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By Alameda County Environmental Health at 2:33 pm, May 23, 2013

March 19, 2013

Mr. Keith Nowell
Alameda County Health Care Services
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Closure Verification Soil and Soil-Vapor Sampling Report _RO0002933
1409 – 1417 12th Street, Oakland, California

Dear Mr. Nowell:

Attached is the Closure Verification Soil and Soil-Vapor Sampling Report for the property located at 1409 – 1417 12th Street, Oakland, California.

Certification

I certify under penalty of law that this document and attachments are prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing the violations.

Please contact Joseph Cotton at (510)703-5420 if you have questions or comments.

Sincerely,

Shirley E. Thompson

Shirley E. Thompson
Property Owner

SITE CLOSURE VERIFICATION SOIL & SOIL-VAPOR SAMPLING REPORT
1409 – 1417 12th Street
OAKLAND, CALIFORNIA

Prepared for

Shirley Thompson
1155 Hopkins Street
Berkeley, CA 94702

March 31, 2013

Prepared by

IES
Impact Environmental Services

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IES

SITE CLOSURE VERIFICATION SAMPLING REPORT
1409-1417 12TH STREET
OAKLAND CALIFORNIA

ACEH File No. RO2933

On behalf of Mrs. Shirley E. Thompson, Impact Environmental Services nefarious (Impact) is presenting this Site Verification Closure Report for 1409-1417 12th Street in Oakland, California (Figure 1). This report presents the results of soil and soil-vapor sampling to verify that site petroleum hydrocarbon contamination in soil has been reduced using Dual-Phase Vacuum Enhanced Extraction to a concentration to validate petitioning the Alameda County Environmental Health Services (ACEH) for corrective action closure. The investigation was conducted to satisfy ACEH closure requirements related to the unauthorized fuel release at the subject property[1].

SITE CONTACT INFORMATION

The site address and contact information for the subject property is as follows:

Site Address:	**Contact Information:**
1409-1417 12th Street	Mrs. Shirley E. Thompson
Oakland, CA	Edward C. & Shirley E. Thompson Trust
APN 004-063-06	1155 Hopkins Street
	Berkeley, CA 94702-1359

SITE BACKGROUND

Site Description

The Subject Property is located in a predominately residential area in the western section of the city of Oakland, Alameda County, California (Figure 1). The subject Property comprises the Alameda County assessor parcel 004-063-06 and is bordered to the north by 12th Street

[1] Alameda County Environmental Health, "Fuel Leak Case No. RO2933, 1409-1417 12th Street, Oakland, California CA 94607-2003_Request for Work Plan", February 26, 2007.

and residential development, to the south by a vacant lot, on the east by Mandela Parkway, and to the west by a residential development (Figure 2). The property is located approximately 1-mile southeast of San Francisco Bay and 1-mile north of Oakland Inner Harbor. The elevation of the site is approximately 17 feet above mean sea level (USGS West Oakland 7.5 Minute Quadrangle). Portions of the site are paved with asphalt and the remainder is covered by grass and soil. Several mounds of soil up to 2 feet high are present in the southeast portion of the subject property.

Historical Site Operation

Historical records indicate that the property was occupied by a service station from circa 1957 to the circa 1969. The subject property was either vacant or occupied by residential dwellings from at least 1902 to circa 1956. Sanborn maps from 1957, 1958, 1961 and 1967 appear to show three underground fuel storage tanks (USTs) located in the southeast corner of the service station. The 1961 Sanborn map appears to show a fourth UST or AST along the west property boundary. Communications with Oakland Fire Department Hazardous Materials Division, confirmed that no records of UST removal exist for the Subject Property[2].

Geologic Setting

The Subject Property is located in the East Bay Plain of the San Francisco Bay Area. This region is dominated by northwest trending topography enclosed in the Coast Range Province of California. The site is located in a "Merritt Sand Outcrop" groundwater subarea, which has a maximum thickness of 65 feet, and the local gradient is directed toward the west to southwest[3]. Soil beneath the property consists primarily of silty-sand to at least 16 feet bgs. Groundwater is first encountered between 10.5 and 13.5 below ground surface (bgs) and stabilizes at approximately 11 feet bgs. A perched groundwater zone was present at approximately 5-feet bgs over most of the site. The direction of groundwater flow in the surrounding area is highly varaible[4]. The direction of groundwater flow at the site is currently unknown.

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2 Personal Communication, *LeRoy Griffin, Oakland Fire Department Hazardous Materials Division,* May 25, 2006.

3 Hickenbottom and Muir, *Geohydrology and Groundwater Quality Overview of the East Bay Plain Area, Alameda County, California, 205 (J) Report*, 1988.

4 Personal Communication, *Steven Plunkett, Alameda County Environmental Health,* March 30, 2007.

HISTORICAL ENVIRONMENTAL ASSESSMENT

Previous Phased Environmental Investigations

The 1409-1417 12th Street site has been the subject of numerous environmental investigations[5,6,7,8,9] beginning in 1999. The suspected source of on-site contamination is believed to be from residual fuel from former underground storage tanks (USTs) associated with service station operations. Petroleum hydrocarbons have been detected in on-site soil, soil-vapor, and groundwater samples at concentrations that exceed environmental screening levels (ESLs)[10] for residential land-use. Significant concentrations of (total petroleum hydrocarbons (TPH) as gasoline (TPHg) up to 20,000 milligrams per kilogram (mg/kg) and volatile organic compounds (VOCs) to 120 mg/kg were detected in soil samples collected from the site. TPHg was detected in groundwater samples at a maximum concentration of 52,000µg/L. Benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in groundwater at maximum concentrations of 8,700µg/L, 2,200µg/L, 2,000µg/L, 7,200µg/L, respectively. 1, 2-Dichloroethane was detected at a maximum concentration of 570µg/L. Soil-vapor samples collected from the site were found to contain TPHg at a maximum concentration of 52,000ug/m^3, benzene as high as 1,200 ug/m^3, and vinyl chloride to 260ug/m^3.

In March 2008, eleven groundwater-monitoring wells (MW-1 through MW-8 and GW-1 through GW-3) were installed at the subject property. Shallow groundwater elevations occur from 9 to 11 feet below ground surface. In general, shallow groundwater flow is toward the south towards San Francisco Bay.

A dual-phase vacuum extraction (DPE) pilot test was conducted at the subject property in October 2008. The pilot test was conducted to evaluate DPE technology as a viable method to cleanup petroleum hydrocarbons from soil and groundwater at the site. The results of pilot test indicated that DPE was a viable technology for mitigating petroleum hydrocarbons from unsaturated soil and groundwater from the subject property.

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5 Blymer Engineers, Inc., *Subsurface Investigation Vacant Parcel 1409-1417 12th Street, Oakland, California*, August 25, 1999.

6 Impact Environmental Services, Phase I Environmental Site Assessment 1409-1417 12th Street Oakland California, August 25, 2006 (revised December 13, 2006).

7 Impact Environmental Services, Site Characterization Report *1409-1417 12th Street Oakland California*, June 5, 2007.

8 Impact Environmental Services, Remediation Workplan Site *1409-1417 12th Street Oakland California*, October 17, 2007.

9 Impact Environmental Services, Groundwater Well Installation & Initial Quarterly Groundwater Monitoring Report for 1409 - 1417 Street, Oakland, California, October 9, 2008.

10 San Francisco Bay Regional Water Quality Control Board, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater-Interim Final*, May 2008.

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A dual-phase vacuum extraction (DPE) pilot test was conducted at the subject property in October 2008. The pilot test was conducted to evaluate DPE technology as a viable method to cleanup petroleum hydrocarbons from soil and groundwater at the site. The results of pilot test indicated that DPE was a viable technology for mitigating petroleum hydrocarbons from unsaturated soil and groundwater from the subject property.

In January 2009, eight dual phase extraction wells (DPE-1, DPE-1B, DPE-2, DPE-2B, DPE-3, DPE-5, DPE-6, and DPE-7) were installed at the property under the direction of IMPACT. In addition, existing wells GW-1, GW-3, and MW-8 were converted for dual use as both groundwater monitoring and DPE wells.

In February 2009, IMPACT and its subcontractor's OTG Environmental Engineering were retained to design the DPE system for the site. In April 2009, Ashby Excavation and Construction was retained by IMPACT to construct the DPE containment building. Mako Industries Inc. was contracted by IMPACT to build the liquid-ring, high vacuum extraction and thermal oxidizer treatment system trailer. Ashby completed the containment building and underground DPE groundwater/vapor recovery piping in October 2009. Pacific Gas & Electric completed gas and electric connections to the site in November 2009. Piping from the eleven DPE wells were connected to a central manifold located within the containment building. Final connections were made to the DPE trailer, manifold, thermal oxidizer system, and liquid-phase granular activated carbon vessels in December 2009.

On January 13, 2010, the remediation system was turned on after laboratory results of the Day 1 samples met the discharge requirements. The discharge of the treated water began on January 13, 2010. The remediation system ran continuously for another five days and was then sampled again on January 18 following the NPDES permit requirement. The Day 5 samples were delivered to Torrent Laboratory under 24-hr turnaround time analysis. The remediation system ran continuously from January 18, 2010 through July 23, 2010, except on occasions when the DPE unit was automatically turned off (tripped) due to low pressure of natural gas supply from PG&E.

