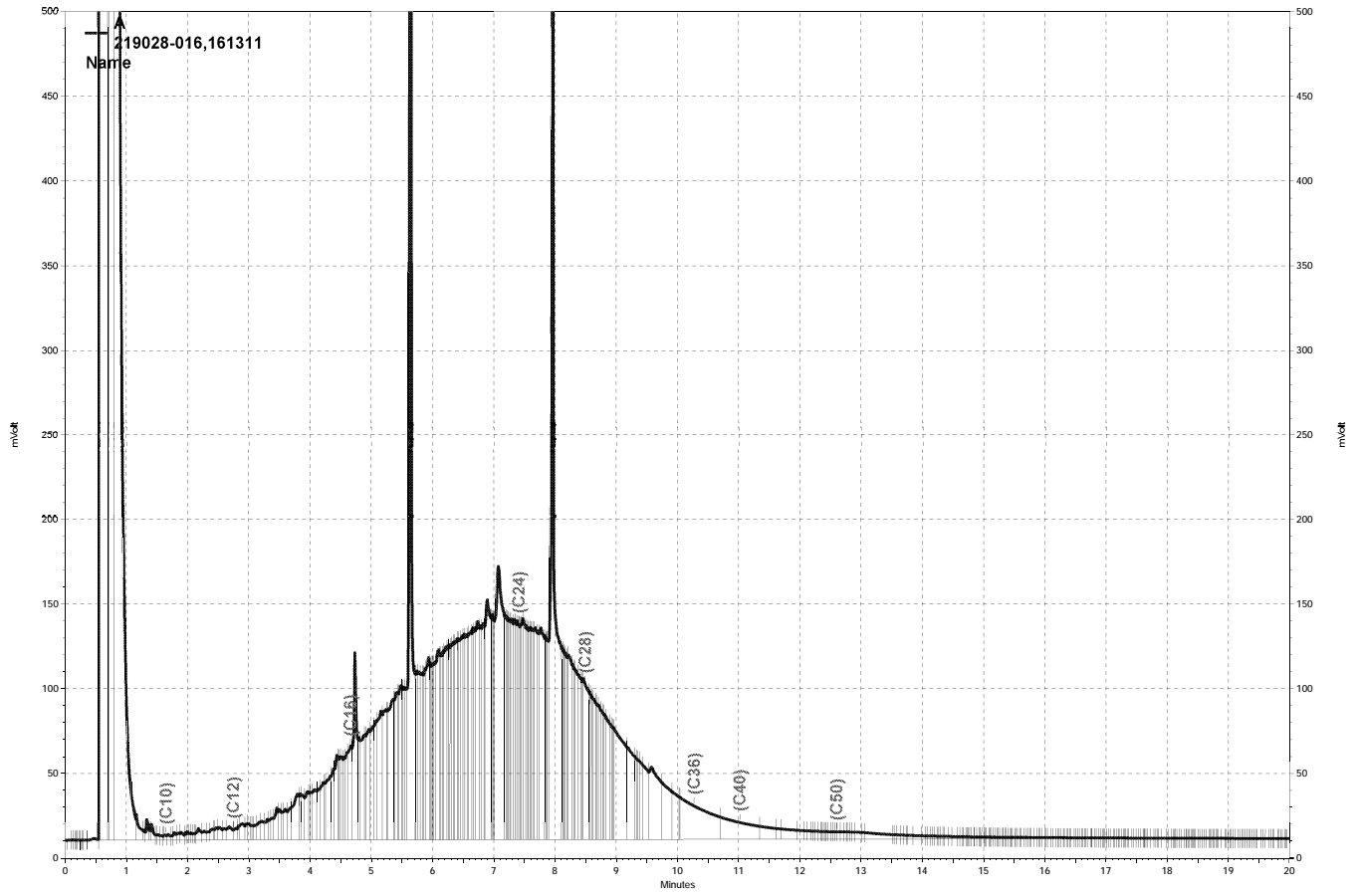
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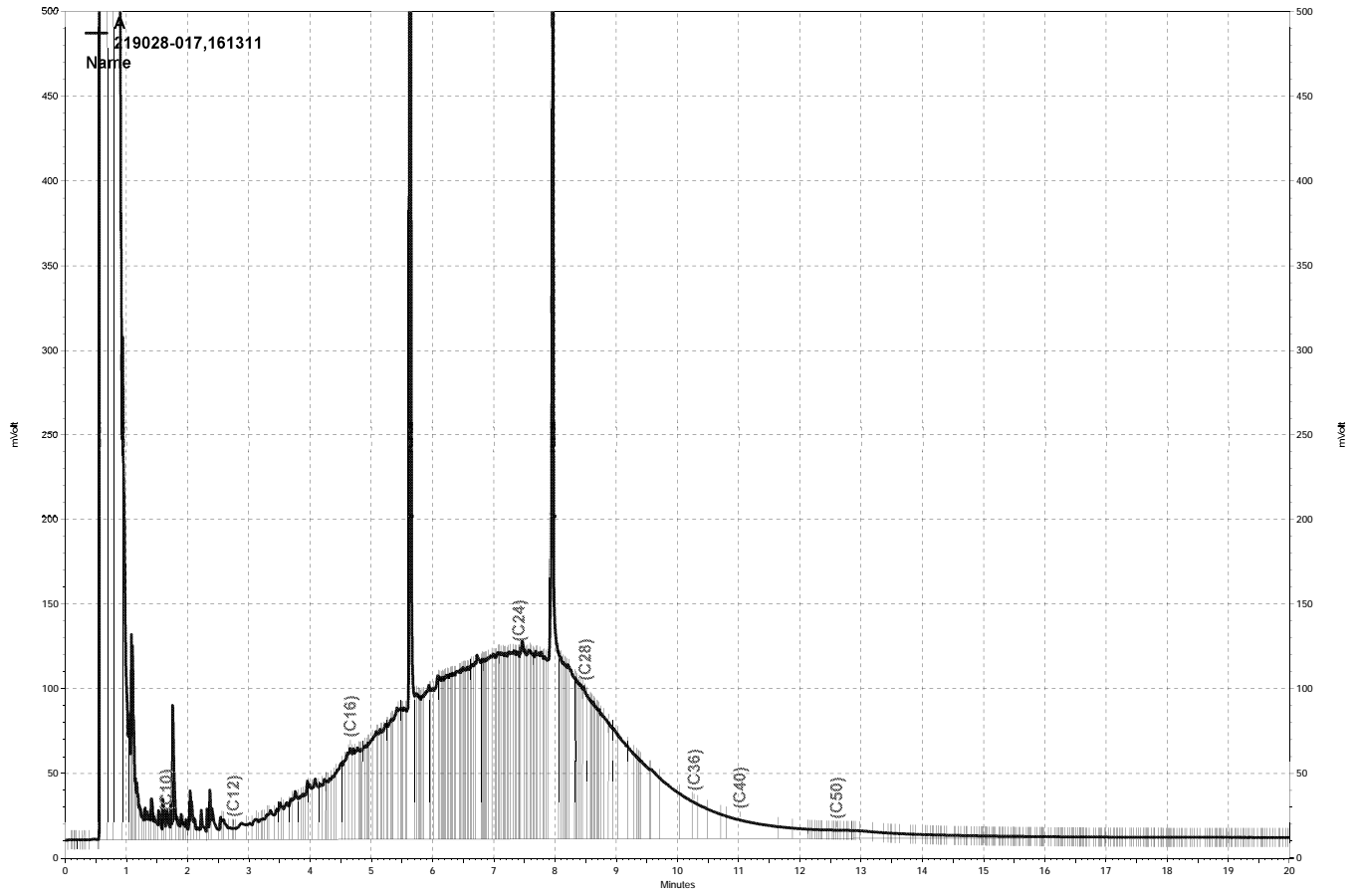
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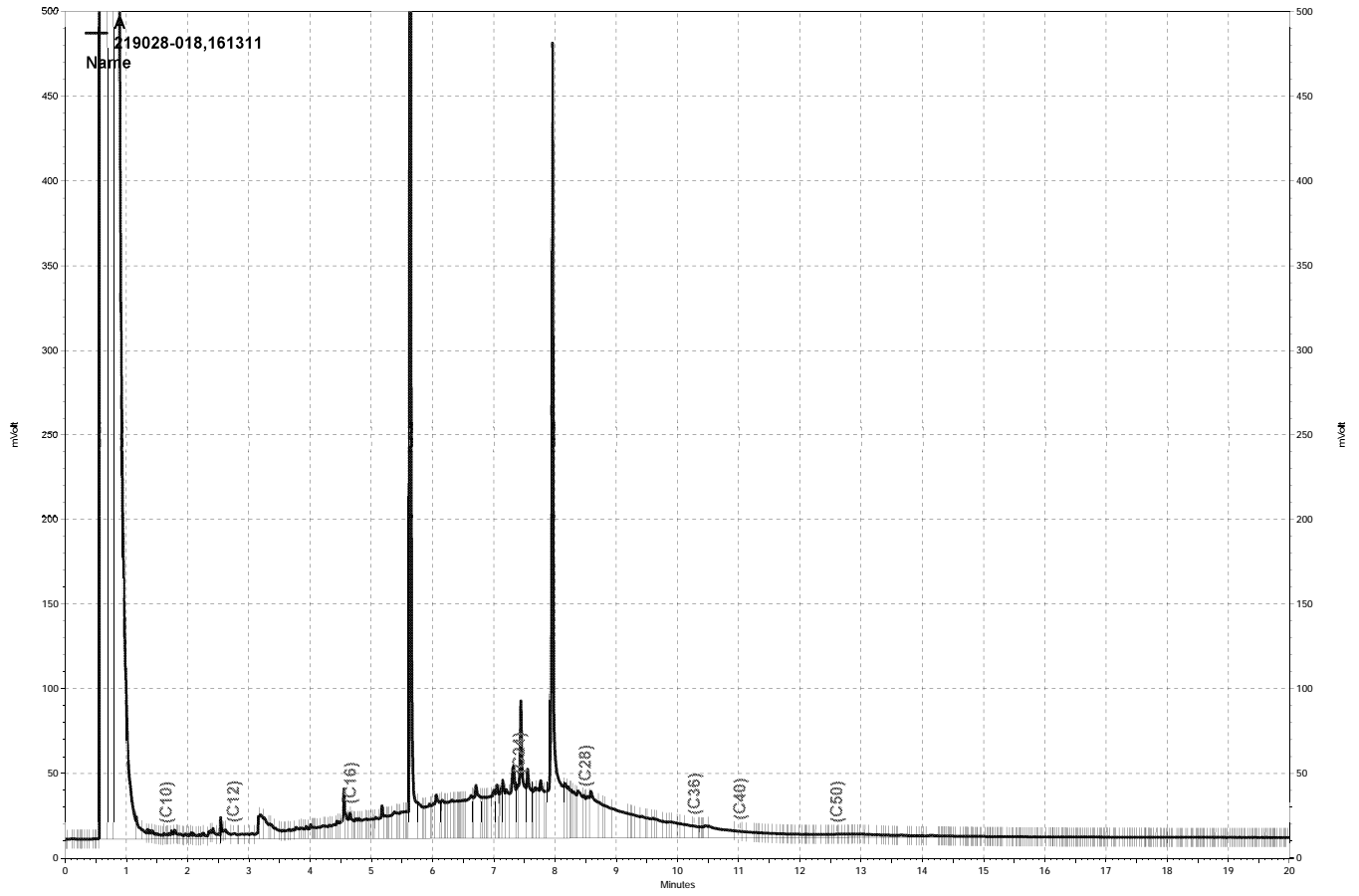
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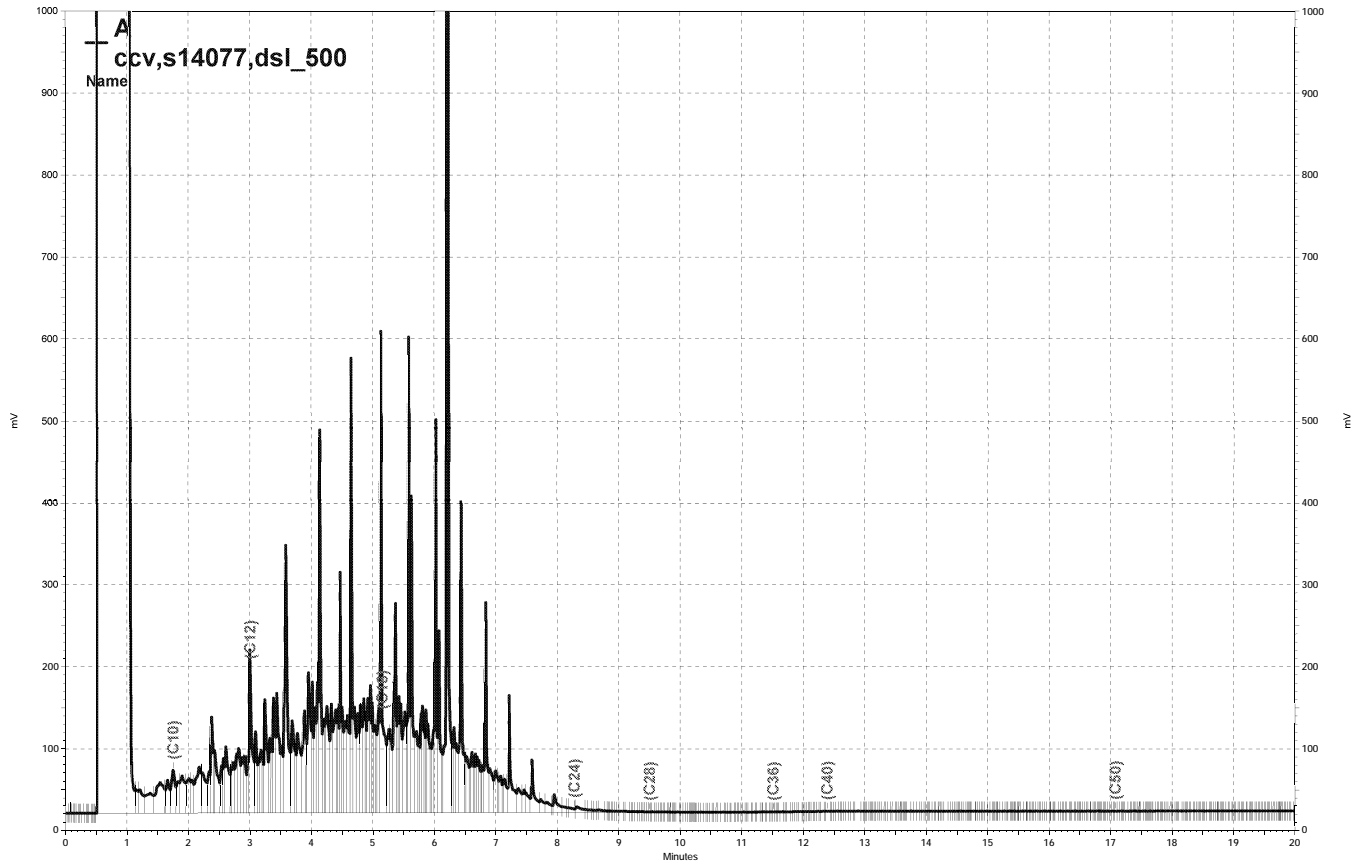
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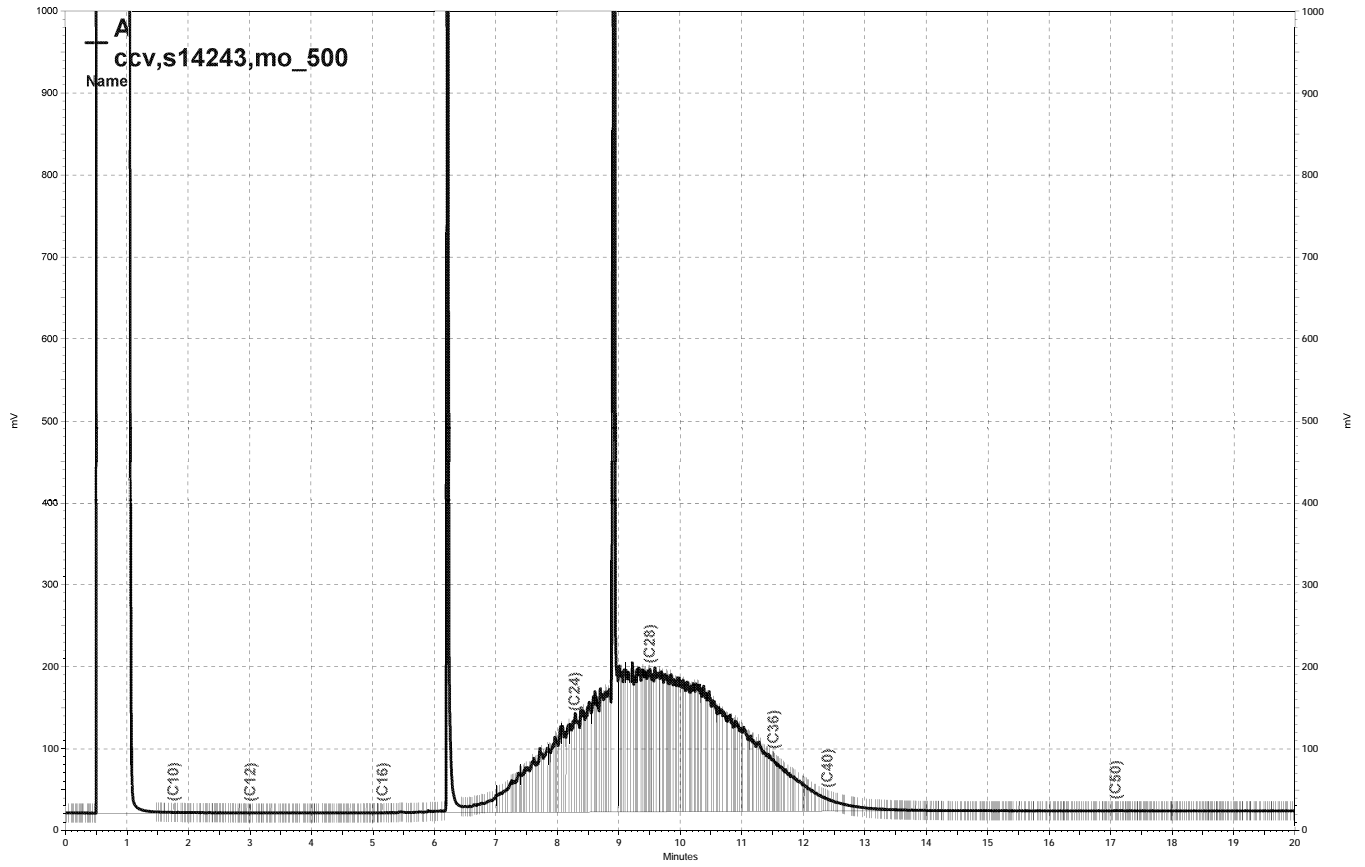
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— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\085a005, A



— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\085a004, A



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



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

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

**Laboratory Job Number 219327
ANALYTICAL REPORT**

Stellar Environmental Solutions
2198 6th Street
Berkeley, CA 94710

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

Sample ID
TANK

Lab ID
219327-001

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

Signature: _____

Project Manager

Date: 04/14/2010

NELAP # 01107CA

CASE NARRATIVE

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

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

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

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 219327 Date Received 4-8-10 Number of coolers 1
Client STEWART ENV. SVC. Project EMERY/BAY BASE 1 COOLERS

Date Opened 4-8-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
Shipping info _____

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

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

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

6. Indicate the packing in cooler: (if other, describe) _____
 Bubble Wrap Foam blocks Bags None
 Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation:
Type of ice used: Wet Blue/Gel None Temp(°C) _____
 Samples Received on ice & cold without a temperature blank
 Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS
1/3 VOA'S HAS BUBBLE

Total Volatile Hydrocarbons			
Lab #:	219327	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	TANK	Batch#:	161863
Matrix:	Water	Sampled:	04/08/10
Units:	ug/L	Received:	04/08/10
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 04/10/10
 Lab ID: 219327-001

Analyte	Result	RL
Gasoline C7-C12	4,000	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	48-162
Bromofluorobenzene (FID)	134	52-158

Type: BLANK Analyzed: 04/09/10
 Lab ID: QC539902

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	48-162
Bromofluorobenzene (FID)	99	52-158

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

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

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

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

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	219327	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	161863
MSS Lab ID:	219291-001	Sampled:	04/07/10
Matrix:	Water	Received:	04/07/10
Units:	ug/L	Analyzed:	04/09/10
Diln Fac:	1.000		

Type: MS Lab ID: QC539904

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<6.172	2,000	1,933	97	49-129

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	48-162
Bromofluorobenzene (FID)	108	52-158

Type: MSD Lab ID: QC539905

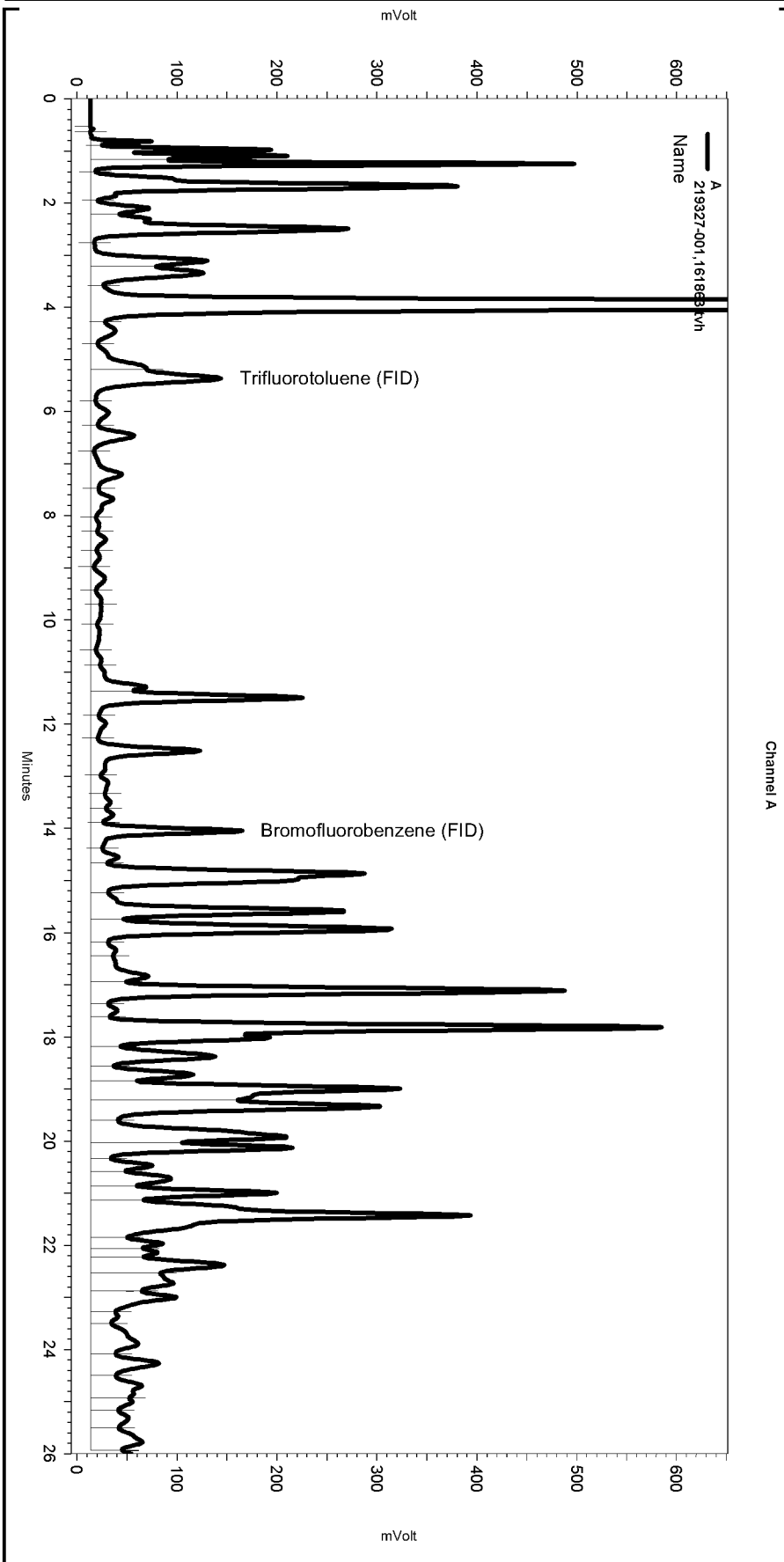
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,968	98	49-129	2	19

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

RPD= Relative Percent Difference

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\099.seq
 Sample Name: 219327-001,161863,tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\099_024
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/10/2010 6:00:52 AM
 Analysis Date: 4/10/2010 3:19:41 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

