

October 16, 2008

RECEIVED

1:54 pm, Oct 17, 2008

Alameda County  
Environmental Health

Mr. Francis Rush  
Rush Property Group, LLC  
2200 Adeline Street, Suite 350  
Oakland, California 94607

RE: Subsurface Investigation Report  
1549 32<sup>nd</sup> Street, California  
Fuel Leak Case No. RO2508  
ERS Project No. 1005-01.00

Dear Mr. Rush:

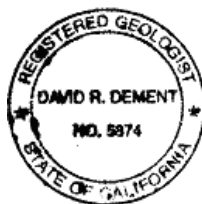
Enclosed please find one copy of the Subsurface Investigation Report for the property located at 1549 32<sup>nd</sup> Street, Oakland, California. The primary focus of this subsurface investigation was to determine subsurface site conditions and address concerns of the Alameda County Health Care Services Agency (ACHCSA).

If you have any questions about this report, please contact me at (925) 938-1600, extension 109 or email me at [ddement@erscorp.us](mailto:ddement@erscorp.us).

Sincerely,



David DeMent, PG, REA II  
Senior Geologist



cc: Mr. Paresh Khatri, ACHCSA

Enclosure

# SUBSURFACE INVESTIGATION REPORT

1549 32<sup>nd</sup> Street  
Oakland, California

*Prepared for:*

Mr. Francis Rush  
Rush Property Group, LLC  
2200 Adeline Street, Suite 350  
Oakland, California 94607

*Prepared by:*

Environmental Risk Specialties Corporation  
Walnut Creek, California

October 16, 2008

---

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2.0</b>	<b>BACKGROUND</b> .....	<b>1</b>
2.1	Previous Site Investigation .....	2
2.2	Remedial Soil Removal .....	3
2.3	Verification Site Investigation .....	3
<b>3.0</b>	<b>FIELD PROCEDURES</b> .....	<b>4</b>
<b>4.0</b>	<b>FINDINGS</b> .....	<b>5</b>
4.1	Subsurface Conditions .....	5
4.2	Analytical Results .....	6
<b>5.0</b>	<b>DISCUSSION</b> .....	<b>9</b>
<b>6.0</b>	<b>CONCLUSIONS</b> .....	<b>11</b>
<b>7.0</b>	<b>RECOMMENDATIONS</b> .....	<b>12</b>
<b>8.0</b>	<b>LIMITATIONS</b> .....	<b>14</b>

### TABLES

1 – Soil Sample TEPH Analytical Results .....	6
2 – Soil Sample HVOC Analytical Results .....	7
3 – Soil Sample Metal Analytical Results.....	7
4 – Groundwater Sample TEPH Analytical Results.....	8
5 – Groundwater Sample TPHg/VOC Analytical Results.....	8

### FIGURES

- 1 – Location Map
- 2 – Site Map

### APPENDICES

- 1 – Alameda County Public Works Agency Soil Boring Permit
- 2 – Lithologic Logs
- 3 – Analytical Results and Chain of Custody Record

---

## 1.0 INTRODUCTION

This *Subsurface Investigation Report* has been prepared by Environmental Risk Specialties Corporation (ERS) at the request of Rush Property Group, LLC (Client). This report describes subsurface investigation work performed at the site located at 1549 32<sup>nd</sup> Street, Oakland, California (Site). The purpose of this subsurface investigation was to further determine subsurface site conditions in select areas of the Site and address concerns of the Alameda County Health Care Services Agency (ACHCSA).

The work performed consisted of advancing nine exploratory soil borings to depths ranging from 12.0 to 24.0 feet bgs, logging encountered soils, collecting representative soil and grab groundwater samples from the borings, and analyzing the samples for constituents of concern. The basic goal of the work was to determine the approximate degree and extent of residual petroleum hydrocarbon and volatile organic compound impacts in soil and groundwater following previously performed soil remediation at the Site.

## 2.0 BACKGROUND

The Site is located on the southeast corner of 32<sup>nd</sup> Street and Hannah Street at 1549 32<sup>nd</sup> Street, Oakland, California (Figure 1). The Site formerly operated as a steel foundry that heat-treated metal products. According to a January 4, 2001 *Phase I Environmental Site Assessment* Report prepared by Lumina Technologies, the property was developed with the current building in 1946 and operated as a metal heat treating facility. City of Oakland Fire Department records indicate the facility operated under the name of Precision Cast, a steel foundry and heat-treating operation, from 1983 to 2002. A small putty/paint factory also operated at 2885 Hannah Street, but the years of operation are unknown.

ACC Environmental Consultants, Inc (ACC) previously submitted a *Request for Regulatory Closure Summary*, dated August 7, 2006, that summarized previous subsurface investigation and remediation work at the Site, and prepared an *Addendum to Request for Regulatory Closure Summary*, dated December 14, 2006 that further elaborated on the issue of volatile organic compounds and perceived data gaps. The ACHCSA subsequently requested for additional investigation in a letter dated March 27, 2007. ACC prepared a *Revised Work Plan - Subsurface Investigation*, dated April 4, 2008, which ERS implemented and is summarized in this Report.

---

## 2.1 Previous Site Investigation

In 1988, Property Contamination Control, Inc (PCC) conducted a soil investigation consisting of four exploratory soil borings. PCC reported relatively minor concentrations of ethanol, methanol, 1,1-dichloroethene (1,1-DCE), and metals in soil. Soil sample locations and depth are unknown.

In March 2002, ERAS Environmental, Inc. (ERAS) advanced four soil borings with a hand auger and reported "elevated" concentrations of total recoverable petroleum hydrocarbons (TRPH) and relatively minor concentrations of benzene, toluene, ethylbenzene and total xylenes (BTEX) in soil as approximately 3.0 feet below ground surface (bgs) in three of the four borings. In November 2002, ERAS analyzed a sample of oil from an excavation pit located near the southeast corner of the building and reported oil resembling mineral oil, foundry quenching oil, or similar material.

In April 2002, Environmental Restoration Services (Enrest) advanced seven soil borings and reported observing free-phase floating oil in boring SB-6. In addition, Enrest determined that a pipe identified by ERAS was actually a waste percolation well. The percolation well was 7 feet deep, perforated from 5.5 feet to 7.0 feet bgs, and surrounded by drain rock from approximately 5 to 10 feet bgs. On April 26, 2002, Enrest demolished the concrete lining of Pit B and excavated soil to 12 feet bgs. Enrest also excavated casting sand backfill from Pit A and Pit C, and identified another suspect percolation well near the southeast corner of the building.

In May 2002, Enrest excavated soil in the vicinity of soil boring SB-6 and in the vicinity of the suspect percolation well in the southeast corner of the Site. Enrest also advanced three soil borings to collect grab groundwater samples north, west, and south of soil boring SB-6, designated SP-1, SP-2, and SP-3. Grab groundwater sample analytical results reported elevated concentrations of motor-oil range petroleum hydrocarbons, relatively minor concentrations of BTEX, 1,2-dichlorobenzene, and naphthalene.

In May 2003, ERAS advanced eleven soil borings to depths of approximately 16 to 20 feet bgs, collected soil and grab groundwater samples, and converted three of the soil borings to temporary piezometers. The piezometers were surveyed and the calculated groundwater flow direction and gradient were west to northwest at 0.03 foot per foot. Soil sample analytical results reported minor to elevated concentrations of total petroleum hydrocarbons (TPH), varying minor volatile organic compound (VOC) concentrations. Grab groundwater sample analytical results reported relatively low TPH concentrations in soil borings E-6, E-9, and E-10 and minor concentrations of

dissolved metals. VOC analytical results were reported below laboratory reporting limits.

Concurrently, ERAS sampled the contents of six subsurface concrete vaults. Vault contents were described as poorly graded sand. All available analytical results of previous investigations are summarized in ACC's August 7, 2006 *Request for Regulatory Closure Summary* and April 4, 2008 *Revised Work Plan - Subsurface Investigation*.

## 2.2 Remedial Soil Removal

In April 2002, Enrest demolished the concrete lining of Pit B and excavated soil to 12 feet bgs. An oil sheen was noted on groundwater that entered the excavation pit. Enrest also excavated sand backfill from Pit A and Pit C. The volume of removed soil is unknown. In or before May 2002, Enrest excavated soil in the vicinity of soil boring SB-6 and around the second 4-inch diameter pipe identified as a waste percolation well.

Between September 2003 to January 2004, ERAS oversaw remedial soil excavation designed to remove soil containing TPH as hydraulic oil above 500 milligrams per kilogram (mg/kg). The limits of soil excavation are shown on ERAS figure 2. Soil was removed in three locations: 1) inside the northeast corner of the building (designated "north"); 2) inside the southeast portion of the building to the building perimeter (designated "middle"); and 3) outside the building on the south side (designated "south"). Approximately 845 cubic yards of soil was removed from the "north" excavation, approximately 1,950 cubic yards of soil was removed from the "middle" excavation, and approximately 407 cubic yards of soil was removed from the "south" excavation, for a total of approximately 3,202 cubic yards. Excavated soil was properly profiled and disposed at Forward landfill, Manteca, California under profile No. 3786. Following remedial soil excavation, confirmatory sidewall and excavation bottom soil samples were collected and analyzed for constituents of concern.

All analytical results of remedial soil excavation activities are summarized in ACC's *Revised Work Plan - Subsurface Investigation* dated April 4, 2008.

## 2.3 Verification Site Investigation

In April 2005, Enrest conducted verification site investigation and advanced fifteen soil borings primary around the perimeter of the Site. The purpose was to collect representative soil and groundwater samples at the perimeter of the property to evaluate the effectiveness of remedial soil excavation performed from September 2003

to January 2004. Soil samples were generally collected at 4 and 9 feet bgs and grab groundwater samples were collected in each soil boring at approximately 15 and 25 feet bgs. In addition, Enrest collected representative soil samples from imported material used to backfill the remedial soil excavations and analyzed the samples for constituents of concern.

Enrest also collected two representative soil gas samples for chemical analysis. None of the reported VOC concentrations reported in the two soil gas samples indicated that a significant source of residual VOCs exist in the subsurface.

All analytical results of previous investigations are summarized in ACC's *Revised Work Plan - Subsurface Investigation* dated April 4, 2008.

### **3.0 FIELD PROCEDURES**

On September 18, 2008, ERS advanced nine exploratory soil borings EB1 through EB9 at selected locations across the Site and at one neighboring residential property located at 2859 Helen Street. These additional soil borings were specifically advanced at selected locations to further characterize the vertical and lateral extent of constituents of concern in soil and groundwater. Soil borings EB5 and EB9 were advanced at an approximate angle of 20 degrees from vertical to assess soil and groundwater of adjacent neighboring properties 2851 Helen Street and 2863 Helen Street. Soil boring locations were marked with white paint and Underground Service Alert was notified at least 48 hours prior to commencing work. In addition, a subsurface utility locator cleared the area of the proposed boring locations and marked underground utilities. A soil borings permit was obtained from the Alameda County Public Works Agency (ACPWA). A copy of the permit is included in Appendix 1.

With the exception of soil borings EB3 and EB4, the continuously cored borings were advanced using a four-foot long, hydraulically driven, truck-mounted Geoprobe® sampling tool equipped with 2-inch inside-diameter clear acetate liners. Soil borings EB3 and EB4 were continuously cored using limited access Geoprobe® equipment. The sampling probe and rods were pre-cleaned prior to use and between sample drives by washing them with a trisodium phosphate and potable water solution, and a potable water rinse. Upon removal from the sampler, each recovered soil core was visually inspected and logged. The sample intervals were primarily logged to determine relative permeability and evaluate migration potential at that soil boring location. Soil samples were collected from each soil boring. Soil at approximate 4-foot intervals was screened with the use of a miniRAE photo-ionization detector (PID) and PID readings were utilized



to assist in choosing soil samples for chemical analysis. The soil cores were collected with acetate liners and specific soil core intervals chosen for analysis were capped with Teflon® sheeting and tight-fitting plastic end caps, labeled, and immediately placed in a pre-chilled insulated container. Sample locations are shown on Figure 2.

Grab groundwater samples were collected in soil borings EB3 through EB9 by advancing the probe into the water bearing formation, installing new polyvinyl chloride (PVC) casing and retrieving first-encountered groundwater with disposable polyethylene tubing and a peristaltic pump. Grab groundwater samples were collected in laboratory-supplied 40-milliliter VOA vials without headspace and amber liter bottles. Following collection, the grab groundwater samples were labeled, transferred to a pre-chilled insulated container, and then transported directly to Curtis and Tompkins Ltd, a state-certified laboratory for analysis.

Drilling was performed under the direction of ERS's Staff Geologist, and the subsurface materials in the borings were identified using visual and manual methods. Soils in each soil boring were logged and classified during drilling operations according to the Unified Soil Classification System (USCS). Lithologic logs of the soil borings are included as Appendix 2. Following drilling and sample collection, each boring location was abandoned with neat cement and a tremie pipe to the surface according to ACPWA requirements.

## **4.0 FINDINGS**

### **4.1 Subsurface Conditions**

The surface of the Site is unpaved. With the exception of soil borings EB1 and EB2, soils encountered consisted primarily of moderately dense, black to dark brown gravel-sand-silt mixtures to depths ranging from 2 to 7 feet bgs. These soils were underlain by moderately plastic, medium stiff, uniform silty clays to depths ranging from 20 to 24 feet bgs. Saturated silty sands were observed in soil boring EB3 between 18 to 20 feet bgs, EB4 between 20 to 22 feet bgs, and EB9 between 15 to 20 feet bgs. A slight unknown odor was noted in soil borings EB5 and EB9 from approximately 6.5 to 7.4 feet bgs. Gravel stringers were also noted in soil borings EB6 between 19.5 to 20.0 feet bgs and EB7 between 15.0 to 15.5 feet bgs.

Groundwater was encountered between 9 and 21 feet bgs. ERS was not able to determine the degree of groundwater confinement, but noted groundwater rose approximately 3 feet in the soil borings after encountering saturated soils.



Generally, soils to an approximate depth of 24 feet bgs exhibited very low to moderate estimated permeability and soils were predominantly silty clays with varying amounts of disseminated or interbedded gravels and sands to approximately 24 feet bgs.

#### 4.2 Analytical Results

Select soil samples were analyzed for TEPH as diesel-range and motor oil-range petroleum hydrocarbons and halogenated VOCs (HVOCs). TEPH soil sample analytical results are summarized in Table 1 and HVOC results are summarized in Table 2.

**TABLE 1 – SOIL SAMPLE TEPH ANALYTICAL RESULTS**

Sample ID	Depth (ft bgs)	TEPH as Diesel (mg/kg)	TEPH Motor Oil (mg/kg)
EB1-4.0	4.0	52	370
EB1-8.0	8.0	<b>250</b>	230
EB1-12.0	12.0	<0.99	<5.0
EB2-4.0	4.0	22	130
EB2-8.0	8.0	33	140
EB2-12.0	12.0	<0.99	<5.0
EB3-9.0	9.0	12	7.3
EB3-15.5	15.5	2.7	<5.0
EB4-9.0	9.0	2.3	<5.0
EB4-16.5	16.5	4.3	<5.0
EB5-7.4	7.4	<b>5,500</b>	2,500
EB5-16.0	16.0	11	<5.0
EB6-7.5	7.5	<1.0	<5.0
EB6-16.0	16.0	<1.0	<5.0
EB7-7.5	7.5	2.2	<5.0
EB7-15.0	15.0	2.4	<5.0
EB8-7.5	7.5	3.3	8.8
EB8-16.0	16.0	1.7	<5.0
EB9-7.4	7.4	<b>1,700</b>	670
EB9-15.5	15.5	<b>290</b>	130
<b>Commercial/Industrial ESL</b>		<b>180</b>	<b>2,500</b>

Note: milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)  
 ESL = Environmental Screening Level (RWQCB, Table B and D)  
**Bolded** values exceed Commercial/Industrial ESL

**TABLE 2 – SOIL SAMPLE HVOC ANALYTICAL RESULTS**

Sample ID	Depth (ft bgs)	Tetrachloroethene (mg/kg)	Other HVOCs (mg/kg)
EB1-4.0	4.0	<0.0048	<RL
EB1-8.0	8.0	<0.005	<RL
EB2-4.0	4.0	<0.0049	<RL
EB2-8.0	8.0	<0.0047	<RL
EB3-9.0	9.0	<0.0049	<RL
EB4-9.0	9.0	<0.005	<RL
EB5-7.4	7.4	<0.0049	<RL
EB6-7.5	7.5	0.048	<RL
EB7-7.5	7.5	<0.0046	<RL
EB8-7.5	7.5	<0.0048	<RL
EB9-7.4	7.4	<0.0049	<RL
<b>Commercial/Residential ESL</b>		<b>0.95</b>	<b>NA</b>

Note: milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)  
 ESL = Environmental Screening Level (RWQCB, Table B and D)  
 <RL = Reported below respective laboratory detection limit (see reports)

Select soil samples were analyzed for the 5 LUFT metals as lead, cadmium, chromium, nickel, and zinc. LUFT metal soil sample analytical results are summarized in Table 3.

**TABLE 3 – SOIL SAMPLE METAL ANALYTICAL RESULTS**

Sample ID	Depth (ft bgs)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
EB1-4.0	4.0	2.0	37	38	20	34
EB1-8.0	8.0	1.8	28	34	20	36
EB2-4.0	4.0	0.76	42	20	33	43
EB2-8.0	8.0	0.72	29	13	39	43
<b>Residential/ Commercial ESL</b>		<b>1.7/7.4</b>	<b>750/750</b>	<b>200/750</b>	<b>150/150</b>	<b>600/600</b>

Note: milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)  
 ESL = Environmental Screening Level (RWQCB, Table B)

Each grab groundwater sample was analyzed for TEPH and HVOCs. Grab groundwater results for TEPH are summarized in Table 4 and HVOC and TPHg analytical results are summarized in Table 5.

**TABLE 4 – GROUNDWATER SAMPLE TEPH ANALYTICAL RESULTS**

Sample ID	Depth (ft bgs)	TEPH as Diesel (µg/L)	TEPH Motor Oil (µg/L)
EB3-W-18.5	18.5	<b>730</b>	<b>610</b>
EB4-W-21.0	21.0	69	<300
EB5-W-21.0	21.0	150	<300
EB6-W-21.0	21.0	73	<300
EB7-W-15.5	15.5	<b>1,400</b>	<b>1,600</b>
EB8-W-8.5	8.5	<b>3,100</b>	<b>650</b>
EB9-W-15.5	15.5	51	<300
<b>Commercial/Industrial ESL</b>		<b>210</b>	<b>210</b>

Note: micrograms per liter (µg/L) approximately equal to parts per billion (ppb)  
ESL = Environmental Screening Level (RWQCB, Table B and D)  
**Bolded values exceed Commercial/Industrial ESL**

**TABLE 5 – GROUNDWATER SAMPLE TPHg/VOCs ANALYTICAL RESULTS**

Constituent	EB3-W-18.5	EB4-W-21.0	EB5-W-21.0	EB6-W-21.0	EB7-W-15.5	EB8-W-8.5	EB9-W-15.5	ESL
TPHg	N/A	N/A	N/A	<b>15,000*</b>	<50	<b>460</b>	N/A	<b>210</b>
Trichloroethene	<RL	<RL	<RL	<RL	4.3	<RL	<RL	<b>360</b>
Tetrachloroethene	<0.5	<0.5	1.6	<b>11,000</b>	7.1	<0.5	2.1	<b>120</b>
Ethylbenzene	<RL	<RL	<RL	<RL	<RL	5.0	<RL	<b>43</b>
M,p-Xylenes	<RL	<RL	<RL	<RL	<RL	1.3	<RL	<b>100</b>
Isopropylbenzene	<RL	<RL	<RL	<RL	<RL	2.0	<RL	---
Propylbenzene	<RL	<RL	<RL	<RL	<RL	3.2	<RL	---
1,3,5-Trimethylbenzene	<RL	<RL	<RL	<RL	<RL	1.8	<RL	---
1,2,4-Trimethylbenzene	<RL	<RL	<RL	<RL	<RL	5.5	<RL	---
Sec-Butylbenzene	<RL	<RL	<RL	<RL	<RL	5.0	<RL	---
n-Butylbenzene	<RL	<RL	<RL	<RL	<RL	3.7	<RL	---
Napthalene	<RL	<RL	<RL	<RL	<RL	<b>94</b>	<RL	<b>24</b>

Note: Analytical Results reported in micrograms per liter (µg/L) approximately equal to parts per billion (ppb)

ESL = Commercial/Industrial Environmental Screening Level (RWQCB, Table B and D)

**Bolded values exceed Commercial/Industrial ESL**

<RL = Reported below laboratory detection limit (see reports)

\* = Result flagged by the laboratory as primarily due to single spike and not resembling TPHg (see reports)

A copy of the analytical results and chain of custody record is included as Appendix 3.

---

## 5.0 DISCUSSION

ERS advanced nine exploratory soil borings, designated EB1 through EB9, in select locations across the Site and at a neighboring residential property located at 2859 Helen Street. Soil borings EB1 and EB2 were advanced to characterize fill material used to backfill the “north” and “middle” excavations. Soil borings EB3 and EB4 were advanced at the neighboring property located at 2859 Helen Street. Due to the property owner’s refusal to provide access, ERS was not able to advance soil boring EB5 in the backyard of 2851 Helen Street as proposed in ACC’s *Revised Work Plan - Subsurface Investigation*. In order to address ACHCSA concerns regarding soil and groundwater at the eastern limit of the soil excavation, ERS advanced soil borings EB5 at an approximate 20 degree angle in a west to east direction to collect soil and grab groundwater samples east of the perimeter of the property. In addition, soil boring EB9 was advanced in a similar fashion to soil boring EB5 to characterize soil adjacent to the property boundary of 2863 Helen Street. Soil boring EB8 was advanced to investigate the former “dist” tank. Soil borings EB6 and EB7 was advanced to evaluate soil and groundwater in the footprint of the former “putty & paint” factory.

Logging encountered soils confirmed that uniform, medium stiff, low to moderate permeability silty clays are the predominant soil type to approximately 24 feet bgs. Groundwater was generally observed at 15 to 21 feet bgs, depending on the permeability of the soil at the soil/groundwater interface, and appeared to rise approximately 3 feet bgs in the borings. Based on this observation in September, we believe groundwater is semi-confined during most of the calendar year.

Soil samples collected in backfilled areas reported varying relatively low concentrations of petroleum hydrocarbons and LUFT metals. The reported petroleum hydrocarbon concentrations are indicative of incidental residential/commercial impacts and the reported metal concentrations are consistent and indicative of naturally occurring background conditions. Since cadmium exceeded its residential ESL in two of the four analyzed soil samples, we evaluated available cadmium concentrations in shallow soil to evaluate background levels in this geographic region. In June 2008, ERS collected 6 soil samples from 2.0 feet bgs and 6 soil samples from 5.5 feet bgs at 4050 Horton Street and analyzed them for the CAM 17 metals. This project is located 0.47 miles north of the Site. Cadmium concentrations at 2.0 feet bgs ranged from 0.74 to 1.5 mg/kg, and concentrations at 5.5 feet bgs ranged from 0.79 to 1.0 mg/kg. Based on this comparison to nearby cadmium concentrations in shallow soil, and consistent metal concentrations in general, it is reasonable to assume that the reported cadmium concentrations in soil used to backfill excavations at the Site is generally representative of regional levels.

With one exception, soil samples collected between 15 to 16.5 feet bgs in soil borings EB3 through EB9 reported only minor concentrations of TEPH ranging from 1.7 mg/kg to 11 mg/kg. In extra soil boring EB9 (advanced primarily to obtain a grab groundwater sample), 290 mg/kg TEPH as diesel and 130 mg/kg TEPH as motor oil were reported at 15.5 feet in silty sand below the depth of first encountered groundwater. Therefore, the petroleum hydrocarbons reported in soil sample EB9-15.5 could potentially be the result of previous contact with impacted groundwater. The general lack of detectable petroleum hydrocarbons below approximately 15 feet bgs is consistent with the low permeability soils observed at the Site and previously reported analytical results in sidewall soil samples.