On May 5, 2011 the DPE System was restarted and monthly NPDES groundwater sampling was resumed. Groundwater-soil vapor extraction wells DPE-1 and DPE-2 were disconnected from the DPE collection network and used as bleeder wells to supplement air flow to the nearby subsurface . The DPE system ran continuously from May 5, 2011 through October 31, 2011, except on occasions when the DPE system tripped. The DPE system was shut down on October 31, 2011 to evaluate remediation effectiveness on groundwater quality. In addition, periodic manual hydrogen peroxide treatment was resumed at wells MW-8, GW-1, GW-3, DPE-1B, and DPE-3 following the shutdown of the DPE system. Semiannual groundwater monitoring for 2011 was performed in the months of June and December.

SCOPE OF WORK FOR SITE VERIFICATION CLOSURE SAMPLING

This report describes our efforts to evaluate the presence of residual petroleum hydrocarbons in soil and groundwater following significant treatment of soil and groundwater using a dual-phase vacuum enhanced extraction in conjunction with manual hydrogen peroxide treatment of groundwater. Historical results from on-site wells appear to indicate that concentrations of constituents of concern in groundwater are below or almost achieving environmental screening limits for residential development. Closure verification soil and soil-vapor samples were collected to evaluate whether the dual-phase vacuum extraction removed sufficient petroleum hydrocarbons to allow IMPACT to petition for corrective action closure for the subject site. IMPACT anticipates petitioning for corrective action closure of the site upon completion of the following scope of work.

- Installing eight exploratory borings near source areas where petroleum hydrocarbon contamination has been previously documented to evaluate the effectiveness of DPE remediation;

- Installing seven semi-permanent soil-vapor wells near source areas where petroleum hydrocarbon contamination has been previously documented to evaluate the effectiveness of DPE remediation;

- Collecting and analyzing soil and soil-vapor samples for petroleum hydrocarbons and select volatile organic compounds for comparison with RWQCB's environmental screening levels (ESLs)[11] for residential land-use.

- Evaluating historical groundwater well sample results for comparison with RWQCB's ESLs for residential land-use.

- Preparing this Site Remediation Verification Closure Report.

Pre-Field Activities

Prior to drilling, IMPACT obtained a drilling permit to install the exploratory borings and install soil-vapor wells from Alameda County Public Works Department. The drilling permit is presented in Appendix A. Underground Service Alert (USA) cleared the perimeter of the site for underground utilities. C-Cruz Underground Utility Locators (C-Cruz) of Milpitas, California cleared boring and soil-vapor well locations for underground utilities.

Drilling and Sampling Methods

Environmental Control Associates (ECA), a licensed driller from Aptos, California, completed the borings using direct-push drilling methods. Borings were advanced using the Enviro-Core sampling system. The Enviro-Core system consists of 2.5-inch-diameter steel drive casing and a 1.8-inch-diameter inner sample barrel that are simultaneously pushed, driven, or vibrated into the ground. Continuous soil cores were collected in butyrate tubes inside the inner sample barrel. After being advanced to the desired interval (usually three to four-feet), the inner sample barrel was retrieved while the drive casing was left in place to prevent borehole collapse. After retrieving the inner core barrel, the samples were removed for chemical analyses or lithologic identification. Periodic soil samples were screened in the field using an organic vapor meter (OVM) and visual and olfactory methods to evaluate the presence of hydrocarbons in the soil. Soil samples were not retrieved from soil-vapor pilot borings.

Eight closure verification exploratory borings (CSB-1 through CSB-8) and seven closure verification soil-vapor wells were completed at the site on May 8th through May 10th.

[11] San Francisco Bay Regional Water Quality Control Board, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater-Interim Final*, May 2008.

Closure verification soil boring locations are shown on Figure 3. Soil samples were collected from exploratory borings at every few feet from 5-feet and generally from 5, 7, 10 12, 15, and in some borings as deep as 18-feet bgs. All eight exploratory verification soil borings were completed to depths between 15 and 18-feet bgs. Soil samples were analyzed for TPHd and TPHmo by EPA Method 8015; TPHg, BTEX and fuel oxygenates by EPA Method 8260. Soil samples for laboratory analysis were properly containerized, labeled, and preserved upon collection. The soil core from each boring was logged according to the Unified Soil Classification System (USCS) by a professional geologist certified by the State of California. Boring logs are presented in Appendix B. Chain-of-custody documentation accompanied the samples to the laboratory for analysis.

All down-hole equipment was triple-rinsed before use and between borings. Following completion of sample collection, each boring was grouted to the surface with bentonite-cement slurry using a tremie pipe.

Soil-Vapor Sample Collection

On May 16th and 17th, IES collected nine soil vapor samples at the locations shown on Figure 3. Soil-vapor sampling was conducted in accordance with the Department of Toxic Substance Control California Environmental Protection Agency (DTSC) guidance document[12]. Closure verification soil-vapor well locations are presented on Figure 4. Soil-vapor wells were installed to a depth of 5-feet bgs. Soil-vapor probes were installed using a direct-push sampling rig. The probes were installed by pushing a hollow rod with a retractable tip to the target sampling depth of 5 feet bgs. After reaching the target sampling depth, the sampling rod was withdrawn 6 inches, exposing a screened interval immediately above the retractable tip. Before retraction, the screened interval was pre-connected to polyethylene tubing that extended to the surface. The lower 9-inches of the borehole were filled with aquarium gravel and the remaining boring was filled to the surface with bentonite to inhibit surface air intrusion. The soil-vapor well was completed with a locking well box. Diflouroethane was used along the sampling train to provide leak detection material. The sampling train volume was purged three times at a rate of approximately 100 milliliters per minute (ml/min) using a 100-ml syringe. A 6-liter Summa canister was used to collect a sample at a rate of 100 to 200 ml/min. Summa canisters were labeled and transported (non-

[12] DTSC Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air-Interim Final, February 7, 2005.

chilled) to Torrent Labs of Milpitas, California under chain-of-custody control and documentation. After completion of sampling, the rod was withdrawn and the boring was backfilled with neat cement mixed with 4% bentonite.

Soil-vapor samples were analyzed for TPHg by modified EPA Method TO-3 and BTEX and MTBEs by EPA Method TO-15.

SITE CHARACTERIZATION RESULTS

Closure Verification Soil Sample Results

Forty-six closure verification soil samples were collected from eight borings at depths ranging from 5 to 18 feet bgs. The locations of the closure verification soil borings are shown on Figure 3. Soil samples results are summarized in Tables 1 and associated laboratory CARs are presented in Appendix C. Sample results are discussed later in the following sections.

Closure Verification Soil-Vapor Sample Results

Seven soil-vapor samples (CSV-1 through CSV-7) were collected from the locations shown on Figure 4. Verification closure soil-vapor sample results are summarized in Table 2 and laboratory CARs are presented in Appendix B. Soil-vapor sample results are discussed later in the following sections.

Quality Control Results

Quality control (QC) sample results and laboratory QC data were evaluated to assess the acceptability of the analytical data. Laboratory QC results are included with the certified analytical reports (CAR) presented in Appendix C. All laboratory analyses occurred within EPA recommended sample holding times and all sample containers were received in acceptable condition by the laboratory. Based on the laboratory QA/QC summaries, all method blanks, laboratory control samples (LCS), matrix spikes (MS), and matrix spike duplicates (MSD) were within laboratory control limits. No laboratory QA/QC issues were noted during this investigation, with the following exception. In samples where TPHd was detected in closure verification soil samples, the samples exhibited chromatographic patterns which did not resemble the diesel standard. Notes describing laboratory quality control

issues are included at the end of each CAR. Laboratory QC results indicate that the soil and soil-vapor results are valid and data are acceptable for the intended use.

DISCUSSION OF RESULTS

The results of closure verification soil and soil-vapor samples were compared to RWQCB ESLs for a residential land-use where shallow groundwater is a source of drinking water. The RWQCB developed ESLs for residential land-use scenarios to provide a measure of whether corrective action closure, additional investigation, remedial action, or a more detailed risk assessment should be pursued.

Three soil samples from boring CSB1 and one soil sample from boring CSB6 contained several constituents of concern above their respective ESLs.

The soil sample from a depth of 7 feet bgs in boring CSB1 contained 1,900mg/kg TPHg, 180mg/kg TPHd, 3,100mg/kg ethylbenzene, and 30,900mg/kg total xylenes. The soil sample from a depth of 10 feet bgs in boring CSB1 contained 3,300mg/kg TPHg, 550mg/kg TPHd, 990mg/kg ethylbenzene, and 85,000mg/kg total xylenes. The soil sample from a depth of 12 feet bgs in boring CSB1 contained 2,600mg/kg TPHg, 490mg/kg TPHd, 25,000mg/kg ethylbenzene, and 105,000mg/kg total xylenes. The soil sample from a depth of 10 feet bgs in boring CSB6 contained 10,000mg/kg TPHg and 3,500mg/kg of TPHd. All remaining soil samples did not contain constituents of concern at or above respective ESLs.

Closure verification soil-vapor samples did not contain constituents of concern at or above respective ESLs.

LOW-RISK GROUNDWATER CASE CLOSURE CRITERIA

Based on the information presented above, the site does not meet all the RWQCB criteria for a low-risk fuel site. As described in the January 5, 1996 RWQCB-SF memorandum Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Sites, a low-risk groundwater case has the following general characteristics:

1) The unauthorized release is located in the service area of a public water system.
2) The unauthorized release consists only of petroleum.
3) The unauthorized release primary release from the UST system has been stopped.

4) Free-product has been removed to the maximum extent practicable.
5) A conceptual site model that assesses the nature, extent, and mobility of the release has been developed.
6) Soil and groundwater has been tested for MTBE and results reported accordingly.
7) Nuisance conditions as defined by the Water Code section 130505 does not exist at the site,
8) The dissolved petroleum hydrocarbon plume must be stable and not migrating,
9) Secondary sources have been removed to the extent practicable.