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

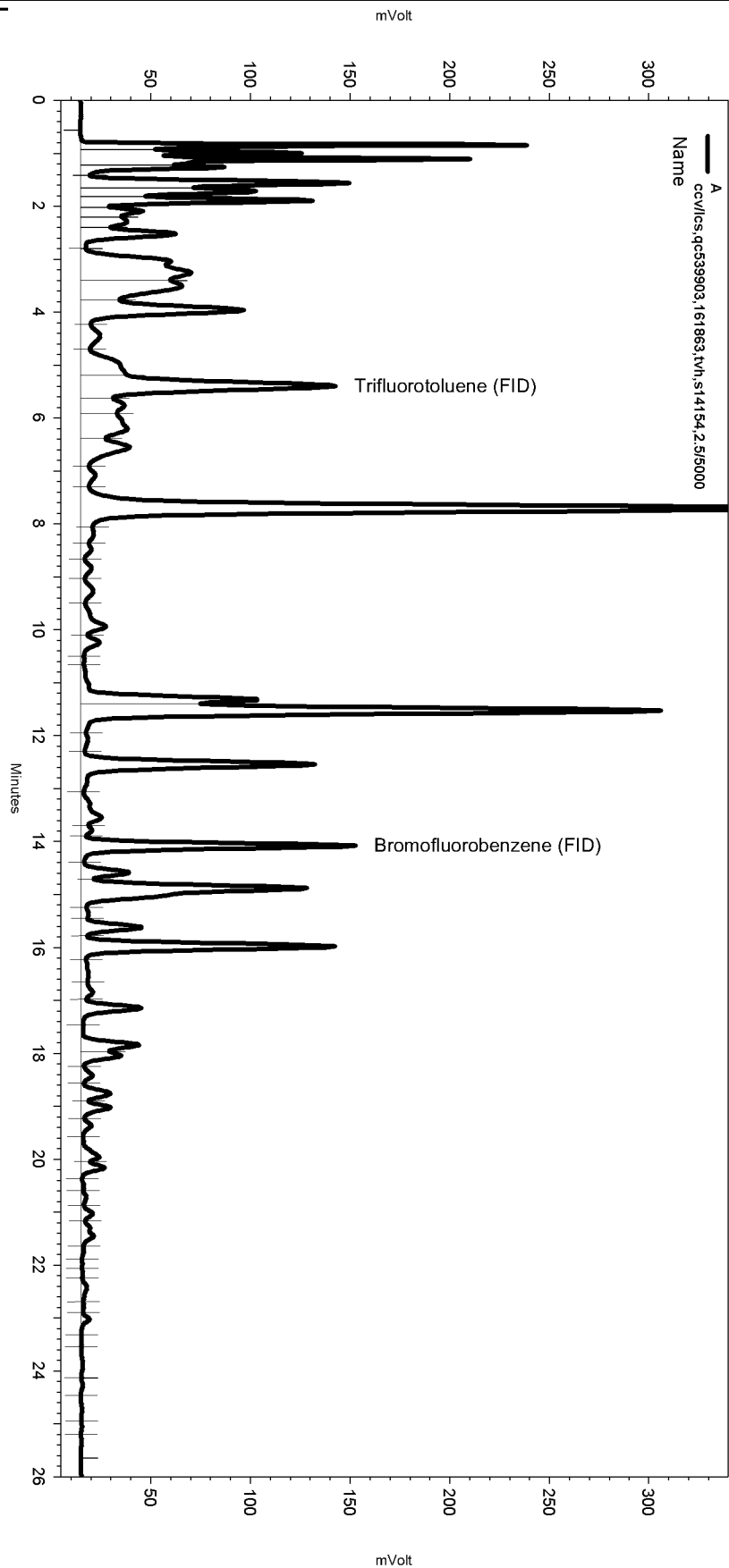
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\099_024

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Yes	Lowest Point Horizontal Baseline	0	26.017	0
Yes	Split Peak	5.198	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\099.seq
 Sample Name: ccv\lcs,qc539903,161863,tvh,s14154,2,5/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\099_003
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lms2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe091.met

Software Version 3.1.7
 Run Date: 4/9/2010 12:52:45 PM
 Analysis Date: 4/10/2010 3:03:45 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: {Data Description}



Channel A

---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\099_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.2	0	0

Total Extractable Hydrocarbons

Lab #:	219327	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	TANK	Sampled:	04/08/10
Matrix:	Water	Received:	04/08/10
Units:	ug/L	Prepared:	04/09/10
Batch#:	161865	Analyzed:	04/13/10

Type: SAMPLE Diln Fac: 50.00
 Lab ID: 219327-001

Analyte	Result	RL
Diesel C10-C24	350,000	2,500

Surrogate	%REC	Limits
o-Terphenyl	DO	39-150

Type: BLANK Diln Fac: 1.000
 Lab ID: QC539911

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	109	39-150

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	219327	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	161865
Units:	ug/L	Prepared:	04/09/10
Diln Fac:	1.000	Analyzed:	04/12/10

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC539912

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,427	97	34-144

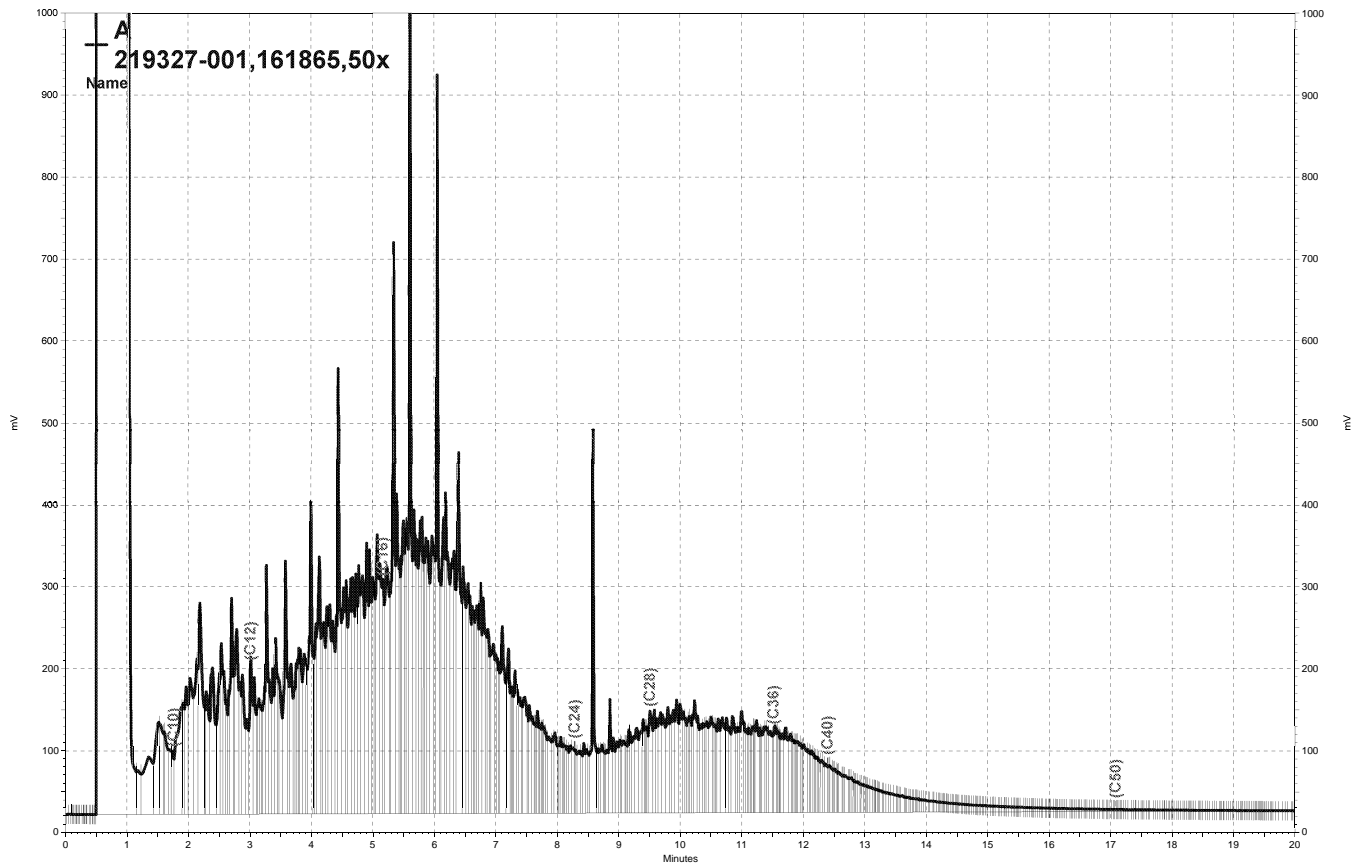
Surrogate	%REC	Limits
o-Terphenyl	113	39-150

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC539913

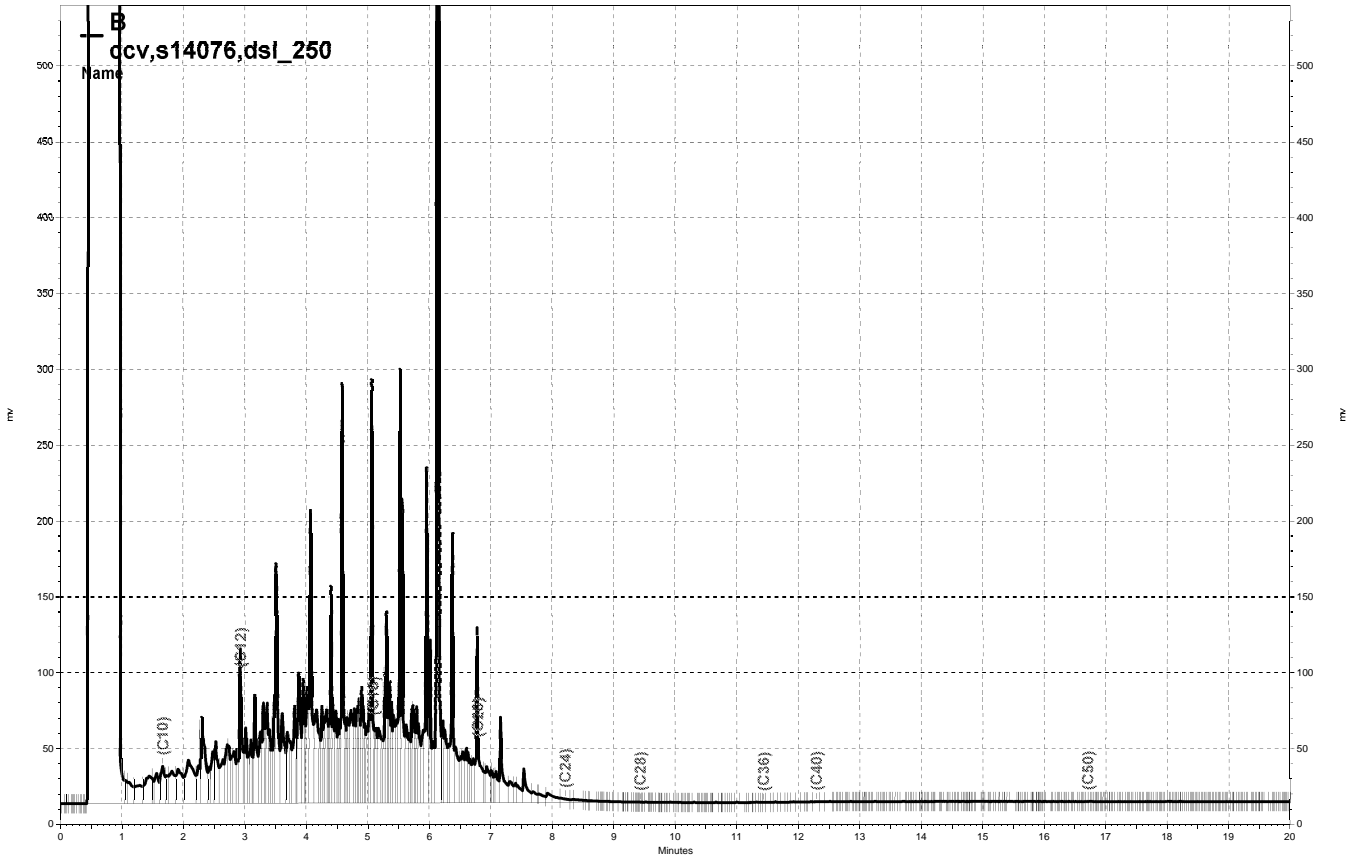
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,534	101	34-144	4	48

Surrogate	%REC	Limits
o-Terphenyl	120	39-150

RPD= Relative Percent Difference



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



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

**September 2009 Corrected Analytical Laboratory
Report and Letter**



CURTIS & TOMPKINS, LTD.

2323 Fifth St., Berkeley, CA 94710

To: Richard Makdisi
From: Dr. Bruce Godfrey, Lab Director
Subject: Data Processing Error Affecting Reported TVH Results

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

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

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

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

Sincerely,

C. Bruce Godfrey, Ph.D.
Lab Director

SDG: 215050, 215154, 215953





Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



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

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

Laboratory Job Number 215050
ANALYTICAL REPORT

Stellar Environmental Solutions
2198 6th Street
Berkeley, CA 94710

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

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers (MW-4, MW-17, etc.) and their corresponding lab IDs (215050-001, 215050-002, etc.).

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 NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: [Handwritten Signature]
Project Manager

Date: 10/02/2009

NELAP # 01107CA

CASE NARRATIVE

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

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

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

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

TPH-Extractables by GC (EPA 8015B):

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

Chain of Custody Record

215050

Lab job no. _____

Date 9/17/09

Page 2 of 3

Laboratory CET Method of Shipment LAB COURIER

Address 2323 FIFTH ST Shipment No. _____

BERKELEY, CA

Airbill No. _____

Project Owner _____ Cooler No. _____

Site Address 6400 CHRISTIE AVE Project Manager TEAL GLASS

BERKELEY, CA

Telephone No. (510) 644-3123

Project Name BAY CENTER APARTMENT Fax No. (510) 644-3859

Project Number 2007-65 Samplers: (Signature) [Signature]

Field Sample Number	Location/Depth	Date	Time	Sample Type	Type/Size of Container	Preservation			Analysis Required	Remarks
						Cooler	Chemical			
10	MW-3	9-17-09	950	W	HCL & NP VOA & I LAMBDA				X X X	
11	MW-7		1045						X X X	
12	MW-9		1120						X X X	
13	MW-11		1140						X X X	
14	MW-8		1355						X X X	

Filtered
 No. of Containers
 TEH-D (805ml)
 TPH-G (805ml)
 BTEX + MTBE

Relinquished by: <u>[Signature]</u> Signature _____ Printed <u>F. SRINONGTOM</u> Company <u>BLAND TECH SER</u>	Date <u>9/17/09</u> Time <u>1605</u>	Received by: <u>[Signature]</u> Signature _____ Printed <u>F. SRINONGTOM</u> Company <u>BLAND TECH SERVICES</u>	Date <u>9-17-09</u> Time <u>1805</u>	Relinquished by: <u>[Signature]</u> Signature _____ Printed <u>Michael Numb</u> Company <u>BTB</u>	Date <u>9/18/09</u> Time <u>1520</u>	Received by: <u>[Signature]</u> Signature _____ Printed <u>Ricky Glass</u> Company <u>CET</u>	Date <u>9/18/09</u> Time <u>1500</u>
---	---	--	---	---	---	--	---

Turnaround Time: <u>STANDARD</u> Comments: <u>EDF REQUIRED</u> <u>GLOBAL ID # SLT 2005561</u>	Relinquished by: _____ Signature _____ Printed _____ Company _____
Date _____ Time _____	Received by: _____ Signature _____ Printed _____ Company _____

intact cold RA

Chain of Custody Record

Lab job no. 215050
 Date 9/17/09
 Page 1 of 3

Laboratory CYT Method of Shipment LAB COURIER
 Address 2323 FIFTH ST Shipment No. _____
BERKELEY, CA
 Project Owner _____ Airbill No. _____
 Site Address 6400 CHRISTIE AVE Project Manager TEAL GLASS
BERKELEY, CA Telephone No. (510) 644-3123
 Project Name BAY CENTER APARTMENT Fax No. (510) 644-3859
 Project Number 2007-65 Samplers: (Signature) Patlin

Filtered
 No. of Containers
TEH-D (8015)
TPH-G (8015)
BTEX + MTBE

	Field Sample Number	Location/Depth	Date	Time	Sample Type	Type/Size of Container	Preservation		Analysis Required	Remarks
							Cooler	Chemical		
1	MW-4		9/17/09	1004	W	40ml Vial / 16 Amber	Y	HEI/NE	X X X	
2	MW-7			1020					X X X	
3	MW-12			1042					X X X	
4	MW-13			1100					X X X	
5	MW-10			1130					X X X	
6	MW-14			1210					X X X	
7	MW-15			1230					X X X	
8	RW-1			1350					X X X	
9	MW-E			1400					X X X	

Relinquished by: Signature <u>Patlin</u> Printed <u>Pate Cornish</u> Company <u>BTS</u>	Date <u>9/17/09</u> Time <u>1600</u>	Received by: Signature <u>Patlin</u> Printed <u>Pate Cornish</u> Company <u>BTS</u>	Date <u>9/17/09</u> Time <u>1600</u>	Relinquished by: Signature <u>[Signature]</u> Printed <u>Michael Minkler</u> Company <u>BTS</u>	Date <u>9/18/09</u> Time <u>1500</u>	Received by: Signature <u>[Signature]</u> Printed <u>Ricky Grams</u> Company <u>CYT</u>	Date <u>9/18/09</u> Time <u>1500</u>
--	---	--	---	--	---	--	---

Turnaround Time: STANDARD
 Comments: EDF REQUIRED
GLOBAL ID # SLT2005561

10-00-0000

intact cold Rg

COOLER RECEIPT CHECKLIST



Login # 215050 Date Received 9/18/09 Number of coolers 2
 Client SES Project BAY CENTER APARTMENT

Date Opened 9/18/09 By (print) M. Villanueva (sign) [Signature]
 Date Logged in 9/21/09 By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
 Shipping info _____

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

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

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

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

- Bubble Wrap
- Foam blocks
- Bags
- None
- Cloth material
- Cardboard
- Styrofoam
- Paper towels

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

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

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

SAMPLE # 2, 3, 4, 5, 7, 8, 11 & 16 4 vials w/ BUBBLE
 SAMPLE # 6 & 10 1/4 vials w/ BUBBLE
 SAMPLE # 9 & 18 1/4 vials w/ BUBBLE
 SAMPLE # 17 3/4 vials w/ BUBBLE
 SAMPLE # 4 OIL IN SAMPLE

Curtis & Tompkins Laboratories Analytical Report

Lab #: 215050	Location: Bay Center Apts
Client: Stellar Environmental Solutions	Prep: EPA 5030B
Project#: 2007-65	
Matrix: Water	Received: 09/18/09
Units: ug/L	

Field ID: MW-4	Batch#: 155391
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-001	Analyzed: 09/29/09
Diln Fac: 1.000	

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	64-147	EPA 8015B
Bromofluorobenzene (FID)	104	71-138	EPA 8015B
Trifluorotoluene (PID)	95	45-151	EPA 8021B
Bromofluorobenzene (PID)	94	54-134	EPA 8021B

Field ID: MW-17	Batch#: 155391
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-002	Analyzed: 09/29/09
Diln Fac: 5.000	

Analyte	Result	RL	Analysis
Gasoline C7-C12	2,200	250	EPA 8015B
MTBE	ND	10	EPA 8021B
Benzene	800	2.5	EPA 8021B
Toluene	95	2.5	EPA 8021B
Ethylbenzene	82	2.5	EPA 8021B
m,p-Xylenes	85	2.5	EPA 8021B
o-Xylene	26	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	130	64-147	EPA 8015B
Bromofluorobenzene (FID)	110	71-138	EPA 8015B
Trifluorotoluene (PID)	120	45-151	EPA 8021B
Bromofluorobenzene (PID)	106	54-134	EPA 8021B

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

Curtis & Tompkins Laboratories Analytical Report

Lab #: 215050	Location: Bay Center Apts
Client: Stellar Environmental Solutions	Prep: EPA 5030B
Project#: 2007-65	
Matrix: Water	Received: 09/18/09
Units: ug/L	

Field ID: MW-12	Batch#: 155391
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-003	Analyzed: 09/29/09
Diln Fac: 20.00	

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,900	1,000	EPA 8015B
MTBE	ND	40	EPA 8021B
Benzene	4,500	10	EPA 8021B
Toluene	80	10	EPA 8021B
Ethylbenzene	14	10	EPA 8021B
m,p-Xylenes	51	10	EPA 8021B
o-Xylene	ND	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	105	64-147	EPA 8015B
Bromofluorobenzene (FID)	103	71-138	EPA 8015B
Trifluorotoluene (PID)	107	45-151	EPA 8021B
Bromofluorobenzene (PID)	102	54-134	EPA 8021B

Field ID: MW-13	Batch#: 155391
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-004	Analyzed: 09/29/09
Diln Fac: 500.0	

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,400,000	25,000	EPA 8015B
MTBE	ND	1,000	EPA 8021B
Benzene	19,000	250	EPA 8021B
Toluene	2,500	250	EPA 8021B
Ethylbenzene	19,000	250	EPA 8021B
m,p-Xylenes	18,000	250	EPA 8021B
o-Xylene	4,300	250	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	157 *	64-147	EPA 8015B
Bromofluorobenzene (FID)	164 *	71-138	EPA 8015B
Trifluorotoluene (PID)	147	45-151	EPA 8021B
Bromofluorobenzene (PID)	129	54-134	EPA 8021B

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

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Type:	BLANK	Batch#:	155536
Lab ID:	QC514596	Analyzed:	10/01/09
Diln Fac:	1.000		

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

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	64-147	EPA 8015B
Bromofluorobenzene (FID)	108	71-138	EPA 8015B
Trifluorotoluene (PID)	82	45-151	EPA 8021B
Bromofluorobenzene (PID)	86	54-134	EPA 8021B

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

Type: BS Lab ID: QC514005

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

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

Type: BSD Lab ID: QC514006

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	20.20	101	58-143	1	31
Benzene	20.00	20.66 b	103	75-116	12	22
Toluene	20.00	21.02 b	105	72-124	13	24
Ethylbenzene	20.00	20.92 b	105	74-127	13	25
m,p-Xylenes	20.00	20.56 b	103	73-128	13	27
o-Xylene	20.00	20.98 b	105	73-126	12	25

Surrogate	%REC	Limits
Trifluorotoluene (PID)	104	45-151
Bromofluorobenzene (PID)	110	54-134

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC514007	Batch#:	155391
Matrix:	Water	Analyzed:	09/28/09
Units:	ug/L		

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

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	MW-5	Batch#:	155391
MSS Lab ID:	215050-016	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514008

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	14.76	2,000	1,841	91	66-110

Surrogate	%REC	Limits
Trifluorotoluene (FID)	118	64-147
Bromofluorobenzene (FID)	111	71-138

Type: MSD Lab ID: QC514009

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,665	82	66-110	10	11

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

RPD= Relative Percent Difference

Batch QC Report
Curtis & Tompkins Laboratories Analytical Report

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

Type: BS Analyzed: 09/29/09
 Lab ID: QC514249

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

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

Type: BSD Analyzed: 09/30/09
 Lab ID: QC514250

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

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

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

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

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65	Analysis:	EPA 8015B
Field ID:	MW-6	Batch#:	155452
MSS Lab ID:	215050-015	Sampled:	09/16/09
Matrix:	Water	Received:	09/18/09
Units:	ug/L	Analyzed:	09/29/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514252

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	37.88	2,000	2,035	100	66-110

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	64-147
Bromofluorobenzene (FID)	116	71-138

Type: MSD Lab ID: QC514253

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,003	98	66-110	2	11

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	64-147
Bromofluorobenzene (FID)	109	71-138

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

Type: BS Lab ID: QC514597

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

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

Type: BSD Lab ID: QC514598

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analysis
Gasoline C7-C12	1,000	1,086	109	77-118	4	23	EPA 8015B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	116	64-147	EPA 8015B
Bromofluorobenzene (FID)	104	71-138	EPA 8015B
Trifluorotoluene (PID)	95	45-151	EPA 8021B
Bromofluorobenzene (PID)	82	54-134	EPA 8021B

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

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

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

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

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 5030B
Project#:	2007-65		
Field ID:	ZZZZZZZZZZ	Batch#:	155536
MSS Lab ID:	215133-001	Sampled:	09/23/09
Matrix:	Water	Received:	09/23/09
Units:	ug/L	Analyzed:	10/01/09
Diln Fac:	1.000		