Offsite groundwater characterization data was obtained in vertical soil borings EB3 and EB4 and in angled soil borings EB5 and EB9, and potentially in soil boring EB6. Soil borings EB3 and EB4 reported detectable concentrations of TEPH with significant attenuation from EB3 to EB4, decreasing from a total TEPH of 1,340 µg/L to a total TEPH of 219 µg/L (assuming TEPH as motor oil is present at half its reporting limit of 300 µg/L). If TEPH decreases in a similar manner every 12 feet in groundwater as it migrates east toward the residence at 2859 Helen Street, the total TEPH concentration at the residence at 2859 Helen Street would approximate 5.8 µg/L.

While 20 feet deep angled soil borings would only move the actual collection point of the grab groundwater sample approximately 6.8 feet horizontally, ERS attempted to advance soil borings EB5 and EB9 at approximate 20 degree angles off vertical towards the residences at 2851 Helen and 2863 Helen, respectively. This angle was the maximum allowed by the truck-mounted Geoprobe equipment. The grab groundwater sample collected in soil boring EB5 reported 150 µg/L TEPH as diesel, TEPH as motor oil less than the reporting limit of 300 µg/L, and 1.6 µg/L Tetrachloroethene (PCE). The grab groundwater sample collected in soil boring EB9 reported 51 µg/L TEPH as diesel, TEPH as motor oil less than the reporting limit of 300 µg/L, and 2.1 µg/L PCE. Grab groundwater samples reported varying minor concentrations of TEPH and generally did not correlate with TEPH impacts in overlying soil. Generally, TEPH concentrations in first encountered groundwater were relatively low approximately 7 feet east of soil boring locations EB5 and EB9 despite elevated TEPH concentrations reported in soil samples collected in each soil boring at 7.4 feet bgs.

Soil borings EB6 through EB8 were advanced in select locations to further characterize groundwater in the southern portion of the Site or characterize previously uncharacterized areas adjacent to the "Putty & Paint" Factory and the former "Dist" tank. Soil boring EB6 was specifically located adjacent to soil boring B18, which

previously reported 1,640 µg/L TPHg in groundwater. The grab groundwater sample collected in EB6 at 21 feet bgs reported 73 µg/L TEPH as diesel, TEPH as motor oil less than the reporting limit of 300 µg/L, 15,000 µg/L TPHg, and 11,000 µg/L PCE. Since the laboratory flagged the TPHg as not resembling the gasoline chromatograph pattern and primarily being due to a single peak, it is most likely due to the reported PCE in groundwater. Similarly, the 1,640 µg/L TPHg reported in soil boring B18 was most likely PCE. The source of the PCE is unknown. The grab groundwater sample collected in soil boring EB7 reported 1,400 µg/L TEPH as diesel, 1,600 µg/L TEPH as motor oil, and 7.1 µg/L PCE. The grab groundwater sample collected in soil boring EB8 reported 3,100 µg/L TEPH as diesel, 650 µg/L TEPH as motor oil, and 94 µg/L naphthalene. Based on observed soils in the soil boring and the anomalously shallow depth of first encountered groundwater, we believe saturated soils at 8.5 feet in soil boring EB8 are perched water in the vicinity of the removed former "dist" tank and not representative of regional groundwater observed between 15 and 21 feet bgs.

## 6.0 CONCLUSIONS

Based on sample analytical results and field observations, ERS has concluded the following:

- Soils at the Site to 15 feet bgs are primarily medium stiff to stiff, moderately plastic silty clays with low to moderate estimated permeability;
- Site observations and soil sample analytical results indicate that TEPH impacts exist in soil and groundwater at the property boundaries with 2851, 2859, and 2863 Helen Street, and TEPH-impacted soil primarily exists at depths of approximately 7 to 15 feet bgs;
- Reported TEPH concentrations in soil and the depth of TEPH-impacted soil are generally consistent with previously reported data and grab groundwater results, and indicate that TEPH impacts in groundwater do not pose an unacceptable human health risk;
- Additional characterization has demonstrated that soil imported from Berkeley to backfill the excavations contains incidental petroleum hydrocarbons but generally meets acceptable soil quality standards and the soil was suitable for use as excavation backfill;

- Saturated soils at the Site below 15 feet bgs are primarily silty sands with moderate estimated permeability due to disseminated fines;
- Grab groundwater sample analytical results suggest that TEPH impact in groundwater is relatively minor and largely localized in the vicinity of the remediated areas of the Site;
- Grab groundwater samples collected at angled soil borings EB5 and EB9 appear to adequately address contaminant concerns at the property boundary of 2851 Helen Street and 2863 Helen Street;
- Additional subsurface investigation along the eastern border of the Site is not warranted and significant TEPH impacts in groundwater do not appear to be migrating in the estimated upgradient direction;
- PCE was reported in three of seven grab groundwater samples at concentrations of 1.6 µg/L, 7.1 µg/L, and 11,000 µg/L PCE was reported in the grab groundwater sample collected in soil boring EB6 advanced at the property boundary; and
- The source of PCE reported in EB6 is unknown, but based on the low concentration of PCE in soil boring EB7 and lack of PCE in soil boring EB8, is mostly due to an offsite source or illegal dumping in the vicinity of soil boring EB6; and
- With the exception of PCE in EB6, data obtained during this investigation was generally consistent with previously performed investigation and supports regulatory no further action.

## 7.0 RECOMMENDATIONS

Based on conclusions of this investigation, ERS recommends the following:

- Submit a copy of this report to the ACHCSA for review and discuss the possible need to further characterize soil and groundwater in the vicinity of soil boring EB6 for PCE;
- During any future site redevelopment, sample any soil exhibiting field indications of potential impact such as noticeable odor, soil discoloration, and/or fill materials for potential constituents of concern; and



- 
- Pending resolution of the PCE issue in soil boring EB6, request regulatory no further action in regards to the former remedial soil excavation and identified subsurface TEPH impacts associated with historic Site use as a metal heat treatment facility.

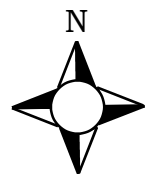
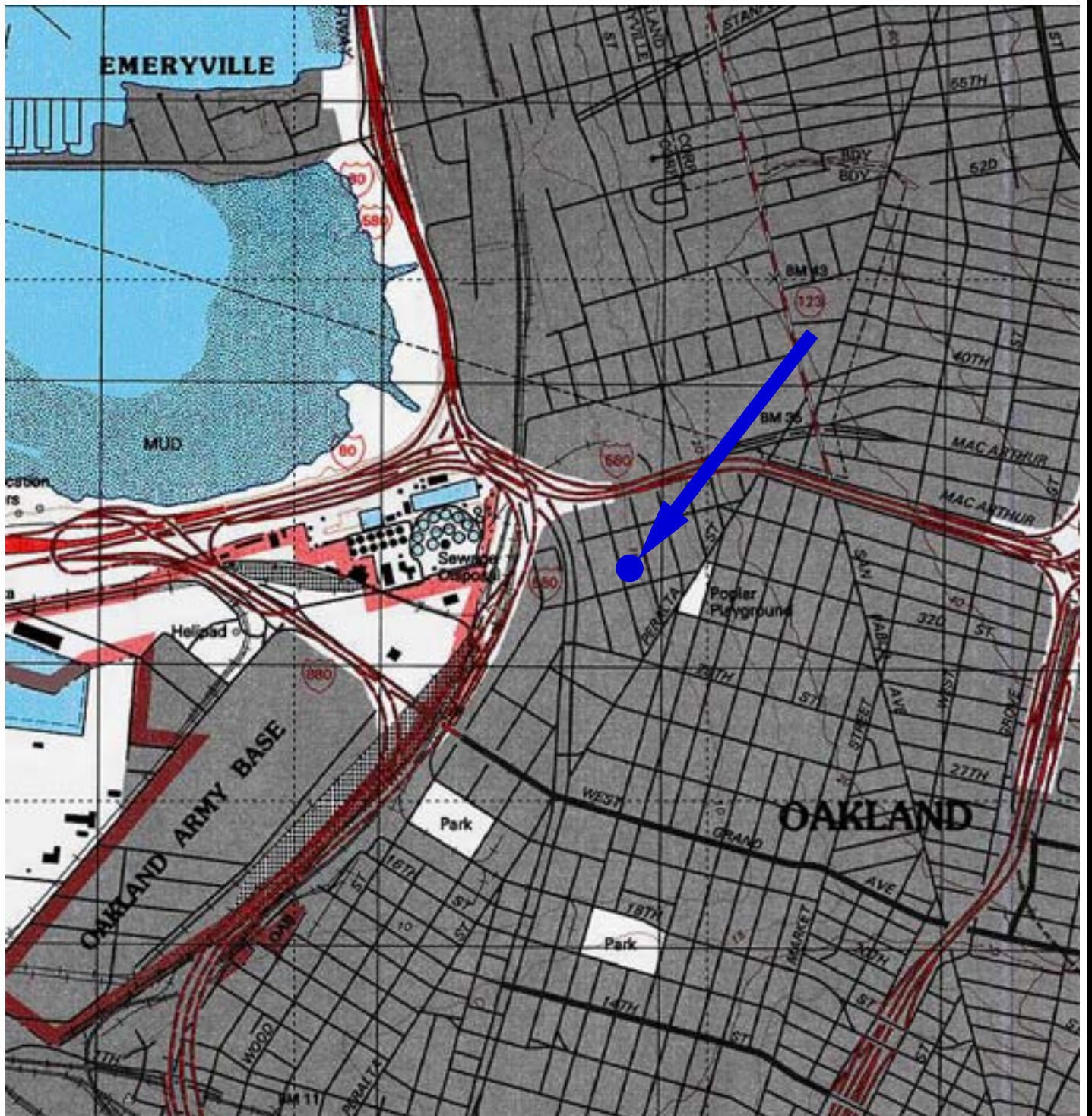
---

## **8.0 LIMITATIONS**

The service performed by ERS has been conducted in a manner consistent with the levels of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area. No other warranty, expressed or implied, is made.

The conclusions presented in this report are professional opinions based on the indicated data described in this report and applicable regulations and guidelines currently in place. They are intended only for the purpose, site, and project indicated. Opinions and recommendations presented herein apply to site conditions existing at the time of our study.

ERS has included analytical results from a state-certified laboratory, which performs analyses according to procedures suggested by the U.S. Environmental Protection Agency and the State of California. ERS is not responsible for laboratory errors in procedure or result reporting.



**Location Map**  
**1549 32nd Street, Oakland, California**



Source: National Geographic TOPO!

**Figure**  
**1**  
**ers**

32nd Street

Sidewalk

**LEGEND**

-  Area of Excavation
-  Footprint of former "Putty" and "Paint" Factory
- EB1 ○ ERS Soil Boring Location
- B6 ● ERAS Soil Boring Locations that exceeded ESLs
- B18 ■ Environmental Restoration Services Soil Boring Locations that exceeded ESLs

North Excavation

EB1 ○

EB9 ○ (angled boring ~20 degrees)

2863 Helen

B5 (1,900 TPH-ho)

○ EB3

2859 Helen

○ EB4

SWJ-7' (3,400 TPH-ho)

(angled boring ~20 degrees)

2851 Helen

EB5 ○

SWB-7' (1,300 TPH-ho)

Middle Excavation

EB2 ○

Footprint of former "Putty" & "Paint" Factory

South Excavation

(1,640 TPHg)

○ EB7

Former "Dist" tank

■ B18

○ EB6

Outside Yard

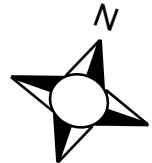
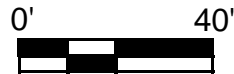
EB8 ○

Property Line


Hannah Street

Sidewalk

Sidewalk



**Site Plan**  
**1549 32nd Street, Oakland, California**  
 Source: ACC Revised Work Plan,  
 April 4, 2008

**Figure 2**  




# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street  
Hayward, CA 94544-1395  
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/09/2008 By jamesy

Permit Numbers: W2008-0634  
Permits Valid from 09/18/2008 to 09/18/2008

Application Id: 1220979537843  
Site Location: 1549 32nd St, Oakland, CA  
Project Start Date: 09/18/2008  
Requested Inspection: 09/18/2008  
Scheduled Inspection: 09/18/2008 at 1:30 PM (Contact your inspector, Ron Smalley at (510) 670-5407, to confirm.)

City of Project Site:Oakland  
Completion Date:09/18/2008

Applicant: Environmental Risk Specialties ERS) - Ken Blume  
1600 Riviera Avenue #310, Walnut Creek, CA 94596  
Property Owner: Rush Property Group LLC  
2200 Adeline St #350, Oakland, CA 94607  
Client: \*\* same as Property Owner \*\*

Phone: 925-938-1600 x103  
Phone: 510-763-7165

Total Due: \$230.00  
Receipt Number: WR2008-0315 Total Amount Paid: \$230.00  
Payer Name : Environmental Risk Specialties Paid By: CHECK PAID IN FULL

## Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 8 Boreholes  
Driller: Environmental Control Associates - Lic #: 695970 - Method: auger

Work Total: \$230.00

### Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0634	09/09/2008	12/17/2008	8	2.00 in.	20.00 ft

### Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the

## **Alameda County Public Works Agency - Water Resources Well Permit**

permits and requirements have been approved or obtained.

5. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 or email to [ronaldws@acpwa.org](mailto:ronaldws@acpwa.org) at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

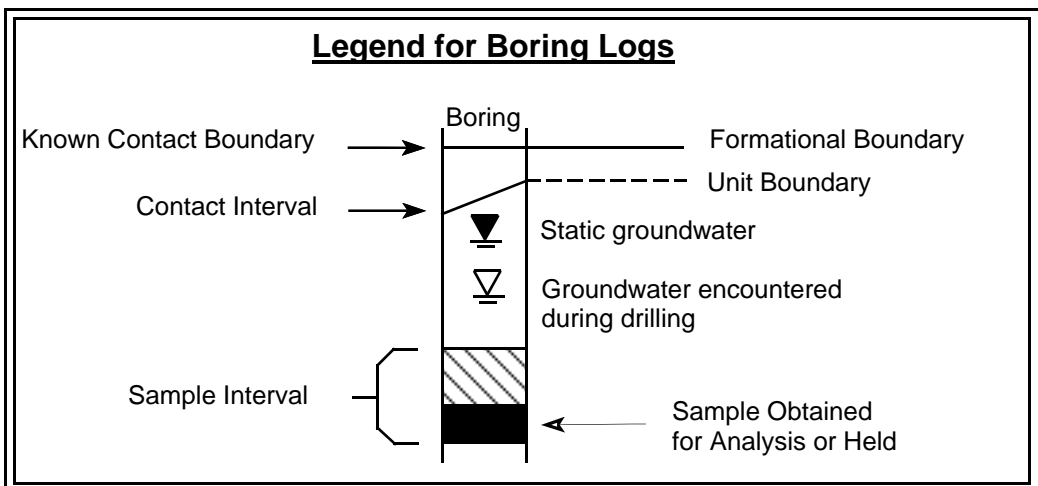
6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

---

## UNIFIED SOIL CLASSIFICATION SYSTEM




MAJOR DIVISIONS		TYPICAL NAMES					
COARSE GRAINED SOILS	<b>GRAVELS</b>  more than half coarse fraction is larger than Number 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES	<b>GW</b>	well graded gravels, gravel-sand mixtures			
			<b>GP</b>	poorly graded gravels, gravel-sand mixtures			
		GRAVELS WITH OVER 12% FINES	<b>GM</b>	silty gravels, poorly graded gravel-sand silt mixtures			
			<b>GC</b>	clayey gravels, poorly graded gravel-sand clay mixtures			
	<b>SANDS</b>  more than half coarse fraction is smaller than Number 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES	<b>SW</b>	well graded sands, gravelly sands			
			<b>SP</b>	poorly graded sands, gravelly sands			
		SANDS WITH OVER 12% FINES	<b>SM</b>	silty sands, poorly graded sand-silt mixtures			
			<b>SC</b>	clayey sands, poorly graded sand-clay mixtures			
			FINE GRAINED SOILS	<b>SILTS AND CLAYS</b> liquid limit less than 50		<b>ML</b>	inorg. silts and very fine sands, rock flour silty or clayey sands, or clayey silts w/ sl. plasticity
					<b>CL</b>	inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays	
	<b>OL</b>	organic clays and organic silty clays of low plasticity					
<b>SILTS AND CLAYS</b> liquid limit greater than 50		<b>MH</b>		inorganic silty, micaceous or diatomaceous fine sandy or silty soils, elastic silts			
	<b>CH</b>	inorganic clays of high plasticity, fat clays					
	<b>OH</b>	organic clays of medium to high plasticity organic silts					
<b>HIGHLY ORGANIC SOILS</b>		<b>PT</b>		peat and other highly organic soils			






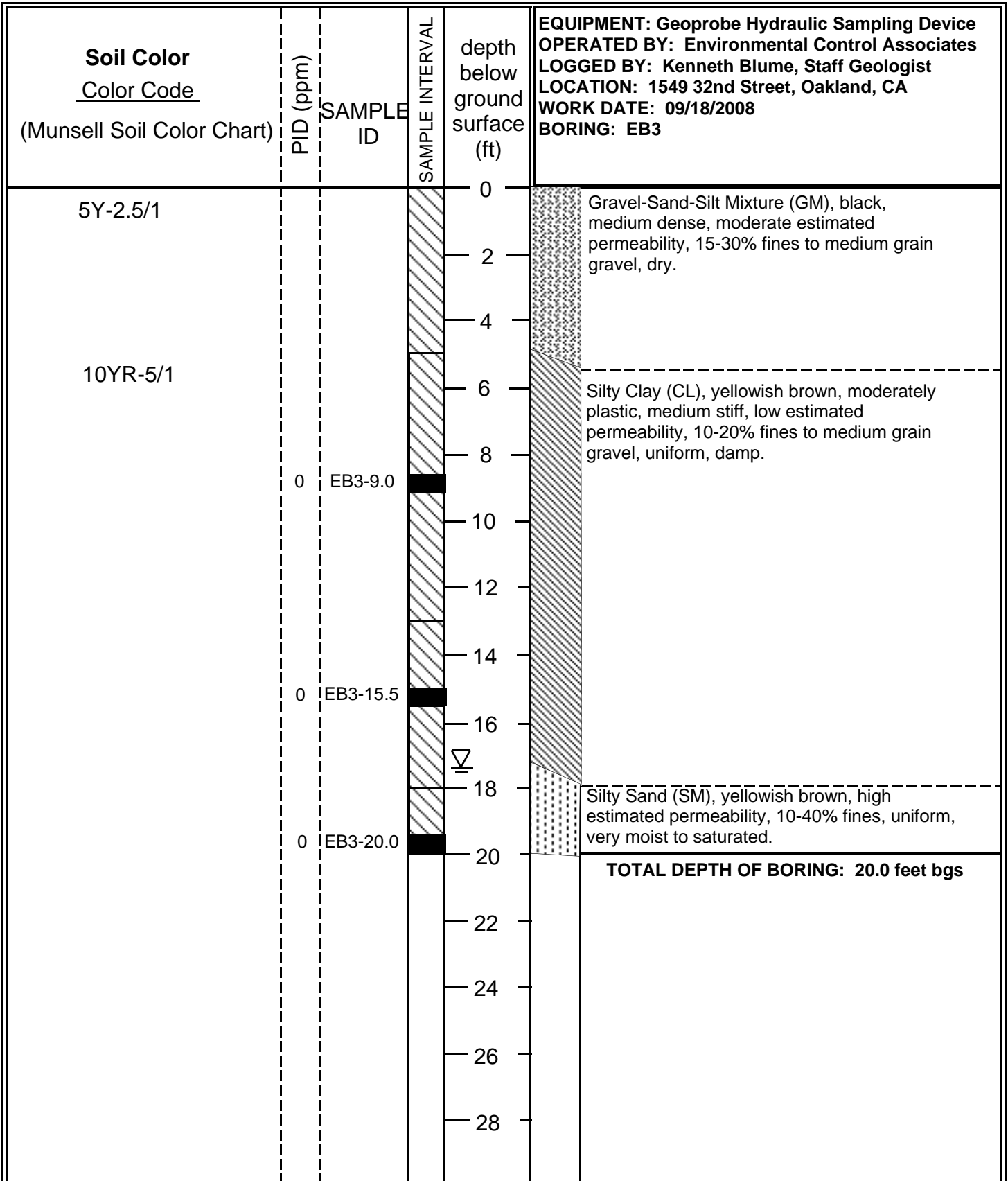
**ERS Corporation**  
 1600 Riviera Avenue, Suite 310  
 Walnut Creek, California 94596  
 (925) 938-1600 Fax: (925) 938-1610

Site: **1549 32nd Street**  
**Oakland, California**



<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT:</b> Geoprobe Hydraulic Sampling Device <b>OPERATED BY:</b> Environmental Control Associates <b>LOGGED BY:</b> Kenneth Blume, Staff Geologist <b>LOCATION:</b> 1549 32nd Street, Oakland, CA <b>WORK DATE:</b> 09/18/2008 <b>BORING:</b> EB1
10YR-5/6	0	EB1-4.0		0 2 4	Gravel-Sand-Silt Mixture (GM), dense, INTERPRETED AS FILL
	0	EB1-8.0		6 8	Silty Clay (CL), yellowish brown, moderately plastic, medium stiff, low estimated permeability, 10-20% fines, uniform, damp.
	0	EB1-12.0		10 12 14 16 18 20 22 24 26 28	<b>TOTAL DEPTH OF BORING: 12.0 feet bgs</b>
<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610			Case Number <b>RO# 2508</b>	Title: <b>LOG OF BORING EB1</b>  1549 32nd Street Oakland, California	
			<b>Date: 09/19/08</b>		




<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB2</b>
2.5Y-5/2	0	EB2-4.0		0 2 4	Gravel-Sand-Silt Mixture (GM), dense, INTERPRETED AS FILL
	0	EB2-8.0		6 8	Silty Clay (CL), olive grey, moderately plastic, medium stiff, low estimated permeability, 10-20% fines, uniform, damp.
	0	EB2-12.0		10 12 14 16 18 20 22 24 26 28	<b>TOTAL DEPTH OF BORING: 12.0 feet bgs</b>
<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610			Case Number <b>RO# 2508</b>	Title: <b>LOG OF BORING EB2</b>  1549 32nd Street Oakland, California	
			<b>Date: 09/19/08</b>		



**ERS Corporation**  
 1600 Riviera Avenue, Suite 310  
 Walnut Creek, California 94596  
 (925) 938-1600 FAX: (925) 938-1610

Case Number  
**RO# 2508**  
 Date: **09/19/08**

Title: **LOG OF BORING EB3**  
 1549 32nd Street  
 Oakland, California

<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB4</b>
5Y-2.5/1				0	Gravel-Sand-Silt Mixture (GM), black, medium dense, moderate estimated permeability, 15-30% fines to medium grain gravel, dry.
10YR-5/1					
	0	EB4-9.0			4
					6
	0	EB4-16.5		8	
	0	EB4-19.0		10	
				12	
				14	
				16	
				18	
				20	
				22	Silty Sand (SM), yellowish brown, high estimated permeability, 10-40% fines, uniform, very moist to saturated.
				24	<b>TOTAL DEPTH OF BORING: 22.0 feet bgs</b>
				26	
				28	




**ERS Corporation**  
1600 Riviera Avenue, Suite 310  
Walnut Creek, California 94596  
(925) 938-1600 FAX: (925) 938-1610





Case Number  
**RO# 2508**  


---

**Date: 09/19/08**

Title: **LOG OF BORING EB4**  
1549 32nd Street  
Oakland, California

<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth (ft) <i>true vertical depth</i>	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB5 (advanced at ~20 degree angle)</b>
				0 2 4 <b>3.7</b> 6	Gravel-Sand-Silt Mixture (GM), dense, INTERPRETED AS FILL
2.5Y-5/2	0.3	EB5-7.4		<b>8</b> 7.4 10	Silty Clay (CL), olive grey, moderately plastic, medium stiff, low estimated permeability, 10-20% fines, uniform, damp, petroleum odor noted from 6.5 to 7.4 feet bgs.
10YR-5/6	0	EB5-11.1		12 14 16 <b>14.8</b> 18	Silty Clay (CL), as above, yellowish brown, medium estimated permeability, 50 to 75% fines, moist, no odor noted.
2.5Y-5/2	0	EB5-16.0		20 ▽ <b>18.5</b> 22	Silty Clay (CL), as above, olive grey, soft, very moist
				24 <b>22.2</b> 26 28	<b>TOTAL DEPTH OF BORING: 22.2 feet bgs</b>
<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610			Case Number <b>RO# 2508</b>	Title: <b>LOG OF BORING EB5</b>	
			<b>Date: 09/19/08</b>	1549 32nd Street Oakland, California	