All of the low-risk groundwater case characteristics for the site have been achieved with the exception of secondary source removal. Closure verification soil samples collected from borings CSB-1 and CSB indicate that secondary sources in the form of soil contaminated with petroleum hydrocarbons and groundwater in wells GW-1 and DPE-3 are present in the subsurface at concentrations above ESLs. It appears that elevated concentrations of petroleum hydrocarbons in soil are negatively impacting groundwater and preventing the site from achieving environmental screening levels for petroleum hydrocarbons in groundwater.

Groundwater remediation via DPE and hydrogen peroxide dosing in select wells at the site has significantly reduced petroleum hydrocarbons in groundwater. Constituents of concern are below respective ESLs in all but a few wells and appear to be relatively stable and contained within the boundaries of the subject property.

CONCLUSIONS

Based on the results of soil and soil-vapor results collected from closure verification sampling efforts, the following are IMPACTs conclusions regarding the current environmental disposition at the subject property.

- Based on the comparison of site data with ESLs, it appears the potential human health risks at the site include exposure from direct-contact with petroleum-impacted soils (i.e., during construction activities) near wells DPE-1B/GW-1 (CSB6) and DPE-3/GW-3 (CSB-1).

- Closure verification soil-vapor samples did not contain constituents of concern at or above respective ESLs.

- It appears that elevated concentrations of petroleum hydrocarbons in soil are negatively impacting groundwater and preventing the site from achieving associated environmental screening levels for petroleum hydrocarbons in groundwater.

RECOMMENDATIONS

IMPACT recommends the following tasks be completed to move the site towards environmental corrective action closure and protect potential receptors.

- Impact recommends that soil in two separate hot-spot areas in the vicinity of wells GW-1 (Excavation Area 1) and DPE-3 (Excavation Area 2) be excavated and transported off-site to an appropriate landfill facility. The locations of the proposed areas of excavation are shown on Figure 11.

- Impact also recommends that the excavated soil be segregated in the field using screening methods including staining, odor, and PID readings of soil. Soil will be placed in separate stockpiles based on the level of TPH contamination and sampled for reuse in accordance with RWQCB guidelines. The stockpiles will also be sampled for disposal in accordance with local landfill requirements. It is estimated that soil from Excavation 1 will need to be excavated to a depth of approximately 12 to 13 feet and soil from Excavation 2 will need to be excavated to a depth of approximately 14 to 15 feet bgs.

- Impact recommends that groundwater monitoring wells and DPE wells within and near the proposed excavations be decommissioned in accordance with the California Well Standards. These wells include MW-8, GW-1, DPE-1B, and DPE-5 in Excavation Area 1 and wells GW-3 and DPE-3 in Excavation Area 2.

- Impact further recommends that Oxygen Releasing Compound (ORC) be placed in the lower section of the excavations prior to being backfilled to grade with clean reused soil and clean imported soil.

- Impact recommends continuing groundwater monitoring on all remaining groundwater monitoring wells and DPE wells for 2 remaining quarters following excavation of TPH-impacted soils.

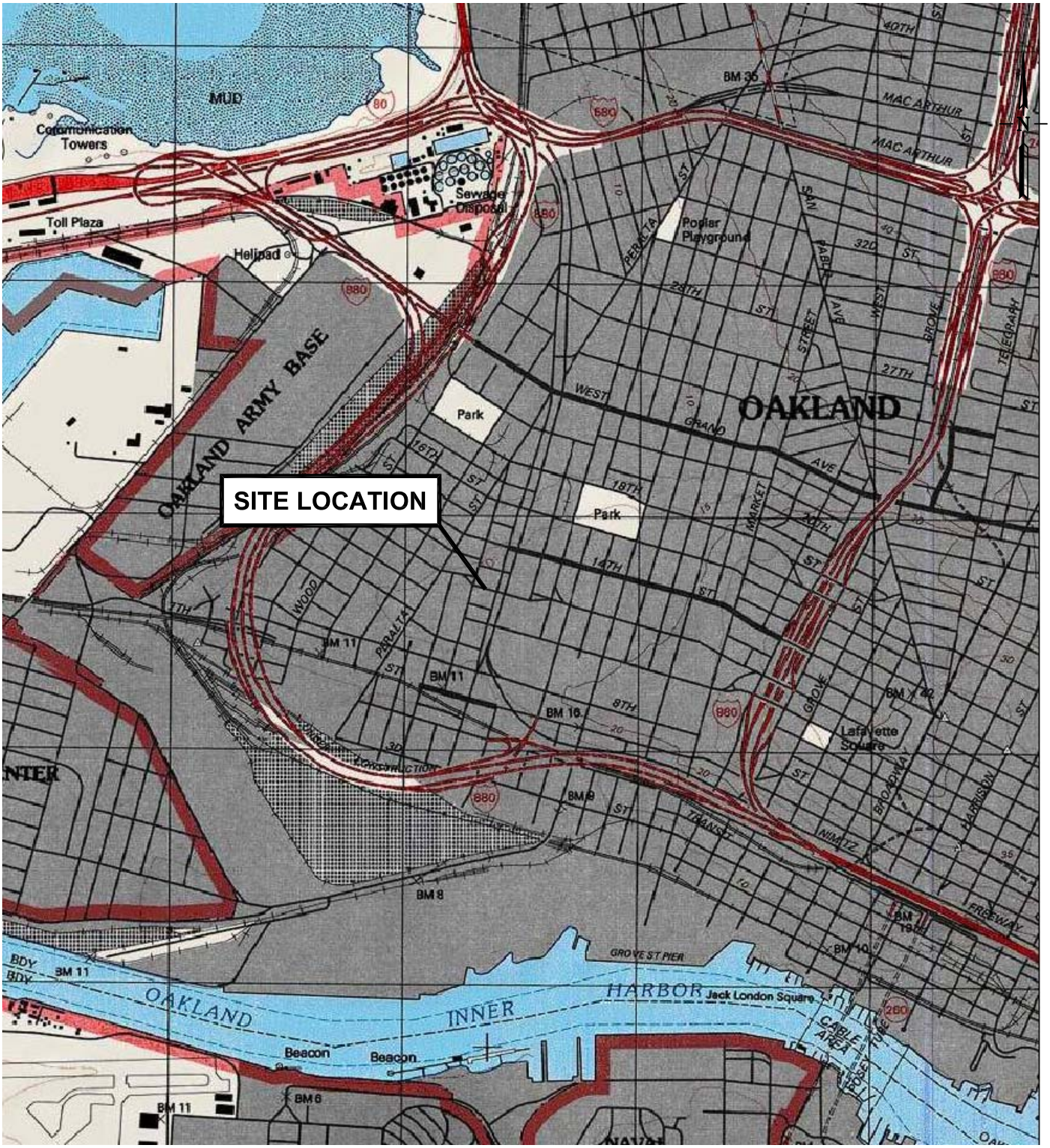
PERJURY STATEMENT

I declare, under penalty of perjury, that the information and/or recommendations contained in this document or report is true and correct to the best of my knowledge.

Impact Environmental

Joseph A Cotton, P.G. 7378
Principal Geologist

PROFESSIONAL GEOLOGIST
JOSEPH A. COTTON
No. 7378
STATE OF CALIFORNIA



Scale 1:24,000

1 1/2 0 1 Mile

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

1 .5 0 1 Kilometer

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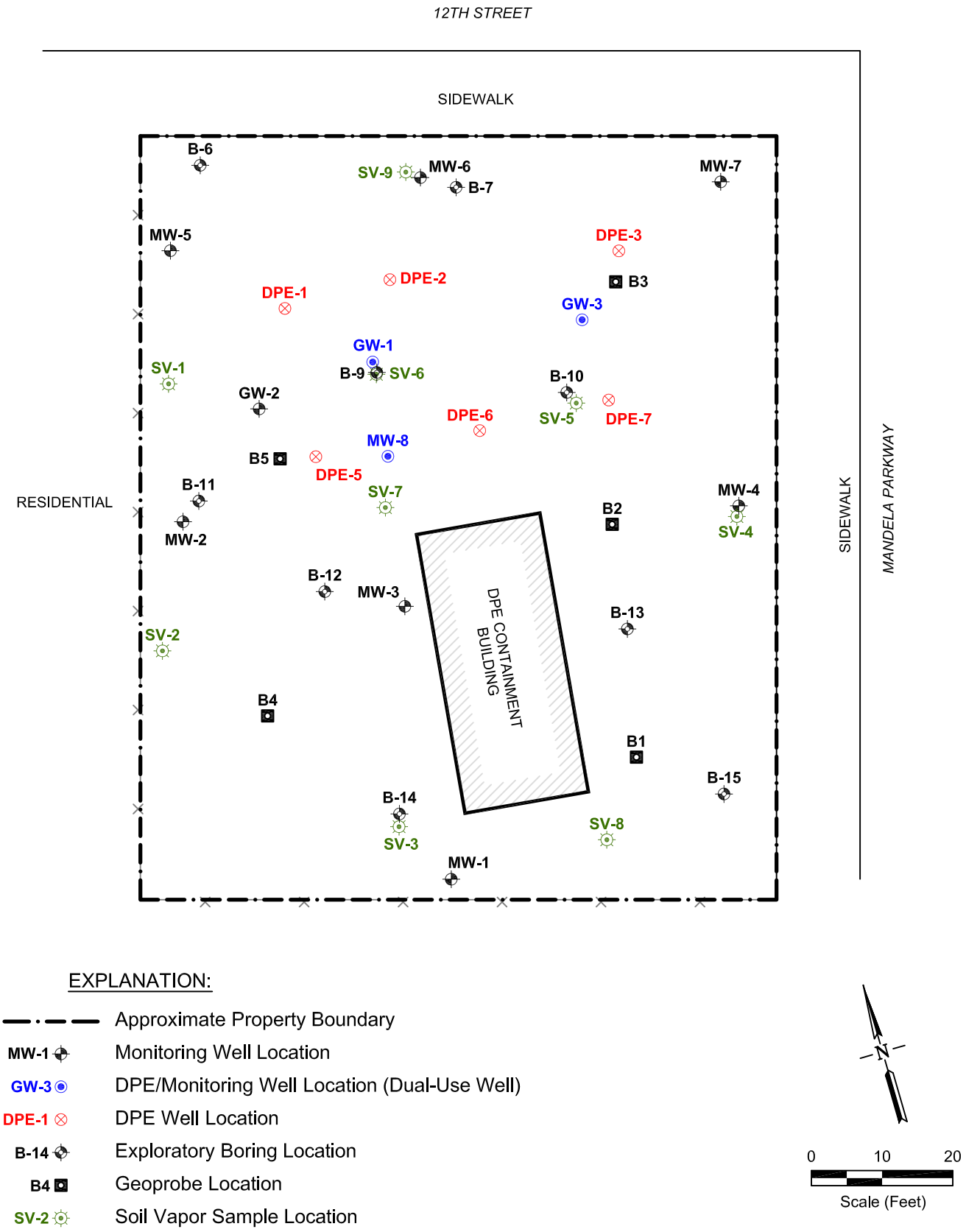
Figure 1