Type: MS Lab ID: QC514681

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

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

Type: MSD Lab ID: QC514682

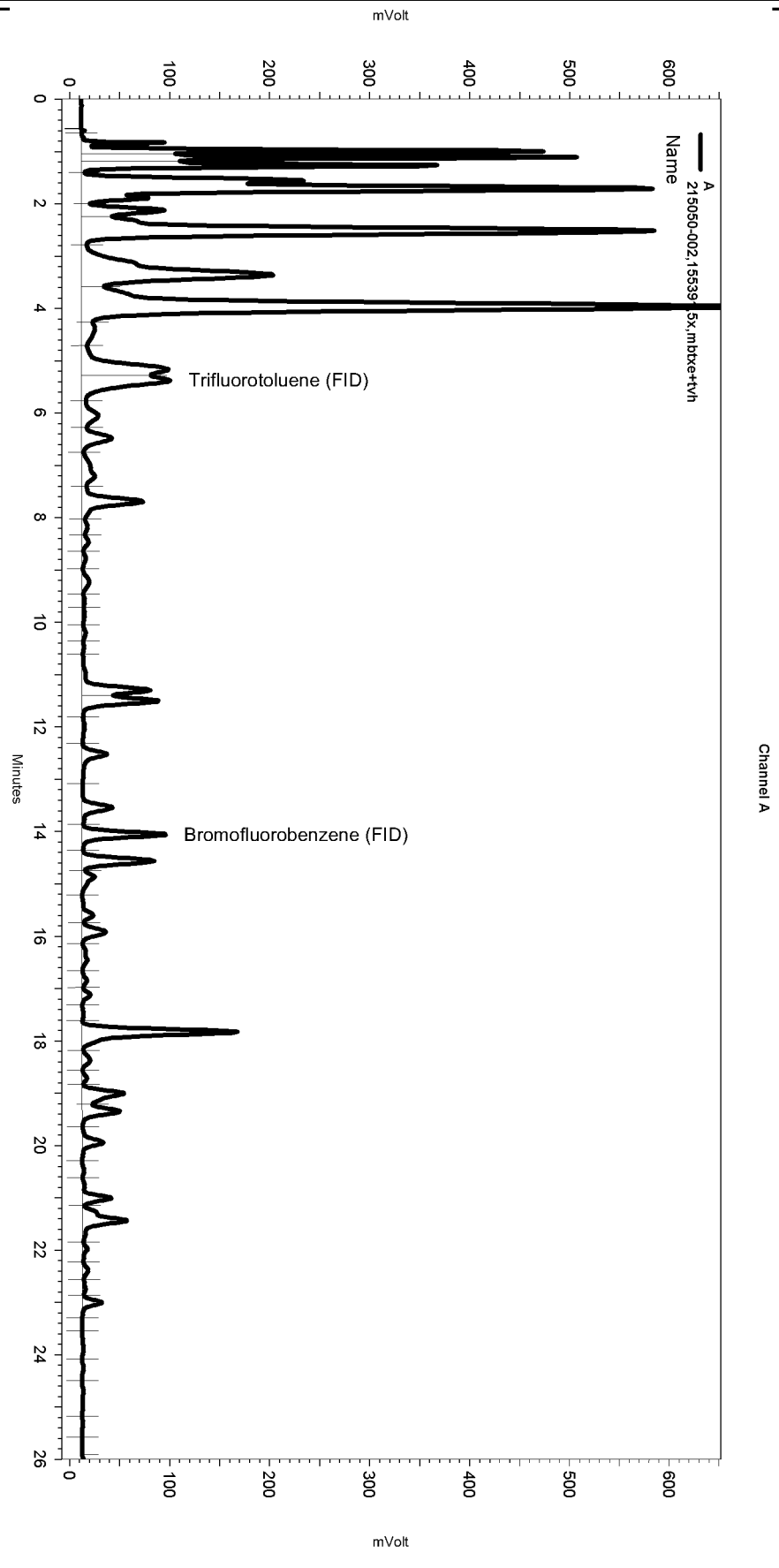
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Gasoline C7-C12	2,000	2,142	106	66-110	4	11	EPA 8015B

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

RPD= Relative Percent Difference

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 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe271.met

Software Version 3.1.7
 Run Date: 9/29/2009 1:15:06 AM
 Analysis Date: 9/29/2009 10:38:12 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0
 hs<1



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No items selected for this section

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No items selected for this section

Integration Events

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Yes	Threshold	0	0	50

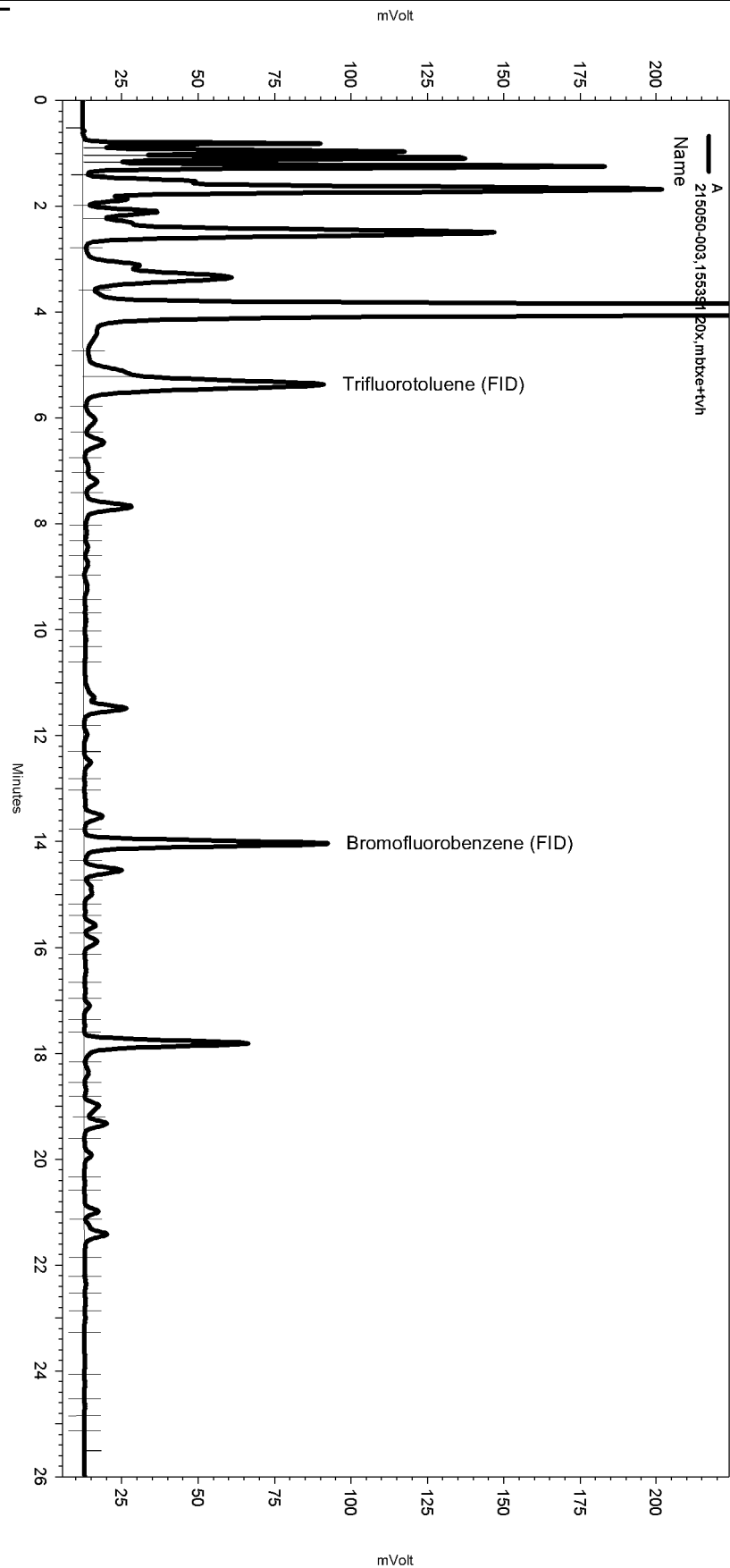
Manual Integration Fixes

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 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE265.MET

Software Version 3.1.7
 Run Date: 9/29/2009 1:52:39 AM
 Analysis Date: 9/29/2009 11:30:17 AM
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 Vial & pH or Core ID: a1.0
 hs<1



Channel A

---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

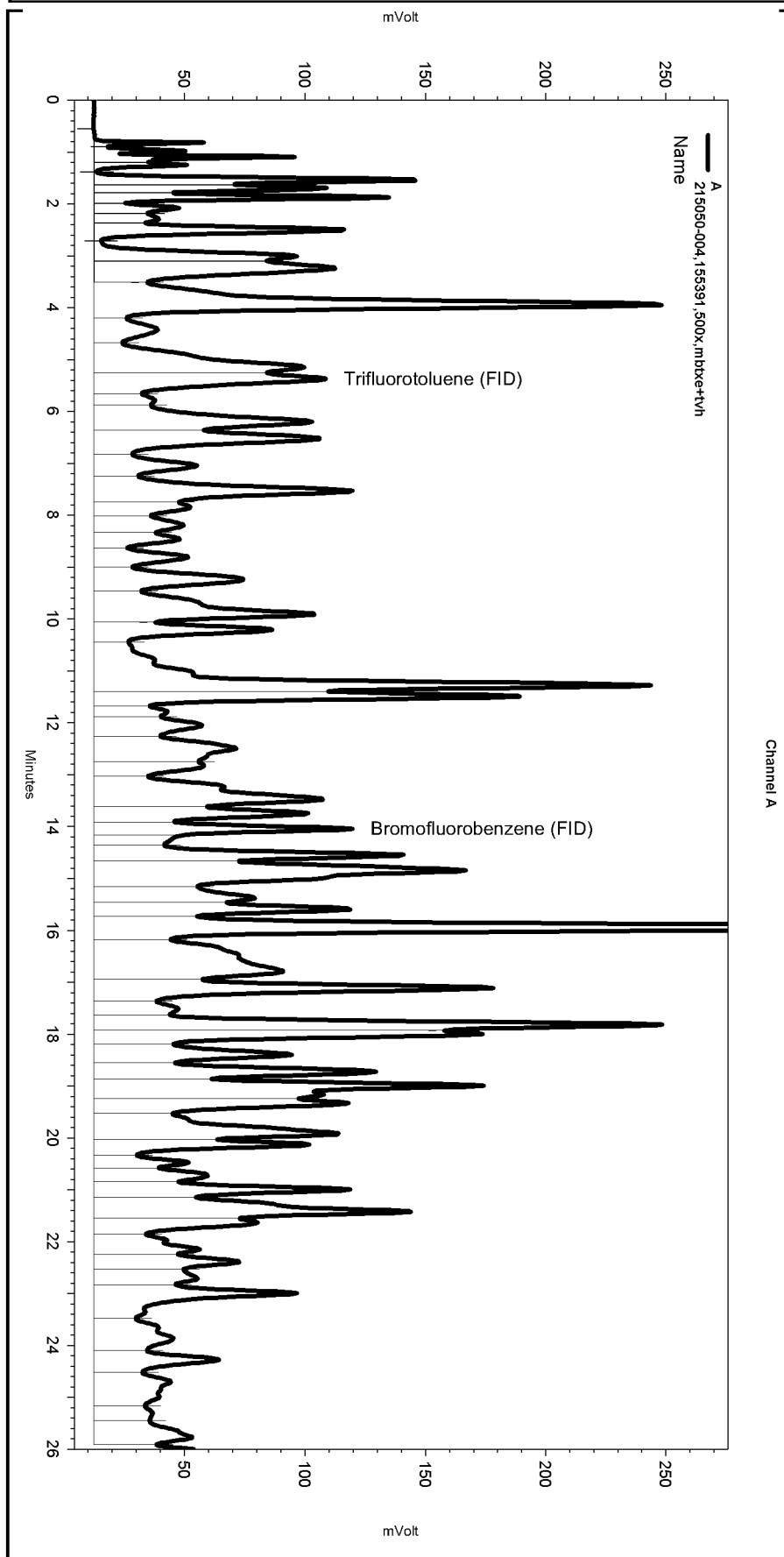
Manual Integration Fixes

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Yes	Split Peak	5.215	0	0

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 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE265.MET

Software Version 3.1.7
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 Analysis Date: 9/29/2009 11:36:04 AM
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 Vial & pH or Core ID: a1.0



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Integration Events

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

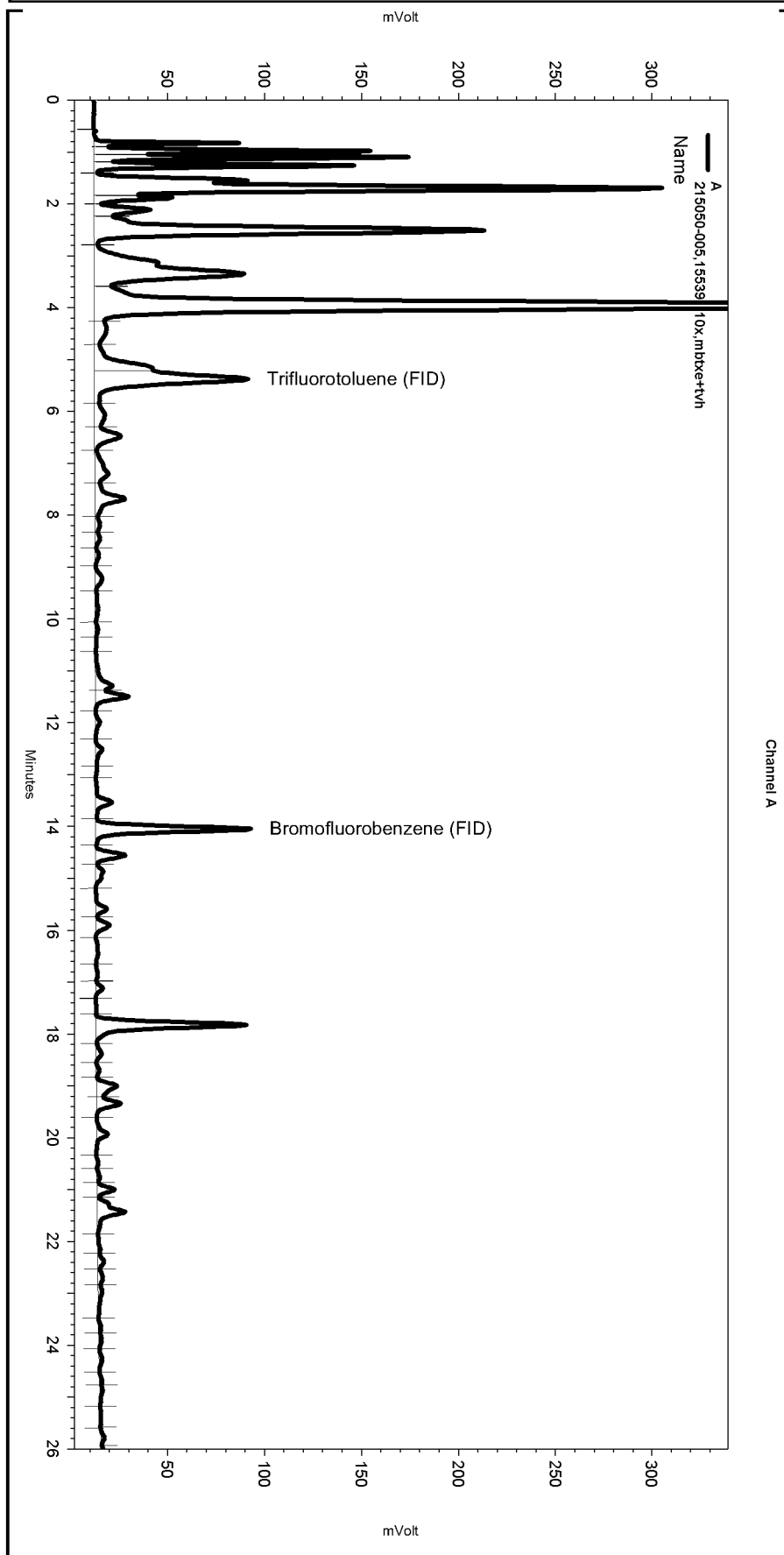
Manual Integration Fixes

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Yes	Split Peak	14.167	0	0

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 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe265.met

Software Version 3.1.7
 Run Date: 9/29/2009 2:30:09 AM
 Analysis Date: 9/29/2009 11:31:33 AM
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 Vial & pH or Core ID: a1.0
 hs<1



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No items selected for this section

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Integration Events

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

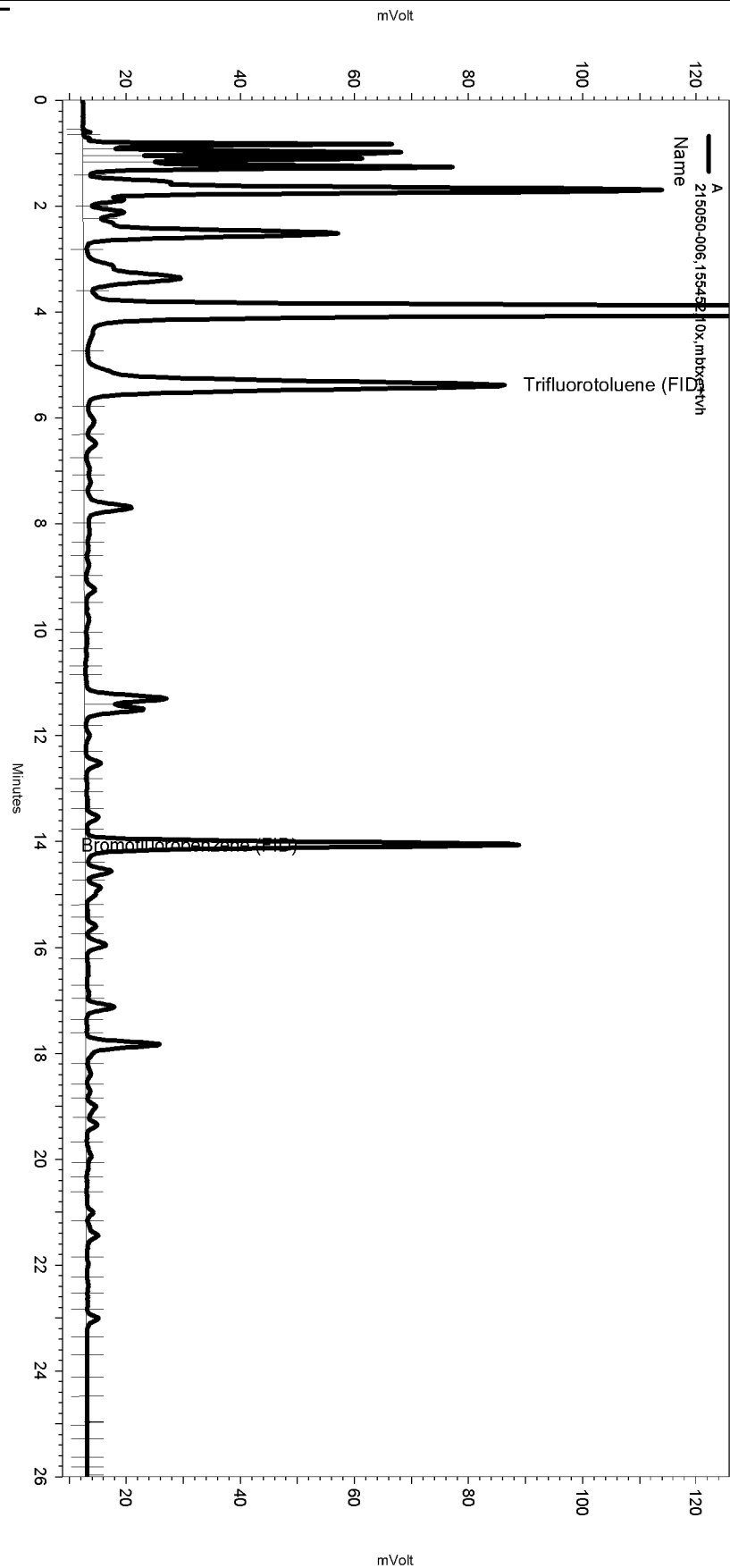
Manual Integration Fixes

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Yes	Split Peak	5.221	0	0

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 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/29/2009 11:19:06 PM
 Analysis Date: 9/30/2009 11:36:41 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: b1.0
 hs<1



Channel A

---< General Method Parameters >---

No items selected for this section

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Integration Events

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

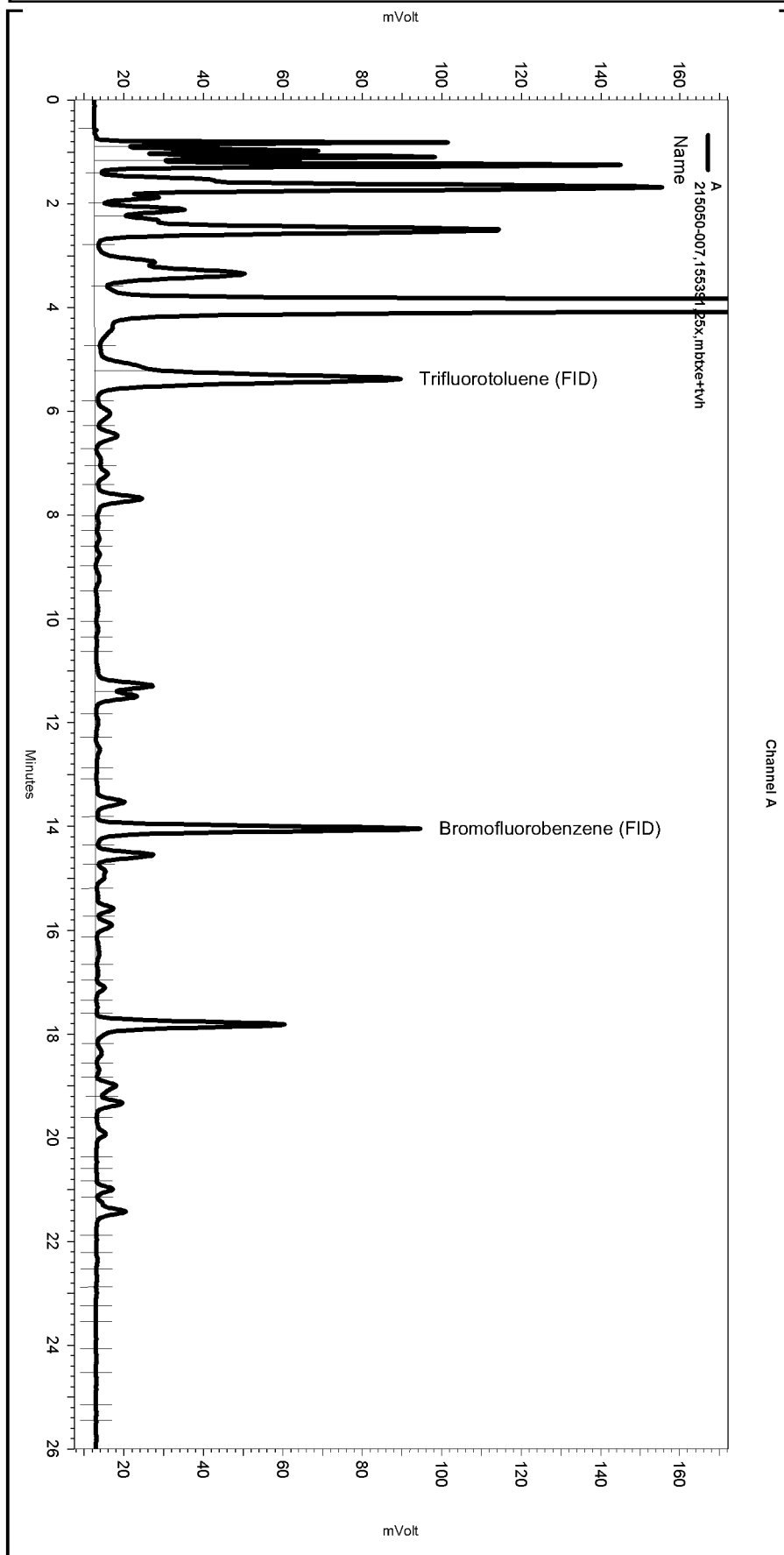
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_014

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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 Sample Name: 215050-007,155391,25x,mbtxe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\271_029
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE265.MET

Software Version 3.1.7
 Run Date: 9/29/2009 3:45:24 AM
 Analysis Date: 9/29/2009 11:33:51 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0
 hs<1