<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB6</b>
10YR-3/4 5Y-2.5/1	0			0 2	Gravel-Sand-Silt Mixture (GM), dark brown, medium dense, moderate estimated permeability, 15-30% fines to medium grain gravel, dry.
2.5Y-4/2	1.0	EB6-7.5		4 6 8	Silty Clay (CL), black, moderately plastic, medium stiff, low estimated permeability, 10-20% fines to medium grain gravel, uniform, damp.  Silty Clay (CL), as above, brownish grey
10YR-5/6	0.6  1.4	EB6--12.0  EB6-16.0		10 12 14 16	Silty Clay (CL), as above, yellow brown, appr. 6-inch disseminated gravel from 19.5 to 20.0 feet (very moist), 30-50 % fines to medium grain gravel, uniform, moist.
	0.7	EB6-20.0		18 20 22	
				24 26 28	<b>TOTAL DEPTH OF BORING: 24.0 feet bgs</b>
<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610			Case Number <b>RO# 2508</b>	Title: <b>LOG OF BORING EB6</b>	
			<b>Date: 09/19/08</b>	1549 32nd Street Oakland, California	

Soil Color Color Code (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB7</b>
10YR-3/4	0		[Hatched pattern]	0	Gravel-Sand-Silt Mixture (GM), dark brown, medium dense, moderate estimated permeability, 15-30% fines to medium grain gravel, dry.
10YR-5/1	0		[Hatched pattern]	2	Gravel-Sand-Silt Mixture (GM), as above, light grey, slightly damp
2.5Y-5/2	0	EB7-7.5	[Solid black]	4	Silty Clay (CL), olive grey, moderately plastic, medium stiff, low estimated permeability, 10-20% fines to medium grain gravel, uniform, damp.
2.5Y-4/4	0	EB7--12.0	[Hatched pattern]	6	Silty Clay (CL), as above, olive brown, moist
2.5Y-5/6	0	EB7-15.0	[Solid black]	8	Silty Clay (CL), light brown, low plasticity, soft, appr. 4-inch disseminated gravel from 15.0 to 15.5 feet (saturated), 30-50 % fines to medium grain gravel, uniform, very moist.
	0	EB7-20.0	[Solid black]	10	
	0		[Hatched pattern]	12	
	0		[Hatched pattern]	14	
	0		[Hatched pattern]	16	
	0		[Hatched pattern]	18	
	0		[Hatched pattern]	20	<b>TOTAL DEPTH OF BORING: 20.0 feet bgs</b>

<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610	Case Number <b>RO# 2508</b> <hr/> <b>Date: 09/19/08</b>	Title: <b>LOG OF BORING EB7</b>  1549 32nd Street Oakland, California
----------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------	--------------------------------------------------------------------------------



<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth below ground surface (ft)	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB8</b>
2.5YR-N3				0	Gravel-Sand-Silt Mixture (GM), greyish, medium dense, moderate estimated permeability, 15-20% fines to medium grain gravel, dry.
10YR-5/6	0			2	Gravelly Clay (CL), yellow-brown, moderately plastic, medium stiff, low estimated permeability, 10-30% fines to medium grain gravel, uniform, dry.
5YR-3/3				4	Gravelly Clay (CL), as above, reddish-brown, damp
2.5Y-5/2	0.1	EB8-7.5		6	
2.5Y-5/2	0	EB8--8.5		8	Silty Clay (CL), as above, olive-grey, very moist
10YR-3/4	0			10	
2.5Y-5/6	0			12	Silty Gravel (CL), as above, dark brown
2.5Y-5/6	0			14	Silty Clays (CL), as above, light brown, 0-10% disseminated gravels, moist
	0	EB8-16.0		16	<b>TOTAL DEPTH OF BORING: 16.0 feet bgs</b>
				18	
				20	
				22	
				24	
				26	
				28	

**ERS Corporation**  
1600 Riviera Avenue, Suite 310  
Walnut Creek, California 94596  
(925) 938-1600 FAX: (925) 938-1610

Case Number  
**RO# 2508**  


---

**Date: 09/19/08**

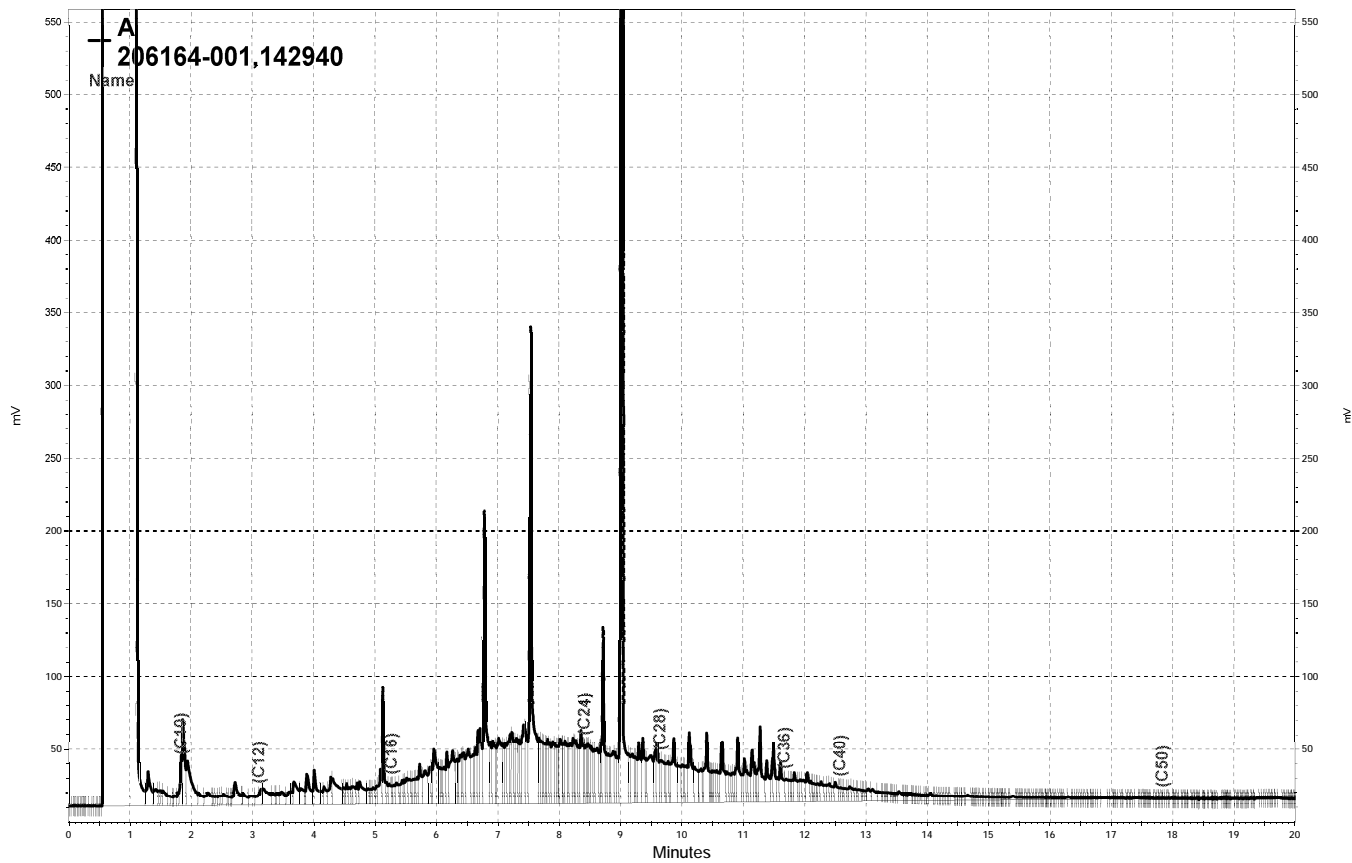
Title: **LOG OF BORING EB8**  
1549 32nd Street  
Oakland, California

<b>Soil Color</b> <u>Color Code</u> (Munsell Soil Color Chart)	PID (ppm)	SAMPLE ID	SAMPLE INTERVAL	depth (ft) <i>true vertical depth</i>	<b>EQUIPMENT: Geoprobe Hydraulic Sampling Device</b> <b>OPERATED BY: Environmental Control Associates</b> <b>LOGGED BY: Kenneth Blume, Staff Geologist</b> <b>LOCATION: 1549 32nd Street, Oakland, CA</b> <b>WORK DATE: 09/18/2008</b> <b>BORING: EB9 (advanced at ~20 degree angle)</b>	
5Y-2.5/1				0	Gravel-Sand-Silt Mixture (GM), dark gray, medium dense, moderate estimated permeability, 15-30% fines to medium grain gravel, dry (interpreted as FILL)	
2.5Y-5/2				2 4 <b>3.7</b>	Gravelly Clay (CL), olive grey, moderately plastic, medium stiff, low to moderate estimated permeability, 10-20% fines, uniform, damp.	
10YR-5/6	0.2	EB9-7.4	█	8 <b>7.4</b>	Silty Clay (CL), as above, low estimated permeability, 10-40% fines to medium grain gravels, uniform, damp, petroleum odor noted from 6.5 to 7.4 feet bgs.	
10YR-5/6	0	EB9-11.1	█	12 <b>11.1</b>	Silty Clay (CL), as above, yellowish brown.	
2.5Y-5/2	0	EB9-15.5	█	16 ▽ <b>14.8</b> 18 <b>18.5</b>	Silty Sand (SM), yellowish brown, moderate estimated permeability, 10-40% fines, fine to medium grain, uniform, saturated.	
				22 <b>22.2</b>	Silty Clay (CL), olive grey, low estimated permeability, 10-20% fines, uniform, moist.. <b>TOTAL DEPTH OF BORING: 22.2 feet bgs</b>	
<b>ERS Corporation</b> 1600 Riviera Avenue, Suite 310 Walnut Creek, California 94596 (925) 938-1600 FAX: (925) 938-1610	Case Number <b>RO# 2508</b>		Title: <b>LOG OF BORING EB9</b>  1549 32nd Street Oakland, California			
		<b>Date: 09/19/08</b>				