1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

SITE LOCATION MAP



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- DPE-1 DPE Well Location
- B-14 Exploratory Boring Location
- B4 Geoprobe Location
- SV-2 Soil Vapor Sample Location

N

0 10 20

Scale (Feet)

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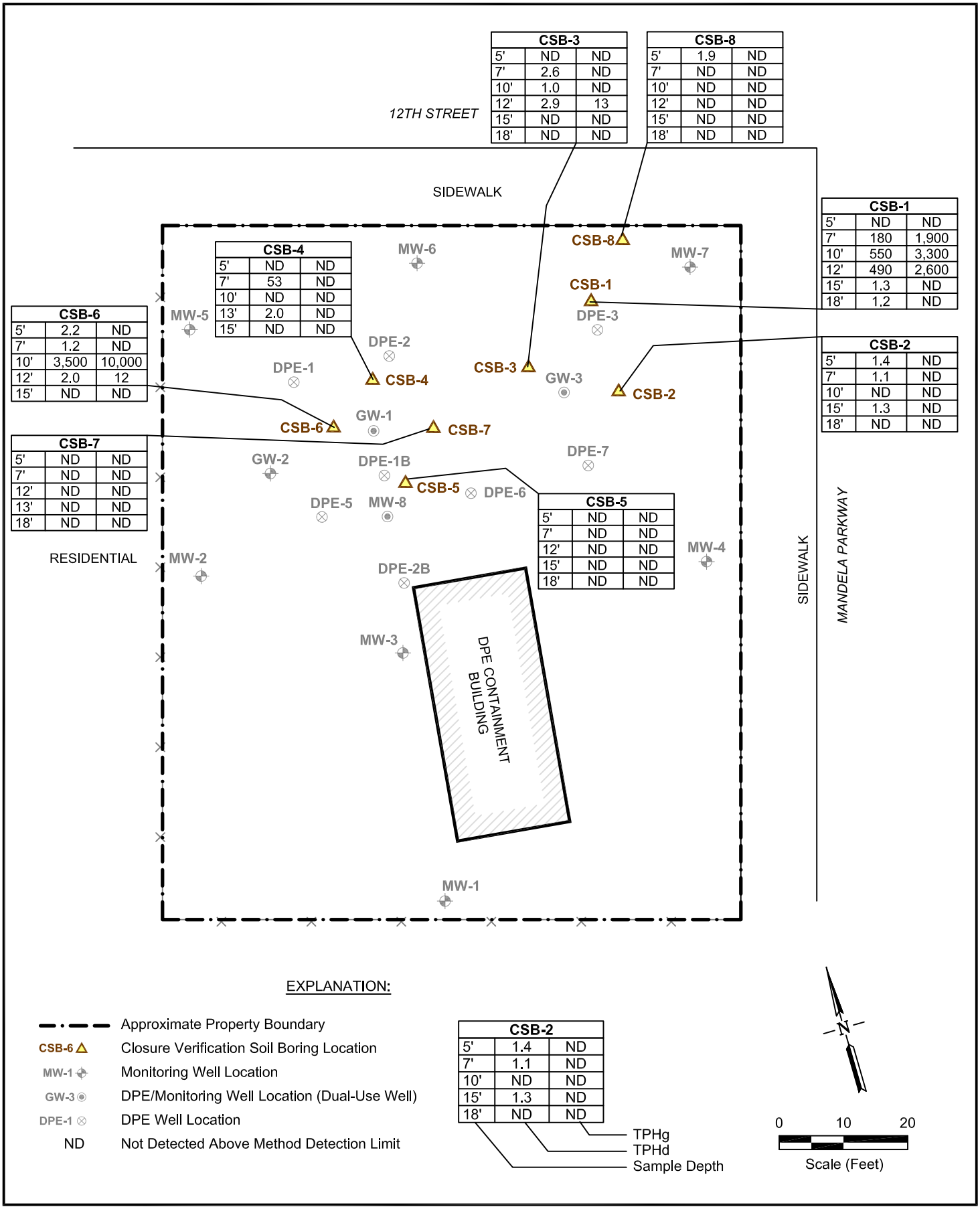
Figure 2
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

SITE PLAN



D:\Work\EnviroCAD\ES\1409-1417 12th Street\Closure Verification\Figure 3-5 - Soil Results.dwg Layout: Fig 3 Mar 18, 2013 - 11:30pm

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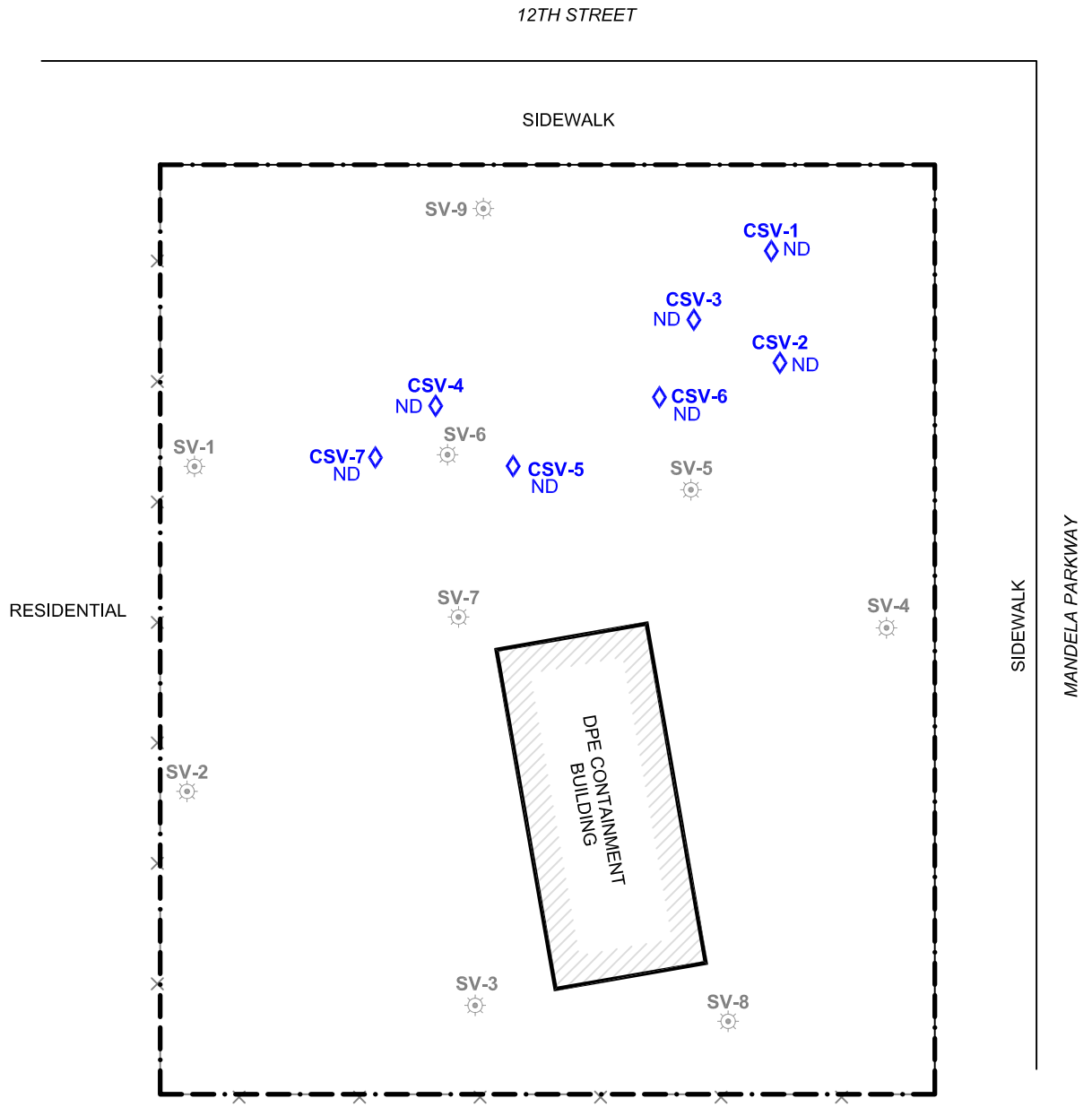
Figure 3