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Integration Events

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

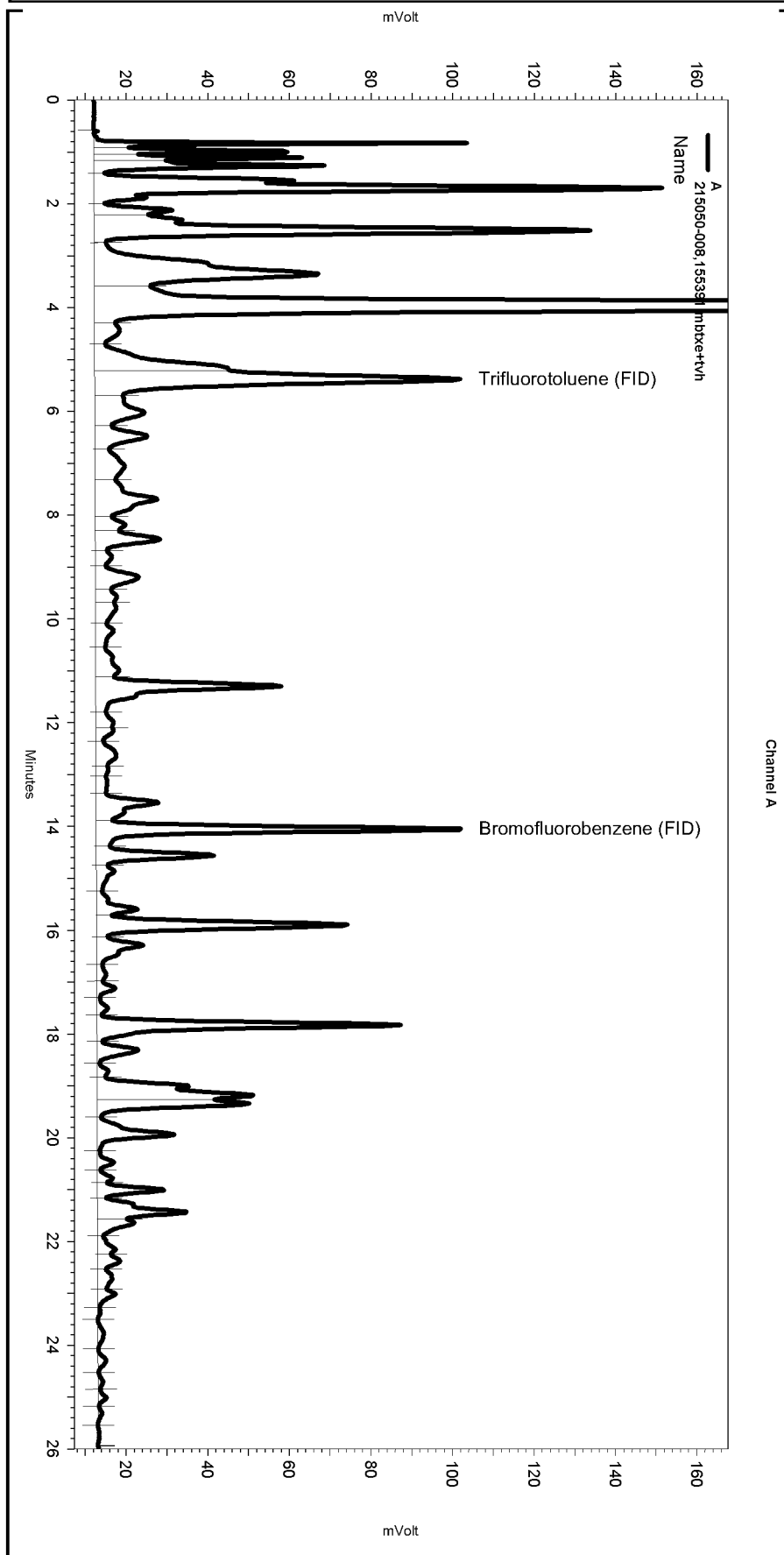
Manual Integration Fixes

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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.211	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\271.seq
 Sample Name: 215050-008,155391,mbtXe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\271_023
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/29/2009
 Analysis Date: 9/29/2009 11:20:23 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0
 hs<1



---< General Method Parameters >---

No items selected for this section

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Integration Events

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

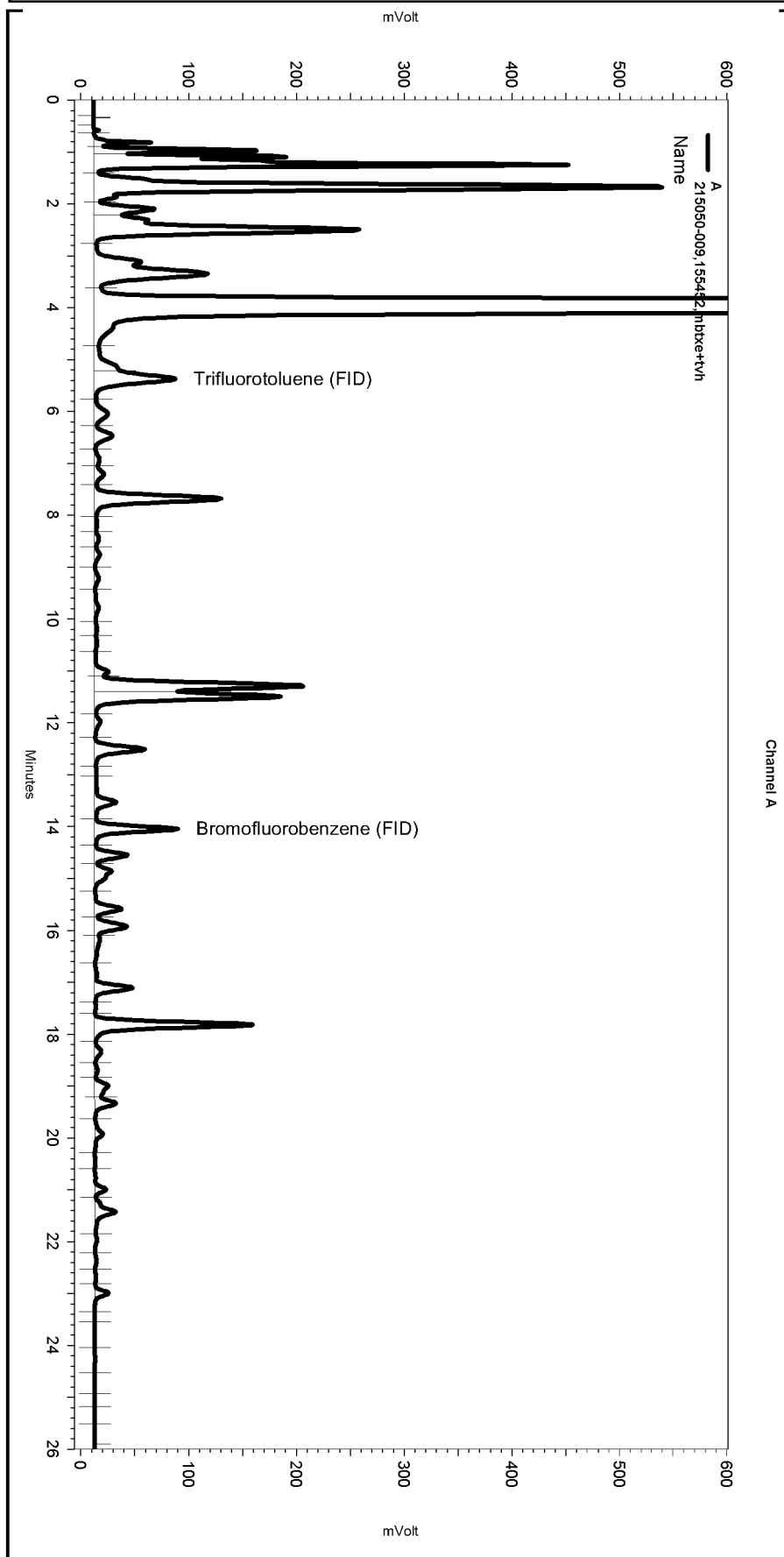
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\271_023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.222	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\272.seq
 Sample Name: 215050-009,155452,mbtXe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_012
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/29/2009 10:03:54 PM
 Analysis Date: 10/2/2009 1:37:42 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

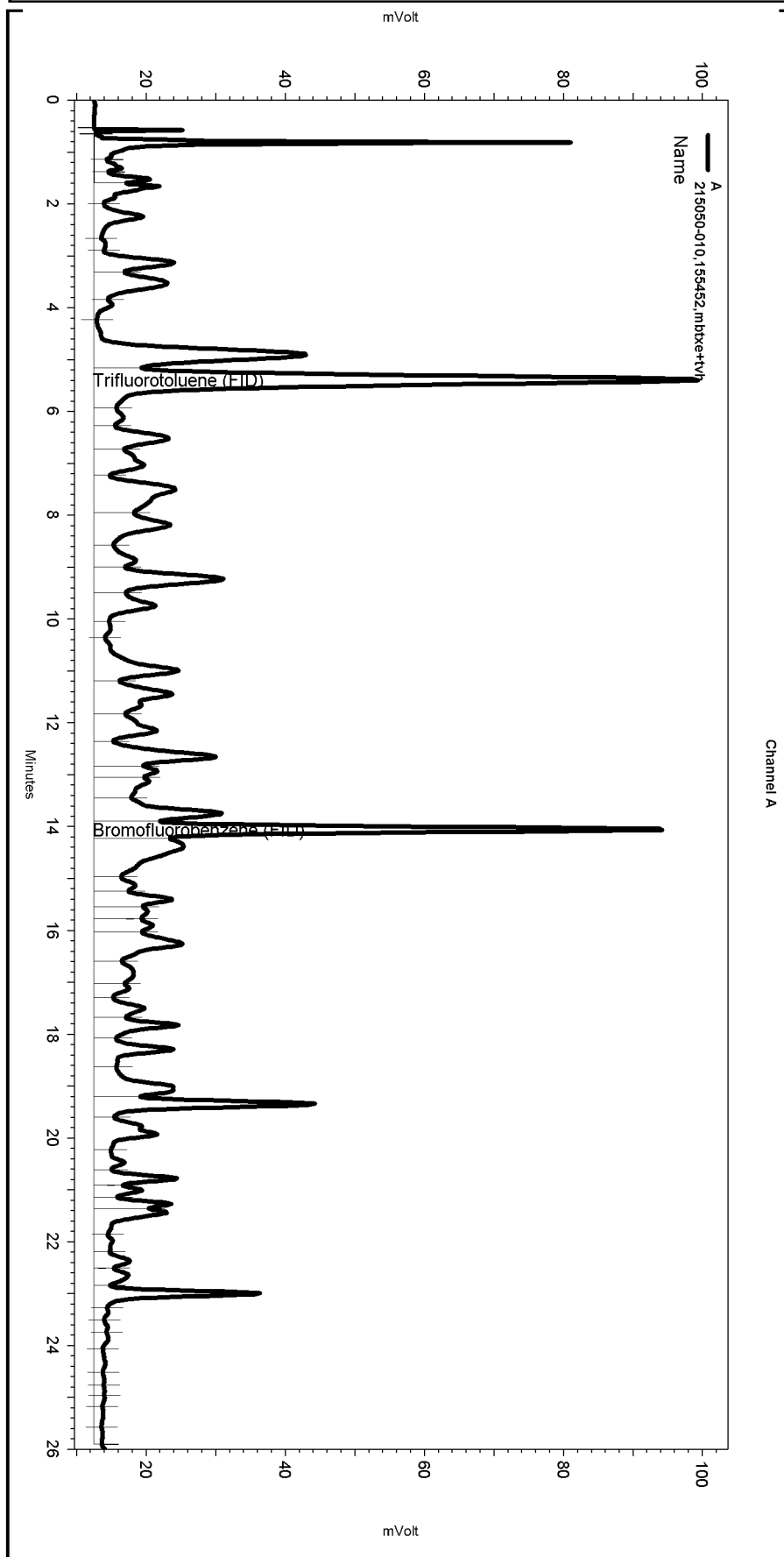
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.211	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\272.seq
 Sample Name: 215050-010,155452,mbtxe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_021
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/30/2009 3:42:19 AM
 Analysis Date: 9/30/2009 11:41:27 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



---< General Method Parameters >---

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No items selected for this section

Integration Events

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

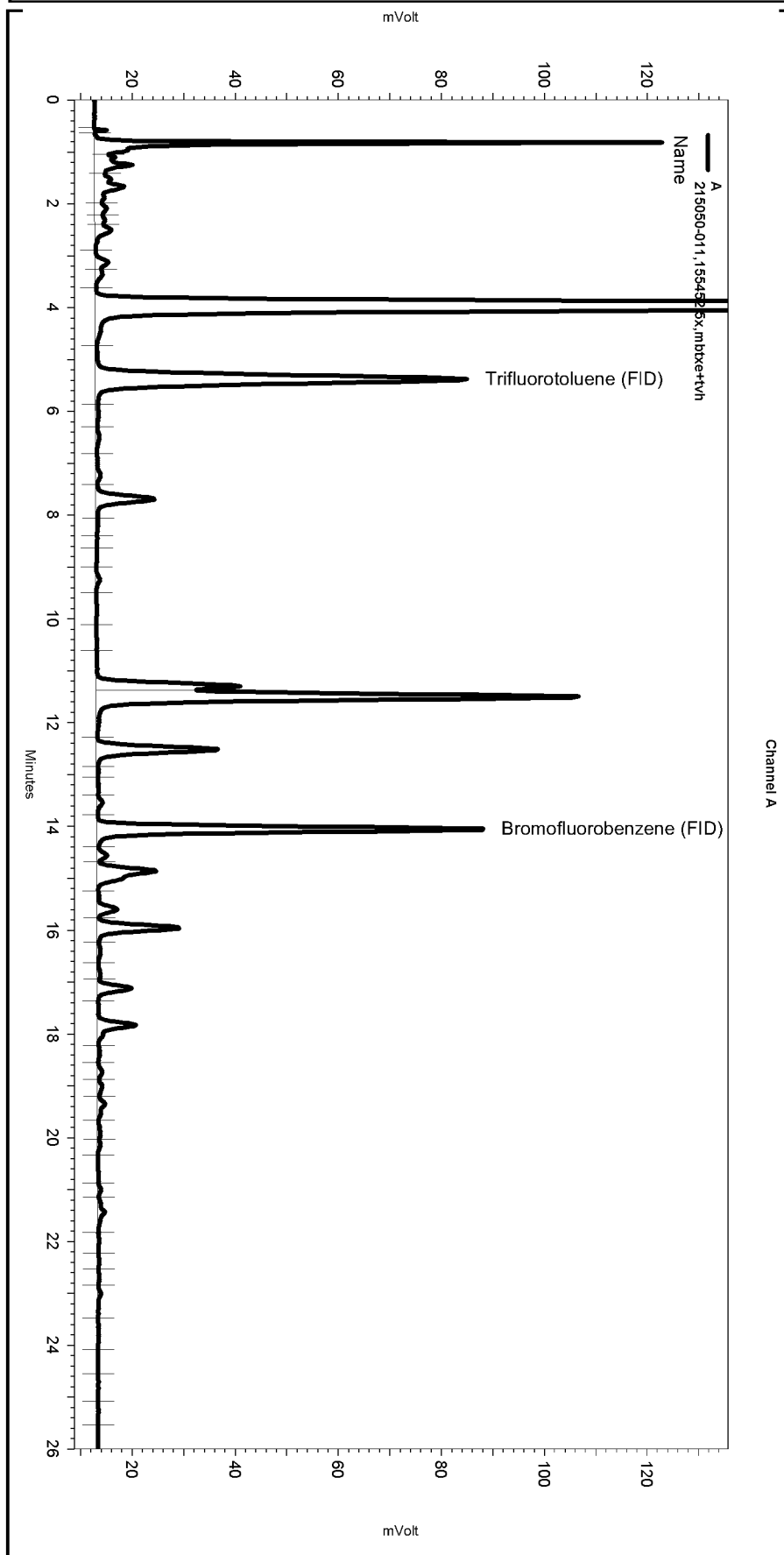
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_021

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseline	0	26.017	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\272.seq
 Sample Name: 215050-011,155452,5x,mbtxe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_022
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/30/2009 4:19:55 AM
 Analysis Date: 9/30/2009 7:56:33 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c8.0



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

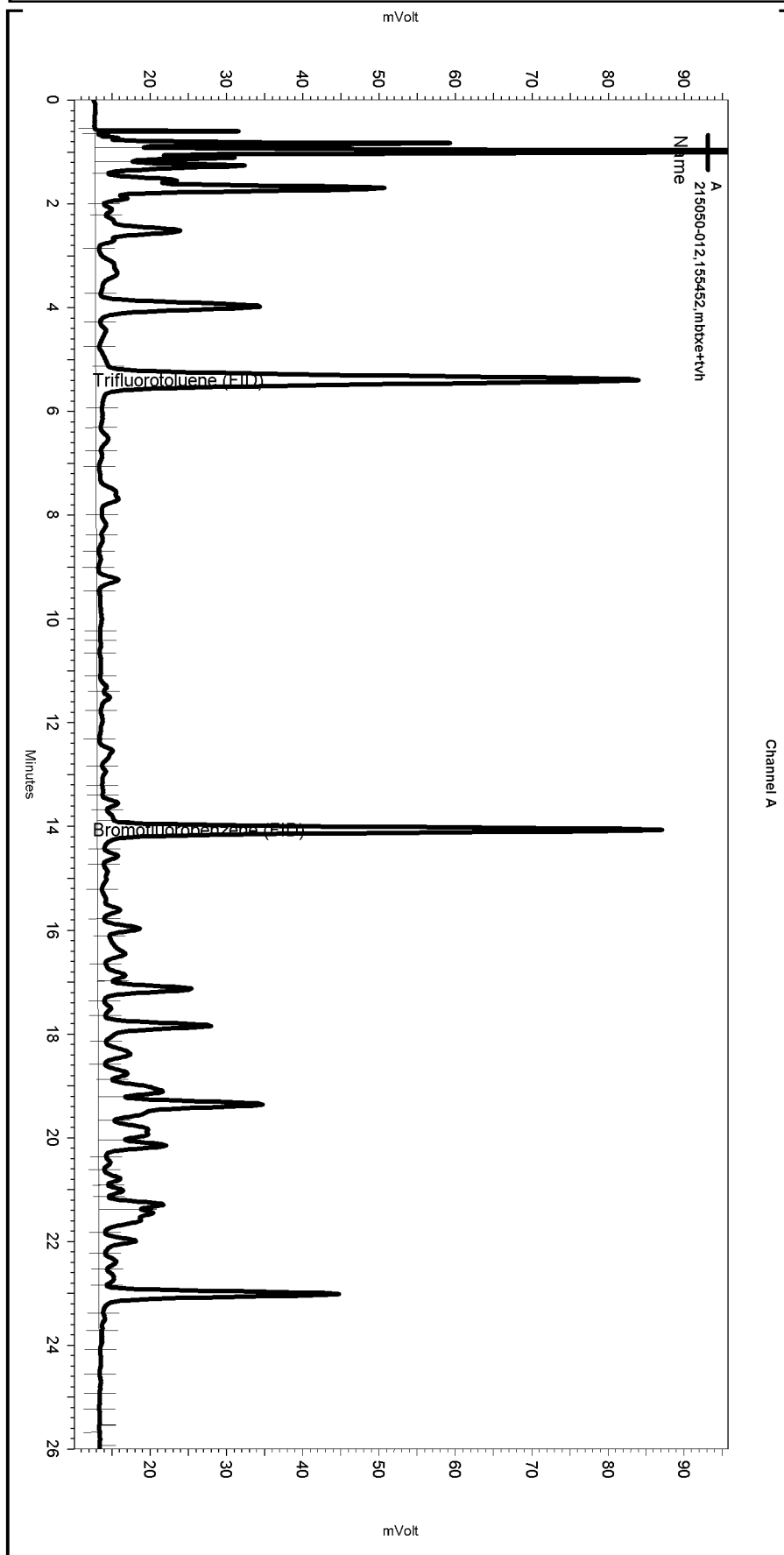
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_022

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

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\272.seq
 Sample Name: 215050-012,155452,mbtxe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_023
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\TVHBTXE271.met

Software Version 3.1.7
 Run Date: 9/30/2009 4:57:29 AM
 Analysis Date: 9/30/2009 11:43:49 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: a1.0



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No items selected for this section

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No items selected for this section

Integration Events

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

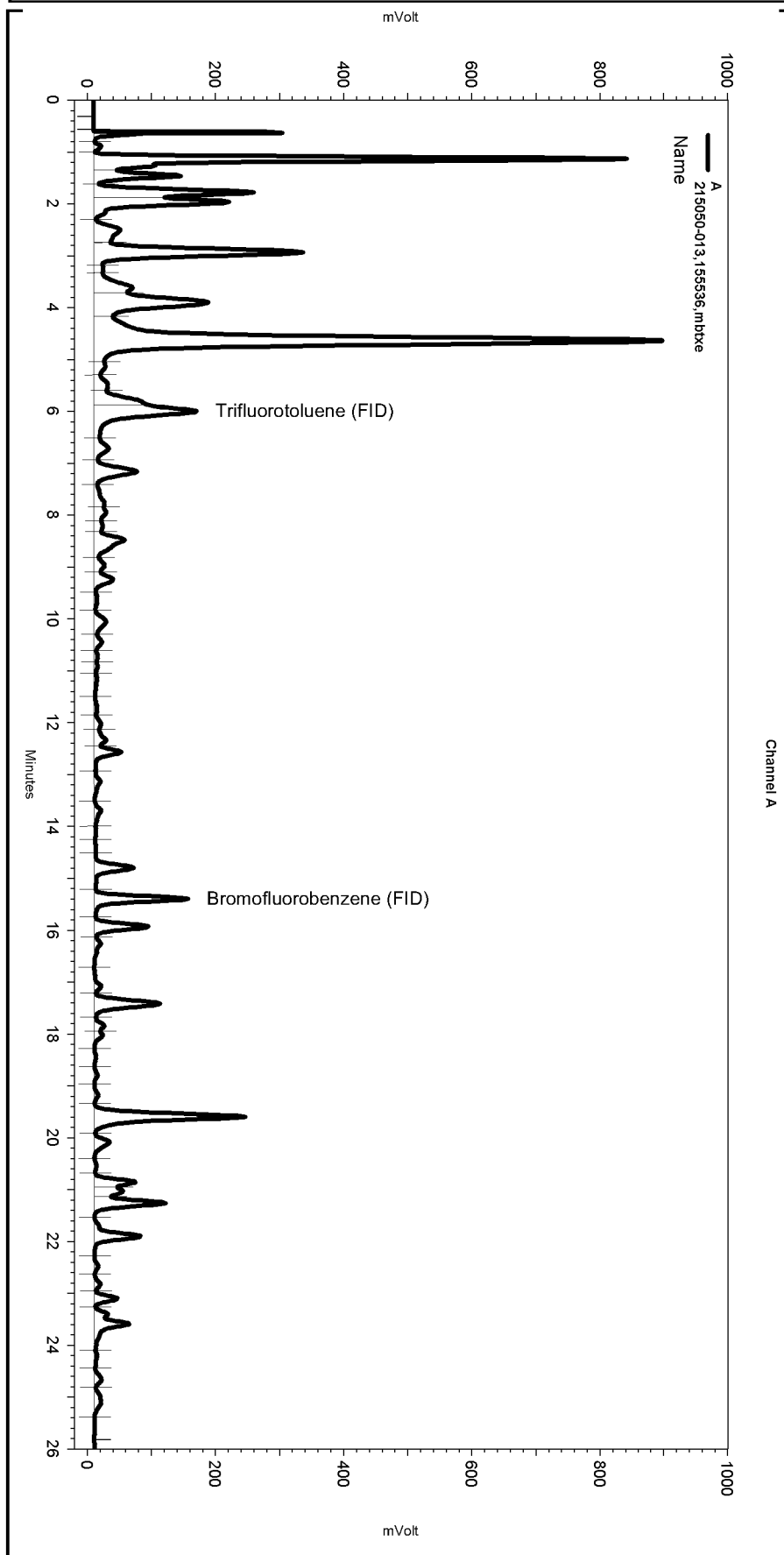
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.14	0	0
Yes	Split Peak	13.888	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\274.seq
 Sample Name: 215050-013,155536,mbtixe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_016
 Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtixe267.met

Software Version 3.1.7
 Run Date: 10/1/2009 6:58:39 PM
 Analysis Date: 10/2/2009 1:57:10 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: d1.0