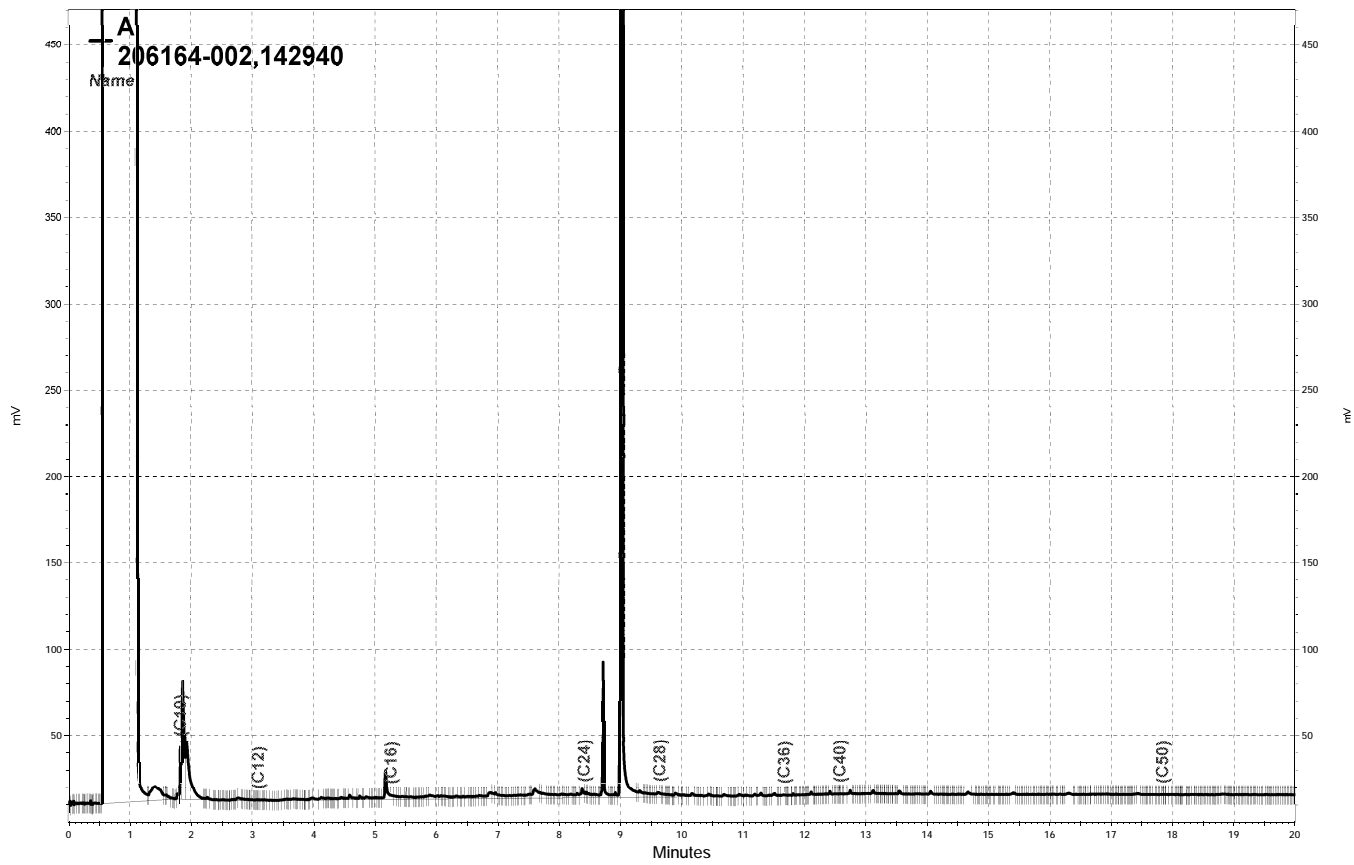




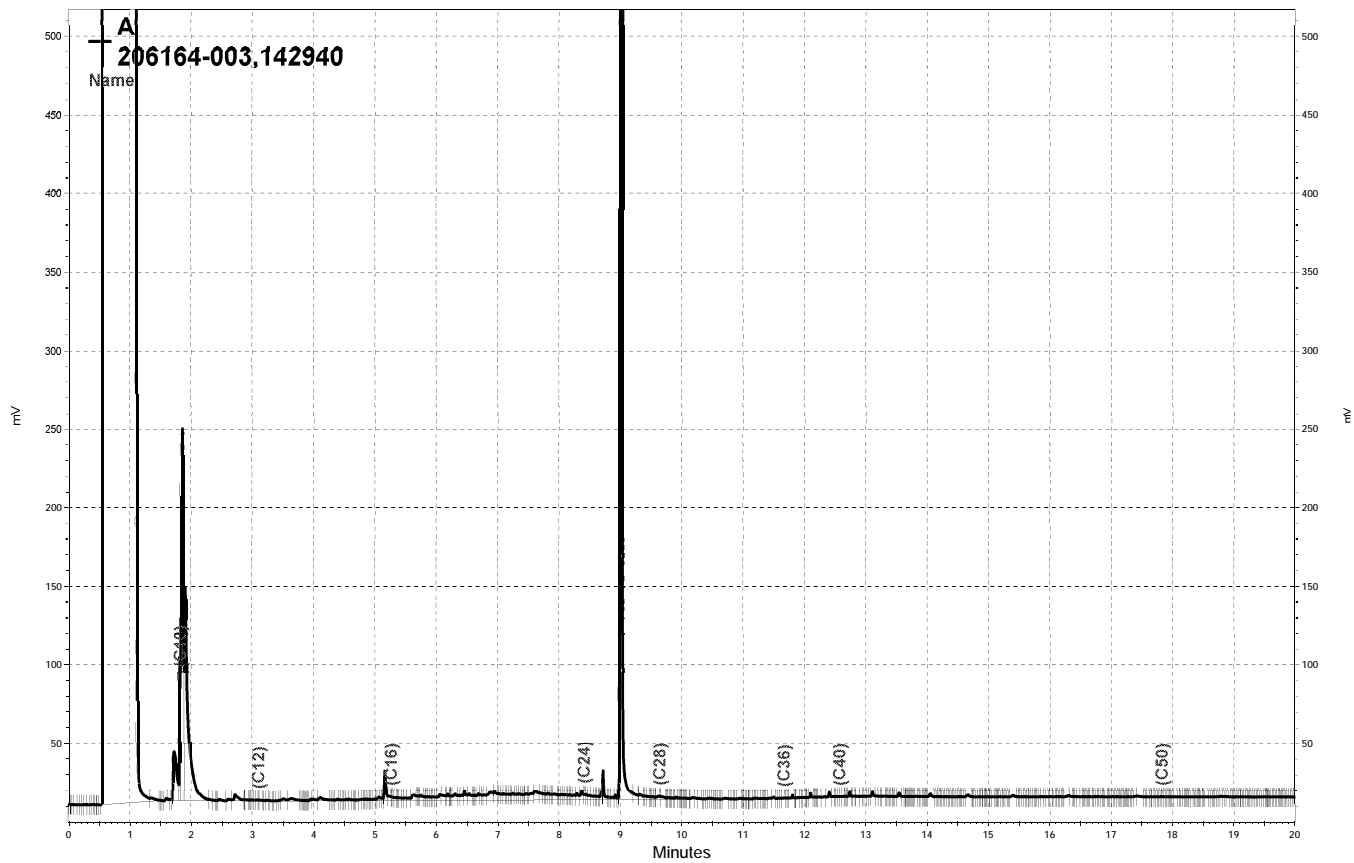




— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\270a018, A

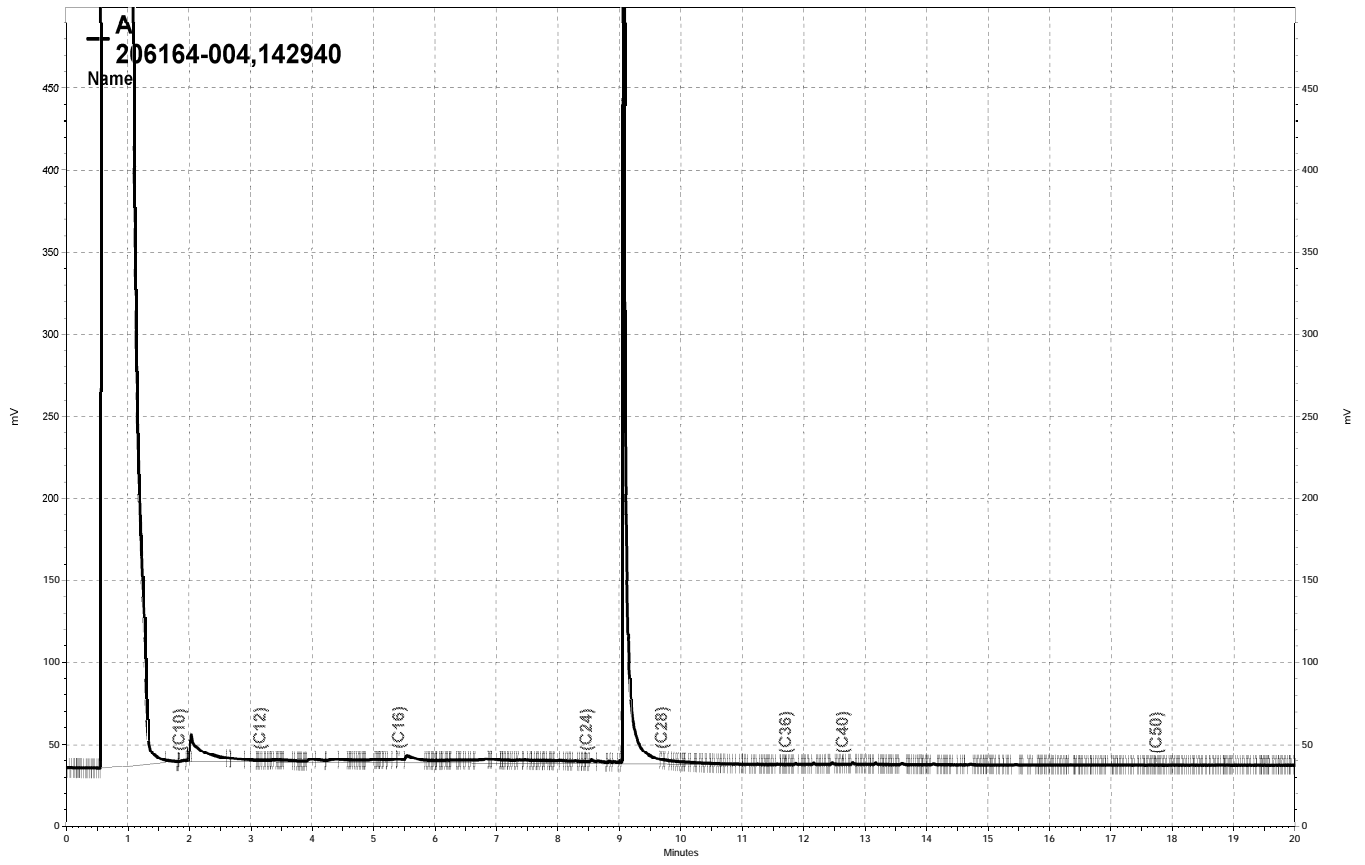


\\Lims\gdrive\ezchrom\Projects\GC17A\Data\270a019, A

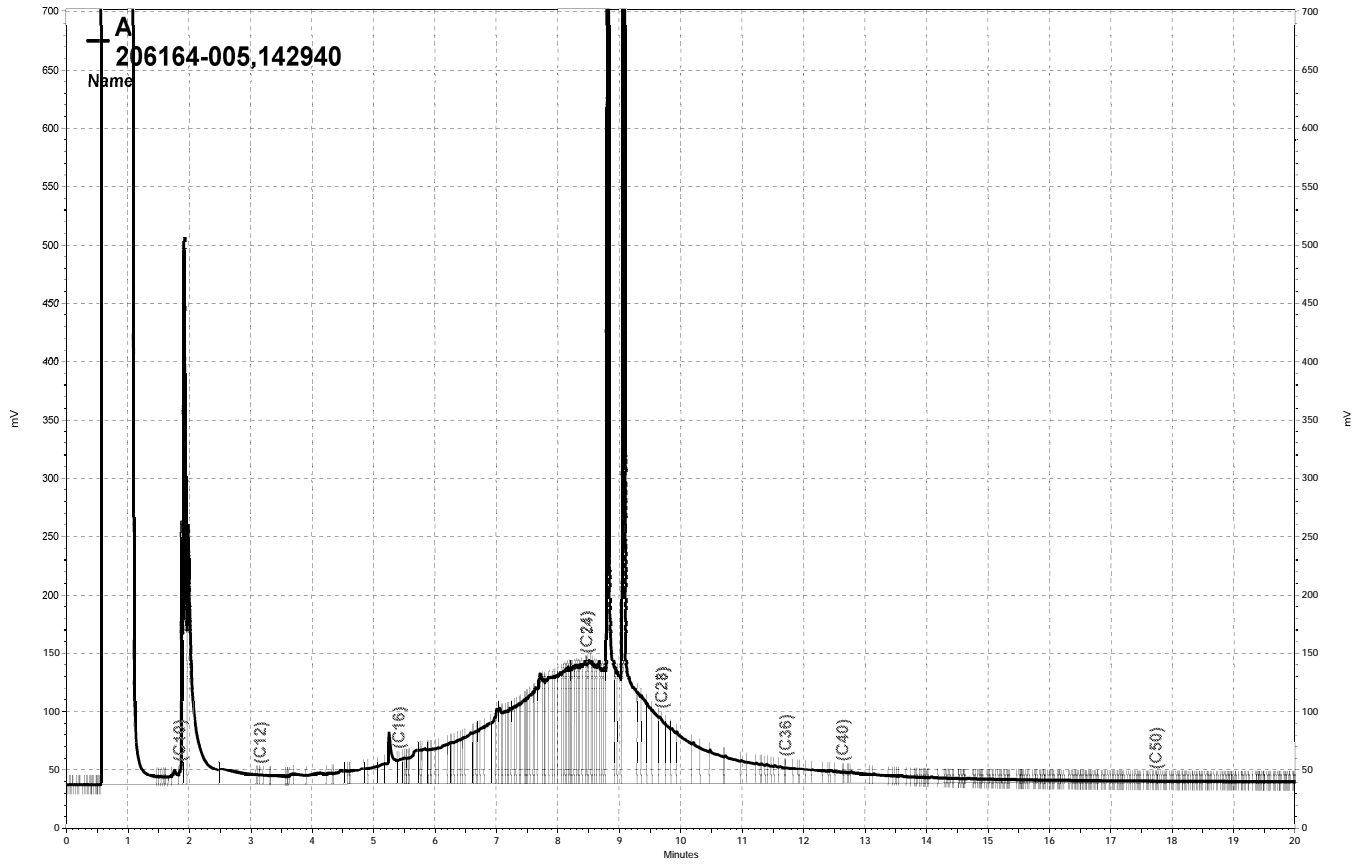


\\Lims\gdrive\ezchrom\Projects\GC17A\Data\270a020, A

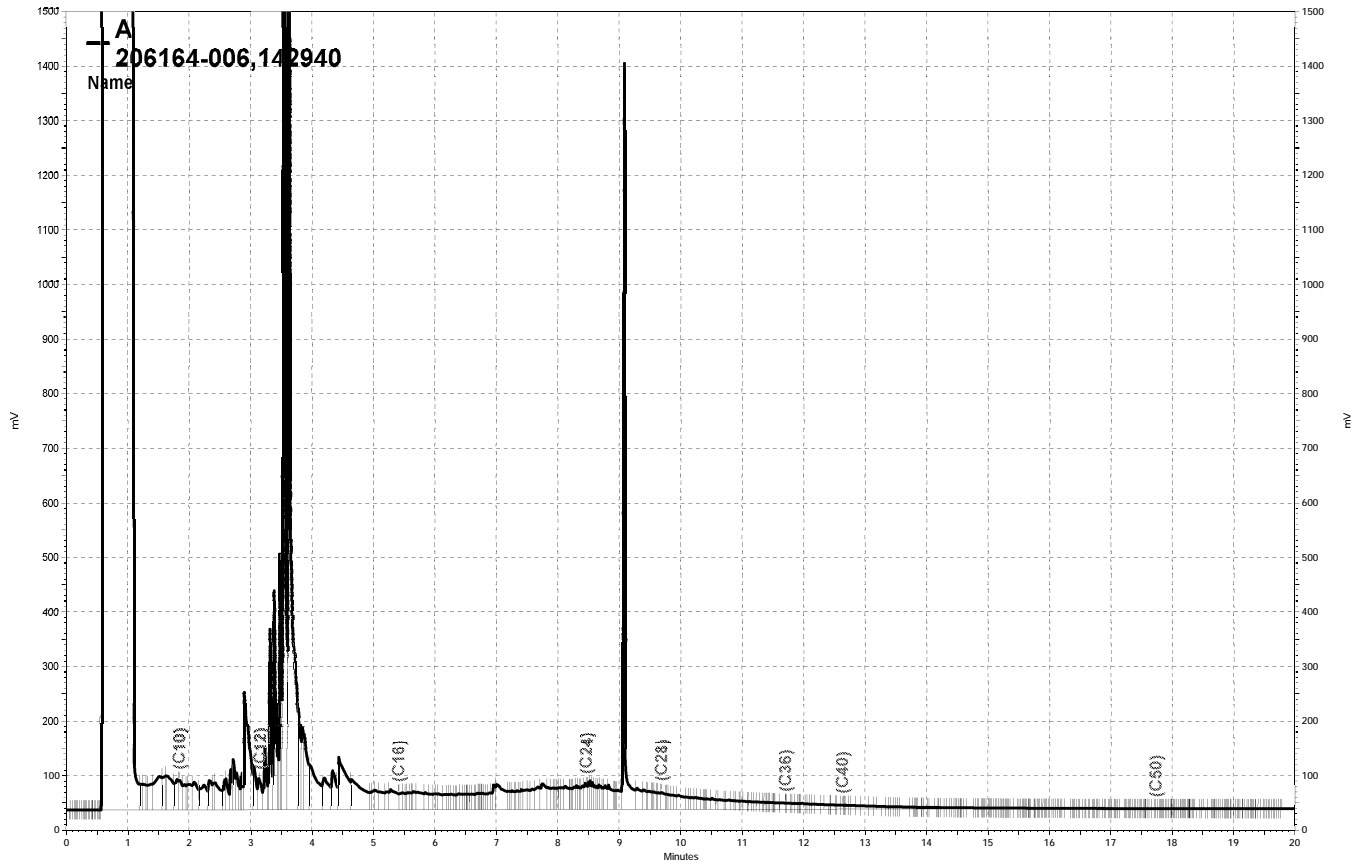




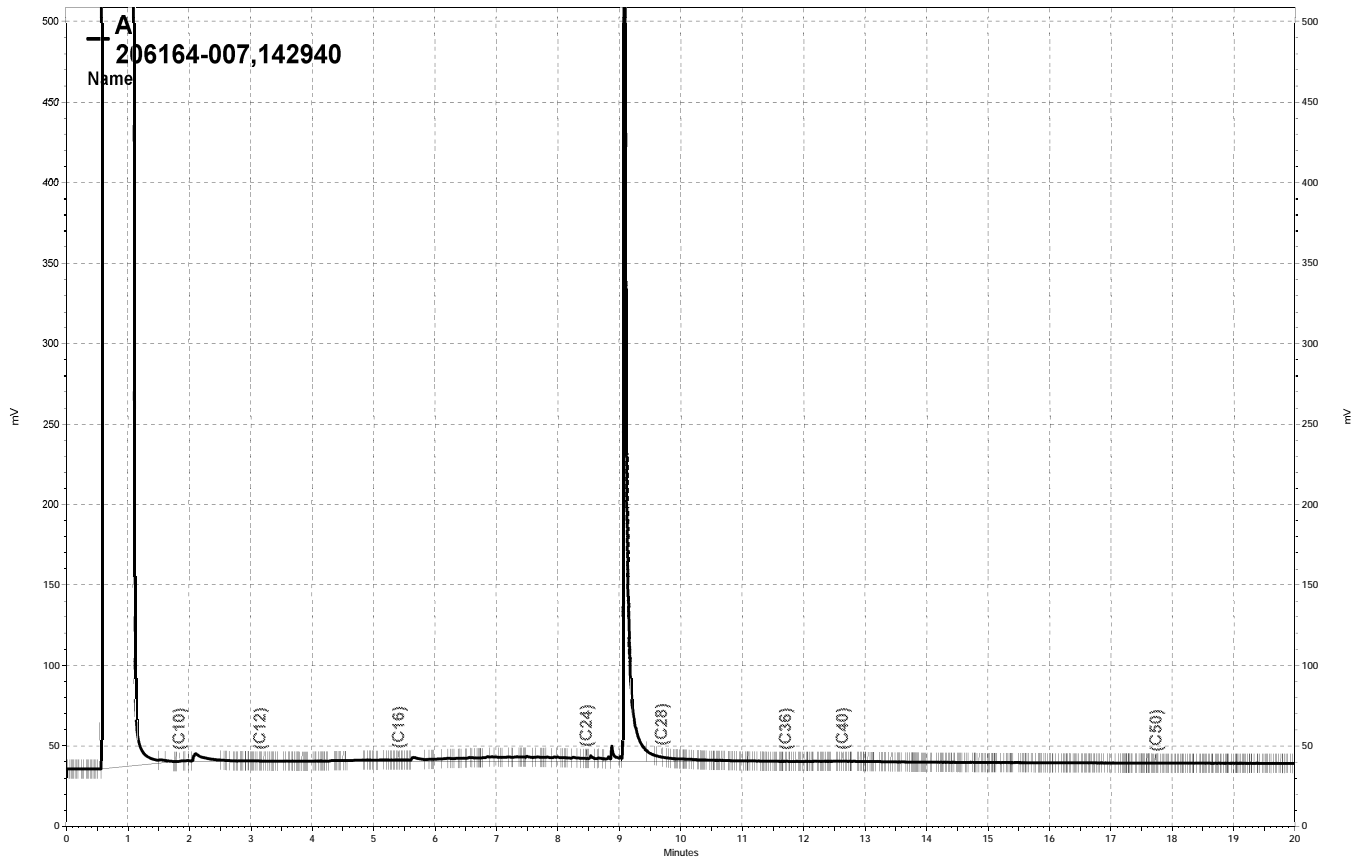
— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a12, A



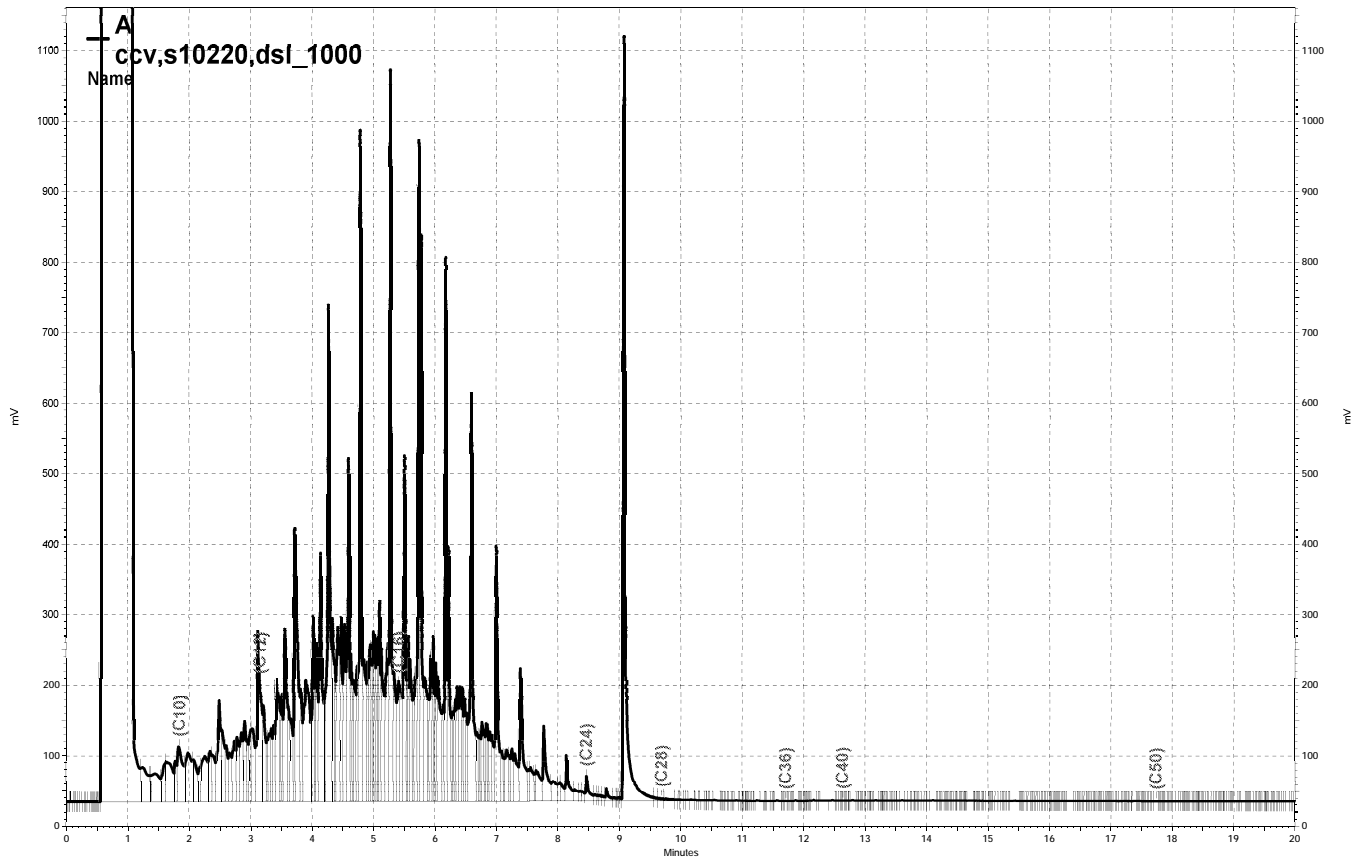
\\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a15, A



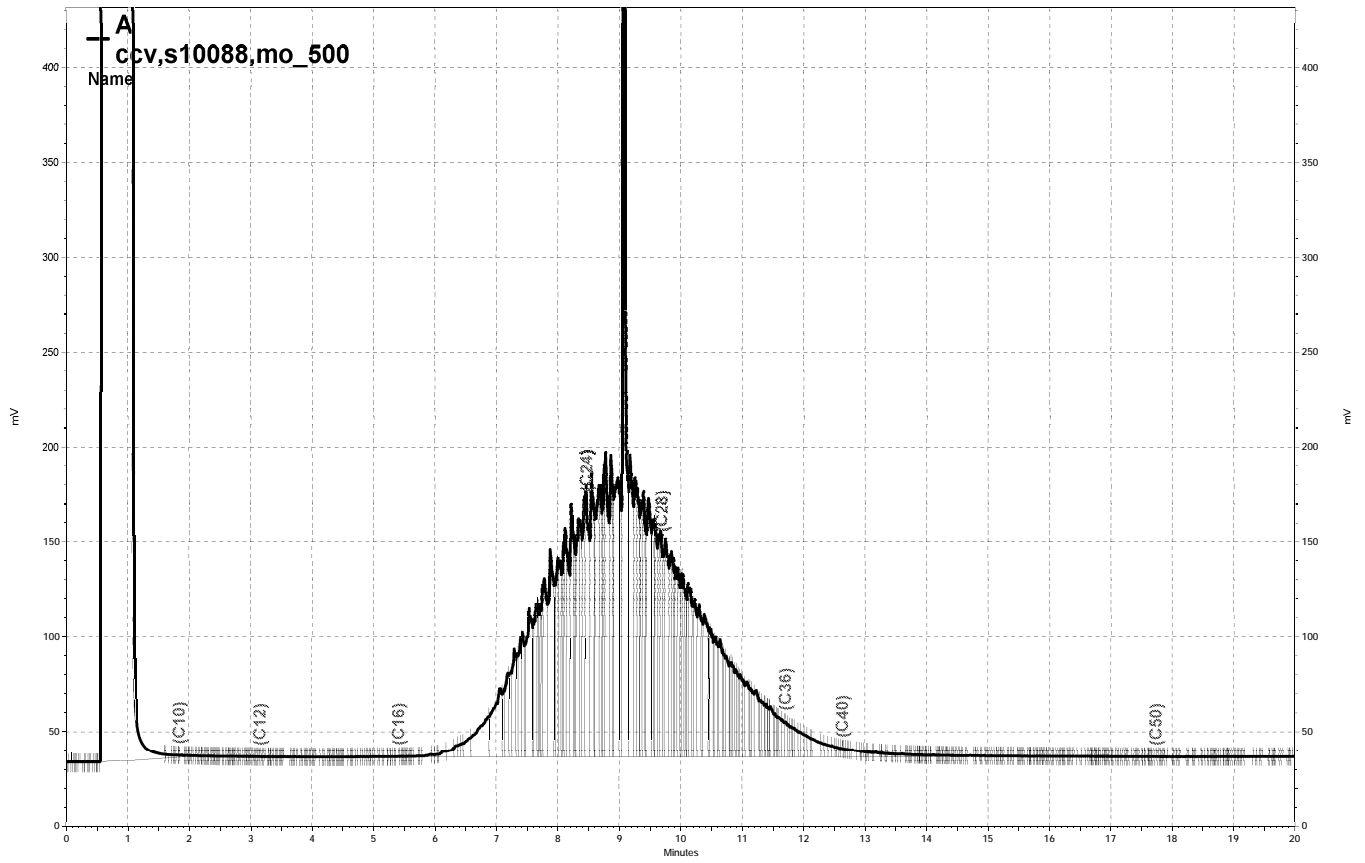
\\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a14, A



— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a13, A



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a10, A



— \\Lims\gdrive\ezchrom\Projects\GC11A\Data\270a11, A

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Field ID:	EB1-4.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-009	Analyzed:	09/22/08
Diln Fac:	5.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	52 Y	5.0
Motor Oil C24-C36	370	25

Surrogate	%REC	Limits
Hexacosane	107	46-130

Field ID:	EB1-8.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-010	Analyzed:	09/22/08
Diln Fac:	2.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	250 Y	2.0
Motor Oil C24-C36	230	9.9

Surrogate	%REC	Limits
Hexacosane	89	46-130

Field ID:	EB1-12.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-011	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	89	46-130

Field ID:	EB2-4.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-012	Analyzed:	09/22/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	22 Y	1.0
Motor Oil C24-C36	130	5.0

Surrogate	%REC	Limits
Hexacosane	111	46-130

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

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Field ID:	EB2-8.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-013	Analyzed:	09/22/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	33 Y	1.0
Motor Oil C24-C36	140	5.0

Surrogate	%REC	Limits
Hexacosane	115	46-130

Field ID:	EB2-12.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-014	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	83	46-130

Field ID:	EB8-7.5	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-015	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	3.3 Y	1.0
Motor Oil C24-C36	8.8	5.0

Surrogate	%REC	Limits
Hexacosane	98	46-130

Field ID:	EB8-16.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-017	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	1.7 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	108	46-130

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



Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Field ID:	EB7-7.5	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-018	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	2.2 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	110	46-130

Field ID:	EB7-15.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-020	Analyzed:	09/22/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	2.4 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	99	46-130

Field ID:	EB6-7.5	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-022	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	117	46-130

Field ID:	EB6-16.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-024	Analyzed:	09/22/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	99	46-130

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

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Field ID:	EB5-7.4	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-026	Analyzed:	09/22/08
Diln Fac:	50.00	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	5,500 Y	50
Motor Oil C24-C36	2,500	250

Surrogate	%REC	Limits
Hexacosane	DO	46-130

Field ID:	EB5-16.0	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-028	Analyzed:	09/22/08
Diln Fac:	1.000	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	11 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	98	46-130

Field ID:	EB9-7.4	Batch#:	142737
Type:	SAMPLE	Prepared:	09/20/08
Lab ID:	206164-030	Analyzed:	09/22/08
Diln Fac:	20.00	Prep:	EPA 3550B

Analyte	Result	RL
Diesel C10-C24	1,700 Y	20
Motor Oil C24-C36	670	100

Surrogate	%REC	Limits
Hexacosane	DO	46-130

Field ID:	EB9-15.5	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-032	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	290 Y	1.0
Motor Oil C24-C36	130	5.0

Surrogate	%REC	Limits
Hexacosane	114	46-130

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

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Field ID:	EB3-9.0	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-033	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	12 Y	1.0
Motor Oil C24-C36	7.3	5.0

Surrogate	%REC	Limits
Hexacosane	129	46-130

Field ID:	EB3-15.5	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-034	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	2.7 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	94	46-130

Field ID:	EB4-9.0	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-036	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	2.3 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	125	46-130

Field ID:	EB4-16.5	Batch#:	142784
Type:	SAMPLE	Prepared:	09/22/08
Lab ID:	206164-037	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE

Analyte	Result	RL
Diesel C10-C24	4.3 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	112	46-130

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

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Analysis:	EPA 8015B
Project#:	STANDARD		
Matrix:	Soil	Sampled:	09/18/08
Units:	mg/Kg	Received:	09/18/08
Basis:	as received		

Type:	BLANK	Prepared:	09/20/08
Lab ID:	QC461273	Analyzed:	09/21/08
Diln Fac:	1.000	Prep:	EPA 3550B
Batch#:	142737		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	98	46-130

Type:	BLANK	Prepared:	09/22/08
Lab ID:	QC461485	Analyzed:	09/23/08
Diln Fac:	1.000	Prep:	SHAKER TABLE
Batch#:	142784		

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	97	46-130

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

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC461274	Batch#:	142737
Matrix:	Soil	Prepared:	09/20/08
Units:	mg/Kg	Analyzed:	09/21/08
Basis:	as received		

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	47.63	95	51-123

Surrogate	%REC	Limits
Hexacosane	97	46-130

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	142737
MSS Lab ID:	206145-001	Sampled:	09/17/08
Matrix:	Soil	Received:	09/18/08
Units:	mg/Kg	Prepared:	09/20/08
Basis:	as received	Analyzed:	09/21/08
Diln Fac:	1.000		

Type: MS Lab ID: QC461275

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.8478	49.85	41.15	81	38-140

Surrogate	%REC	Limits
Hexacosane	86	46-130

Type: MSD Lab ID: QC461276

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.79	42.08	83	38-140	2	49

Surrogate	%REC	Limits
Hexacosane	91	46-130

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC461486	Batch#:	142784
Matrix:	Soil	Prepared:	09/22/08
Units:	mg/Kg	Analyzed:	09/23/08
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.75	44.13	89	51-123

Surrogate	%REC	Limits
Hexacosane	95	46-130

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	142784
MSS Lab ID:	206045-004	Sampled:	09/14/08
Matrix:	Soil	Received:	09/15/08
Units:	mg/Kg	Prepared:	09/22/08
Basis:	as received	Analyzed:	09/23/08
Diln Fac:	1.000		

Type: MS  
Lab ID: QC461487

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	41.88	49.94	65.42	47	38-140

Surrogate	%REC	Limits
Hexacosane	71	46-130

Type: MSD  
Lab ID: QC461488

Cleanup Method: EPA 3630C

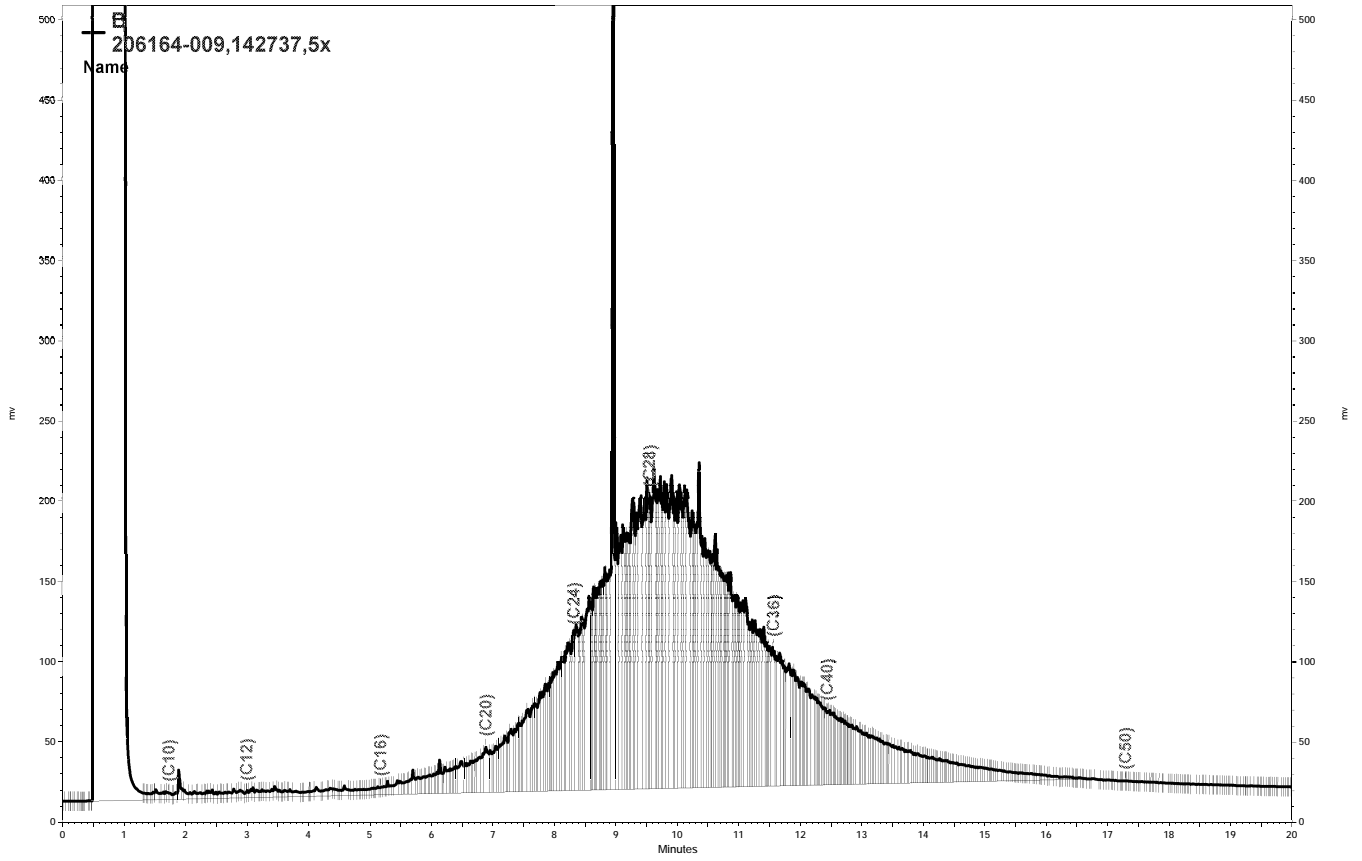
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.93	217.2	351 *	38-140	107 *	49