1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

CLOSURE VERIFICATION SOIL SAMPLE RESULTS



EXPLANATION:

- Approximate Property Boundary
- SV-1 — Former Soil Vapor Sample Location
- CSV-5 — Closure Verification Soil Vapor Well Location
- ND — All Compounds Not Detected Above Method Detection Limit

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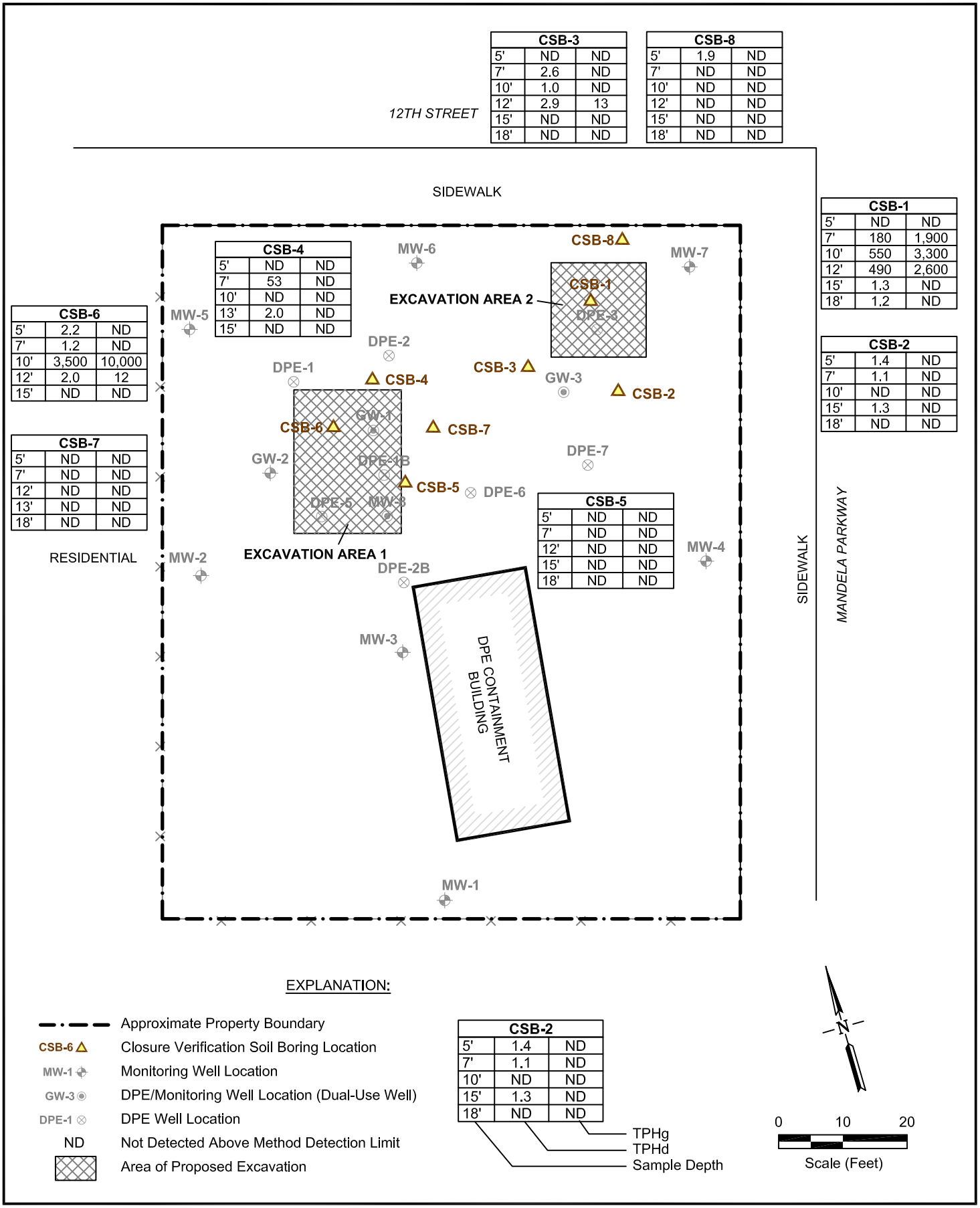
Figure 4
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

CLOSURE VERIFICATION SOIL VAPOR SAMPLE RESULTS



CSB-3		
5'	ND	ND
7'	2.6	ND
10'	1.0	ND
12'	2.9	13
15'	ND	ND
18'	ND	ND

CSB-8		
5'	1.9	ND
7'	ND	ND
10'	ND	ND
12'	ND	ND
15'	ND	ND
18'	ND	ND

CSB-1		
5'	ND	ND
7'	180	1,900
10'	550	3,300
12'	490	2,600
15'	1.3	ND
18'	1.2	ND

CSB-2		
5'	1.4	ND
7'	1.1	ND
10'	ND	ND
15'	1.3	ND
18'	ND	ND

CSB-4		
5'	ND	ND
7'	53	ND
10'	ND	ND
13'	2.0	ND
15'	ND	ND

CSB-6		
5'	2.2	ND
7'	1.2	ND
10'	3,500	10,000
12'	2.0	12
15'	ND	ND

CSB-7		
5'	ND	ND
7'	ND	ND
12'	ND	ND
13'	ND	ND
18'	ND	ND

CSB-5		
5'	ND	ND
7'	ND	ND
12'	ND	ND
15'	ND	ND
18'	ND	ND

CSB-2		
5'	1.4	ND
7'	1.1	ND
10'	ND	ND
15'	1.3	ND
18'	ND	ND

TPHg
TPHd
Sample Depth

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Figure 5

1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

PROPOSED AREA OF EXCAVATION

Table 1
Soil Analytical Results
Site Closure Verification Soil Samples
1409-1417 12th Street Oakland, California

			Total Petroleum Hydrocarbons			BTEX				Fuel Oxygenates and Lead Scavengers						
Sample ID	Date Sampled	Sample Depth	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (ukg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Total Xylene (ug/kg)	TBA (ug/kg)	MTBE (ug/kg)	DIPE (ug/kg)	ETBE (ug/kg)	1,2-DCA (ug/kg)	TAME (ug/kg)	1,2-DBE (ug/kg)
CSB1-5	05/10/12	5	<0.98	<1.0	<5.0	<4.8	<4.8	<4.8	<4.8	<97	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB1-7	05/10/12	7	**1,900**	**180Y**	<5.0	<1,300	<1,300	**3,100**	**30,900**	<25,000	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300
CSB1-10	05/10/12	10	**3,300**	**550Y**	<5.0	<830	<830	**990**	**85,000**	<830	<830	<830	<830	<830	<830	830
CSB1-12	05/10/12	12	**2,600**	**490Y**	<5.0	<1,300	<1,300	**25,000**	**105,000**	<25,000	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300
CSB1-12A	05/10/12	12.5	55	40Y	<5.0	<5.0	<5.0	<5.0	<5.0	<99	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CSB1-15	05/10/12	15	<0.99	1.3Y	<5.0	<4.8	<4.8	<4.8	<4.8	<96	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB1-18	05/10/12	18	<0.95	1.2Y	<5.0	<4.7	4.7	<4.7	<4.7	<95	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB2-5	05/10/12	5	<1.1	1.4Y	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CSB2-7	05/10/12	7	<1.1	1.1Y	<5.0	<4.8	<4.8	<4.8	<4.8	<96	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB2-10	05/10/12	10	<0.96	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CSB2-15	05/10/12	15	<1.0	1.3Y	<5.0	<4.8	<4.8	<4.8	<4.8	<95	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB2-18	05/10/12	18	<0.93	<1.0	<5.0	<4.7	4.7	<4.7	<4.7	<93	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB3-5	05/10/12	5	<0.95	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CSB3-7	05/10/12	7	<1.0	2.6Y	7.4	<4.7	4.7	<4.7	<4.7	<93	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB3-10	05/10/12	10	<0.95	1.0Y	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
CSB3-12	05/10/12	12	13Y	2.9Y	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB3-15	05/10/12	15	<0.98	<1.0	<5.0	<4.6	4.6	4.6	<4.6	<92	4.6	4.6	4.6	4.6	4.6	<4.6
CSB3-18	05/10/12	18	<0.92	<1.0	<5.0	<4.7	4.7	<4.7	<4.7	<95	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB4-5	05/10/12	5	<1.0	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB4-7	05/10/12	7	<0.94	53Y	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB4-10	05/10/12	10	<0.94	1.1Y	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB4-12	05/10/12	12	<0.97	<1.0	<5.0	<4.8	<4.8	<4.8	<4.8	<97	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB4-13	05/10/12	13	<0.96	1.0Y	<5.0	<4.8	<4.8	<4.8	<4.8	<95	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB4-15	05/10/12	15	<0.96	<1.0	<5.0	<4.6	4.6	4.6	<4.6	<91	4.6	4.6	4.6	4.6	4.6	<4.6
Residential ESL for Shallow Soil (DWS)			*83*	*83*	*370*	*0.000044*	*0.0093*	*0.0023*	*0.011*	*0.000075*	*0.000023*	*No ESL*	*No ESL*	*0.00022*	*No ESL*	*0.0016*
Residential ESL for Shallow Soil (NDWS)			*83*	*83*	*370*	*0.00012*	*0.0029*	*0.0023*	*0.0023*	*0.10*	*0.0084*	*No ESL*	*No ESL*	*`0.0000045*	*No ESL*	*0.0011*

Table 1
Soil Analytical Results
Site Closure Verification Soil Samples
1409-1417 12th Street Oakland, California