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

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

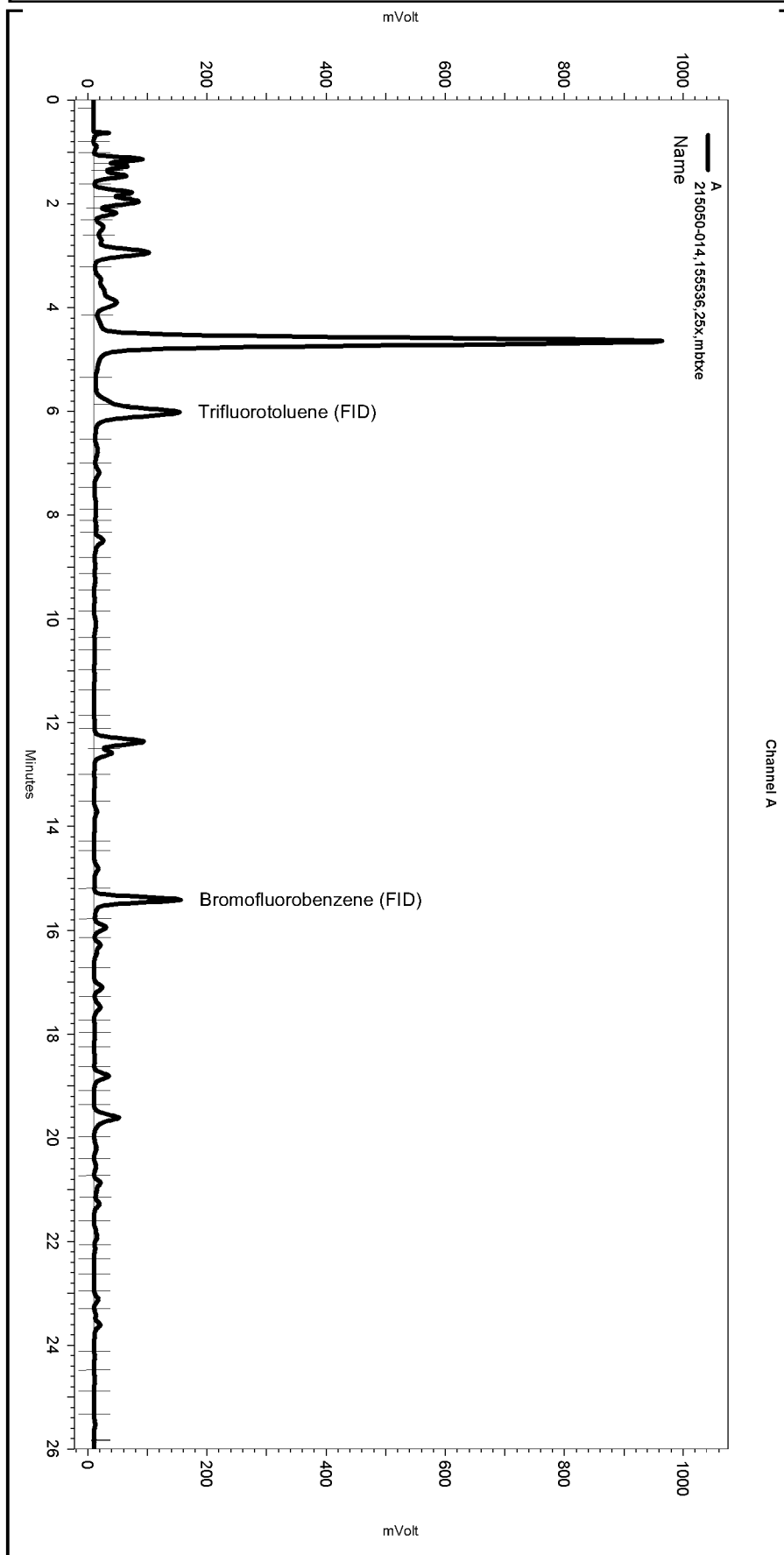
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.877	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\274.seq
 Sample Name: 215050-014,155536,25x,mbtxe
 Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_018
 Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\TVHBTXE267.met

Software Version 3.1.7
 Run Date: 10/1/2009 8:10:43 PM
 Analysis Date: 10/2/2009 3:19:46 PM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: c1.0



---< General Method Parameters >---

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Integration Events

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

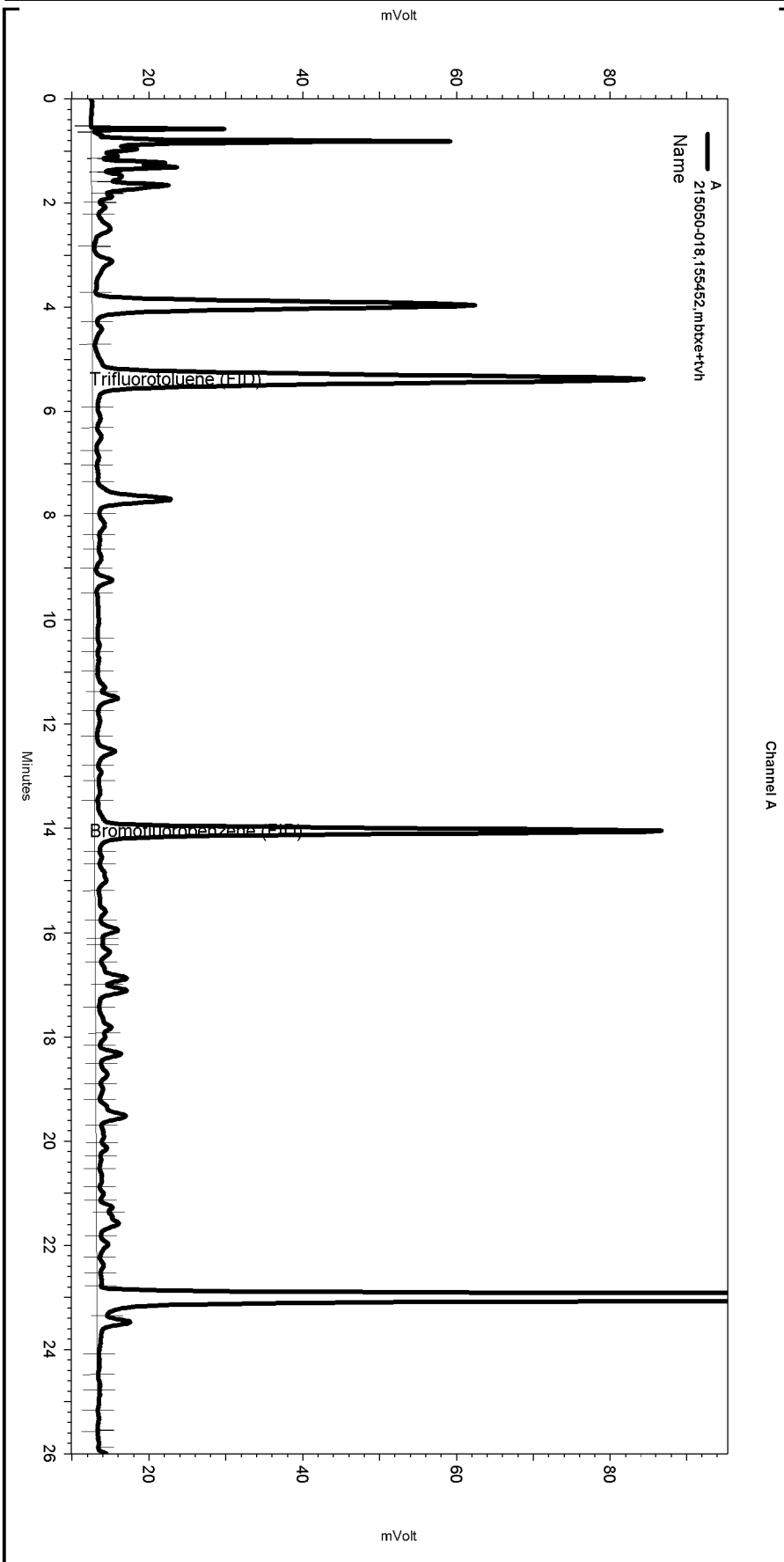
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_018

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	5.862	0	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\272.seq
 Sample Name: 215050-018,155452,mbtxe+tvh
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_013
 Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe271.met

Software Version 3.1.7
 Run Date: 9/29/2009 10:41:31 PM
 Analysis Date: 9/30/2009 11:32:19 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: b1.0



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

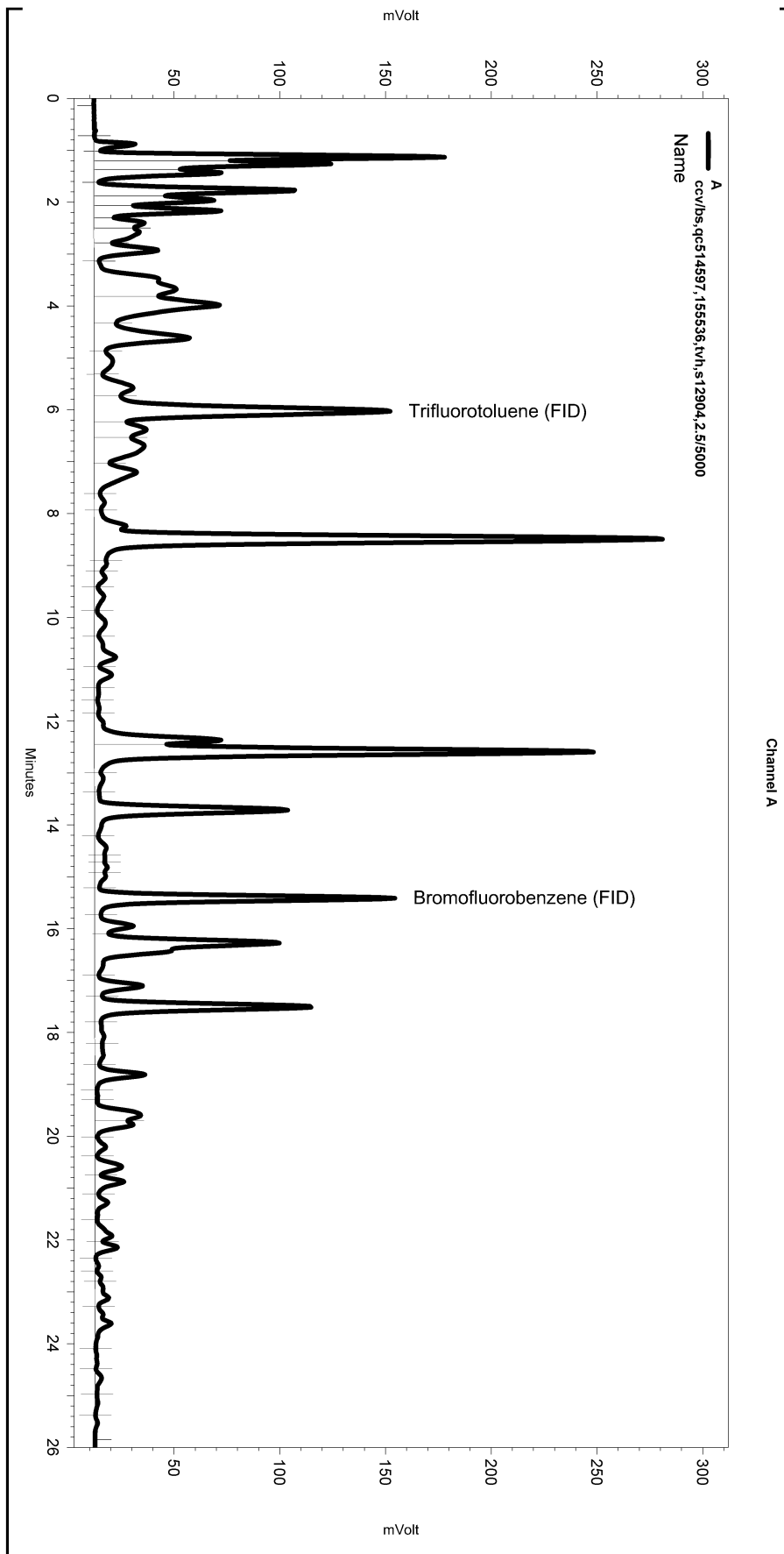
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\272_013

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

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\274.seq
 Sample Name: ccv/bs,qc514597,155536,tvh,s12904,2.5/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_003
 Instrument: GC07 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\TVHBTXE267.met

Software Version 3.1.7
 Run Date: 10/1/2009 8:41:13 AM
 Analysis Date: 10/1/2009 11:47:56 AM
 Sample Amount: 5 Multiplier: 5
 Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

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No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\274_003

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

Total Extractable Hydrocarbons			
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Field ID:	MW-4	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-001	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	660	50

Surrogate	%REC	Limits
o-Terphenyl	101	60-130

Field ID:	MW-17	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-002	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	3,000	50

Surrogate	%REC	Limits
o-Terphenyl	102	60-130

Field ID:	MW-12	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-003	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	3,000	50

Surrogate	%REC	Limits
o-Terphenyl	103	60-130

Field ID:	MW-13	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-004	Prepared:	09/28/09
Diln Fac:	3.000	Analyzed:	09/29/09

Analyte	Result	RL
Diesel C10-C24	38,000	150

Surrogate	%REC	Limits
o-Terphenyl	118	60-130

Total Extractable Hydrocarbons			
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Field ID:	MW-10	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-005	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	6,100	50

Surrogate	%REC	Limits
o-Terphenyl	108	60-130

Field ID:	MW-14	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-006	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	2,100	50

Surrogate	%REC	Limits
o-Terphenyl	100	60-130

Field ID:	MW-15	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-007	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	2,700	50

Surrogate	%REC	Limits
o-Terphenyl	95	60-130

Field ID:	RW-1	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-008	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	770	50

Surrogate	%REC	Limits
o-Terphenyl	106	60-130

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Field ID:	MW-E	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-009	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	6,200	50

Surrogate	%REC	Limits
o-Terphenyl	98	60-130

Field ID:	MW-3	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-010	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	5,000	50

Surrogate	%REC	Limits
o-Terphenyl	105	60-130

Field ID:	MW-7	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-011	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	6,800	50

Surrogate	%REC	Limits
o-Terphenyl	81	60-130

Field ID:	MW-9	Batch#:	155394
Type:	SAMPLE	Sampled:	09/17/09
Lab ID:	215050-012	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/30/09

Analyte	Result	RL
Diesel C10-C24	8,200	50

Surrogate	%REC	Limits
o-Terphenyl	101	60-130

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons

Lab #: 215050	Location: Bay Center Apts
Client: Stellar Environmental Solutions	Prep: EPA 3520C
Project#: 2007-65	Analysis: EPA 8015B
Matrix: Water	Received: 09/18/09
Units: ug/L	

Field ID: MW-11	Batch#: 155394
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-013	Prepared: 09/28/09
Diln Fac: 1.000	Analyzed: 09/30/09

Analyte	Result	RL
Diesel C10-C24	6,400	50

Surrogate	%REC	Limits
o-Terphenyl	101	60-130

Field ID: MW-8	Batch#: 155394
Type: SAMPLE	Sampled: 09/17/09
Lab ID: 215050-014	Prepared: 09/28/09
Diln Fac: 5.000	Analyzed: 09/30/09

Analyte	Result	RL
Diesel C10-C24	9,200	250

Surrogate	%REC	Limits
o-Terphenyl	106	60-130

Field ID: MW-6	Batch#: 155293
Type: SAMPLE	Sampled: 09/16/09
Lab ID: 215050-015	Prepared: 09/24/09
Diln Fac: 1.000	Analyzed: 09/28/09

Analyte	Result	RL
Diesel C10-C24	1,500	50

Surrogate	%REC	Limits
o-Terphenyl	107	60-130

Field ID: MW-5	Batch#: 155293
Type: SAMPLE	Sampled: 09/16/09
Lab ID: 215050-016	Prepared: 09/24/09
Diln Fac: 1.000	Analyzed: 09/28/09

Analyte	Result	RL
Diesel C10-C24	5,600	50

Surrogate	%REC	Limits
o-Terphenyl	106	60-130

Total Extractable Hydrocarbons			
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/18/09
Units:	ug/L		

Field ID:	MW-18	Batch#:	155293
Type:	SAMPLE	Sampled:	09/16/09
Lab ID:	215050-017	Prepared:	09/24/09
Diln Fac:	1.000	Analyzed:	09/28/09

Analyte	Result	RL
Diesel C10-C24	11,000	50

Surrogate	%REC	Limits
o-Terphenyl	111	60-130

Field ID:	MW-16	Batch#:	155293
Type:	SAMPLE	Sampled:	09/16/09
Lab ID:	215050-018	Prepared:	09/24/09
Diln Fac:	1.000	Analyzed:	09/28/09

Analyte	Result	RL
Diesel C10-C24	10,000	50

Surrogate	%REC	Limits
o-Terphenyl	100	60-130

Type:	BLANK	Batch#:	155293
Lab ID:	QC513591	Prepared:	09/24/09
Diln Fac:	1.000	Analyzed:	09/28/09

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	108	60-130

Type:	BLANK	Batch#:	155394
Lab ID:	QC514017	Prepared:	09/28/09
Diln Fac:	1.000	Analyzed:	09/29/09

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	97	60-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	215050	Location:	Bay Center Apts
Client:	Stellar Environmental Solutions	Prep:	EPA 3520C
Project#:	2007-65	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	155293
Units:	ug/L	Prepared:	09/24/09
Diln Fac:	1.000	Analyzed:	09/28/09

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC513592

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,315	93	53-122

Surrogate	%REC	Limits
o-Terphenyl	102	60-130

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC513593

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,101	84	53-122	10	36

Surrogate	%REC	Limits
o-Terphenyl	105	60-130

RPD= Relative Percent Difference

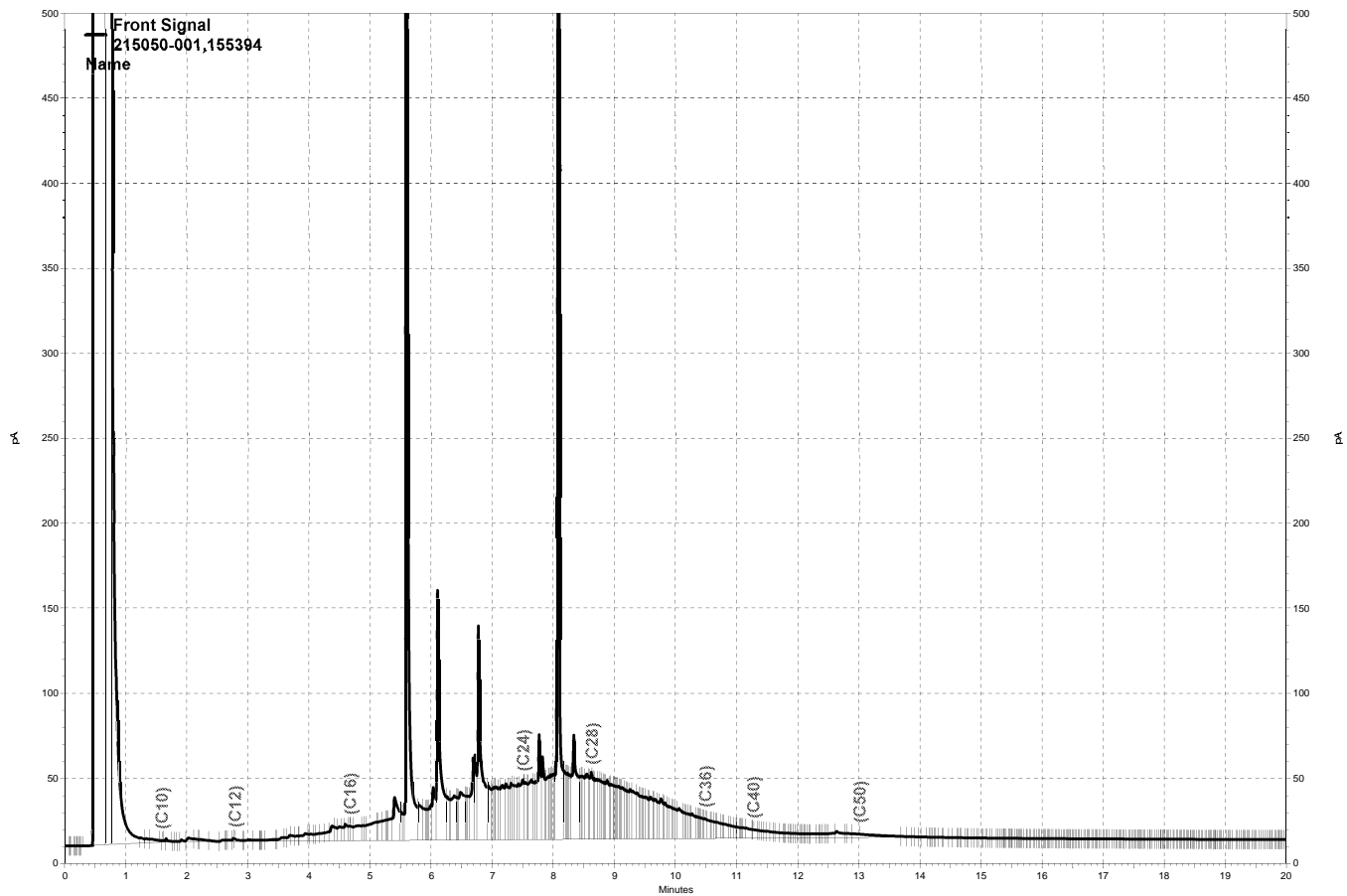
Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	215050	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:	QC514018	Batch#:	155394
Matrix:	Water	Prepared:	09/28/09
Units:	ug/L	Analyzed:	09/30/09

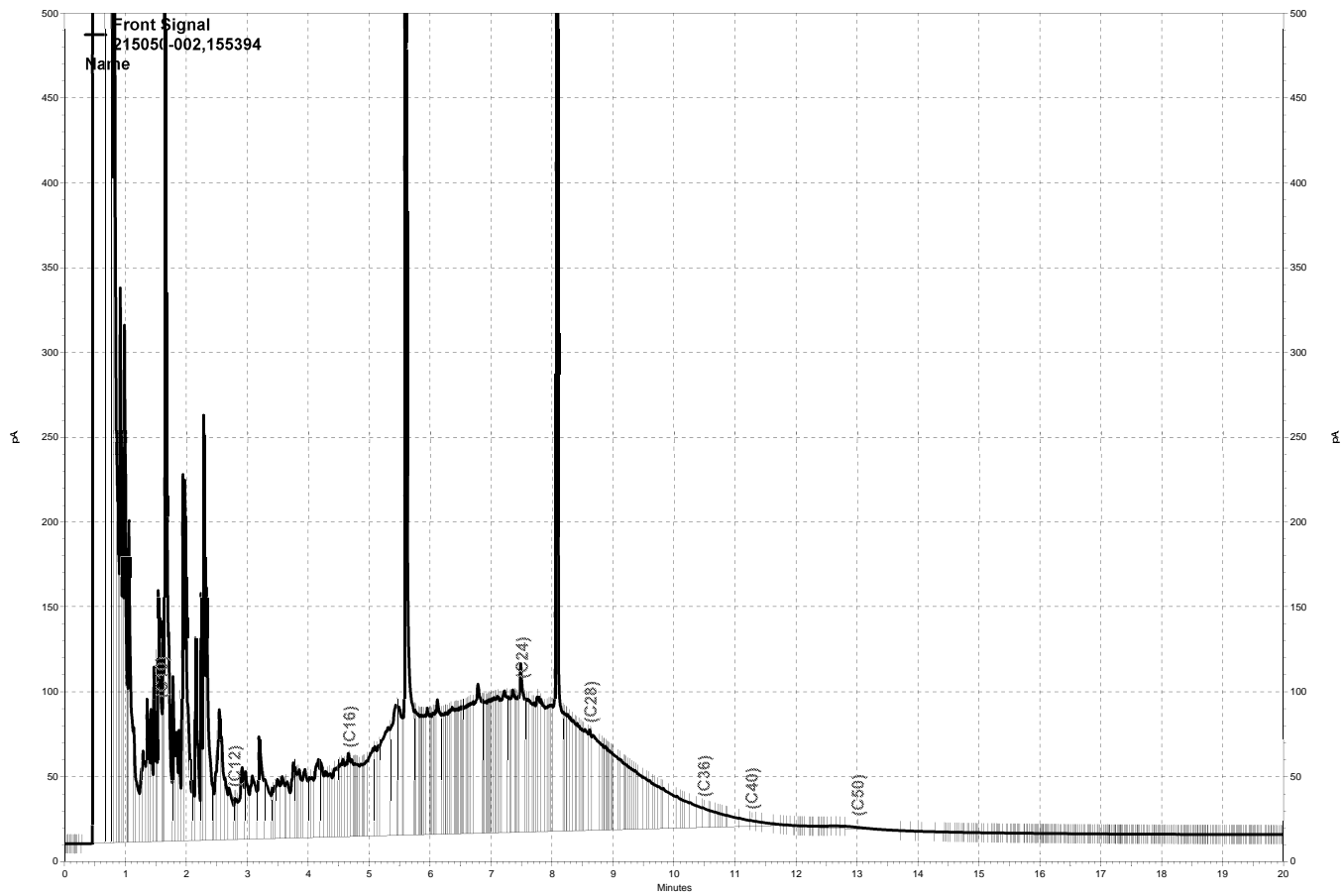
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	5,000	4,914	98	53-122