Surrogate	%REC	Limits
Hexacosane	98	46-130

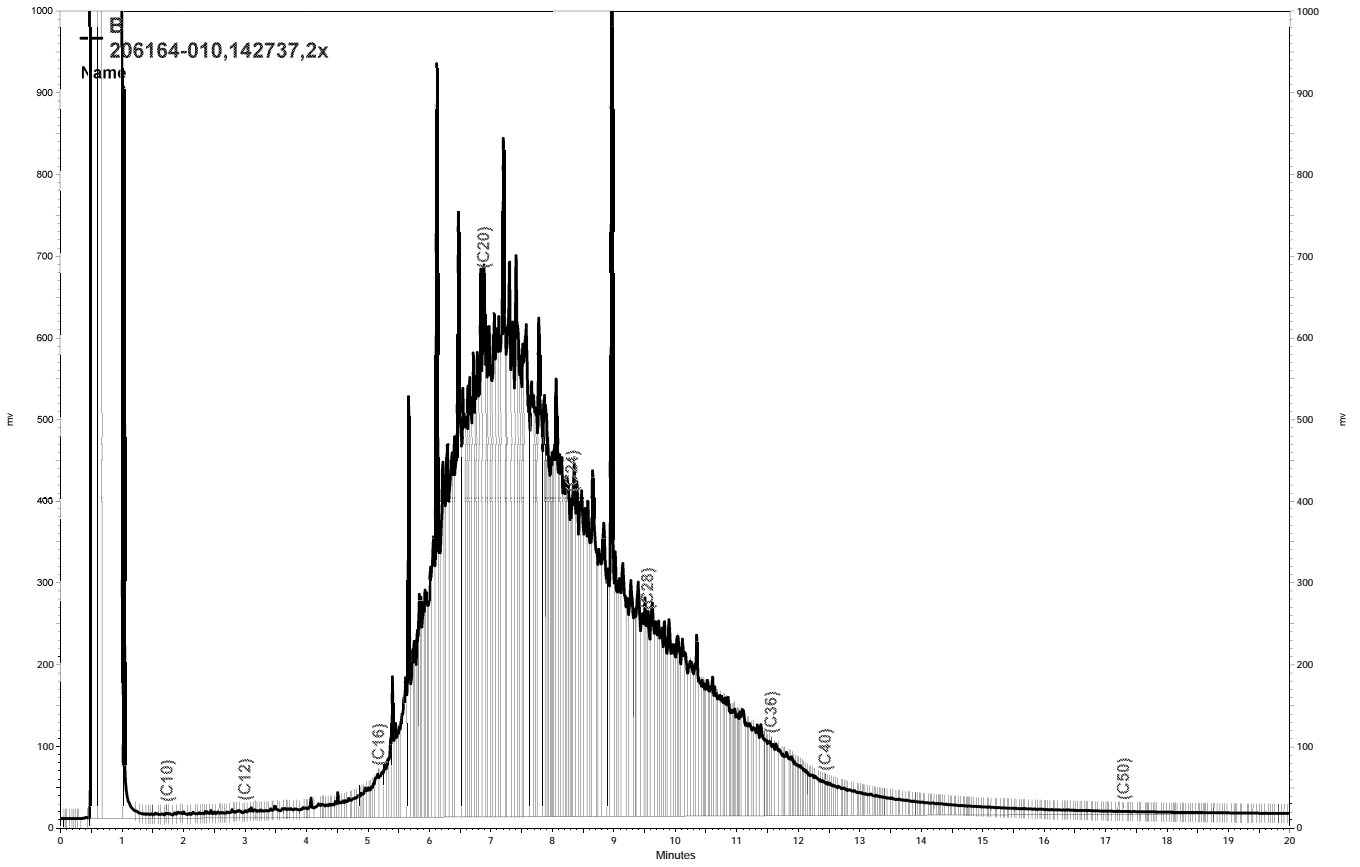
\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

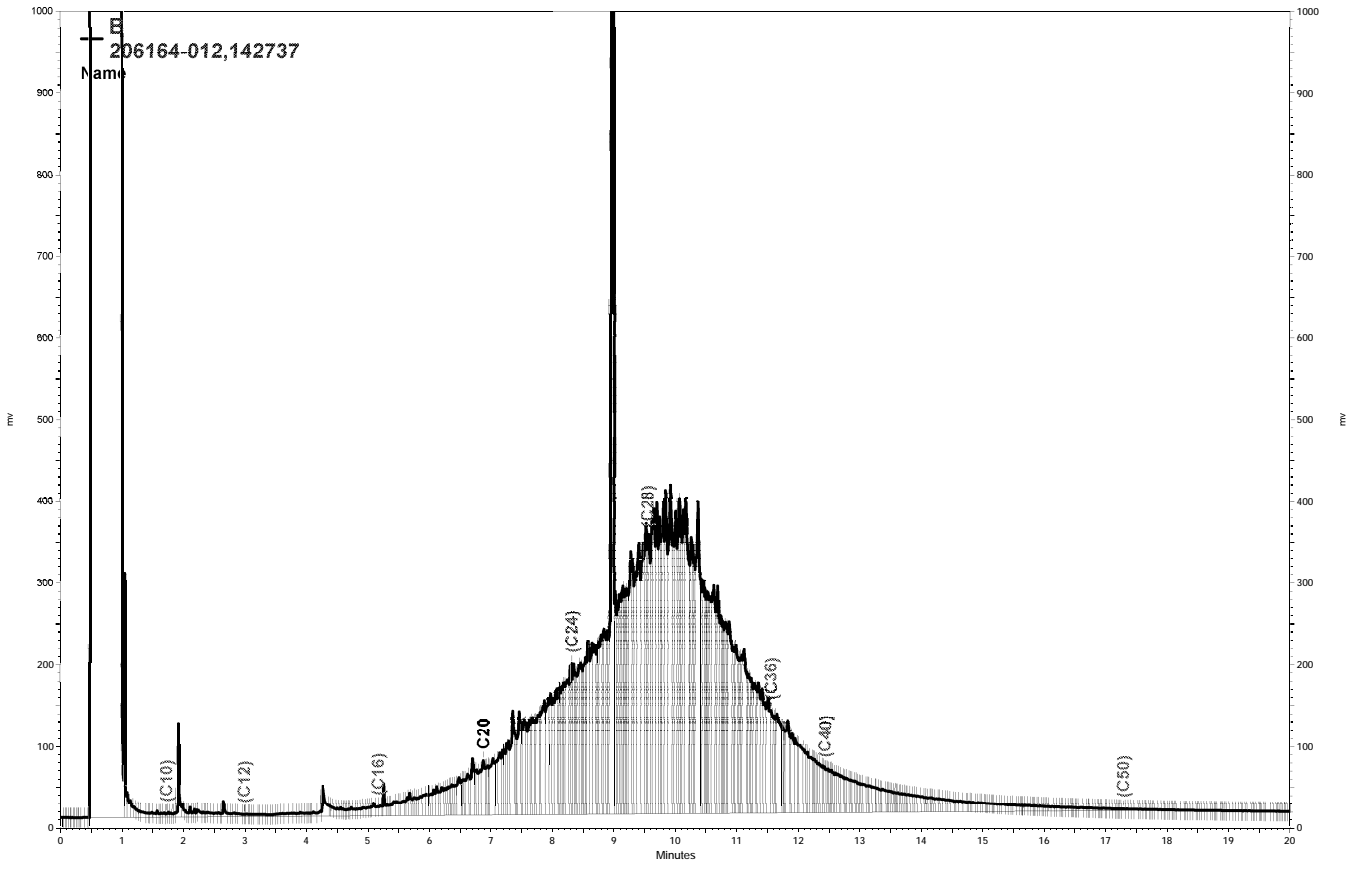




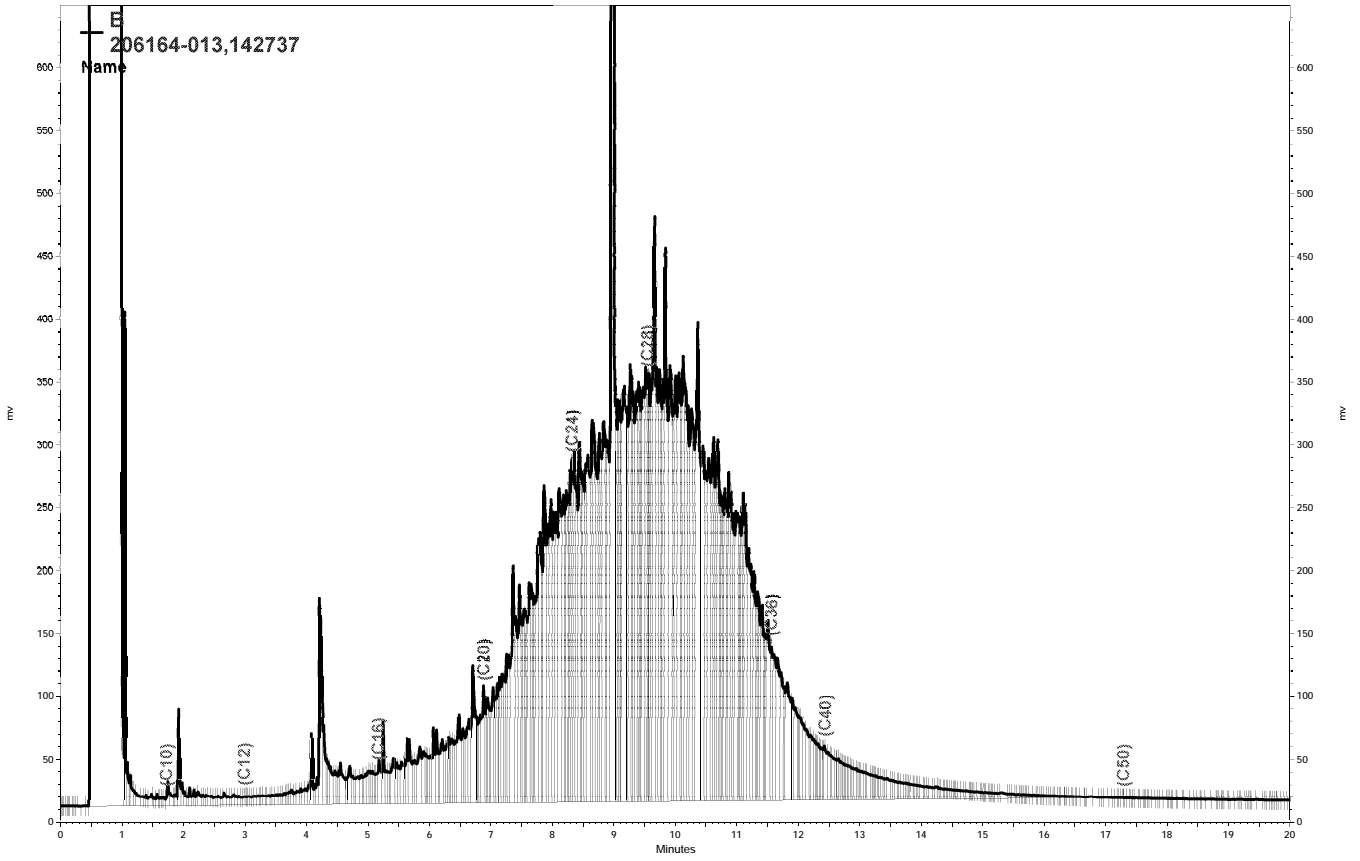
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b029, B



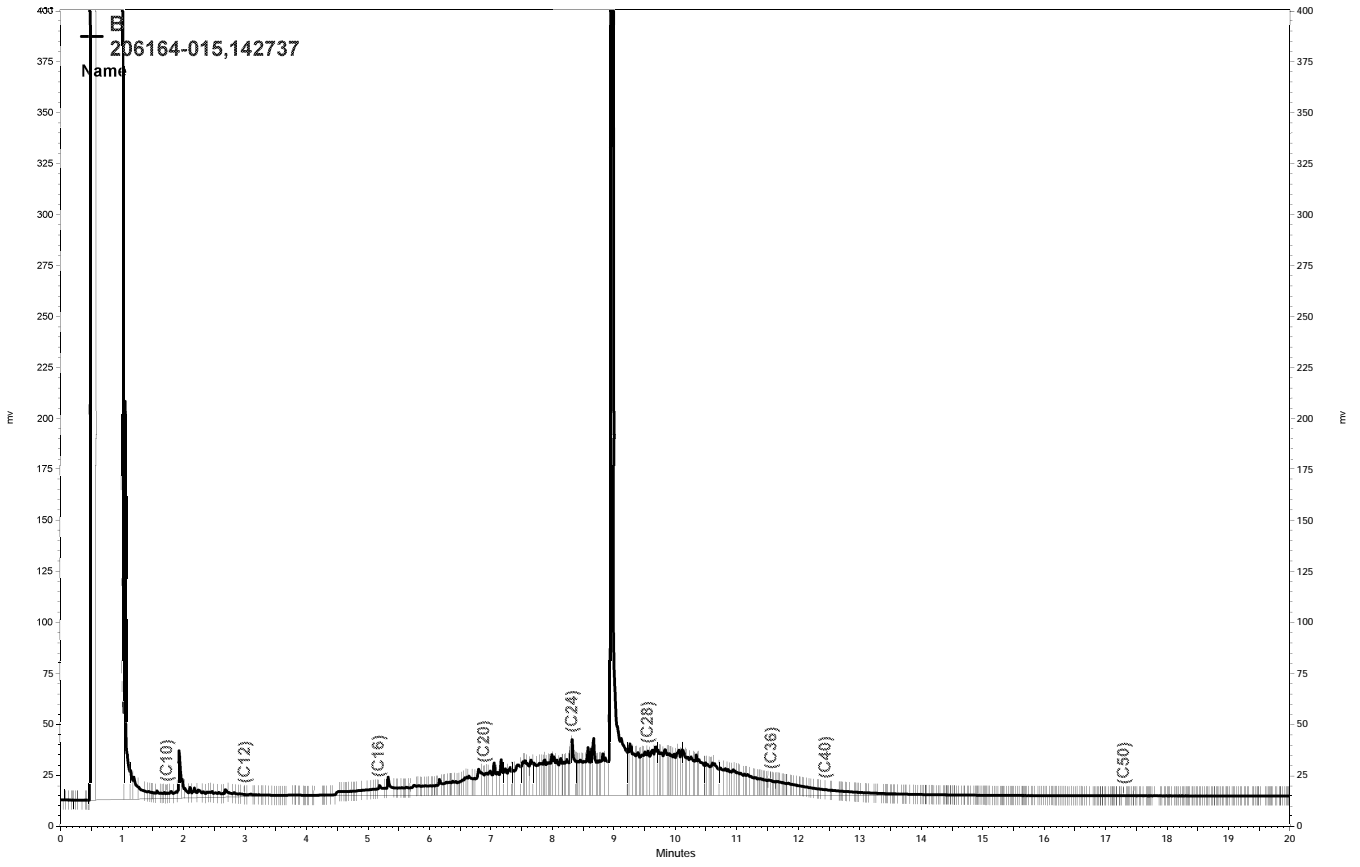
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b027, B



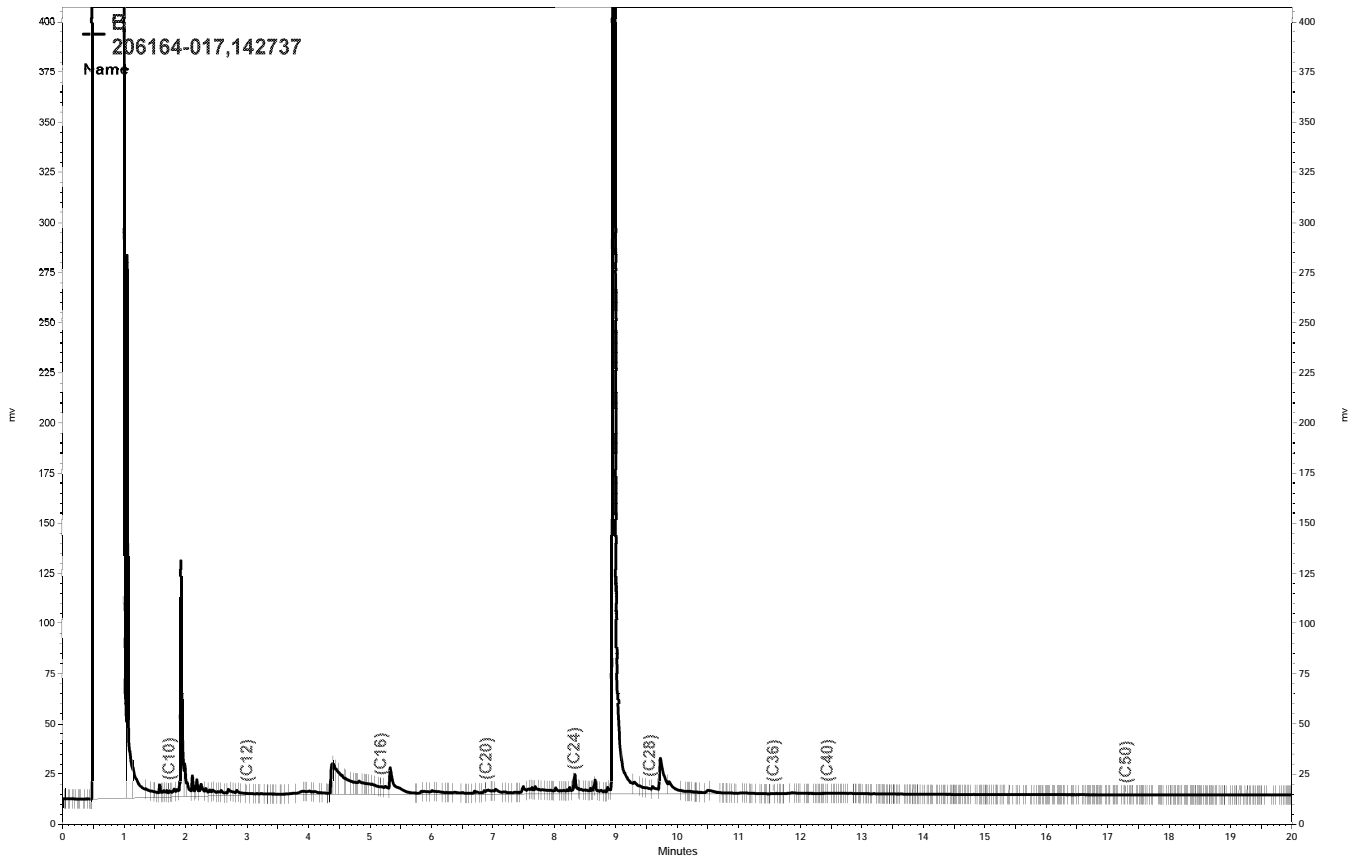
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b028, B



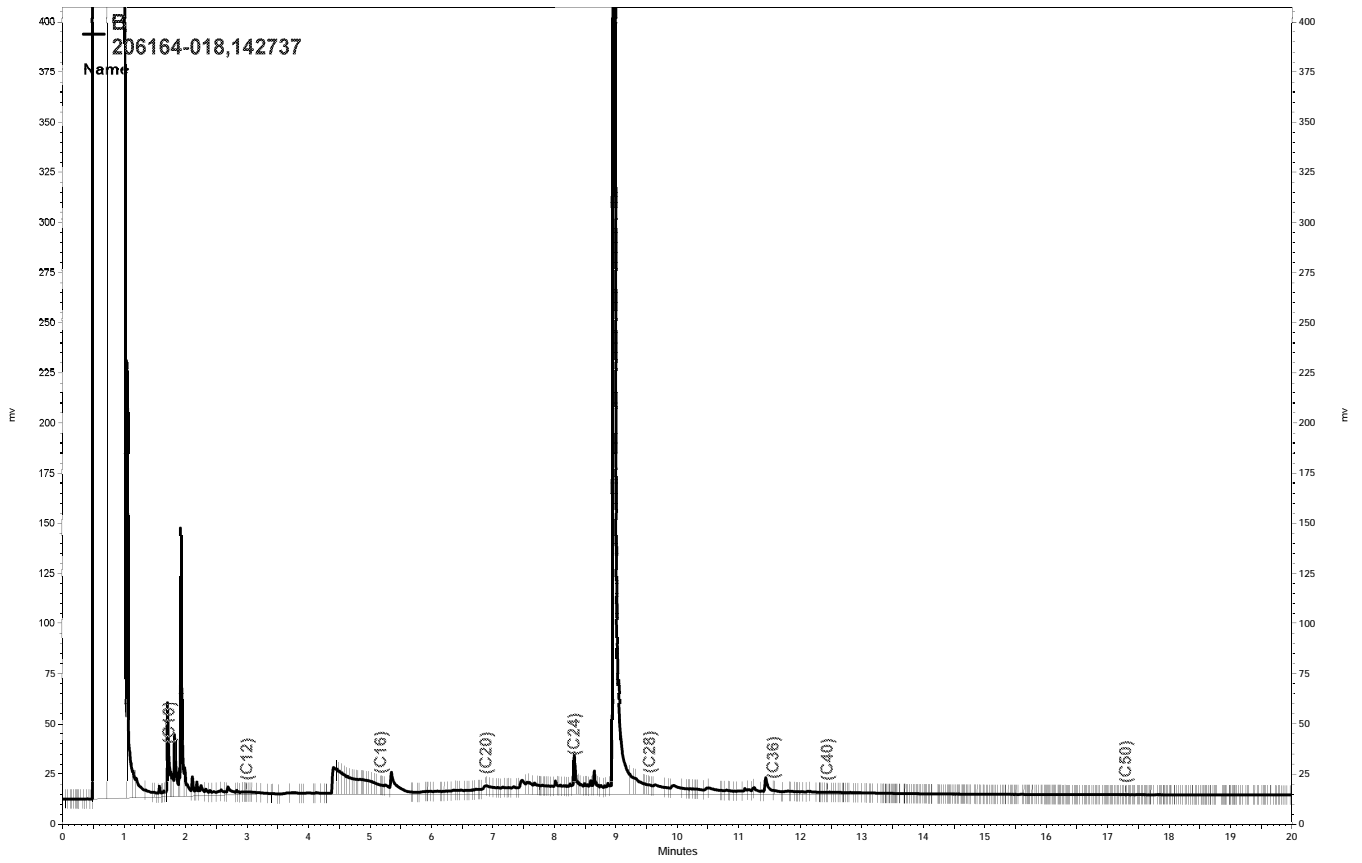
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b026, B