			Total Petroleum Hydrocarbons			BTEX				Fuel Oxygenates and Lead Scavengers						
Sample ID	Date Sampled	Sample Depth	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	TBA (mg/kg)	MTBE (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	1,2-DBE (mg/kg)
CSB5-5	05/10/12	5	<1.0	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<97	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB5-7	05/10/12	7	<0.93	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<97	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB5-10	05/10/12	10	<1.1	<.99	<5.0	<4.9	<4.9	<4.9	<4.9	<97	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB5-12	05/10/12	12	<0.93	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<97	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB5-15	05/10/12	15	<0.94	<.99	<5.0	<4.7	<4.7	<4.7	<4.7	<95	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB5-18	05/10/12	18	<0.99	<.99	<5.0	<4.8	<4.8	<4.8	<4.8	<96	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB6-5	05/10/12	5	<1.0	2.2Y	27	<4.8	<4.8	<4.8	<4.8	<96	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB6-7	05/10/12	7	<0.99	1.2Y	<5.0	<4.8	<4.8	<4.8	<4.8	<96	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB6-10	05/10/12	10	**10,000**	**3,500Y**	**<100**	<13,000	<13,000	<13,000	<13,000	<250,000	<13,000	<13,000	<13,000	<13,000	<13,000	<13,000
CSB6-13	05/10/12	13	12Y	2.0Y	<5.0	<4.7	<4.7	<4.7	<4.7	<95	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
CSB6-15	05/10/12	15	<1.0	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB7-5	05/10/12	5	<0.94	<1.0	<5.0	<4.4	<4.4	<4.4	<4.4	<88	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
CSB7-7	05/10/12	7	<0.98	<1.0	<5.0	<4.9	<4.9	<4.9	<4.9	<98	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
CSB7-10	05/10/12	10	<0.93	<.99	<5.0	<4.8	<4.8	<4.8	<4.8	<97	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
CSB5-13	05/10/12	13	<1.0	<.99	<5.0	<4.4	<4.4	<4.4	<4.4	<88	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
CSB5-15	05/10/12	15	<0.95	<1.0	<5.0	<4.5	<4.5	<4.5	<4.5	<91	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5
CSB8-5	05/10/12	5	<0.97	1.9Y	9.8	<4.4	<4.4	<4.4	<4.4	<89	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
CSB8-7	05/10/12	7	<1.1	<1.0	<5.0	<4.3	<4.3	<4.3	<4.3	<87	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3
CSB8-10	05/10/12	10	<0.98	<1.0	<5.0	<4.6	4.6	4.6	<4.6	<91	4.6	4.6	4.6	4.6	4.6	<4.6
CSB8-12	05/10/12	12	<0.93	<1.0	<5.0	<4.5	<4.5	<4.5	<4.5	<91	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5
CSB8-15	05/10/12	15	<0.95	<1.0	<5.0	<4.5	<4.5	<4.5	<4.5	<91	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5
CSB8-18	05/10/12	18	<0.93	<.99	<5.0	<4.6	4.6	4.6	<4.6	<92	4.6	4.6	4.6	4.6	4.6	<4.6
Residential ESL for Shallow Soil (DWS)			*83*	*83*	*370*	*0.000044*	*0.0093*	*0.0023*	*0.011*	*0.000075*	*0.000023*	*No ESL*	*No ESL*	*0.00022*	*No ESL*	*0.0016*
Residential ESL for Shallow Soil (NDWS)			*83*	*83*	*2,500*	*0.00012*	*0.0029*	*0.0023*	*0.0023*	*0.10*	*0.0084*	*No ESL*	*No ESL*	*`0.0000045*	*No ESL*	*0.0011*

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8015
TPHd= Total Petroleum Hydrocarbons as diesel by EPA Method 8015
TPHmo= Total Petroleum Hydrocarbons as motor oil by EPA Method 8015
Benzene, methyl-tert-butyl ether, toluene, ethylbenzene, and xylenes by EPA Method 8020
mg/kg = Milligrams per kilogram, equivalent to parts per million (ppm)
ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, February 2005.
Y= Sample exhibits chromatographic pattern which does not resemble diesel pattern.

Table 2
Soil Gas Analytical Results_
Site Closure Verification Report
1409- 1417 12th Street Oakland, California

Sample ID	CSV-1	CSV-2	CSV-3	CSV-4	CSV-5	CSV-6	CSV-7	Residential ESL
	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	(ug/m^3)	
	05/16/07	05/16/07	05/16/07	05/16/07	05/16/07	05/17/07	05/16/07	
TPHg	<180	<180	<180	<180	<180	<180	<180	*10,000*
Benzene	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	*84*
Toluene	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	*63,000*
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	*980*
m,p-Xylenes	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	*21,000*
o-Xylenes	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	<0.82	*21,000*
MTBE	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	*9,400*
1,1 Diflouroethane	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	*NA*

Abbreviations and Methods:

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method modified TO-3

VOC = Volatile Organic Compounds by EPA Method TO-15

1,2,4-TMB= 1,2,4-Trimethylbenzene

1,2,4-TMB= 1,2,4-Trimethylbenzene

ug/m^3= Micrograms per cubic meter, equivalent to parts per billion by volume (ppbv)

ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, February 2005.

APPENDIX A

Alameda County Public Works Boring Permits

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: 05/01/2012 By jamesy

Permit Numbers: W2012-0298 to W2012-0299
Permits Valid from 05/03/2012 to 05/07/2012

Application Id: 1334997003644 **City of Project Site:** Oakland
Site Location: 1409-1417 12th Street, Oakland, CA
Project Start Date: 05/03/2012 **Completion Date:** 05/07/2012
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant:	IMPACT ENVIRONMENTAL - JOSEPH COTTON 39120 Argonaut Way, #223, FREMONT, CA 94538	**Phone:** 510-703-5420
Property Owner:	Mrs. Shirley E. Thompson 1155 HOPKINS STREET, BERKELEY, CA 94702	**Phone:** 510-504-8948
Client:	Mrs. Shirley E. Thompson 1155 HOPKINS STREET, BERKELEY, CA 94702	**Phone:** 510-504-8948
Contact:	Joseph Cotton	**Phone:** 510-703-5420 **Cell:** 510-703-5420

Total Due: $530.00
Receipt Number: WR2012-0123 **Total Amount Paid:** $530.00
Payer Name : Joseph Cotton Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 5 Boreholes
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0298	05/01/2012	08/01/2012	5	2.00 in.	30.00 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

permits and requirements have been approved or obtained.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@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. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. 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.

Remediation Well Construction-Vapor Remediation Well - 5 Wells
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2012-0299	05/01/2012	08/01/2012	CSV-1	2.00 in.	1.00 in.	4.00 ft	5.00 ft
W2012-0299	05/01/2012	08/01/2012	CSV-2	2.00 in.	1.00 in.	4.00 ft	5.00 ft
W2012-0299	05/01/2012	08/01/2012	CSV-3	2.00 in.	1.00 in.	4.00 ft	5.00 ft
W2012-0299	05/01/2012	08/01/2012	CSV-4	2.00 in.	1.00 in.	4.00 ft	5.00 ft
W2012-0299	05/01/2012	08/01/2012	CSV-5	2.00 in.	1.00 in.	4.00 ft	5.00 ft

Specific Work Permit Conditions

1. 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.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit

number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@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. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

7. Minimum surface seal thickness is two inches of cement grout placed by tremie.

8. 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.

9. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

APPENDIX B

Boring Logs

IMPACT Environmental

BORING LOG

Boring No. **CSB-1**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **18**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 18 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						1	FILL	**0- 2' (FILL) BASEROCK & CONCRETE**
		0			No	2		
								2- 18' SILTY SAND (SM): Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
		0			No	3		
						4	SM	
CSB1-5'					No	5		Perched groundwater zone at 5-6' bgs
		18				6		
CSB1-7'					Yes	7		
						8		Hydrocarbon odor and color change at 8-11'.
		35				9		
		45			Yes	10		
CSB1-10'						11		
					Yes	12		
CSB1-12'		13				13		
						14		▽ Groundwater first encountered at 14' bgs. Color change to yellowish brown
					Yes	15		
CSB1-15'		0			No	16		
						17		
CSB1-18'					No	18		
						19		**Total Depth of Boring= 18 feet bgs**
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-2**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **18**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 18 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		0			No	1	FILL	**0- 2' (FILL) BASEROCK & CONCRETE**
		0			No	2		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
CSB2-5'		0			No	3	SM	
						4		
CSB2-7'					No	5		-Perched groundwater zone at 5-6' bgs
		0			No	6		
CSB2-10'		0			No	7		
						8		
		0			No	9		
CSB2-15'		0			No	10		
						11		
CSB2-18'					No	12		
						13		
						14		Groundwater first encountered at 14' bgs.
						15		
						16		
						17		
						18		
						19		**Total Depth of Boring= 18 feet bgs**
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-3**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **18**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 18 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						1	FILL	**0- 2' (FILL) BASEROCK &Sandy SILT**
		0			No	2		
						3		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
		0			No	4	SM	
						5		-Perched groundwater zone at 5-6' bgs
CSB3-5'		0			No	6		
						7		
CSB3-7'					No	8		
		0				9		
					No	10		
		0				11		-Hydrocarbon odor and color change to olive green at 11-14'.
CSB3-10'						12		
		12			Yes	13		
CSB3-12'						14		▽ Groundwater first encountered at 14' bgs. Color change to yellowish brown
		18				15		
					No	16		
CSB3-15'		0				17		
						18		
CSB3-18'					No	19		**Total Depth of Boring= 18 feet bgs**
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-4**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **16**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 16 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						1	FILL	**0- 2' (FILL) BASEROCK &Sandy SILT**
		0			No	2		
						3		**2- 11' SILTY SAND with clay (SM):** Dusky red to dark yellowish brown; moist; fine to medium sand; 25% fines. 10% plastic fines.
		0			No	4	SM	
						5		-Perched groundwater zone at 5-6' bgs
CSB4-5'		0			No	6		
		13				7		-Hydrocarbon odor and color change to olive green at 6.5-11'.
CSB4-7'					Yes	8		
		19				9		
					Yes	10		
CSB4-10'						11		**11- 15' SILTY SAND (SM):** Moderate yellowish brown; very moist to wet; fine to medium sand.
		6			Yes	12		▽ Groundwater first encountered at 12.5' bgs. Color change to yellowish brown
CSB4-12'						13		
CSB4-13'						14		
					No	15		
CSB4-15'						16		
						17		**Total Depth of Boring= 16 feet bgs**
						18		
						19		
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-5**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **18**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 18 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		0			No	1	FILL	**0- 2' (FILL) BASEROCK, BRICK & CONCRETE**
						2		
		0			No	3		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
						4	SM	
CSB5-5'		0			No	5		-Perched groundwater zone at 5-6' bgs
						6		
CSB5-7'					No	7		
		0				8		
					No	9		
		0				10		
CSB5-10'						11		
					No	12		
CSB5-12'		0				13		▽ Groundwater first encountered at 13' bgs.
						14		
					No	15		
CSB5-15'		0				16		
						17		
CSB5-18'					No	18		
						19		**Total Depth of Boring= 18 feet bgs**
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-6**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **15**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 15 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						1	FILL	**0- 2' (FILL) BASEROCK**
		0			No			
						2		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
		0			No	3		
						4	SM	
CSB6-5'					No	5		-Perched groundwater zone at 5-7' bgs
						6		
CSB6-7'					Yes	7		
						8		
					Yes	9		-Hydrocarbon odor and color change at 9-14'.
		66				10		
CSB6-10'						11		
					Yes			
		33				12		
						13		
CSB6-13'		5						▽ Groundwater first encountered at 14' bgs. Color change to yellowish brown
CSB6-15'						14		
		0			Yes	15		
						16		
						17		
						18		
						19		
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-7**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **15**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 15 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
						1	FILL	**0- 2' (FILL) BASEROCK & BRICK**
		0			No	2		
						3		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand; 15 & non-plastic fines. 0-5%plastic fines.
		0			No	4	SM	
						5		-Perched groundwater zone at 5-6' bgs
CSB7-5'		0			No	6		
						7		
CSB7-7'					No	8		
		0				9		
					No	10		
		0				11		
CSB7-10'						12		
					No	13		Groundwater first encountered at 13' bgs.
		0				14		
CSB7-13'						15		
CSB7-15'					No	16		**Total Depth of Boring= 15 feet bgs**
						17		
						18		
						19		
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

IMPACT Environmental

BORING LOG

Boring No. **CSB-8**
Well No. N/A
Sheet 1 of 1

Site: **1409- 1417 12th ST. , OAKLAND, CA**
Client: **MRS. SHIRLEY E. THOMPSON**
Project Number:
Date(s) Drilled: **05/10/13**
Date(s) Installed: **NA**
Drilling Co./Driller: **ENVIRONMENTAL CONTROL ASSOCIATES**

Ground Elevation:
T.O.C. Elevation:
Coordinates:
Drilling Method: **Direct Push-EnviroCore**
Borehole Total Depth: **18**
Final Borehole Diameter: **2.5"**

Drilling Summary: Direct push and vibrate boring to 18 feet bgs. Collect continuous cores in butyrate liners for logging. Cut 1' length cores selected for laboratory analysis and use teflon liners and end caps to seal sample. Place sample in plastic zip-lock bag. Backfill soil boring using neat cement grout.

Sample No.	Sample Interval	PID Reading	Recovery	Sampler	Odor	Depth (ft)	Graphic Log	LITHOLOGY/REMARKS
		0			No	1	FILL	**0- 2' (FILL) BASEROCK, BRICK & CONCRETE**
		0			No	2		**2- 18' SILTY SAND (SM):** Dark yellowish brown; moist to very moist; fine to medium sand. Trace plastic fines.
CSB8-5'		0			No	3		
						4		
CSB8-7'					No	5	SM	-Perched groundwater zone at 5-6' bgs
		0				6		
					No	7		
		0				8		
CSB8-10'					No	9		
						10		
CSB8-12'		0			No	11		
						12		
CSB8-15'		0			No	13		▽ Groundwater first encountered at 14' bgs.
						14		
CSB8-18'					No	15		
						16		
						17		
						18		**Total Depth of Boring= 18 feet bgs**
						19		
						20		

Date checked: March 31, 2013

Logged by: Joseph Cotton

Checked by: Joseph Cotton

APPENDIX C

Certified Laboratory Analytical Reports


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 236194
ANALYTICAL REPORT

Impact Environmental
39120 Argonaut Way
Fremont, CA 94538

Project : 1409-1417
Location : 1409-1417 12th St., Oakland
Level : II

Sample ID	Lab ID	Sample ID	Lab ID
CSB1-5	236194-001	CSB5-10	236194-024
CSB1-7	236194-002	CSB5-7	236194-025
CSB1-10	236194-003	CSB5-12	236194-026
CSB1-12	236194-004	CSB5-15	236194-027
CSB1-12A	236194-005	CSB5-18	236194-028
CSB1-15	236194-006	CSB6-5	236194-029
CSB1-18	236194-007	CSB6-7	236194-030
CSB2-5	236194-008	CSB6-10	236194-031
CSB2-7	236194-009	CSB6-13	236194-032
CSB2-10	236194-010	CSB6-15	236194-033
CSB3-5	236194-011	CSB7-5	236194-034
CSB3-7	236194-012	CSB7-7	236194-035
CSB3-10	236194-013	CSB7-10	236194-036
CSB3-12	236194-014	CSB7-13	236194-037
CSB3-15	236194-015	CSB7-15	236194-038
CSB3-18	236194-016	CSB8-5	236194-039
CSB4-5'	236194-017	CSB8-7	236194-040
CSB4-10'	236194-018	CSB8-10	236194-041
CSB4-7'	236194-019	CSB8-12	236194-042
CSB4-13	236194-020	CSB8-15	236194-043
CSB4-12	236194-021	CSB8-18	236194-044
CSB4-15	236194-022	CSB2-15	236194-045
CSB5-5	236194-023	CSB2-18	236194-046

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

Signature: Trig Bolton
Project Manager

Date: 05/22/2012

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**236194**
Client:	**Impact Environmental**
Project:	**1409-1417**
Location:	**1409-1417 12th St., Oakland**
Request Date:	**05/14/12**
Samples Received:	**05/14/12**

This data package contains sample and QC results for forty six soil samples, requested for the above referenced project on 05/14/12. The samples were received cold and intact.

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

Matrix spikes QC640094,QC640095 (batch 186629) were not reported because the concentration of the target analyte in the parent sample was more than four times the amount spiked, rendering the spike recovery not meaningful. Low recovery was observed for gasoline C7-C12 in the MSD of CSB6-13 (lab # 236194-032); the LCS was within limits. High recovery was also observed for gasoline C7-C12 in the MS of CSB6-13 (lab # 236194-032); the LCS was within limits. Response exceeding the instrument's linear range was observed for gasoline C7-C12 in the MS of CSB6-13 (lab # 236194-032); affected data was qualified with "b". High surrogate recoveries were observed for bromofluorobenzene (FID) in CSB6-10 (lab # 236194-031) and the MS of CSB6-13 (lab # 236194-032). No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

High recoveries were observed for diesel C10-C24 in the MS/MSD for batch 186635; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

CSB1-7 (lab # 236194-002) and CSB6-10 (lab # 236194-031) were diluted due to high hydrocarbons. No other analytical problems were encountered.

CURTIS TOMPKINS

236194

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409 12th St., Oakland, CA
Address: 39120 ARGONAUT WAY, #223			Purpose: Site Closure Verification SOil Sampling
City: Oxnard	State: Oxnard	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: Joseph Cotton	SAMPLER: Joseph Cotton		P.O. #: EMAIL: jac21462@aol.com

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☑ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

	LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPHg/BTEX/MTBE	TPHd/TPHmo (Silica Gel Cleanup)	Fuel Oxygenates							REMARKS
1			CSB1-5	5-10-12	Soil	1	Liner	✓	✓	✓							
2			CSB1-7	5-10-12	Soil	1	Liner	✓	✓	✓							
3			CSB1-10	5-10-12	Soil	1	Liner	✓	✓	✓							
4			CSB1-12	5-10-12	Soil	1	Liner	✓	✓	✓							
5			CSB1-12A	5-10-12	Soil	1	Liner	✓	✓	✓							
6			CSB1-15	5-10-12	Soil	1	Liner	✓	✓	✓							
7			CSB1-18	5-10-12	Soil	1	Liner	✓	✓	✓							
8			CSB2-5	5-10-12	Soil	1	Liner	✓	✓	✓							
9			CSB2-7	5-10-12	Soil	1	Liner	✓	✓	✓							
10			CSB2-10	5-10-12	Soil	1	Liner	✓	✓	✓							

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	5/14/12	5:45 PM			5/14/12	5:45 P.M
2			5/14/12	7:10 AM			5/14/12	9:10AM

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp _____ °C Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____ Rev. 1

236194

Torrent LABORATORY, INC.