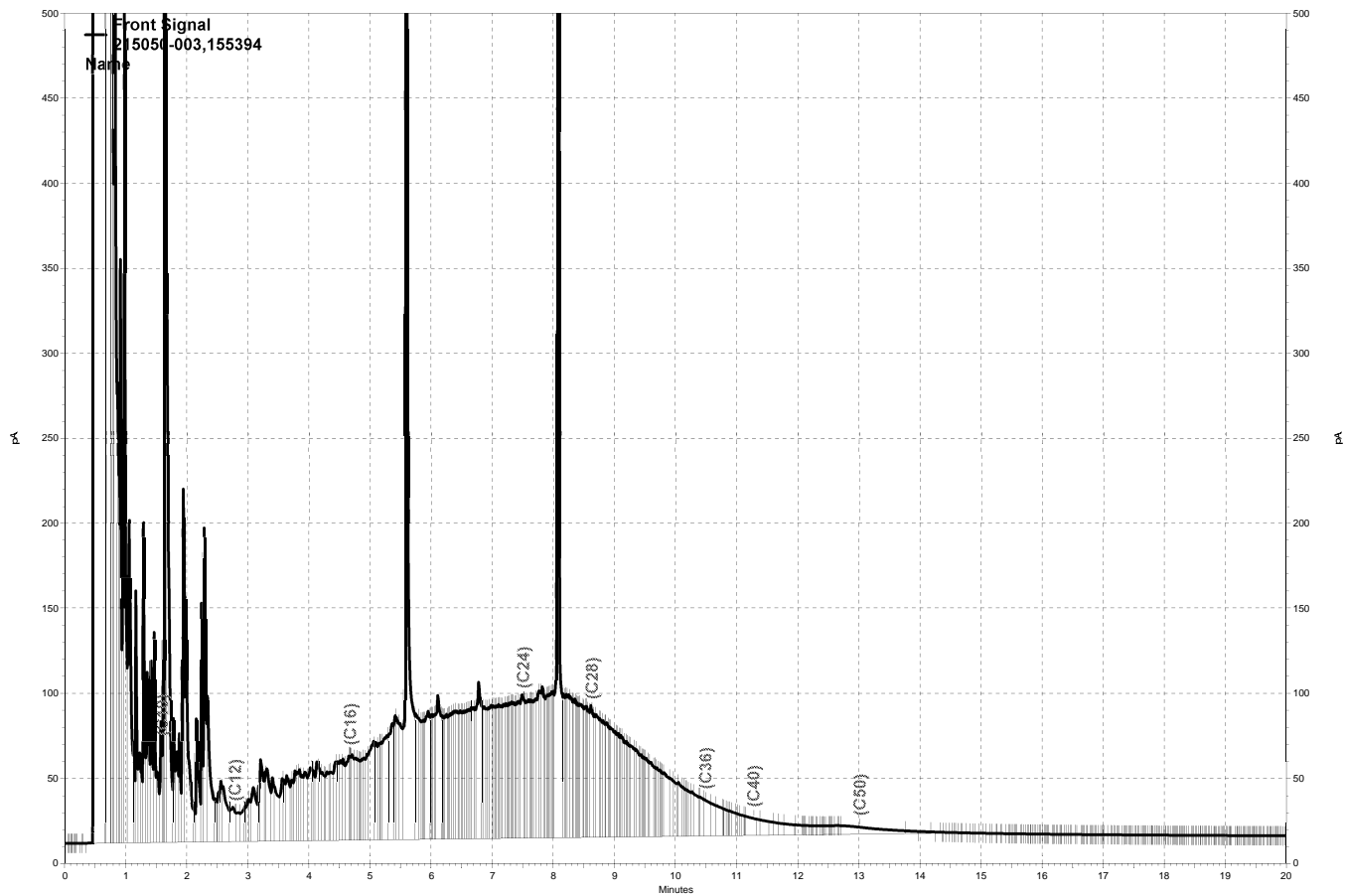
Surrogate	%REC	Limits
o-Terphenyl	111	60-130



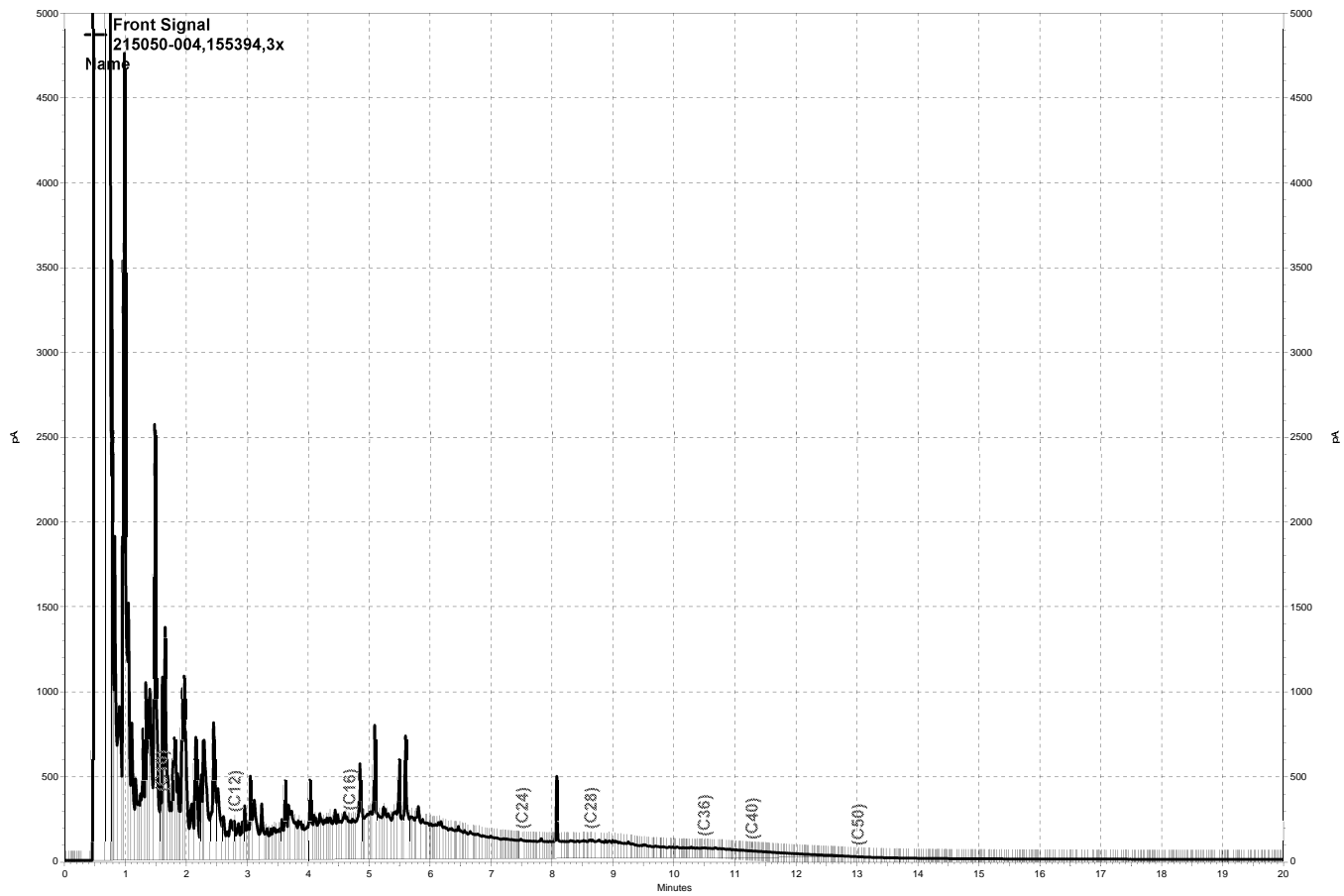
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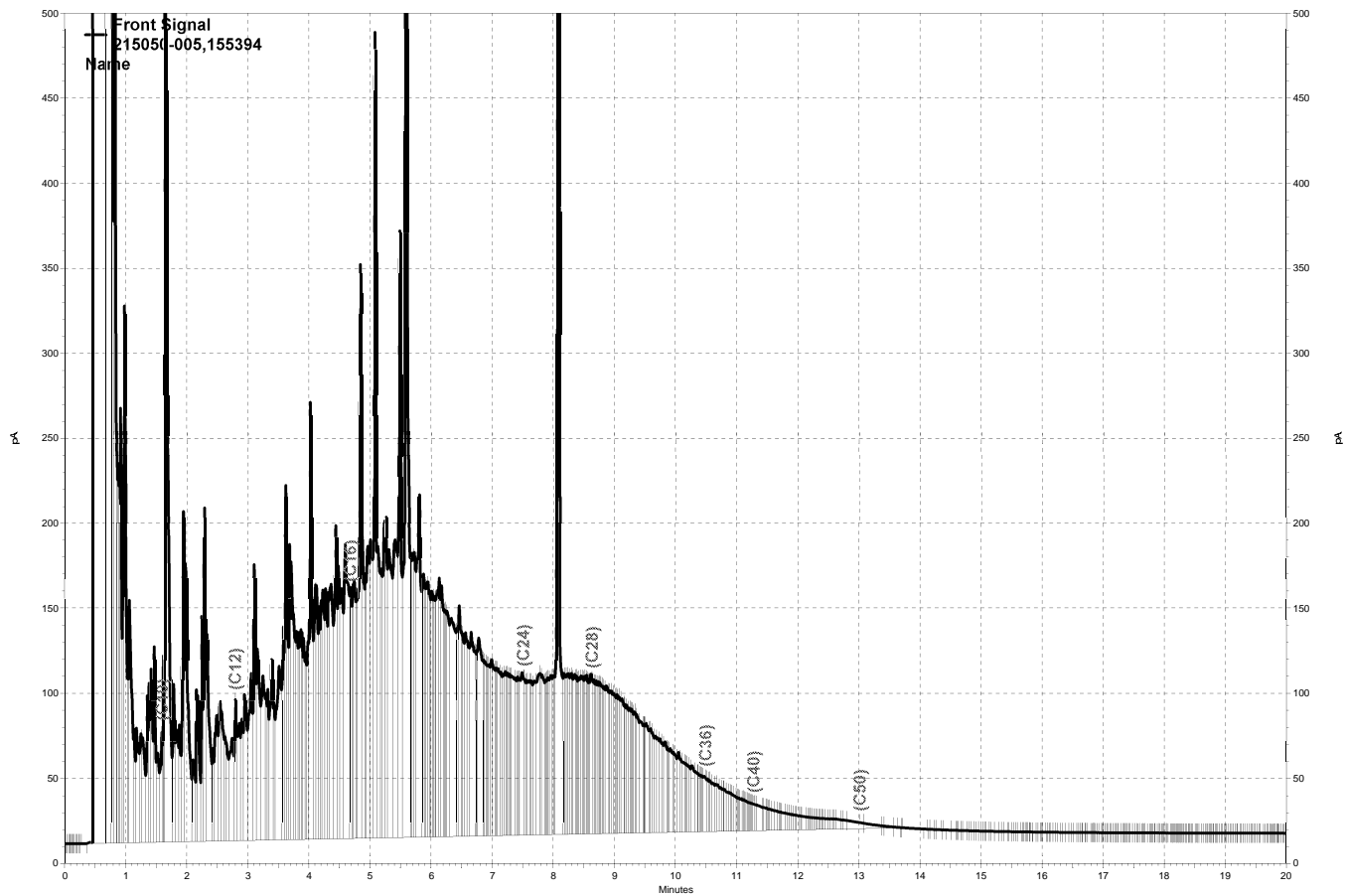
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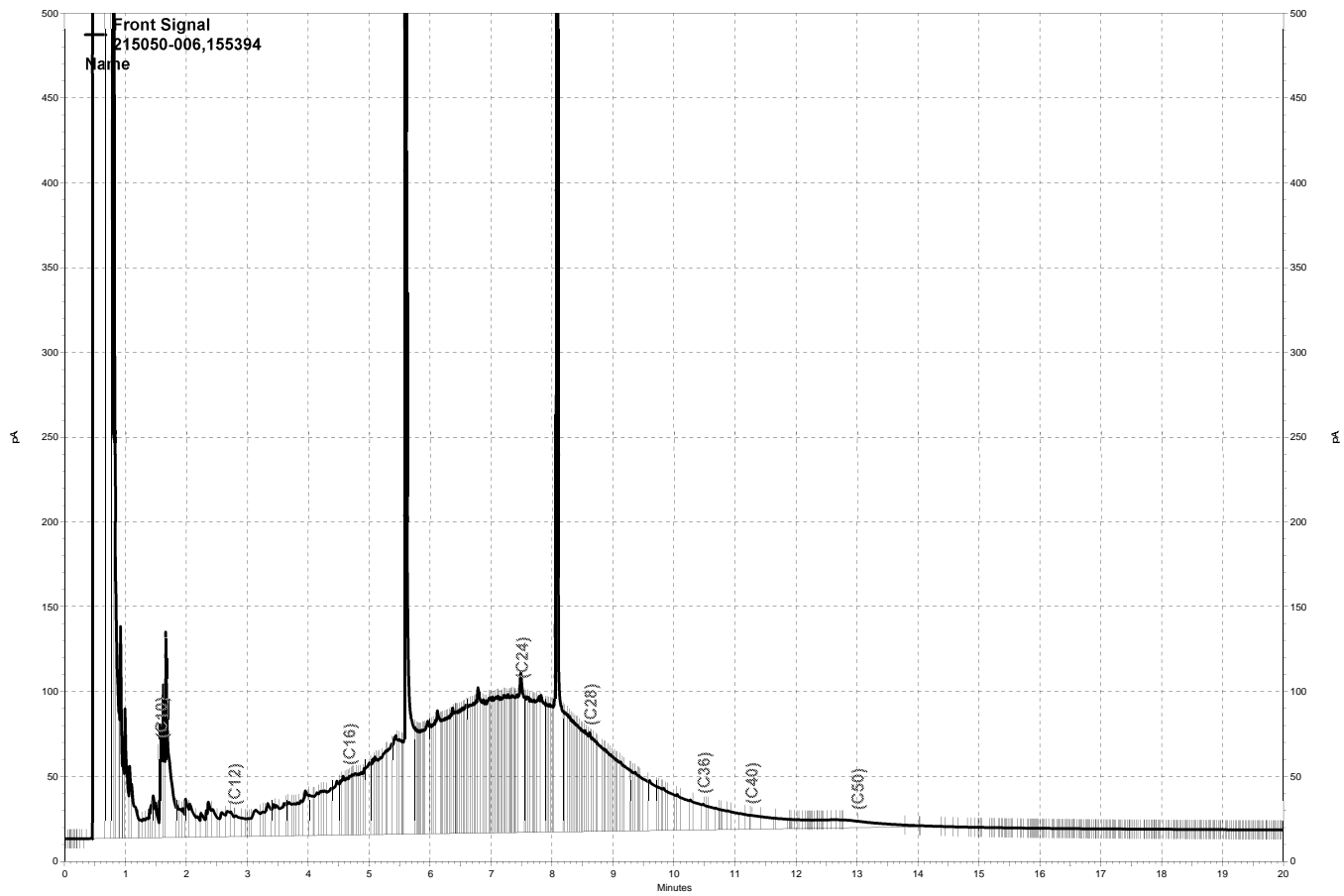
— G:\ezchrom\Projects\GC27\Data\272a026.dat, Front Signal



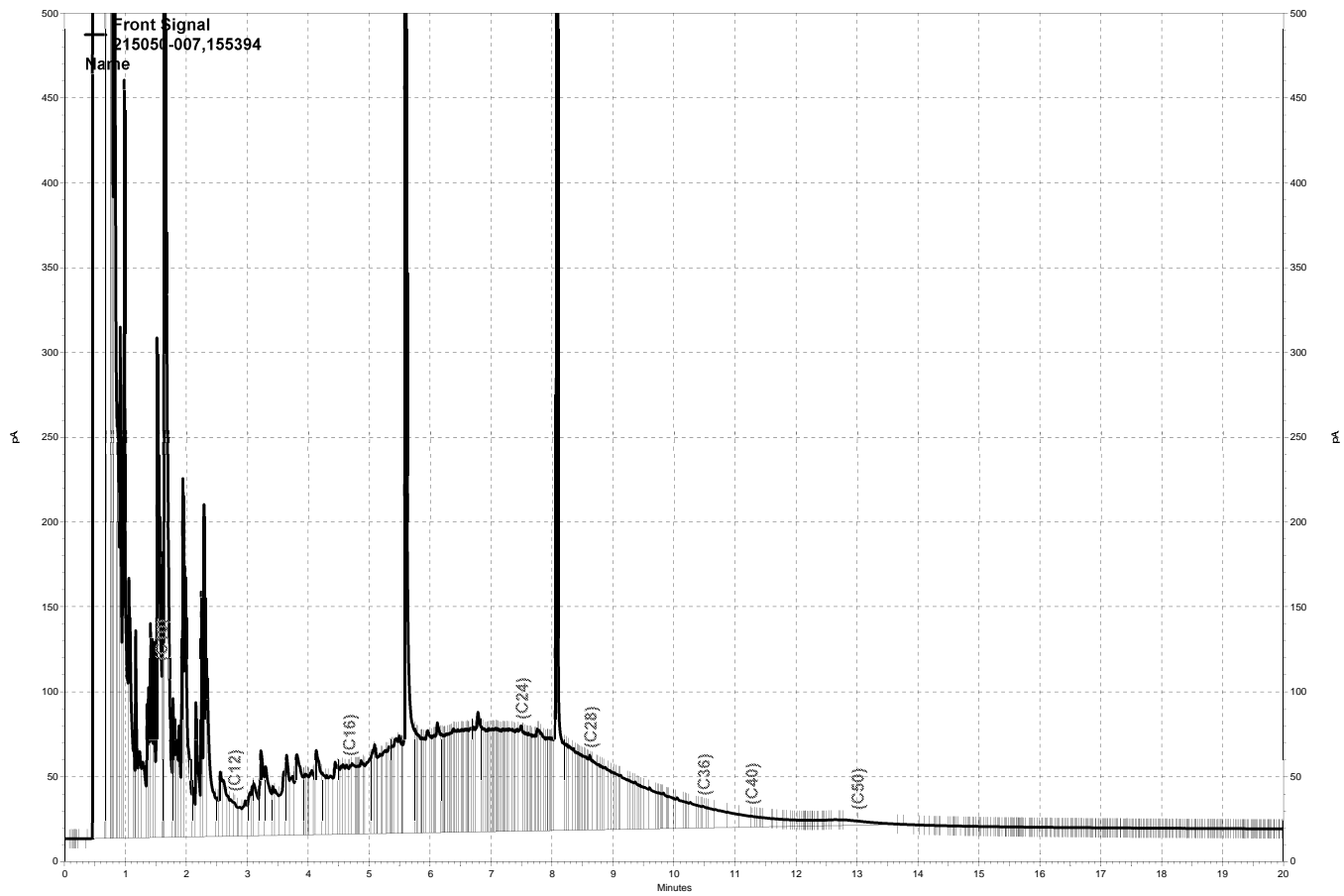
— G:\ezchrom\Projects\GC27\Data\272a021.dat, Front Signal



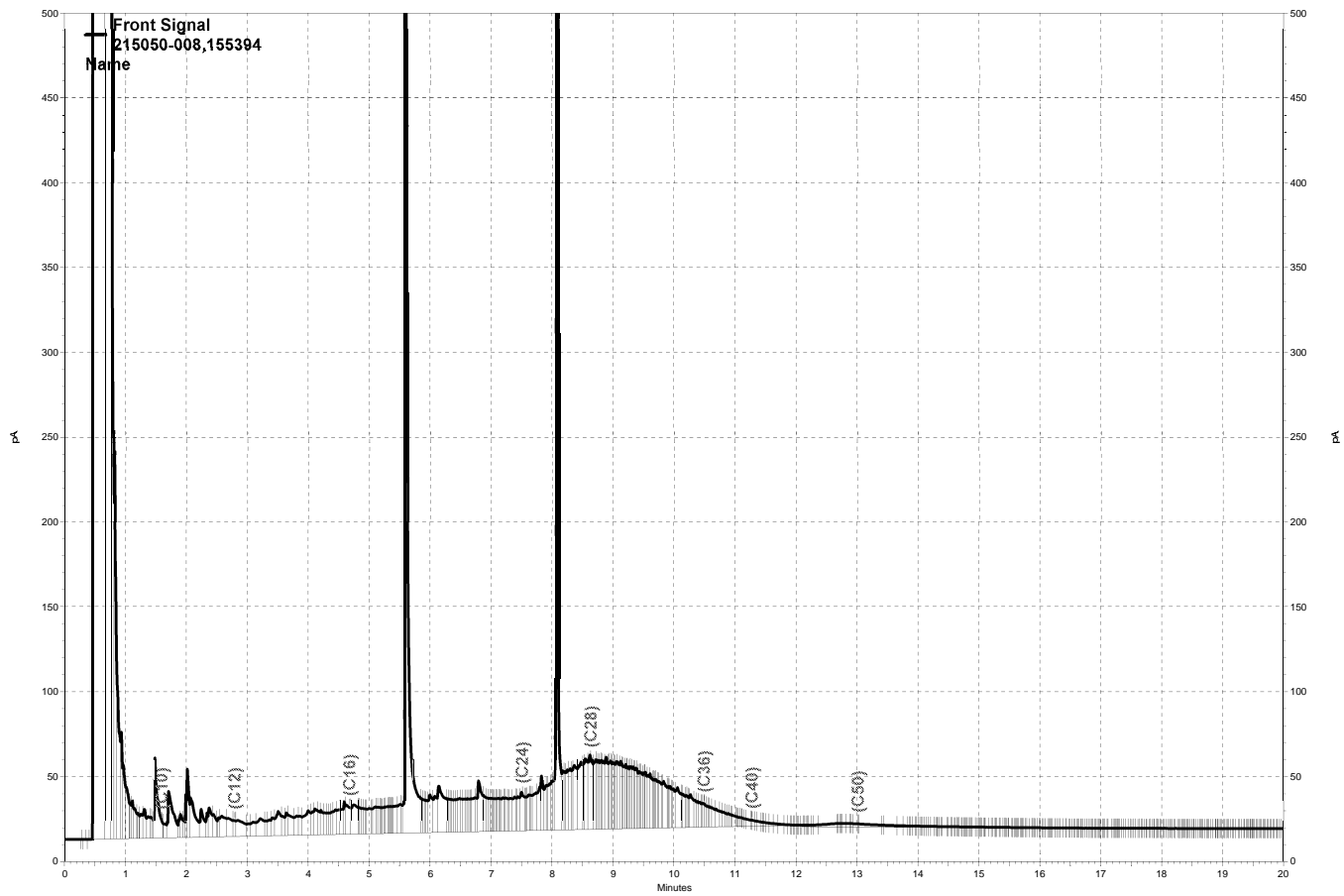
— G:\ezchrom\Projects\GC27\Data\272a027.dat, Front Signal