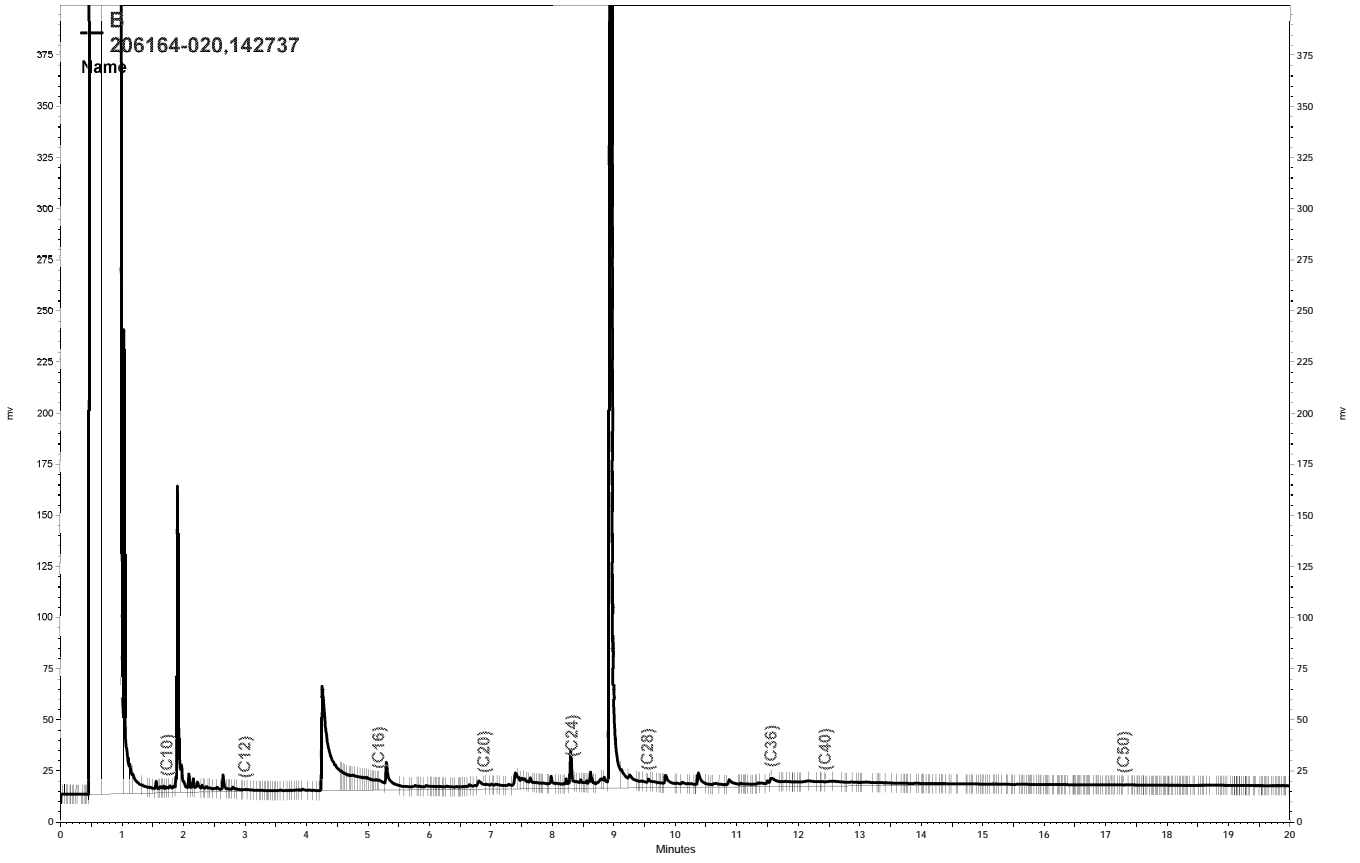
— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b025, B



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b023, B

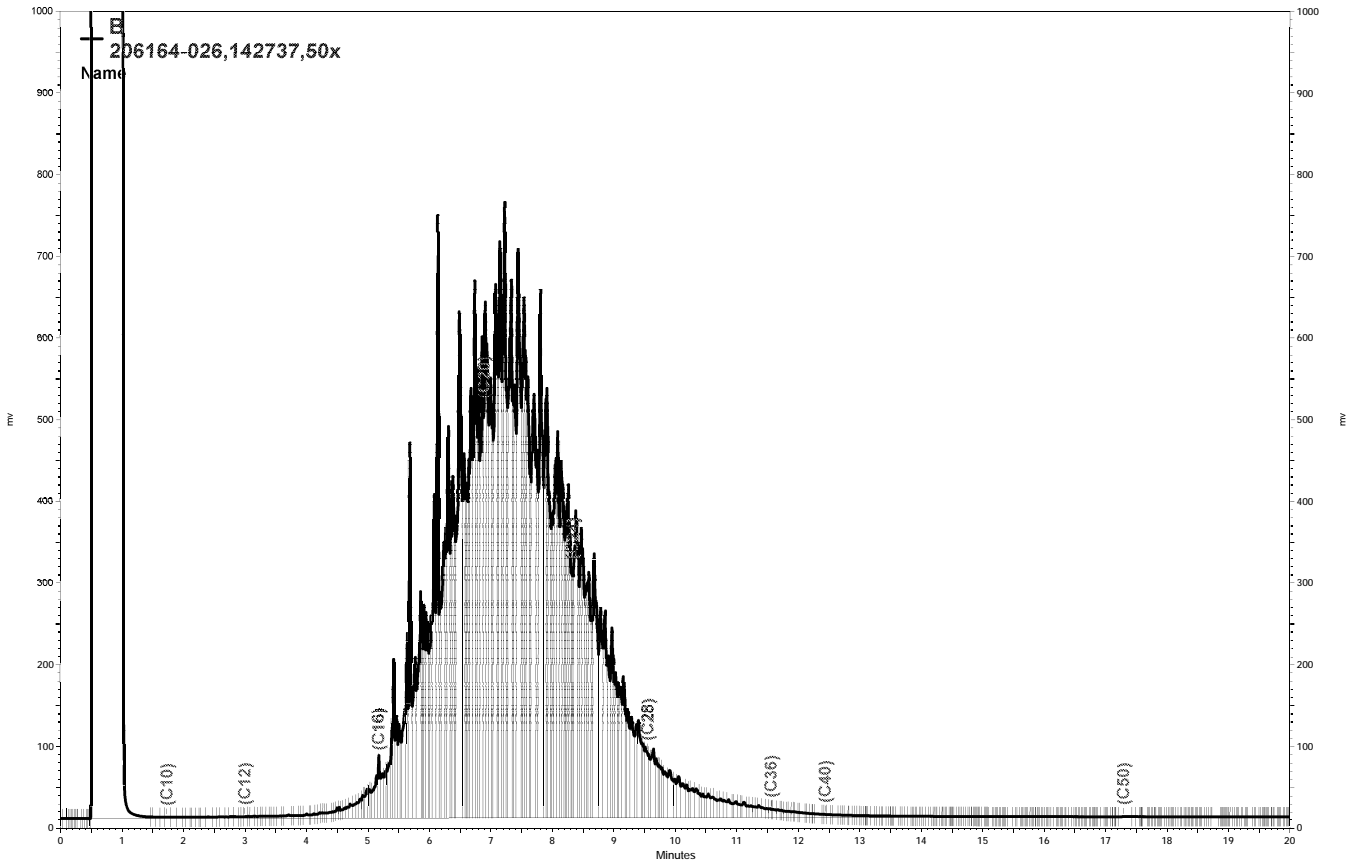


\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b024, B

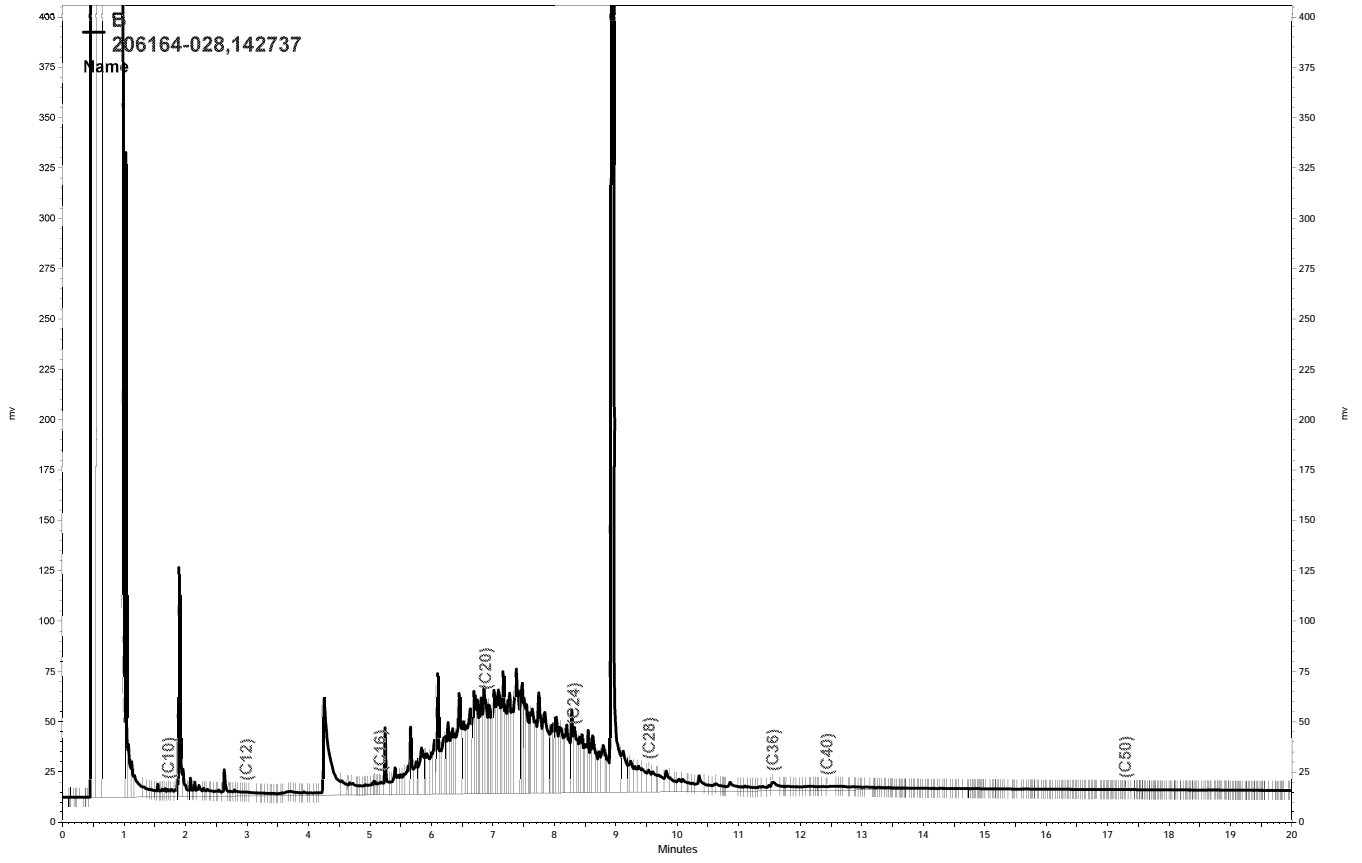


\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b031, B

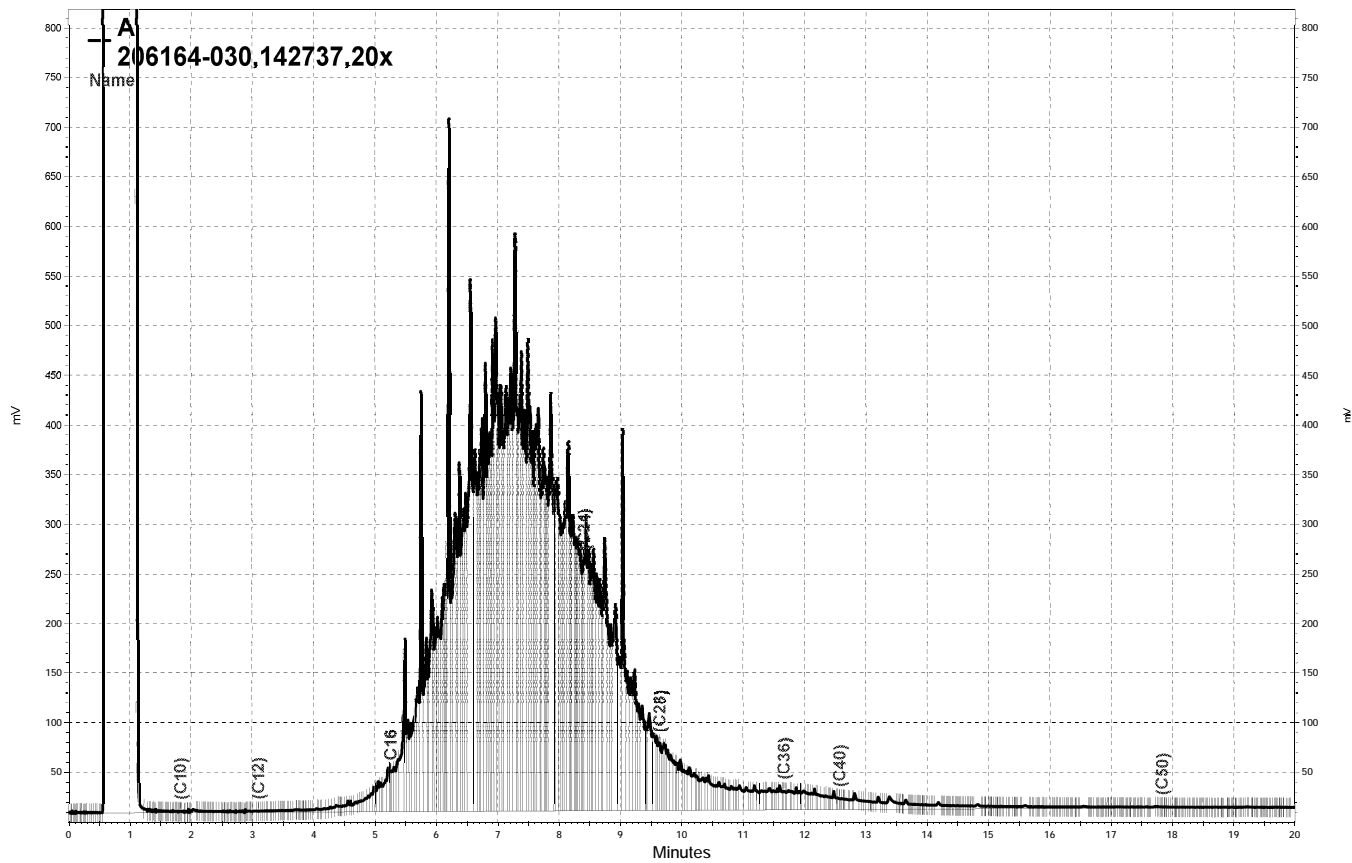




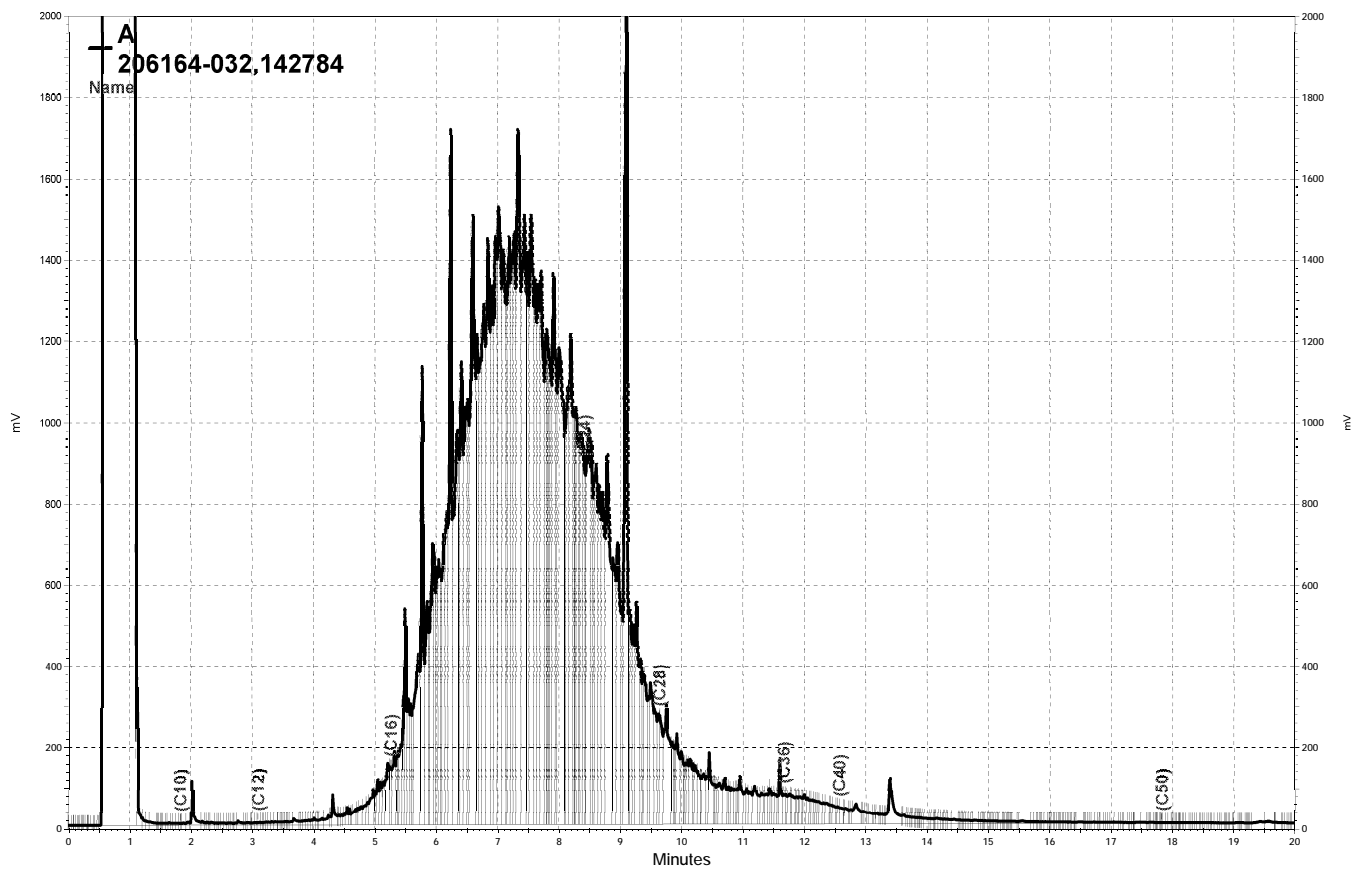
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\266b006, B



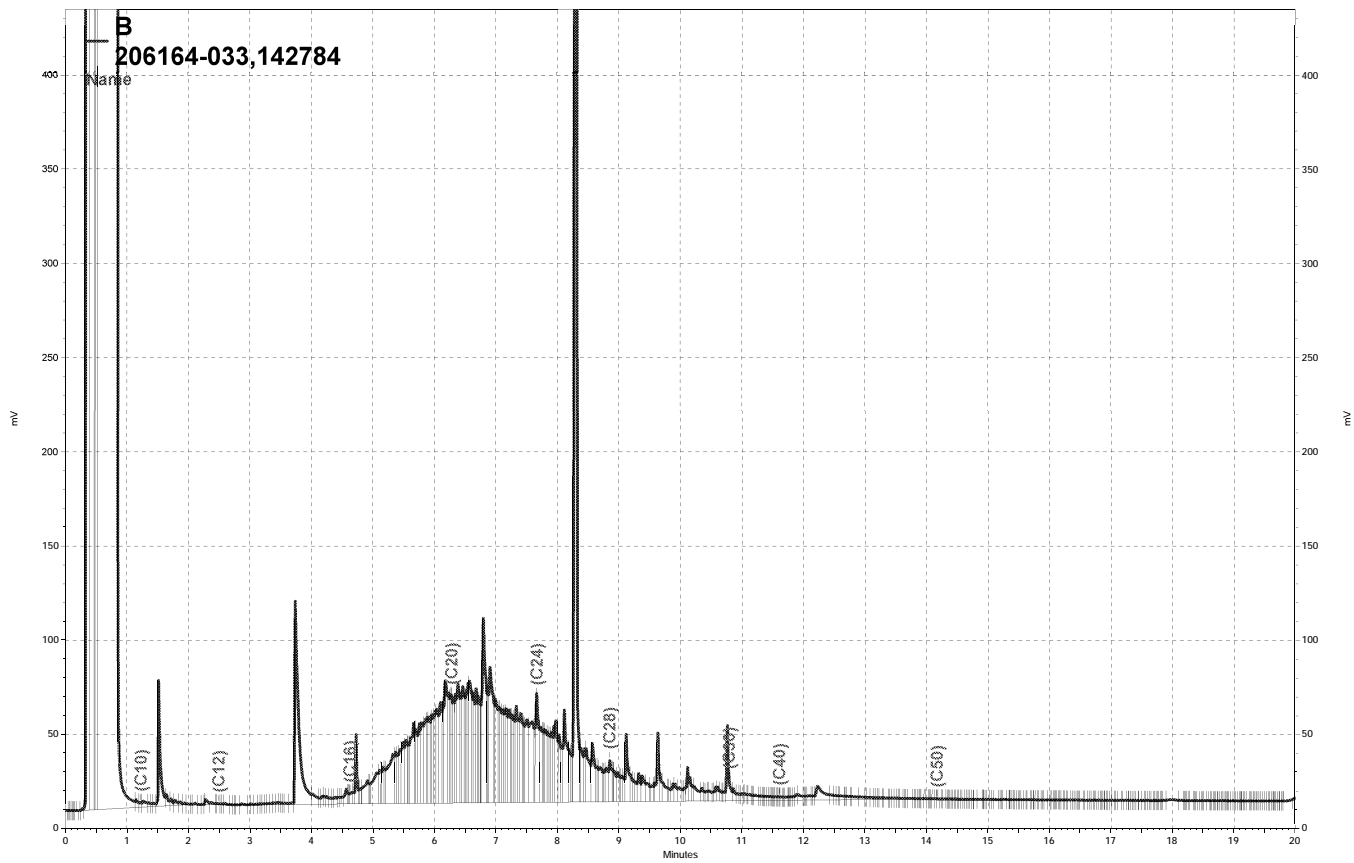
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b045, B



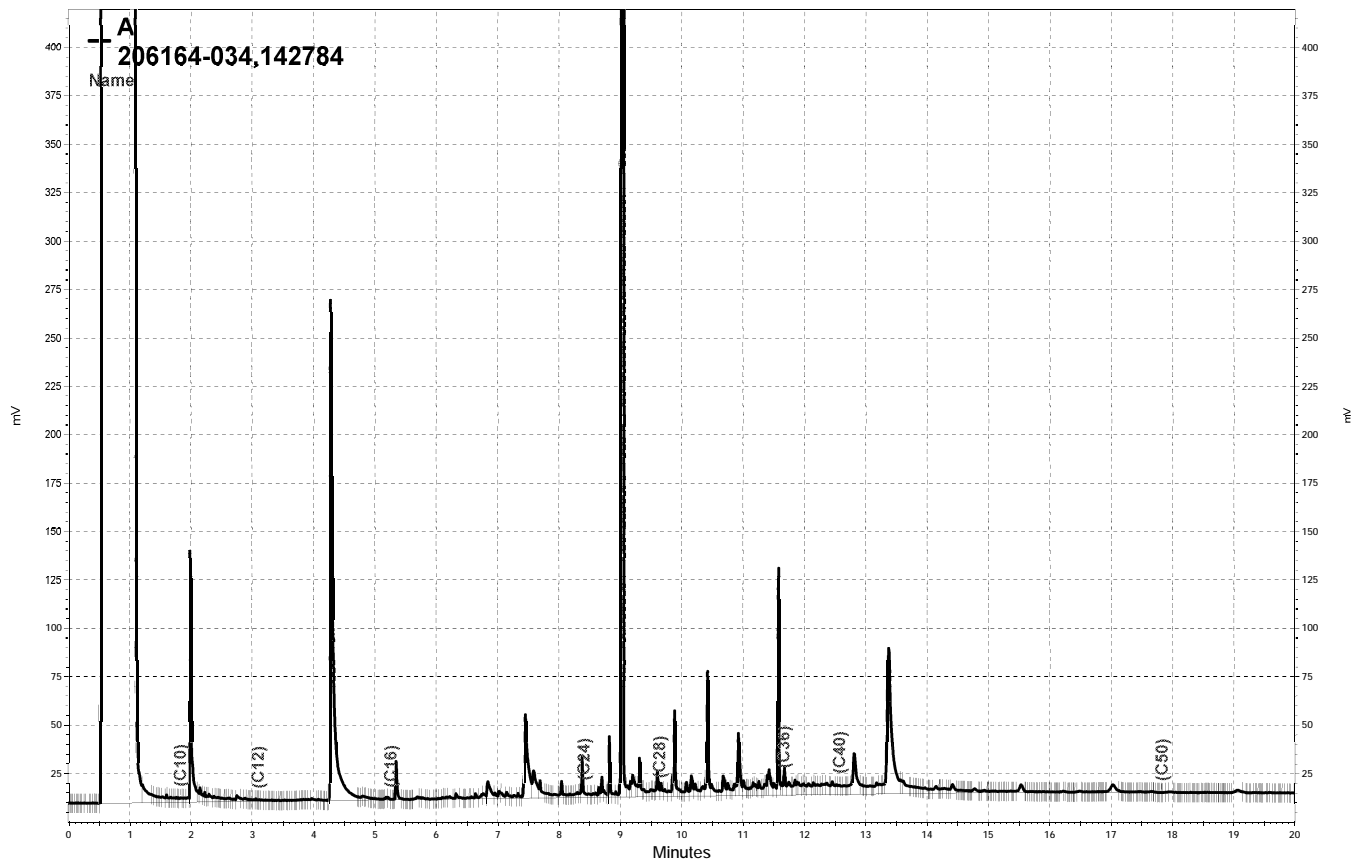
— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\266a018, A



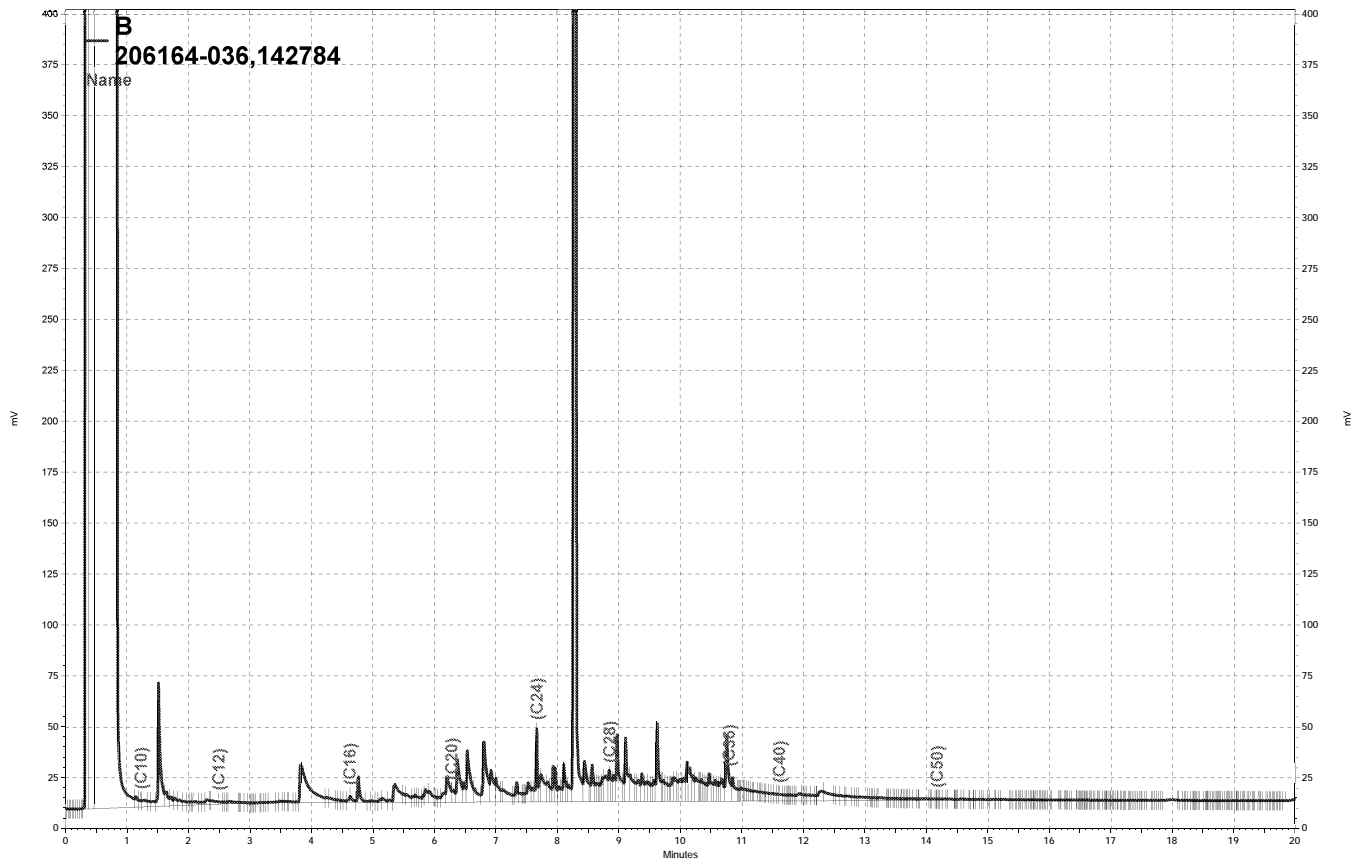
— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\267a018, A



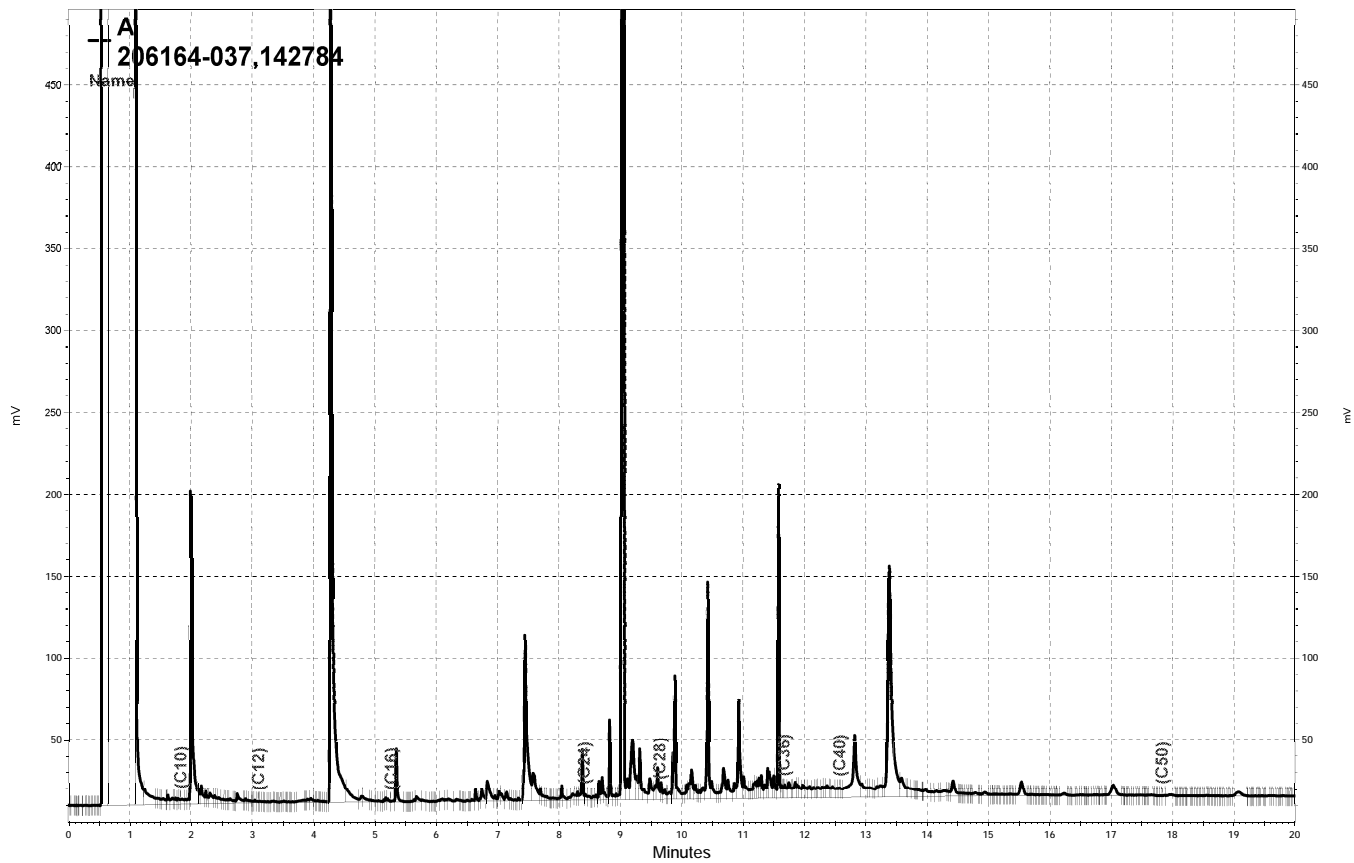
\\Lims\gdrive\ezchrom\Projects\GC14B\Data\267b013, B



\\Lims\gdrive\ezchrom\Projects\GC17A\Data\267a019, A

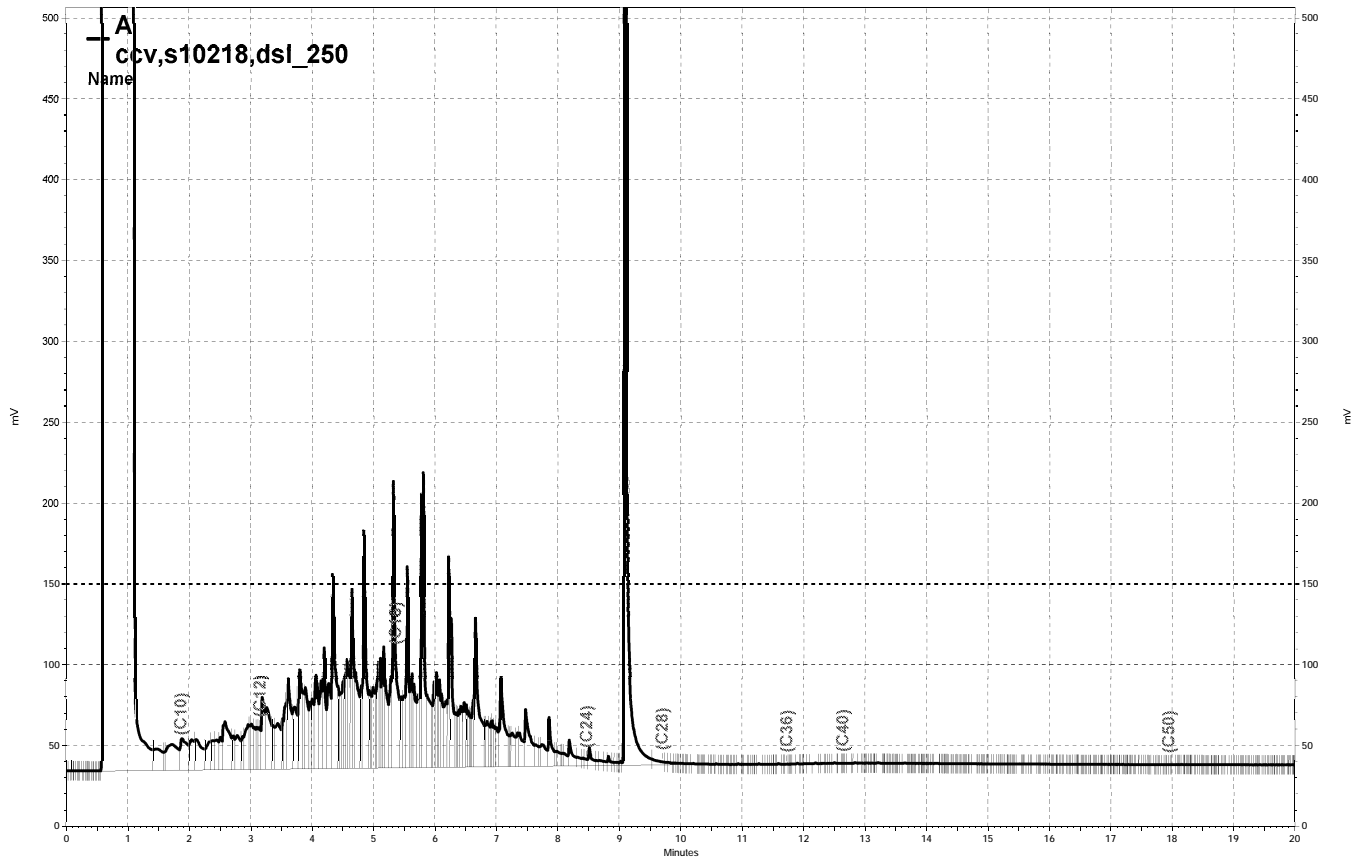


\\Lims\gdrive\ezchrom\Projects\GC14B\Data\267b016, B

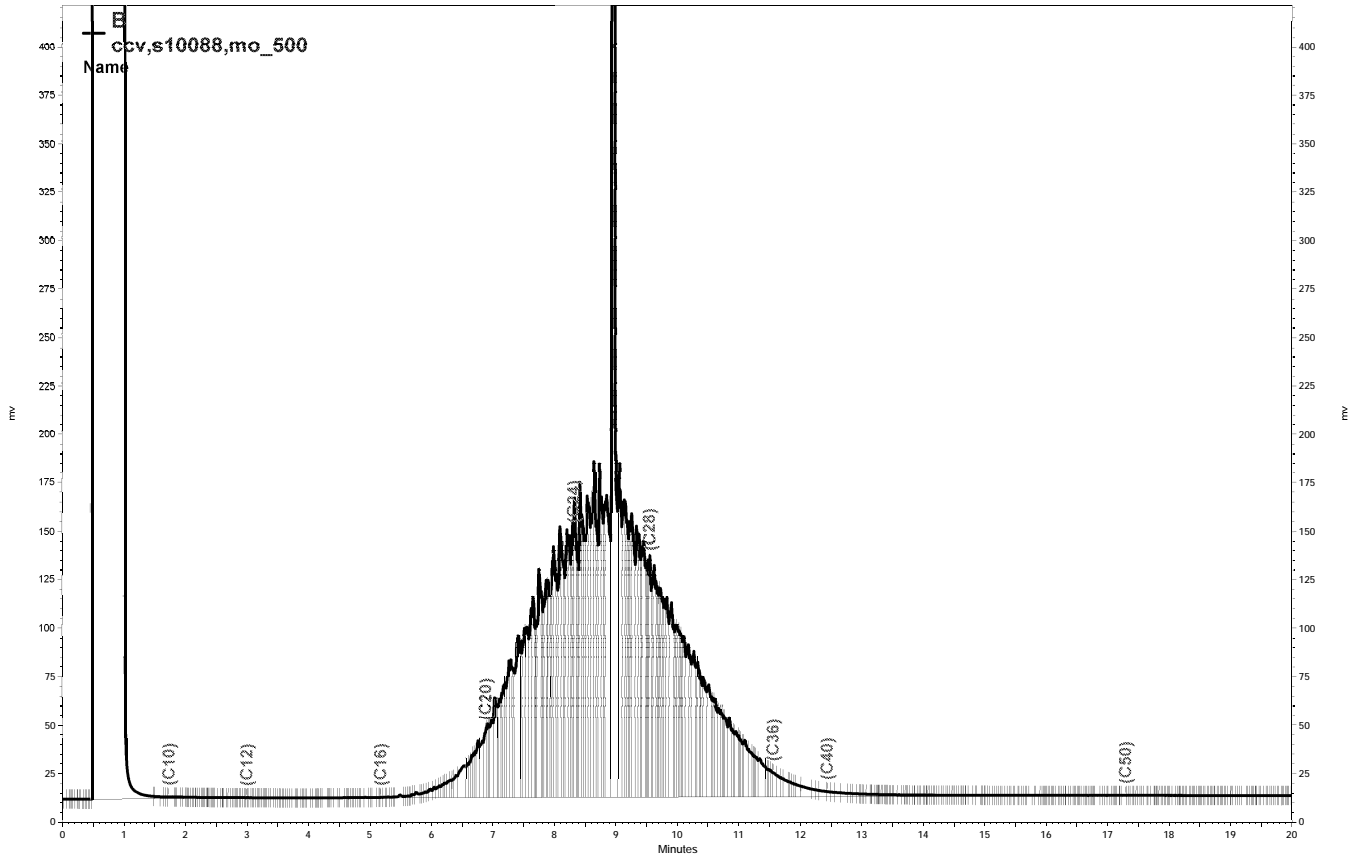


\\Lims\gdrive\ezchrom\Projects\GC17A\Data\267a020, A





\\Lims\gdrive\ezchrom\Projects\GC11A\Data\267a004, A



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\265b005, B

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB3-W-18.5	Batch#:	142749
Lab ID:	206164-001	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	91	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB4-W-21.0	Batch#:	142749
Lab ID:	206164-002	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB5-W-21.0	Batch#:	142749
Lab ID:	206164-003	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	1.6	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB9-W-15.5	Batch#:	142753
Lab ID:	206164-007	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	2.1	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	108	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	TRIP BLANK	Batch#:	142750
Lab ID:	206164-008	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142749
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461316

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	22.50	23.42	104	73-133
Trichloroethene	22.50	22.05	98	80-120
Chlorobenzene	22.50	22.38	99	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	102	80-122

Type: BSD Lab ID: QC461317

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	22.50	24.40	108	73-133	4	20
Trichloroethene	22.50	24.28	108	80-120	10	20
Chlorobenzene	22.50	23.22	103	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	94	80-122

RPD= Relative Percent Difference



**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461318	Batch#:	142749
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected

RL= Reporting Limit



**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461321	Batch#:	142750
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142753
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461331

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	20.15	101	73-133
Trichloroethene	20.00	21.62	108	80-120
Chlorobenzene	20.00	21.07	105	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	99	80-122

Type: BSD Lab ID: QC461332

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	19.20	96	73-133	5	20
Trichloroethene	20.00	19.70	99	80-120	9	20
Chlorobenzene	20.00	19.54	98	80-120	8	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	108	80-120
Bromofluorobenzene	100	80-122

RPD= Relative Percent Difference

**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461333	Batch#:	142753
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	110	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	142750
MSS Lab ID:	206090-002	Sampled:	09/16/08
Matrix:	Water	Received:	09/16/08
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: MS Lab ID: QC461444

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1379	25.00	25.61	102	76-133
Trichloroethene	19.07	25.00	44.24	101	74-129
Chlorobenzene	<0.1000	25.00	24.57	98	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122

Type: MSD Lab ID: QC461445

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.60	102	76-133	0	20
Trichloroethene	25.00	42.71	95	74-129	4	20
Chlorobenzene	25.00	24.59	98	80-120	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB6-W-21.0	Batch#:	142754
Lab ID:	206164-004	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	166.7		

Analyte	Result	RL
Gasoline C7-C12	15,000 Y Z	8,300
Freon 12	ND	170
Chloromethane	ND	170
Vinyl Chloride	ND	83
Bromomethane	ND	170
Chloroethane	ND	170
Trichlorofluoromethane	ND	170
Acetone	ND	1,700
Freon 113	ND	330
1,1-Dichloroethene	ND	83
Methylene Chloride	ND	1,700
Carbon Disulfide	ND	83
MTBE	ND	83
trans-1,2-Dichloroethene	ND	83
Vinyl Acetate	ND	1,700
1,1-Dichloroethane	ND	83
2-Butanone	ND	1,700
cis-1,2-Dichloroethene	ND	83
2,2-Dichloropropane	ND	83
Chloroform	ND	83
Bromochloromethane	ND	83
1,1,1-Trichloroethane	ND	83
1,1-Dichloropropene	ND	83
Carbon Tetrachloride	ND	83
1,2-Dichloroethane	ND	83
Benzene	ND	83
Trichloroethene	ND	83
1,2-Dichloropropane	ND	83
Bromodichloromethane	ND	83
Dibromomethane	ND	83
4-Methyl-2-Pentanone	ND	1,700
cis-1,3-Dichloropropene	ND	83
Toluene	ND	83
trans-1,3-Dichloropropene	ND	83
1,1,2-Trichloroethane	ND	83
2-Hexanone	ND	1,700
1,3-Dichloropropane	ND	83
Tetrachloroethene	11,000	83
Dibromochloromethane	ND	83
1,2-Dibromoethane	ND	83
Chlorobenzene	ND	83
1,1,1,2-Tetrachloroethane	ND	83
Ethylbenzene	ND	83
m,p-Xylenes	ND	83
o-Xylene	ND	83
Styrene	ND	83
Bromoform	ND	170
Isopropylbenzene	ND	83
1,1,2,2-Tetrachloroethane	ND	83
1,2,3-Trichloropropane	ND	83
Propylbenzene	ND	83

\*= Value outside of QC limits; see narrative

Y= Sample exhibits chromatographic pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB6-W-21.0	Batch#:	142754
Lab ID:	206164-004	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	166.7		

Analyte	Result	RL
Bromobenzene	ND	83
1,3,5-Trimethylbenzene	ND	83
2-Chlorotoluene	ND	83
4-Chlorotoluene	ND	83
tert-Butylbenzene	ND	83
1,2,4-Trimethylbenzene	ND	83
sec-Butylbenzene	ND	83
para-Isopropyl Toluene	ND	83
1,3-Dichlorobenzene	ND	83
1,4-Dichlorobenzene	ND	83
n-Butylbenzene	ND	83
1,2-Dichlorobenzene	ND	83
1,2-Dibromo-3-Chloropropane	ND	330
1,2,4-Trichlorobenzene	ND	83
Hexachlorobutadiene	ND	330
Naphthalene	ND	330
1,2,3-Trichlorobenzene	ND	83

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	130 *	80-122

\*= Value outside of QC limits; see narrative

Y= Sample exhibits chromatographic pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB7-W-15.5	Batch#:	142824
Lab ID:	206164-005	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/24/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	4.3	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB7-W-15.5	Batch#:	142824
Lab ID:	206164-005	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/24/08
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	7.1	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected

RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB8-W-8.5	Batch#:	142824
Lab ID:	206164-006	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/24/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	460 Y	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	5.0	0.5
m,p-Xylenes	1.3	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	2.0	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	3.2	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	1.8	0.5

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB8-W-8.5	Batch#:	142824
Lab ID:	206164-006	Sampled:	09/18/08
Matrix:	Water	Received:	09/18/08
Units:	ug/L	Analyzed:	09/24/08
Diln Fac:	1.000		

Analyte	Result	RL
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	5.5	0.5
sec-Butylbenzene	5.0	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	3.7	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	94	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	84	80-122

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 #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461334	Batch#:	142754
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	0.5
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461334	Batch#:	142754
Matrix:	Water	Analyzed:	09/22/08
Units:	ug/L		

Analyte	Result	RL
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	124 *	80-122

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

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142754
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461335

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	15.74	79	73-133
Benzene	20.00	19.16	96	80-120
Trichloroethene	20.00	19.09	95	80-120
Toluene	20.00	19.39	97	80-120
Chlorobenzene	20.00	19.44	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-122

Type: BSD Lab ID: QC461336

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	16.20	81	73-133	3	20
Benzene	20.00	19.99	100	80-120	4	20
Trichloroethene	20.00	20.01	100	80-120	5	20
Toluene	20.00	19.28	96	80-120	1	20
Chlorobenzene	20.00	20.35	102	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142754
Units:	ug/L	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461337

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	750.0	729.3	97	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC461338

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	750.0	714.5	95	70-130	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference



## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461637	Batch#:	142824
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC461637	Batch#:	142824
Matrix:	Water	Analyzed:	09/23/08
Units:	ug/L		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	0.5
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142824
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461638

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	23.75	119	73-133
Benzene	20.00	22.88	114	80-120
Trichloroethene	20.00	21.84	109	80-120
Toluene	20.00	21.71	109	80-120
Chlorobenzene	20.00	20.42	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	96	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	86	80-122

Type: BSD Lab ID: QC461639

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	22.67	113	73-133	5	20
Benzene	20.00	22.22	111	80-120	3	20
Trichloroethene	20.00	20.55	103	80-120	6	20
Toluene	20.00	20.58	103	80-120	5	20
Chlorobenzene	20.00	20.49	102	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	83	80-122

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142824
Units:	ug/L	Analyzed:	09/23/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461640

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	900.0	869.3	97	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	85	80-122

Type: BSD Lab ID: QC461641

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	900.0	845.4	94	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	85	80-122