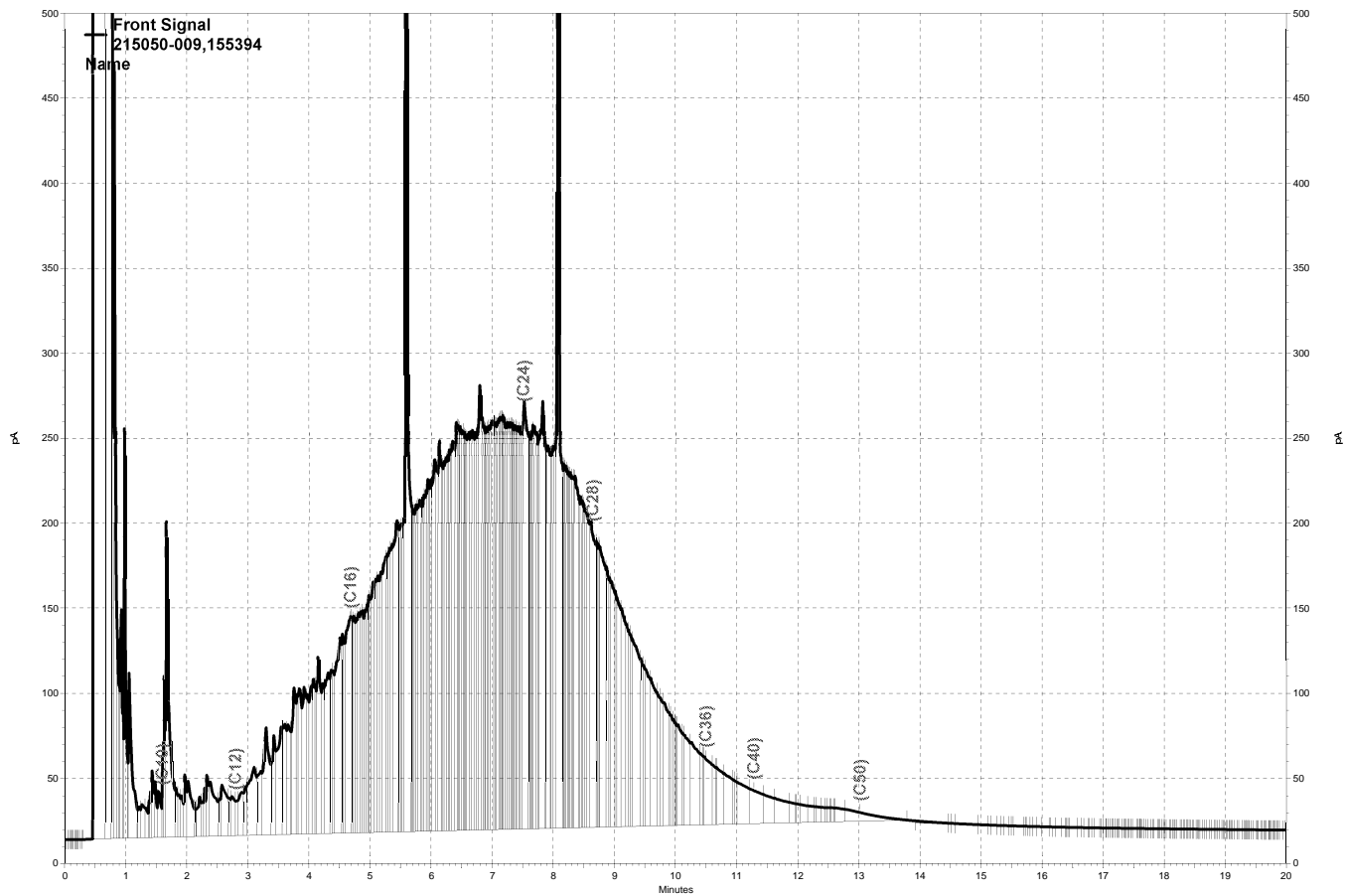
— G:\ezchrom\Projects\GC27\Data\272a028.dat, Front Signal



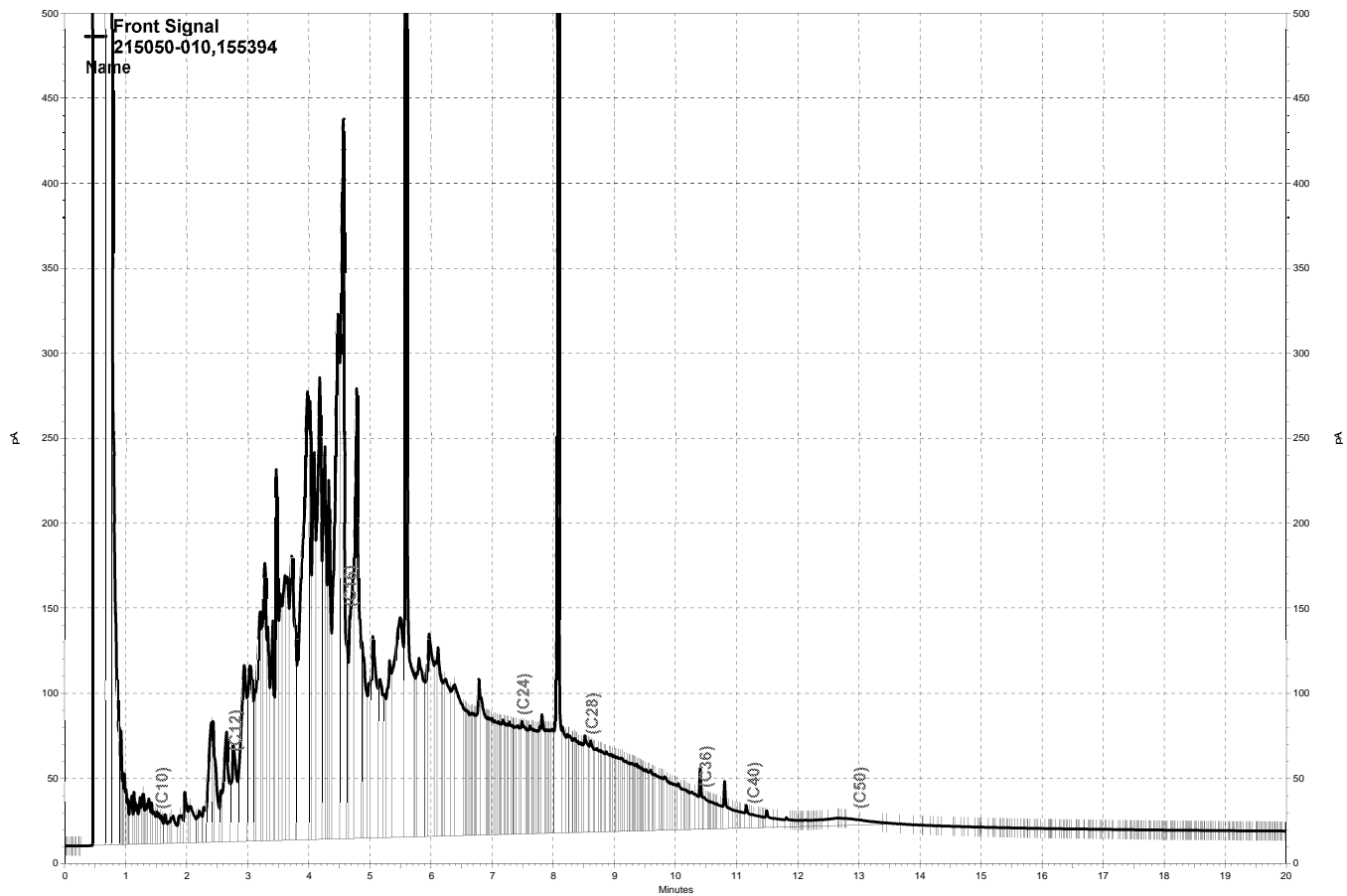
— G:\ezchrom\Projects\GC27\Data\272a029.dat, Front Signal



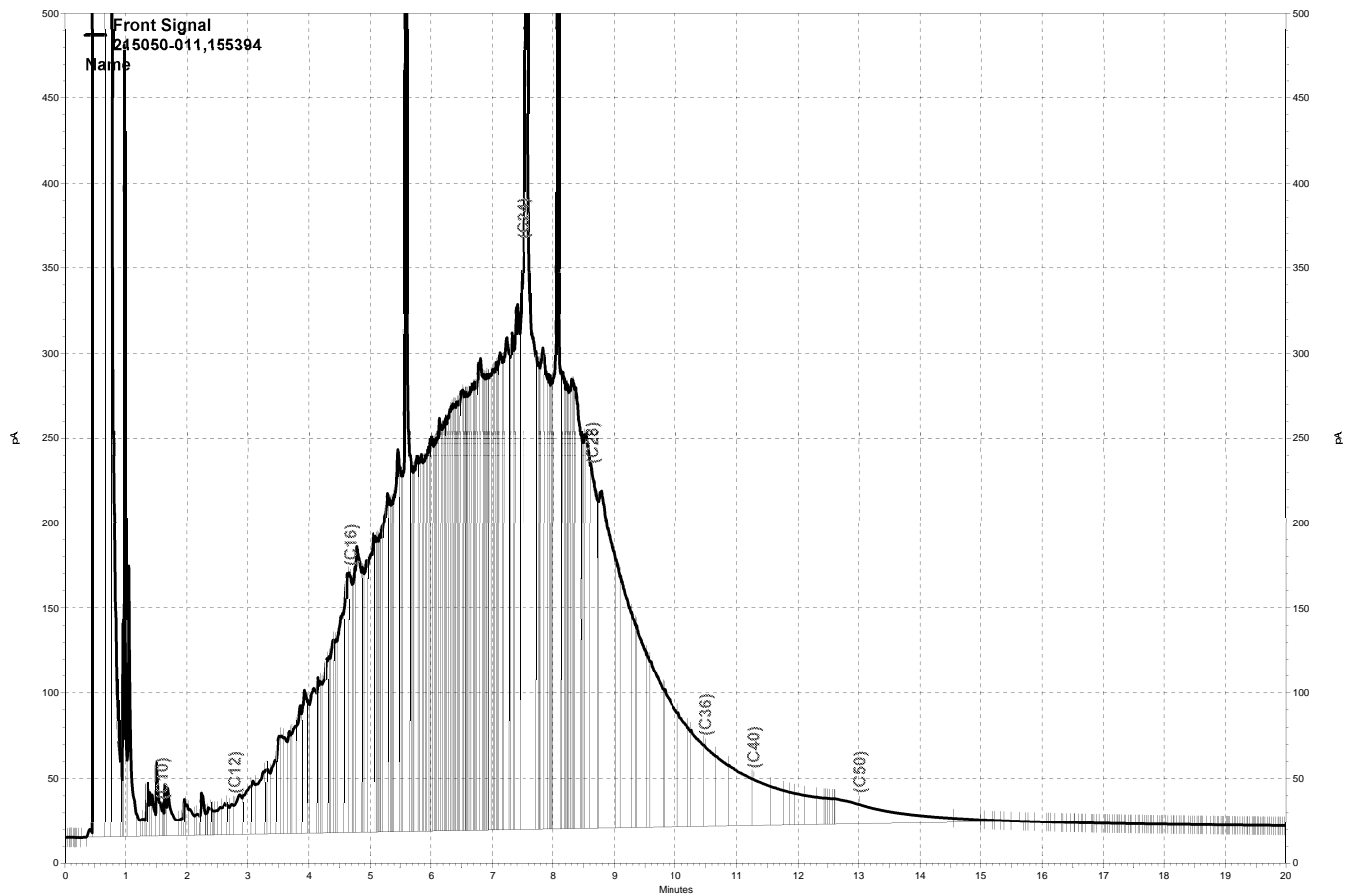
— G:\ezchrom\Projects\GC27\Data\272a031.dat, Front Signal



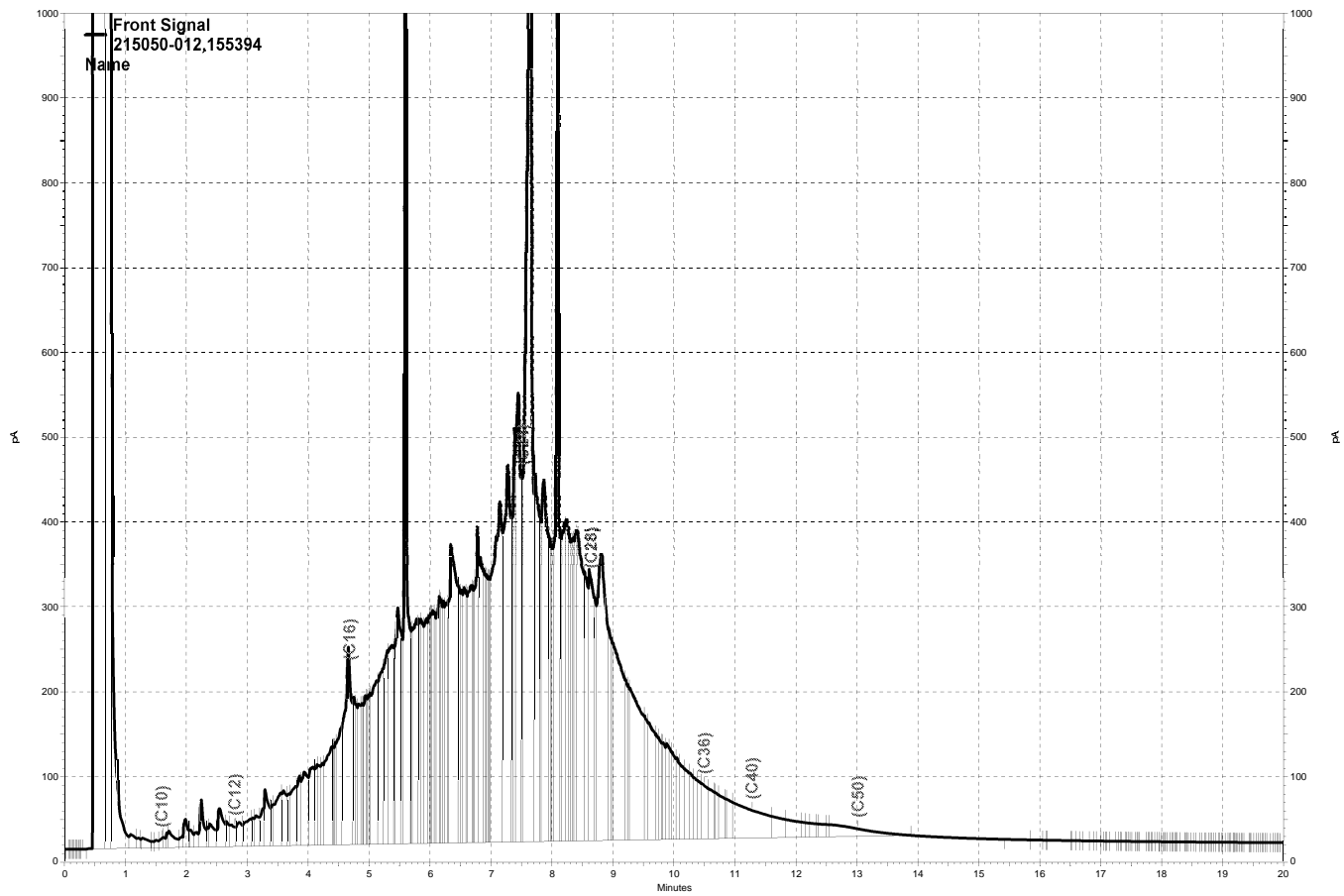
— G:\ezchrom\Projects\GC27\Data\272a030.dat, Front Signal



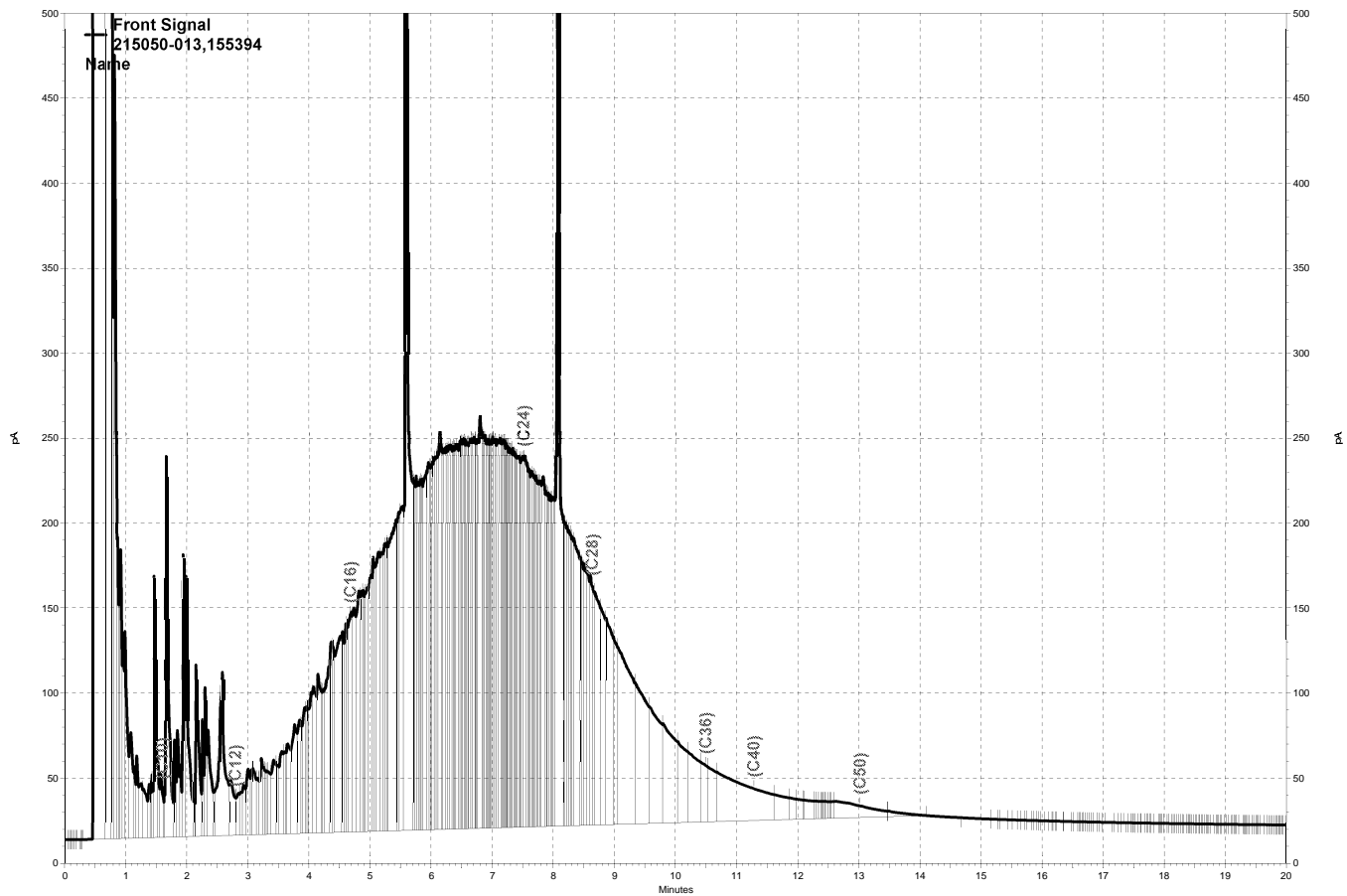
— G:\ezchrom\Projects\GC27\Data\272a045.dat, Front Signal



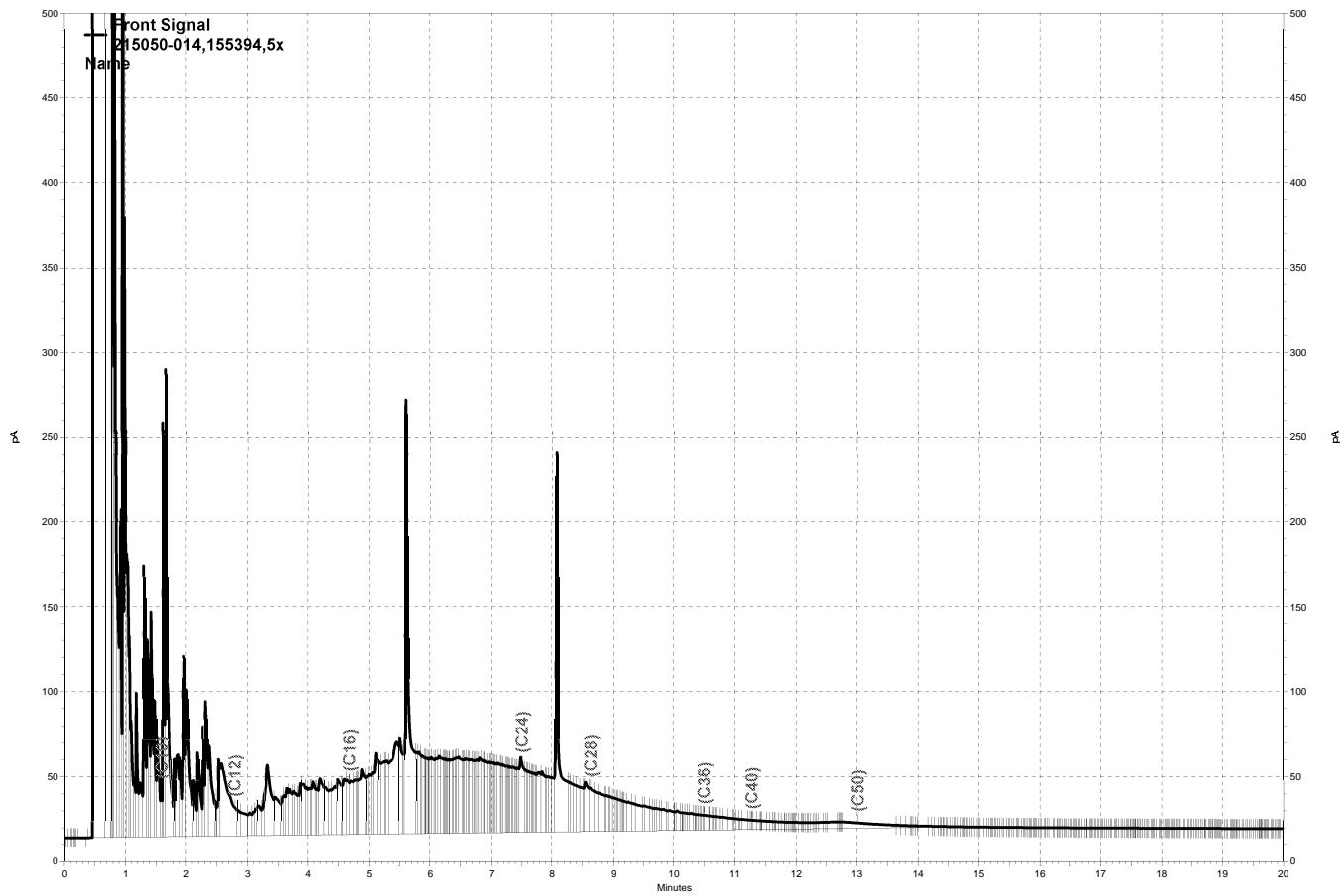
— G:\ezchrom\Projects\GC27\Data\272a036.dat, Front Signal



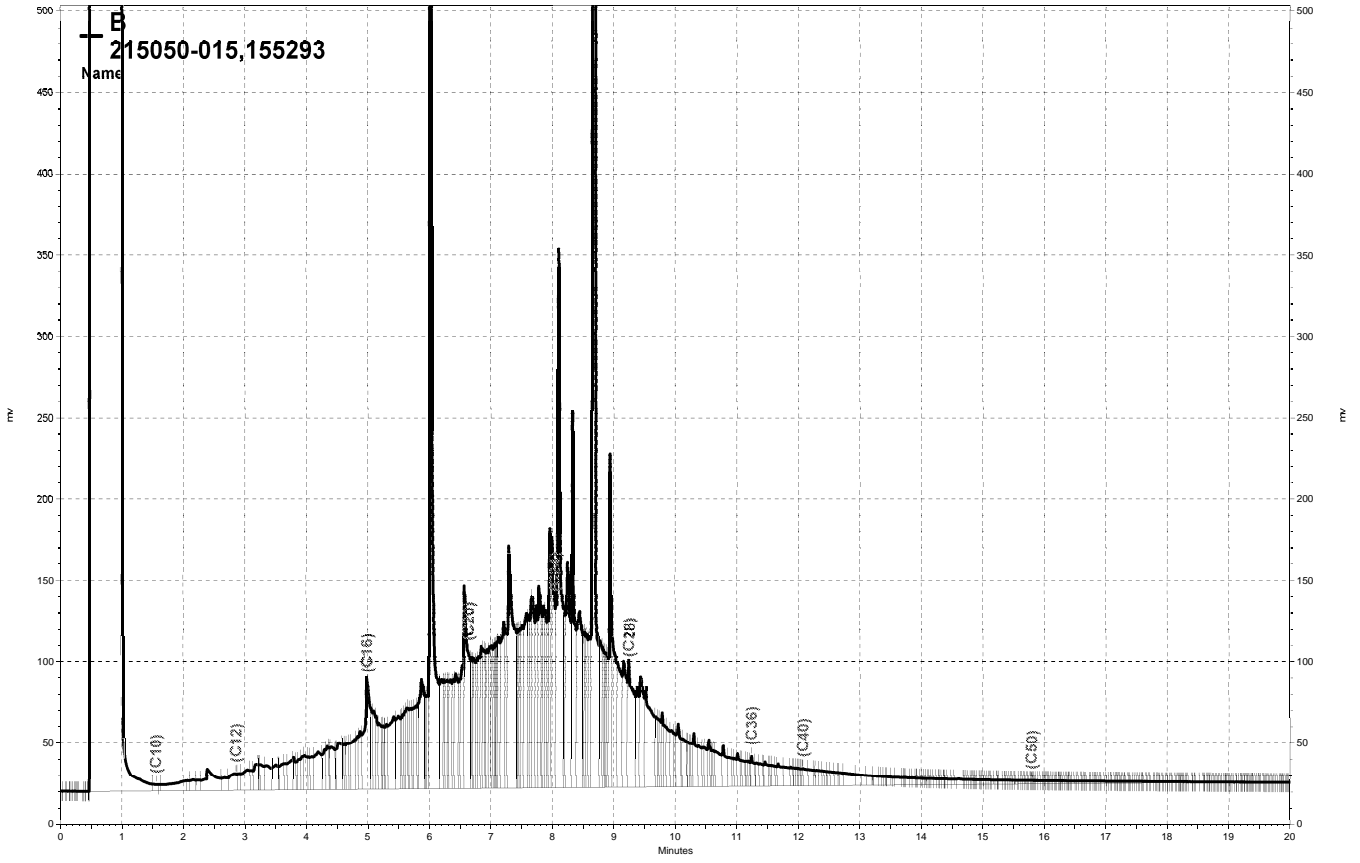
— G:\ezchrom\Projects\GC27\Data\272a037.dat, Front Signal



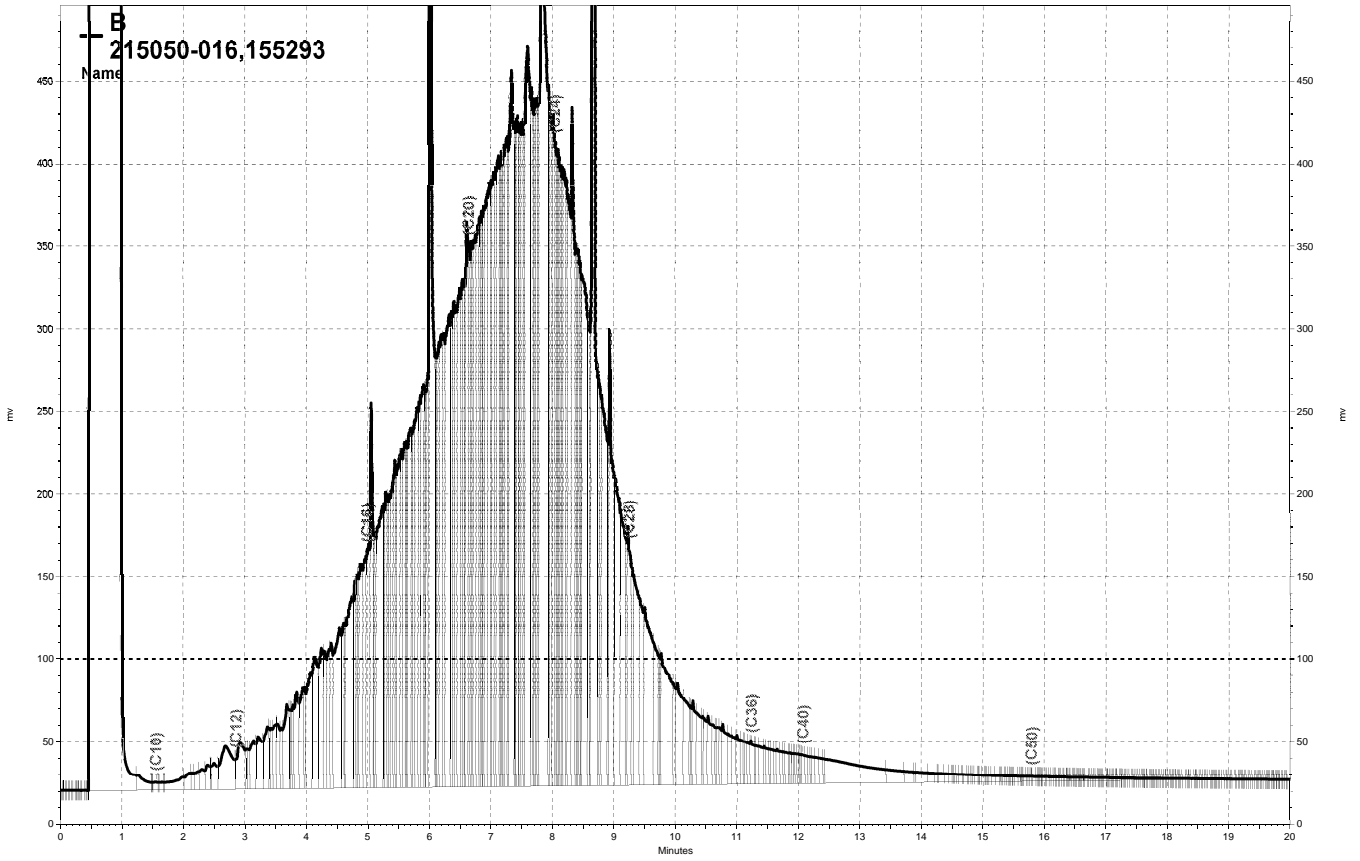
— G:\ezchrom\Projects\GC27\Data\272a038.dat, Front Signal



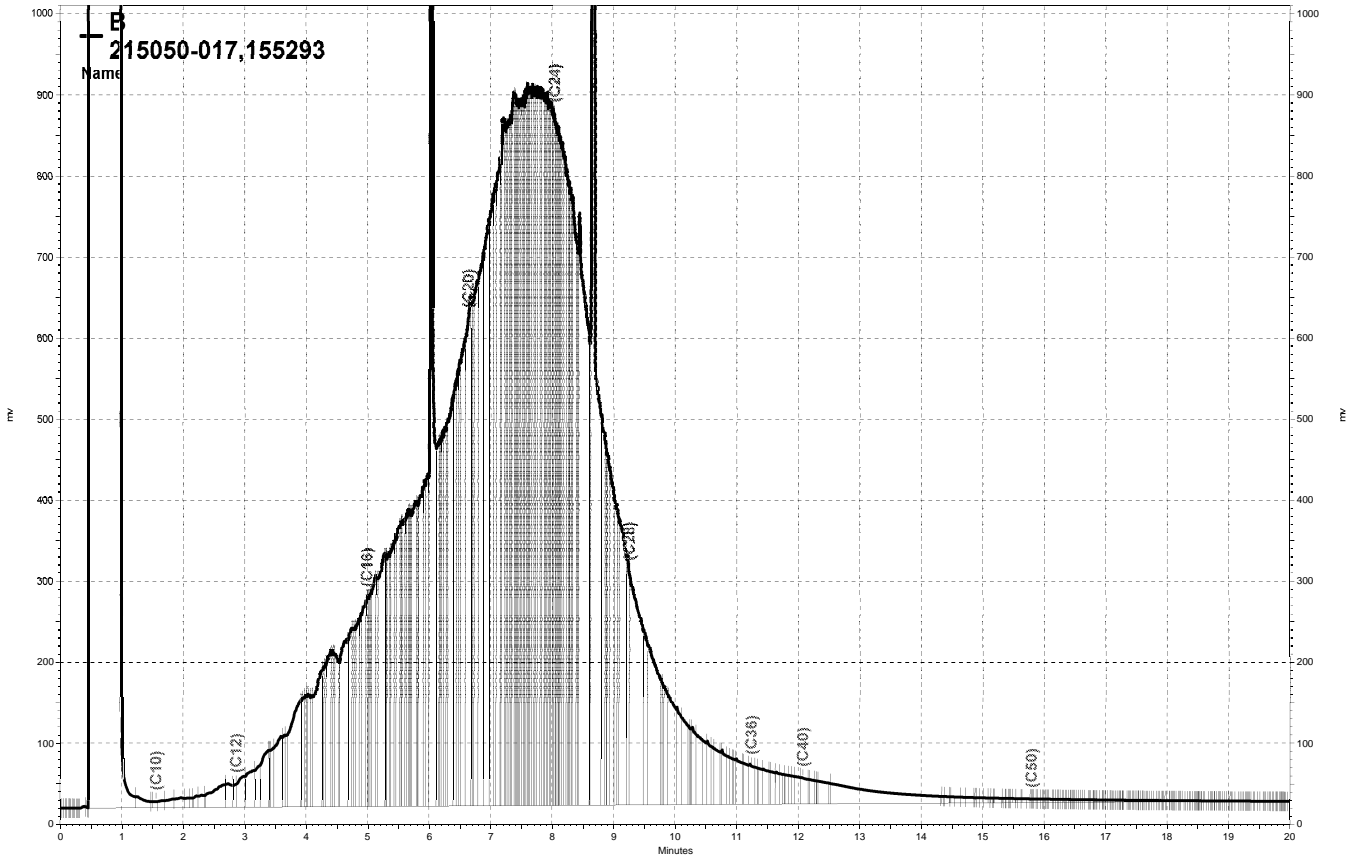
— G:\ezchrom\Projects\GC27\Data\272a035.dat, Front Signal



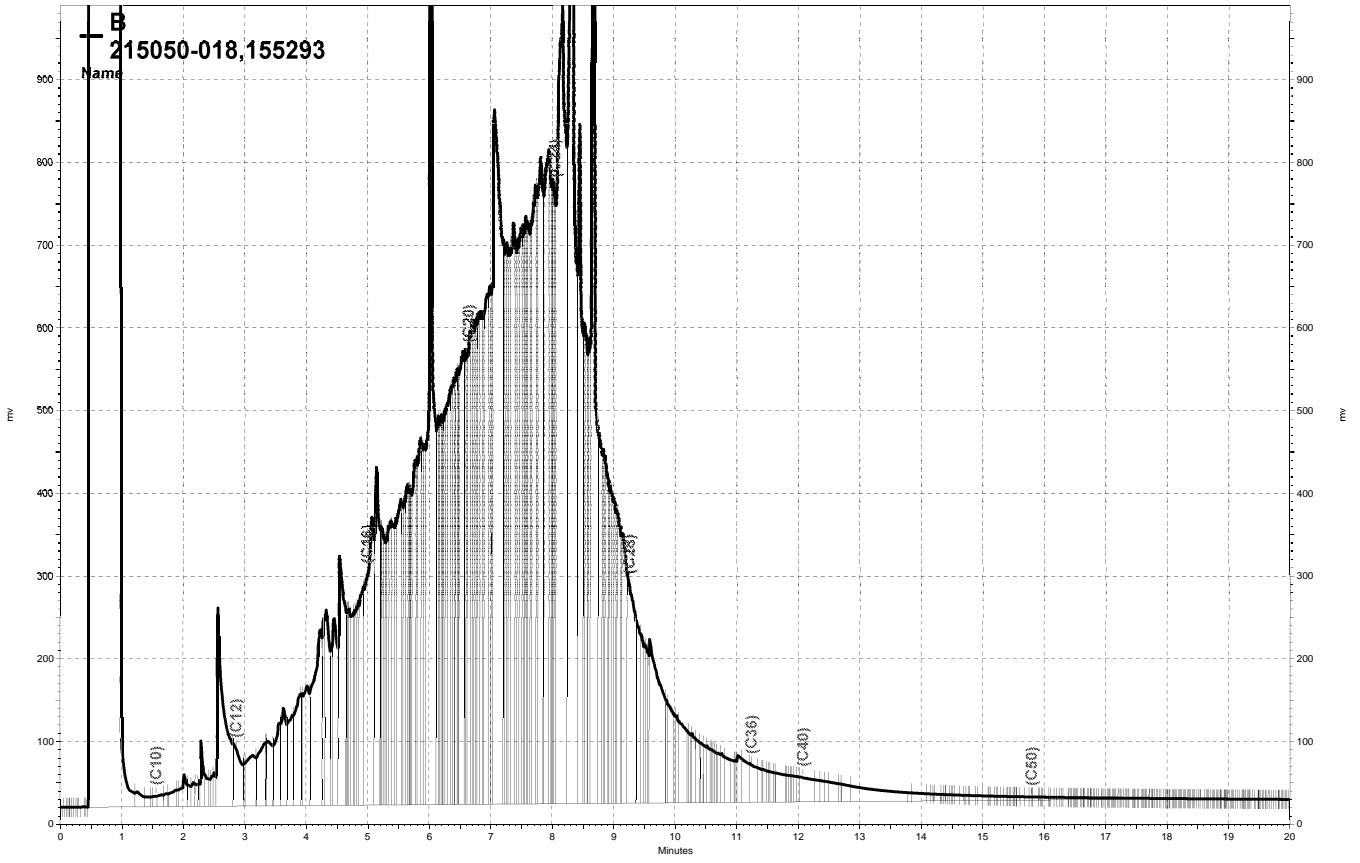
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\271a019, B



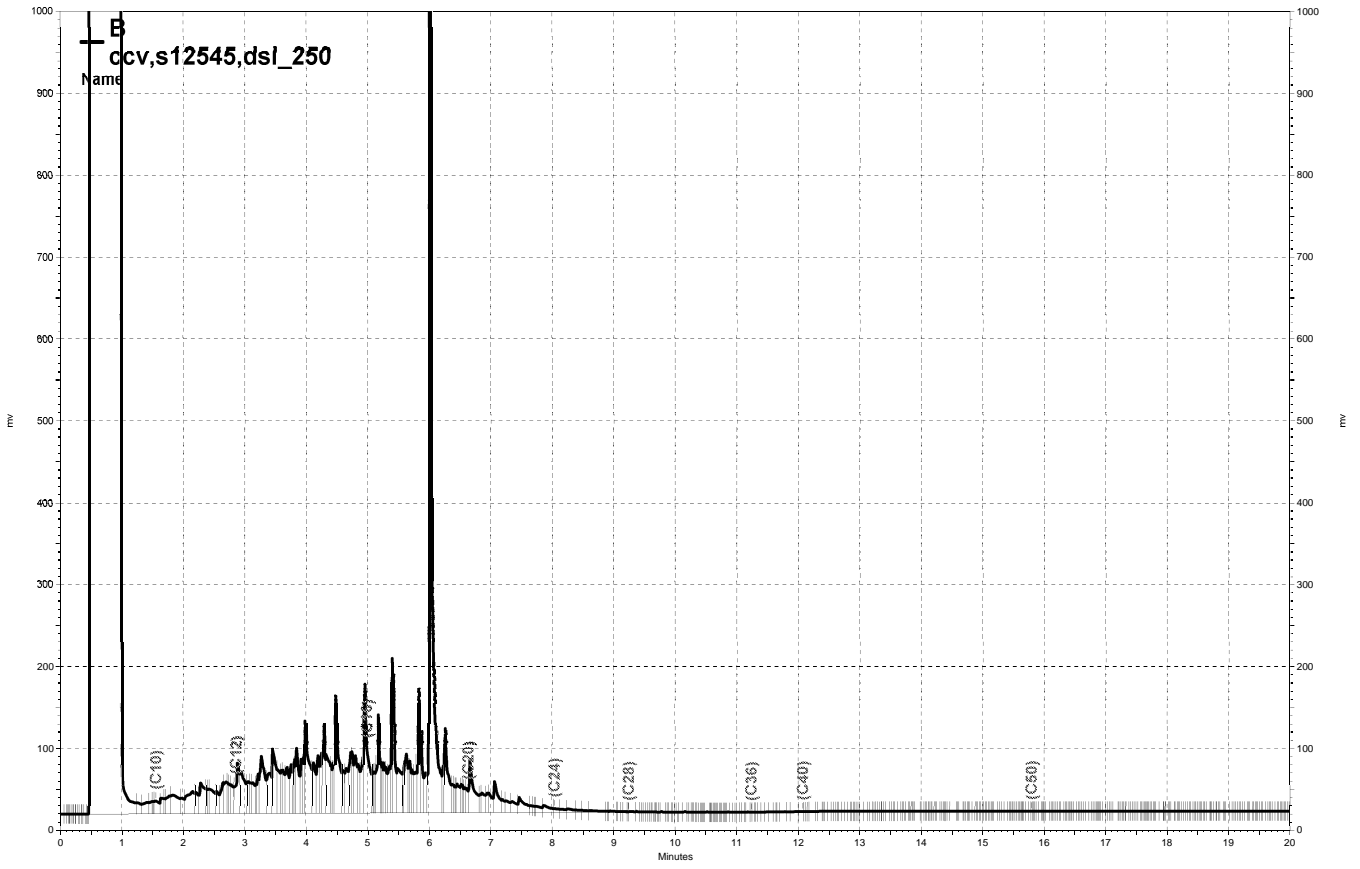
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\271a020, B



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\271a021, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\271a022, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\271a012, 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 - date unclear					

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

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

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

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

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

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

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

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

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

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

MW-12					
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
Installed between 2004-2006					
1	Nov-06 ^(d)	17.83 ^(c)	9.37	NP	8.46
2	Dec-07	17.83	9.15	NP	8.68
3	Mar-08	17.83	9.11	NP	8.72
4	Jun-08	17.83	8.86	NP	8.97
5	Sep-08	17.83	8.76	NP	9.07
6	Dec-08	17.83	8.98	NP	8.85
7	Mar-09	17.83	8.50	NP	9.33
8	Mar-10	17.83	8.66	NP	9.17

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

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

MW-15					
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
Installed between 2004-2006					
1	Dec-06	17.80 ^(c)	9.15	NP	8.65
2	Dec-07	17.80	9.30	NP	8.50
3	Mar-08	17.80	9.20	9.18	8.60
4	Jun-08	17.80	9.60	9.63	8.20
5	Sep-08	17.80	8.84	8.84 ^(f)	8.96
6	Dec-08	17.80	9.19	8.36	8.61
7	Mar-09	17.80	8.70	NP	9.10
8	Mar-10	17.80	8.81 ^(e)	8.81	8.99

MW-16					
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
Installed between 2004-2006					
1	Dec-06	NA	NA	NA	NA
2	Dec-07	17.74 ^(c)	9.36	NP	8.38
3	Mar-08	17.74	9.88	NP	7.86
4	Jun-08	17.74	9.25	NP	7.80
5	Sep-08	17.74	9.07	NP	8.67
6	Dec-08	17.74	9.45	NP	8.29
7	Mar-09	17.74	8.88	NP	8.86
8	Mar-10	17.74	8.92	NP	8.82

MW-17					
Sampling Event No.	Date	TOC Elevation	DTW	DTP	GW Elevation
Installed between 2004-2006					
1	Dec-06	NA	NA	NA	NA
2	Dec-07	18.17 ^(c)	9.40	9.32	8.77
3	Mar-08	18.17	9.34	9.18	8.83
4	Jun-08	18.17	8.98	8.97	9.19
5	Sep-08	18.17	9.21	7.92	8.96
6	Dec-08	18.17	9.25	9.11	8.92
7	Mar-09	18.17	8.89	NP	9.28
8	Mar-10	18.17	8.93	NP	9.24

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

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

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

Notes:

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

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

NS = Not sampled

NP = No product

NM = Not measured

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

TOC Elevation = Top of Casing Elevation

DTW = Depth to water from the top of the casing

DTP = Depth to product from the top of the casing

GW Elevation - Groundwater elevation as compared to mean sea level

^(a) Wells resurveyed in May 1989

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

^(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

Extraction Date	Well or Trench Location																							Total Extracted					
	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	
Apr-04	---	---	---	---	---	1.00	---	1.00	---	---	---	---	---	---	---	---	---	19.75	---	---	---	---	---	---	---	---	---	---	21.75
May-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	22.5	---	---	---	---	---	---	---	---	---	---	22.50
Sep-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.74	---	---	---	---	---	---	---	---	---	---	0.74
Oct-04	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5.22	---	---	---	---	---	---	---	---	---	---	5.22
2004 Total	50.21																												
Jan-05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.00	
Apr-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.3	---	---	---	---	---	---	3.30
Jun-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	8.9	9.2	10.3	---	---	---	---	---	---	---	28.40
Jul-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	3.6	5	5.3	---	---	---	---	---	---	---	13.90
Aug-06	---	---	---	---	---	0.8	---	0.8	---	---	1	0.2	0.2	---	---	---	---	---	0.2	0.2	0.4	---	---	---	---	---	---	---	3.80
Sep-06	---	---	---	---	---	---	---	0.8	---	---	0.2	0.3	---	---	---	---	---	---	0.6	---	0.6	---	---	---	---	---	---	---	2.50
Nov-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---	---	0.20
Dec-06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---	---	0.20
2006 Total	52.30																												
Jan-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---	---	0.20
Feb-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---	---	0.20
Mar-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.2	---	---	---	---	---	---	---	---	---	0.20
Nov-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.81	0.68	---	---	---	---	0.63	---	---	2.12
Dec-07	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.01	0.61	0.07	---	---	---	---	0.002	---	---	0.69
2007 Total	3.41																												
Feb-08	0.03	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.45	0.08	0.06	0.18	0.04	0.06	0.06	0.08	0.05	0.05	1.14	
Feb-08	---	---	0.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.45	0.15	0.15	0.30	---	---	---	---	---	---	---	1.10
Mar-08	---	---	---	0.02	0.002	0.02	0.001	0.04	0.02	0.03	0.004	0.01	0.02	0.01	0.01	0.003	0.012	0.3	0.09	0.06	0.09	---	---	---	0.06	---	---	0.80	
Mar-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0.008	---	---	---	---	---	---	---	0.01
May-08	0.09	---	---	---	---	---	---	0.075	---	0.075	0.019	0.009	---	---	0.13	---	---	1.397	0.866	1.466	1.431	---	---	---	---	---	---	5.56	
Jun-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.15	0.11	0.57	---	---	---	---	---	---	---	0.83
Aug-08	0.12	---	---	---	---	---	---	0.048	---	0.024	0.009	---	---	---	---	---	---	0.75	0.9	1.6	0.7	0.3	0.3	---	0.15	---	---	4.90	
Sep-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.03	0.09	0.048	---	---	---	---	---	---	---	0.17
Nov-08	0.078	---	---	---	---	0.009	---	---	---	0.06	0.009	---	---	0.003	0.06	---	---	0.6	0.1	0.03	---	0.06	0.06	0.06	0.06	0.09	0.09	1.37	
Dec-08	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0003	0.08	---	---	---	---	0.03	---	---	---	0.11
2008 Total	15.99																												
Mar-09	0.279	---	---	---	---	0.378	---	0.369	---	0.261	0.007	0.023	0.117	---	0.342	---	0.023	1.800	0.750	0.950	1.010	0.153	0.153	0.153	0.653	0.153	0.153	7.73	
Jun-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.5	---	---	---	---	---	---	---	---	---	0.50
Sep-09	0.286	---	---	---	0.022	0.418	---	0.176	0.308	0.176	0.088	0.007	0.176	0.088	0.176	0.022	0.066	7.15	1.4	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	19.46	
Dec-09	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0.9	0.06	---	---	---	---	0	---	---	0.96
2009 Total	28.65																												
Mar-10	0.14	---	---	---	0.01	0.18	0.02	0.60	---	0.60	0.03	0.10	0.69	0.04	0.30	0.02	---	8.00	1.30	1.00	1.00	0.50	1.00	0.50	1.00	1.00	1.00	19.03	
Total Extracted	1.02	0.00	0.05	0.02	0.03	2.81	0.02	3.91	0.33	1.23	1.37	0.65	1.20	0.14	1.02	0.05	0.10	69.11	20.63	23.42	27.25	2.15	2.67	1.87	3.77	2.39	2.39	169.59	

Note:
All free product quantities presented in gallons
Product extraction events conducted before November 2007 were completed by PES Environmental

APPENDIX F

Groundwater Disposal Documentation

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number CAL000331636	2. Page 1 of 1	3. Emergency Response Phone 1800-424-9300	4. Manifest Tracking Number 005765369 JJK			
5. Generator's Name and Mailing Address Bay Center Apartments 6400 Christie St Emeryville CA 94604 Generator's Phone: 510 594-2010				Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name EVERGREEN ENVIRONMENTAL SERVICES					U.S. EPA ID Number CAD982413262			
7. Transporter 2 Company Name					U.S. EPA ID Number			
8. Designated Facility Name and Site Address EVERGREEN OIL, INC. 6880 Smith Ave. Newark, Ca. 94560 510-795-4400 Facility's Phone:					U.S. EPA ID Number CAD980887418			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt. Vol.	13. Waste Codes
		1. NON-RCRA HAZARDOUS WASTE, LIQUID (Oil & water)		No. 001	Type TT	1020	G	223
		2.						
		3.						
		4.						
14. Special Handling Instructions and Additional Information PROFILE # _____ INVOICE # 555699 DOT ERG # 171 WEAR PROTECTIVE CLOTHING SALES ORDER # 0271764								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offoror's Printed/Typed Name Paul Gross (mercury comm)				Signature [Signature]		Month Day Year 10/10/81/0		
INT'L	16. International Shipments		<input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____			
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials							
	Transporter 1 Printed/Typed Name Jesse FALIONE			Signature [Signature]		Month Day Year 10/10/81/0		
Transporter 2 Printed/Typed Name			Signature		Month Day Year			
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	18b. Alternate Facility (or Generator)					Manifest Reference Number: _____		
	Facility's Phone: _____					U.S. EPA ID Number		
18c. Signature of Alternate Facility (or Generator)						Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name				Signature		Month Day Year		