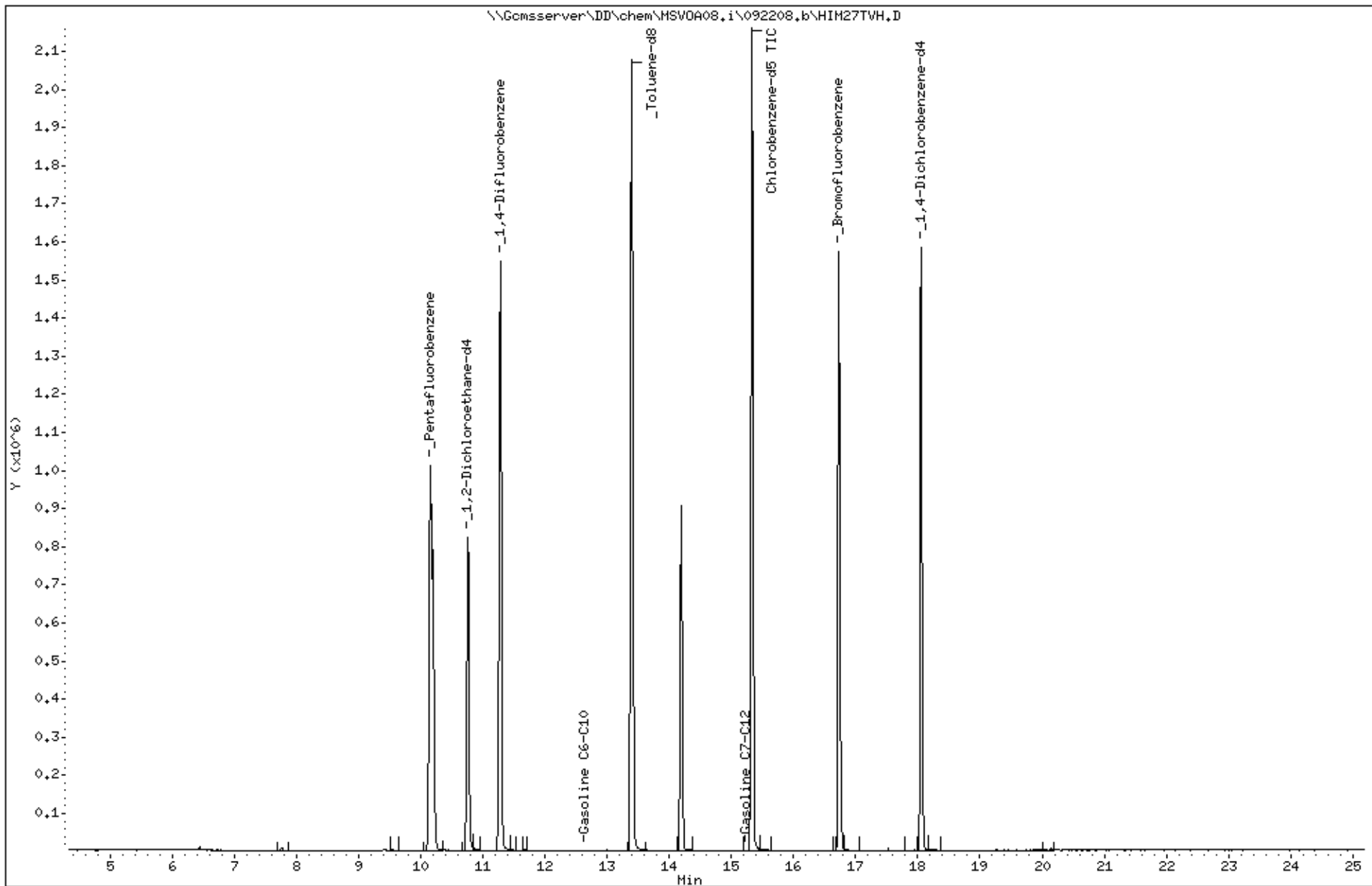
RPD= Relative Percent Difference

Date : 23-SEP-2008 02:18  
Client ID: DYNA P&T  
Sample Info: S,206164-004

Instrument: MSV0A08.i

Operator: voc  
Column diameter: 2.00

Column phase:

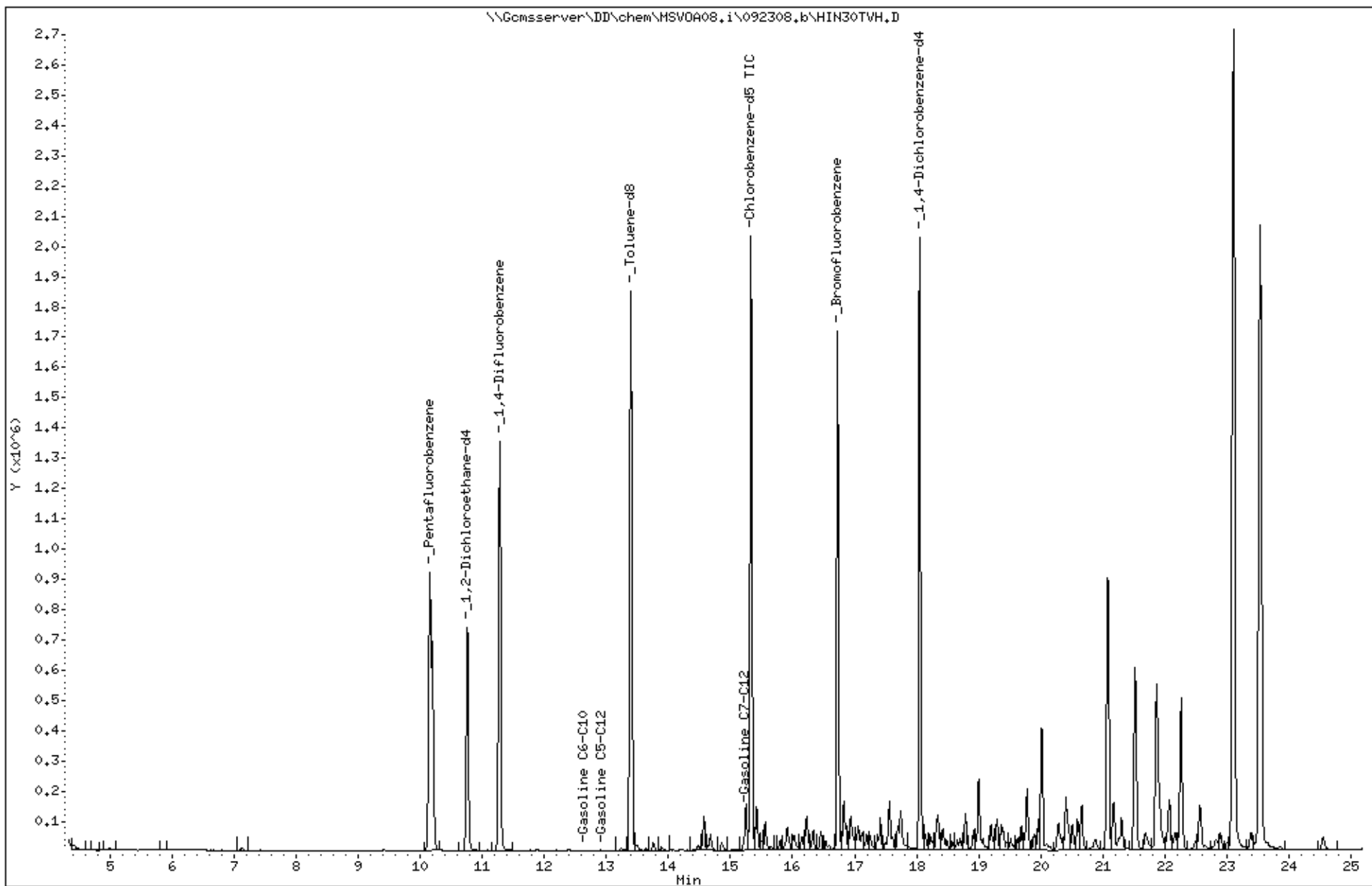


Date : 24-SEP-2008 04:14  
Client ID: DYNA P&T  
Sample Info: S,206164-006

Instrument: MSV0A08.i

Operator: voc  
Column diameter: 2.00

Column phase:



Date : 22-SEP-2008 13:58

Client ID: DYNA P&T

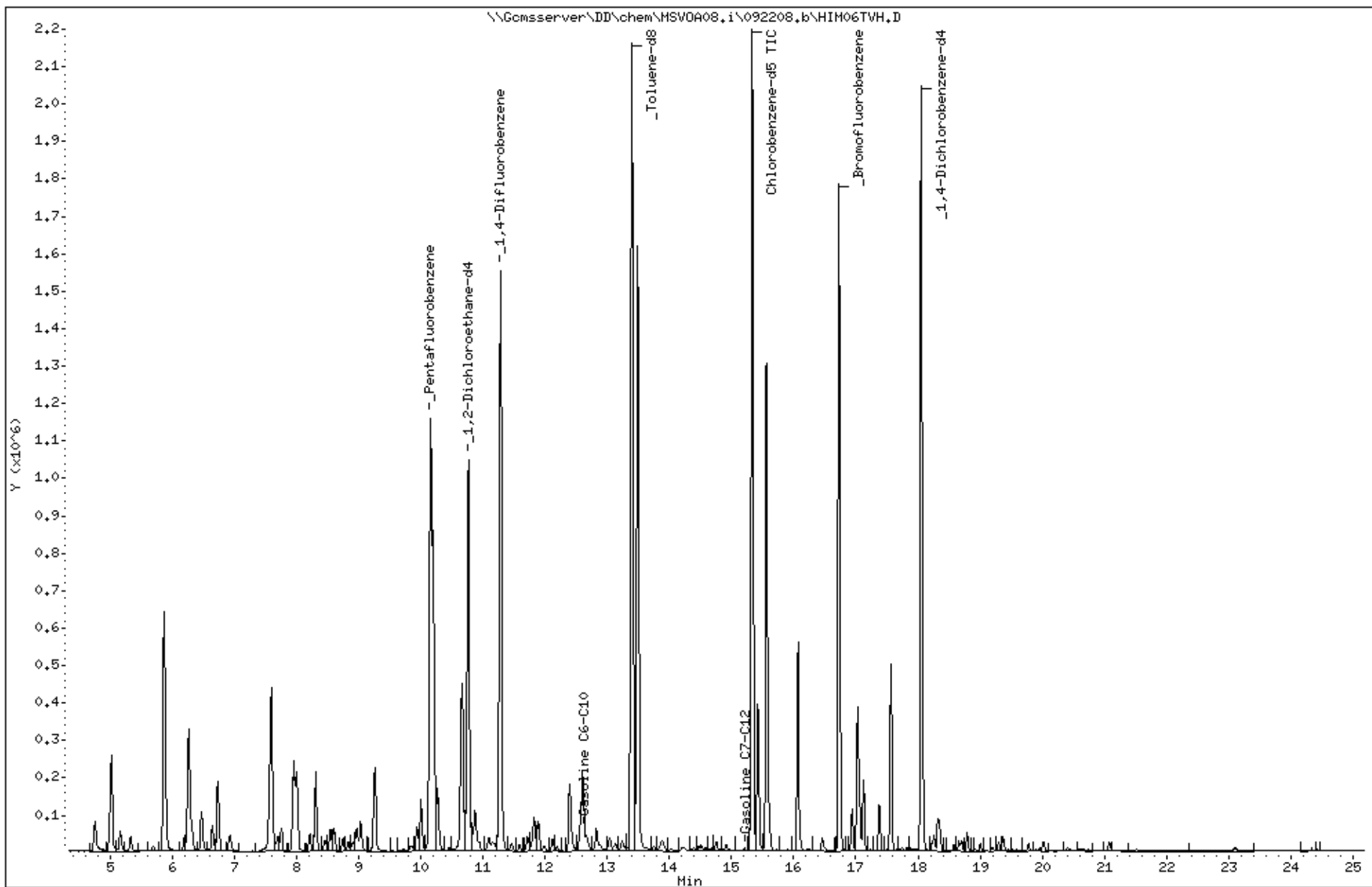
Sample Info: CCV/BS,QC461337,142754,S10222,0,0075/100

Instrument: MSV0A08,i

Operator: voc

Column diameter: 2,00

Column phase:



### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB1-4.0	Diln Fac:	0.9560
Lab ID:	206164-009	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.8
1,1-Dichloroethane	ND	4.8
cis-1,2-Dichloroethene	ND	4.8
Chloroform	ND	4.8
1,1,1-Trichloroethane	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
cis-1,3-Dichloropropene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
Tetrachloroethene	ND	4.8
Dibromochloromethane	ND	4.8
Chlorobenzene	ND	4.8
Bromoform	ND	9.6
1,1,2,2-Tetrachloroethane	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected  
 RL= Reporting Limit



### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB1-8.0	Diln Fac:	0.9921
Lab ID:	206164-010	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	9.9
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	74-133
Toluene-d8	105	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB2-4.0	Diln Fac:	0.9804
Lab ID:	206164-012	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	4.9
Bromoform	ND	9.8
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	74-133
Toluene-d8	107	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB2-8.0	Diln Fac:	0.9416
Lab ID:	206164-013	Batch#:	142806
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/23/08

Analyte	Result	RL
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.7
1,1-Dichloroethane	ND	4.7
cis-1,2-Dichloroethene	ND	4.7
Chloroform	ND	4.7
1,1,1-Trichloroethane	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
cis-1,3-Dichloropropene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
Tetrachloroethene	ND	4.7
Dibromochloromethane	ND	4.7
Chlorobenzene	ND	4.7
Bromoform	ND	9.4
1,1,2,2-Tetrachloroethane	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	74-133
Toluene-d8	105	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB8-7.5	Diln Fac:	0.9579
Lab ID:	206164-015	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.8
1,1-Dichloroethane	ND	4.8
cis-1,2-Dichloroethene	ND	4.8
Chloroform	ND	4.8
1,1,1-Trichloroethane	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
cis-1,3-Dichloropropene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
Tetrachloroethene	ND	4.8
Dibromochloromethane	ND	4.8
Chlorobenzene	ND	4.8
Bromoform	ND	9.6
1,1,2,2-Tetrachloroethane	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	111	74-133
Toluene-d8	105	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB7-7.5	Diln Fac:	0.9276
Lab ID:	206164-018	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.6
1,1-Dichloroethane	ND	4.6
cis-1,2-Dichloroethene	ND	4.6
Chloroform	ND	4.6
1,1,1-Trichloroethane	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
cis-1,3-Dichloropropene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
Tetrachloroethene	ND	4.6
Dibromochloromethane	ND	4.6
Chlorobenzene	ND	4.6
Bromoform	ND	9.3
1,1,2,2-Tetrachloroethane	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB6-7.5	Diln Fac:	0.9141
Lab ID:	206164-022	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.1
Vinyl Chloride	ND	9.1
Bromomethane	ND	9.1
Chloroethane	ND	9.1
Trichlorofluoromethane	ND	4.6
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	18
trans-1,2-Dichloroethene	ND	4.6
1,1-Dichloroethane	ND	4.6
cis-1,2-Dichloroethene	ND	4.6
Chloroform	ND	4.6
1,1,1-Trichloroethane	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
cis-1,3-Dichloropropene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
Tetrachloroethene	48	4.6
Dibromochloromethane	ND	4.6
Chlorobenzene	ND	4.6
Bromoform	ND	9.1
1,1,2,2-Tetrachloroethane	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB5-7.4	Diln Fac:	0.9785
Lab ID:	206164-026	Batch#:	142855
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/24/08

Analyte	Result	RL
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	4.9
Bromoform	ND	9.8
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	74-133
Toluene-d8	104	80-120
Bromofluorobenzene	111	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB9-7.4	Diln Fac:	0.9823
Lab ID:	206164-030	Batch#:	142806
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/23/08

Analyte	Result	RL
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	4.9
Bromoform	ND	9.8
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	118	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	99	79-127

ND= Not Detected  
 RL= Reporting Limit



### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB3-9.0	Diln Fac:	0.9804
Lab ID:	206164-033	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/22/08

Analyte	Result	RL
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	4.9
1,1-Dichloroethane	ND	4.9
cis-1,2-Dichloroethene	ND	4.9
Chloroform	ND	4.9
1,1,1-Trichloroethane	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
cis-1,3-Dichloropropene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
Chlorobenzene	ND	4.9
Bromoform	ND	9.8
1,1,2,2-Tetrachloroethane	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	115	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected  
 RL= Reporting Limit

### Purgeable Halocarbons by GC/MS

Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB4-9.0	Diln Fac:	0.9901
Lab ID:	206164-036	Batch#:	142806
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received	Analyzed:	09/23/08

Analyte	Result	RL
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	9.9
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	74-133
Toluene-d8	107	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC461374	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142762
Units:	ug/Kg	Analyzed:	09/22/08

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	110	74-133
Toluene-d8	106	80-120
Bromofluorobenzene	102	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC461375	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142762
Units:	ug/Kg	Analyzed:	09/22/08

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	30.97	124	72-132
Trichloroethene	25.00	29.65	119	80-125
Chlorobenzene	25.00	27.32	109	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	74-133
Toluene-d8	103	80-120
Bromofluorobenzene	97	79-127

**Batch QC Report**

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EB2-4.0	Diln Fac:	0.9804
MSS Lab ID:	206164-012	Batch#:	142762
Matrix:	Soil	Sampled:	09/18/08
Units:	ug/Kg	Received:	09/18/08
Basis:	as received		

Type: MS Analyzed: 09/22/08  
 Lab ID: QC461455

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.9804	49.02	49.73	101	54-132
Trichloroethene	<0.9804	49.02	48.94	100	47-138
Chlorobenzene	<0.9804	49.02	39.50	81	44-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	74-133
Toluene-d8	104	80-120
Bromofluorobenzene	96	79-127

Type: MSD Analyzed: 09/23/08  
 Lab ID: QC461456

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.02	57.05	116	54-132	14	29
Trichloroethene	49.02	55.17	113	47-138	12	28
Chlorobenzene	49.02	45.29	92	44-120	14	29

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	74-133
Toluene-d8	101	80-120
Bromofluorobenzene	98	79-127

RPD= Relative Percent Difference

**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC461568	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142806
Units:	ug/Kg	Analyzed:	09/23/08

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	108	74-133
Toluene-d8	107	80-120
Bromofluorobenzene	99	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC461569	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142806
Units:	ug/Kg	Analyzed:	09/23/08

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	30.91	124	72-132
Trichloroethene	25.00	31.17	125	80-125
Chlorobenzene	25.00	28.11	112	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	74-133
Toluene-d8	104	80-120
Bromofluorobenzene	96	79-127

**Batch QC Report**

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.9524
MSS Lab ID:	206207-003	Batch#:	142806
Matrix:	Soil	Sampled:	09/11/08
Units:	ug/Kg	Received:	09/12/08
Basis:	as received	Analyzed:	09/23/08

Type: MS Lab ID: QC461615

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.9524	47.62	54.33	114	54-132
Trichloroethene	<0.9524	47.62	51.69	109	47-138
Chlorobenzene	<0.9524	47.62	42.71	90	44-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	74-133
Toluene-d8	101	80-120
Bromofluorobenzene	95	79-127

Type: MSD Lab ID: QC461616

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	47.62	51.98	109	54-132	4	29
Trichloroethene	47.62	51.32	108	47-138	1	28
Chlorobenzene	47.62	42.40	89	44-120	1	29

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	74-133
Toluene-d8	101	80-120
Bromofluorobenzene	95	79-127

RPD= Relative Percent Difference



**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC461756	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142855
Units:	ug/Kg	Analyzed:	09/24/08

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloroethane-d4	107	74-133
Toluene-d8	108	80-120
Bromofluorobenzene	97	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Halocarbons by GC/MS			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC461757	Diln Fac:	1.000
Matrix:	Soil	Batch#:	142855
Units:	ug/Kg	Analyzed:	09/24/08

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.01	112	72-132
Trichloroethene	25.00	30.03	120	80-125
Chlorobenzene	25.00	26.87	107	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	74-133
Toluene-d8	102	80-120
Bromofluorobenzene	95	79-127

**Batch QC Report**

<b>Purgeable Halocarbons by GC/MS</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.9671
MSS Lab ID:	206241-001	Batch#:	142855
Matrix:	Soil	Sampled:	09/22/08
Units:	ug/Kg	Received:	09/23/08
Basis:	as received	Analyzed:	09/24/08

Type: MS Lab ID: QC461833

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.9671	48.36	49.24	102	54-132
Trichloroethene	<0.9671	48.36	40.87	85	47-138
Chlorobenzene	<0.9671	48.36	28.86	60	44-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	74-133
Toluene-d8	102	80-120
Bromofluorobenzene	98	79-127

Type: MSD Lab ID: QC461834

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.36	51.00	105	54-132	4	29
Trichloroethene	48.36	43.67	90	47-138	7	28
Chlorobenzene	48.36	31.02	64	44-120	7	29

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	74-133
Toluene-d8	101	80-120
Bromofluorobenzene	97	79-127

RPD= Relative Percent Difference





## Batch QC Report

California LUFT Metals			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	142720
Units:	mg/Kg	Prepared:	09/19/08
Basis:	as received	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: BS Lab ID: QC461206

Analyte	Spiked	Result	%REC	Limits
Cadmium	10.00	9.423	94	80-120
Chromium	100.0	94.81	95	80-120
Lead	100.0	91.44	91	80-120
Nickel	25.00	22.56	90	80-120
Zinc	25.00	23.42	94	80-120

Type: BSD Lab ID: QC461207

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	10.00	9.543	95	80-120	1	20
Chromium	100.0	96.07	96	80-120	1	20
Lead	100.0	92.25	92	80-120	1	20
Nickel	25.00	22.78	91	80-120	1	20
Zinc	25.00	23.81	95	80-120	2	20

RPD= Relative Percent Difference

**Batch QC Report**

<b>California LUFT Metals</b>			
Lab #:	206164	Location:	1549 32nd St
Client:	ERS Corp.	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	142720
MSS Lab ID:	206136-002	Sampled:	09/18/08
Matrix:	Soil	Received:	09/18/08
Units:	mg/Kg	Prepared:	09/19/08
Basis:	as received	Analyzed:	09/22/08
Diln Fac:	1.000		

Type: MS Lab ID: QC461208

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	1.203	9.709	9.386	84	65-120
Chromium	51.52	97.09	131.2	82	59-120
Lead	43.17	97.09	118.1	77	50-123
Nickel	52.43	24.27	70.78	76	42-139
Zinc	119.6	24.27	136.8	71 NM	30-152

Type: MSD Lab ID: QC461209

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	9.804	9.993	90	65-120	5	20
Chromium	98.04	141.3	92	59-120	7	23
Lead	98.04	123.7	82	50-123	4	30
Nickel	24.51	75.34	93	42-139	6	29
Zinc	24.51	145.5	106 NM	30-152	6	33

NM= Not Meaningful: Sample concentration > 4X spike concentration  
 RPD= Relative Percent Difference







**Curtis & Tompkins, Ltd.**

Analytical Laboratory Since 1878

2323 Fifth Street  
Berkeley, CA 94710  
(510) 486-0900 Phone  
(510) 486-0532 Fax

# CHAIN OF CUSTODY

**Analysis**

C & T LOGIN #: 206164

Project No.: \_\_\_\_\_

Sampler: Ken Blume

Report To: kblume@erscorp.us

Project Name: 1549 32nd St

Company: ERS Corp

Project P.O.: \_\_\_\_\_

Telephone: (925) 938-1600 x103

Turnaround Time: 5-day TAT

Fax: (925) 938-1610

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE
27	EB5-11.1	9/18/08 12:00	X			↓				
28	EB5-16.0	12:10	X							
29	EB5-20.0	12:20	X							
30	EB9-7.4	14:15	X							
31	EB9-12.0	14:20	X							
32	EB9-15.5	14:45	X							
33	EB3-9.0	14:50	X							
34	EB3-15.5	15:10	X							
35	EB3-20.0	15:45	X							
36	EB4-9.0	16:25	X							
37	EB4-16.5	16:30	X							
38	EB4-19.0	16:35	X							

VOCs (8010 List)	TEPH	TPHg/BTEX	Hold																
X	X		X																
X	X		X																
X	X		X																
X	X		X																
X	X		X																
X	X		X																
X	X		X																

Notes:

SAMPLE RECEIPT  
 Intact  Cold  
 On Ice  Ambient  
 Preservative Correct?  
 Yes  No  N/A

RELINQUISHED BY:  
Ken Blume 9/18/08 17:30  
 DATE / TIME

RECEIVED BY:  
[Signature] 9-18-8 17:30  
 DATE / TIME

SIGNATURE

**Tracy Babjar**

---

206164

**From:** "Ken Blume" <kblume@erscorp.us>  
**To:** "Tracy Babjar" <tracy.babjar@ctberk.com>  
**Sent:** Friday, September 19, 2008 9:34 AM  
**Subject:** 1549 32nd Street - Analytical

Hi Tracy,

I dropped off some samples yesterday afternoon for 1549 32nd Street. I would also like to have the following three water samples analyzed for TPHg: EB6-W-21.0, EB7-W-15.5, and EB8-W-8.5.

Thanks,      #4)      ↘ 5      ↘ 6

Kenneth Blume  
Project Coordinator/Environmental Assessor  
ERS Corp  
1600 Riviera Avenue, Suite 310  
Walnut Creek, CA 94596  
Tel: (925) 938-1600 x103  
Fax: (925) 938-1610  
[kblume@erscorp.us](mailto:kblume@erscorp.us)

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 206164 Date Received 9-17-8 Number of coolers 1
Client ERS CORP Project 1549 32ND ST

Date Opened 9-18-8 By (print) SAM EVANS (sign)
Date Logged in By (print) M. VILLANUEVA (sign)

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

2A. Were custody seals present? YES 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

Blank lines for handwritten comments.