483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☒ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409 12th Street, Oakland, CA
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SAMPLING
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON		P.O. #: EMAIL: JAC21462@AOL.COM

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☑ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

	LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	(Silica Gel Cl) TPHd/TPHms	MTBE TPHg/BTEX	Fuel Oxygenates	REMARKS
11			CSB3-5	5-10-12	SOIL	1	LINER	X	X	X	
12			CSB3-7					X	X	X	
13			CSB3-10					X	X	X	
14			CSB3-12					X	X	X	
15			CSB3-15					X	X	X	
16			CSB3-18					X	X	X	
17			CSB4-5'					X	X	X	
18			CSB4-10'					X	X	X	
19			CSB4-7'					X	X	X	
20			CSB4-13					X	X	X	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	5/13/12	5:45			5/13/12	5:45
2			5/14/12	9:30			5/14/12	9:20

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp _____ °C Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____ Rev. 1

236194

Torrent LABORATORY, INC.

483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409 12th Street, Oakland, CA
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SAMPLING
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON		P.O. #: EMAIL: JAC21462@AOL.COM

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☑ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

	LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	Silica Gel Cleanup TPHd/TPHmo	MTBE TPHg/BTEX	5 oxygenates Fuel
21			CSB4-12	5-10-12	SOIL	1	LINER	X	X	X
22			CSB4-15					X	X	X
23			CSB5-5					X	X	X
24			CSB5-10					X	X	X
25			CSB5-7					X	X	X
26			CSB5-12					X	X	X
27			CSB5-15					X	X	X
28			CSB5-18					X	X	X
29			CSB6-5					X	X	X
30			CSB6-7					X	X	X

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	5/10/12	5:45			5/10/12	5:45
2			5/14/12	9:20			5/14/12	9:20 AM

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp _____ °C Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____ Rev. 1

236194

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☐ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409 12th Street, Oakland, CA
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SAMPLING
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON		P.O. #: EMAIL: JAC21462@AOL.COM

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☑ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

	LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPHd/TPHmo (Silica Gel Cl)	TPHg/BTEX MTBE	Fuel Oxygenates	REMARKS
31			CSB6-10		SOIL	1	LINER	X	X	X	
32			CSB6-13					X	X	X	
33			CSB6-15					X	X	X	
34			CSB7-5					X	X	X	
35			CSB7-7					X	X	X	
36			CSB7-10					X	X	X	
37			CSB7-13					X	X	X	
38			CSB7-15					X	X	X	
39			CSB8-5					X	X	X	
40			CSB8-7					X	X	X	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	5/12/12	5:45			5/12/12	5:45
2			5/14/12	9:10AM			9:10AM 5/14/12	5/14/12

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp _____ °C Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____ Rev. 1

234194

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[redacted]

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409 12th Street, Oakland, CA
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SAMPLING
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON	P.O. #:	EMAIL: JAC21462@AOL.COM

TURNAROUND TIME: ☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day ☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day ☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE: ☐ Storm Water ☐ Air ☐ Waste Water ☐ Other ☐ Ground Water ☑ Soil

REPORT FORMAT: ☐ QC Level IV ☑ EDF ☑ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPHd/TPHmo SIL GEL CU	TPHg/BTEX MTBE	FUEL OXYGENATES	REMARKS
41		CSB8-10	5-10-12	SOIL	1	LINER	X	X	X	
42		CSB8-12	}	}	}	}	X	X	X	
43		CSB8-15	}	}	}	}	X	X	X	
44		CSB8-18	}	}	}	}	X	X	X	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	[signature]	JOSEPH COTTON	5/12/12	5:45	[signature]	Anthony McMillan	5/12/12	5:45
2	[signature]	Anthony C. McMillan	5/14/12	~~5:45~~ 5-14-12 9:10 AM	[signature]		5/14/12	9:10 AM

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment ______ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp ______ °C Page ______ of ______

Log In By: ______ Date: ______ | Log In Reviewed By: ______ Date: ______ Rev. 1

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CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special	Location of Sampling: 1409 12th St., Oakland, CA
Address: 39120 ARGONAUT WAY, #223		Purpose: Site Closure Verification Soil Sampling
City: CA	State: CA / Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:	
REPORT TO: Joseph Cotton	SAMPLER: Joseph Cotton	P.O. #: / EMAIL: jac21462@aol.com

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☐ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☐ Soil

REPORT FORMAT:
☐ QC Level IV
☐ EDF
☐ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPHd/TPHmo (Silica Gell Cleanup)	REMARKS
45		CSB2-15	5-10-12	Soil	1	Liner	✓	
46		CSB2-18	5-10-12	Soil	1	Liner	✓	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		Joseph Cotton	5/12/12	5:45			5/12/12	5:45
2			5/14/12	9:00 AM			5/14/12	9:10 AM

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp _____ °C Page _____ of _____

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____ Rev. 1

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 236194 Date Received 5/14/12 Number of coolers 1
Client IMPACT Project 1409 12th St. OAKLAND, CA

Date Opened 5/14/12 By (print) I-CHUN (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

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

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

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

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) ____

☒ Samples Received on ice & cold without a temperature blank; ~~temp. taken with IR gun~~

☐ 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 there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? ____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? ____ (YES) NO
If YES, Who was called? JOSEPH By DNT Date: 5/14/12

COMMENTS
21) DNT Contacted client b/c samples were submerged in H2O upon arrival.
Client said samples were pretty wet, but we try to analyze from middle of liners.
also, client wants analysis TVHg / BTXE / MTBE + fuel oxygenates for samples
-045 [CSB2-15] & -046 [CSB2-18] although not listed on COC.

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB1-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-001	Analyzed:	05/15/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	61-136

Field ID:	CSB1-7	Diln Fac:	1,000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-002	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	1,900	200

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	61-136

Field ID:	CSB1-10	Diln Fac:	1,000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-003	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	3,300	200

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	61-136

Field ID:	CSB1-12	Diln Fac:	1,000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-004	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	2,600	200

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB1-12A	Diln Fac:	62.50
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-005	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	55	13

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	61-136

Field ID:	CSB1-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-006	Analyzed:	05/15/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

Field ID:	CSB1-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-007	Analyzed:	05/15/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	84	61-136

Field ID:	CSB2-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-008	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB2-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-009	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Field ID:	CSB2-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-010	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	61-136

Field ID:	CSB3-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-011	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	61-136

Field ID:	CSB3-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-012	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB3-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-013	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	61-136

Field ID:	CSB3-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-014	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	13 Y	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	61-136

Field ID:	CSB3-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-015	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	84	61-136

Field ID:	CSB3-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-016	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.92

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB4-5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-017	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Field ID:	CSB4-10'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186587
Lab ID:	236194-018	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Field ID:	CSB4-7'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-019	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	61-136

Field ID:	CSB4-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-020	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB4-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-021	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.97

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	61-136

Field ID:	CSB4-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-022	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	61-136

Field ID:	CSB5-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-023	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	61-136

Field ID:	CSB5-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-024	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB5-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-025	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	61-136

Field ID:	CSB5-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-026	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	61-136

Field ID:	CSB5-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-027	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	61-136

Field ID:	CSB5-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-028	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB6-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186626
Lab ID:	236194-029	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	61-136

Field ID:	CSB6-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-030	Analyzed:	05/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	61-136

Field ID:	CSB6-10	Diln Fac:	1,250
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-031	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	10,000 Y	250

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	155 *	61-136

Field ID:	CSB6-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-032	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	12 Y	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB6-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-033	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

Field ID:	CSB7-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-034	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Field ID:	CSB7-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-035	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	61-136

Field ID:	CSB7-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-036	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB7-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186629
Lab ID:	236194-037	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

Field ID:	CSB7-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-038	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Field ID:	CSB8-5	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-039	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.97

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Field ID:	CSB8-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-040	Analyzed:	05/17/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB8-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-041	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Field ID:	CSB8-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-042	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Field ID:	CSB8-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-043	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Field ID:	CSB8-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-044	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB2-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-045	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Field ID:	CSB2-18	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	186687
Lab ID:	236194-046	Analyzed:	05/18/12

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

Type:	BLANK	Batch#:	186587
Lab ID:	QC639879	Analyzed:	05/15/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	61-136

Type:	BLANK	Batch#:	186626
Lab ID:	QC640052	Analyzed:	05/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Type:	BLANK	Batch#:	186629
Lab ID:	QC640070	Analyzed:	05/16/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	61-136

Type:	BLANK	Batch#:	186687
Lab ID:	QC640300	Analyzed:	05/17/12
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	61-136

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC639878	Batch#:	186587
Matrix:	Soil	Analyzed:	05/15/12
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9437	94	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	61-136

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	CSB1-5	Diln Fac:	1.000
MSS Lab ID:	236194-001	Batch#:	186587
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/15/12

Type: MS Lab ID: QC639880

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.06286	10.42	8.982	86	31-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	61-136

Type: MSD Lab ID: QC639881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.20	6.018	59	31-120	38	57

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	71	61-136

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640051	Batch#:	186626
Matrix:	Soil	Analyzed:	05/16/12
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.053	105	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	61-136

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	CSB2-7	Diln Fac:	1.000
MSS Lab ID:	236194-009	Batch#:	186626
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Type: MS Lab ID: QC640053

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.07808	10.64	9.818	92	31-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	61-136

Type: MSD Lab ID: QC640054

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.615	8.257	85	31-120	7	57

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	61-136

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640069	Batch#:	186629
Matrix:	Soil	Analyzed:	05/16/12
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.107	111	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	61-136

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640299	Batch#:	186687
Matrix:	Soil	Analyzed:	05/17/12
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.040	104	79-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	61-136

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	CSB6-13	Diln Fac:	1.000
MSS Lab ID:	236194-032	Batch#:	186687
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Type: MS Lab ID: QC640328

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.18	9.709	72.24 >LR b	619 *	31-120

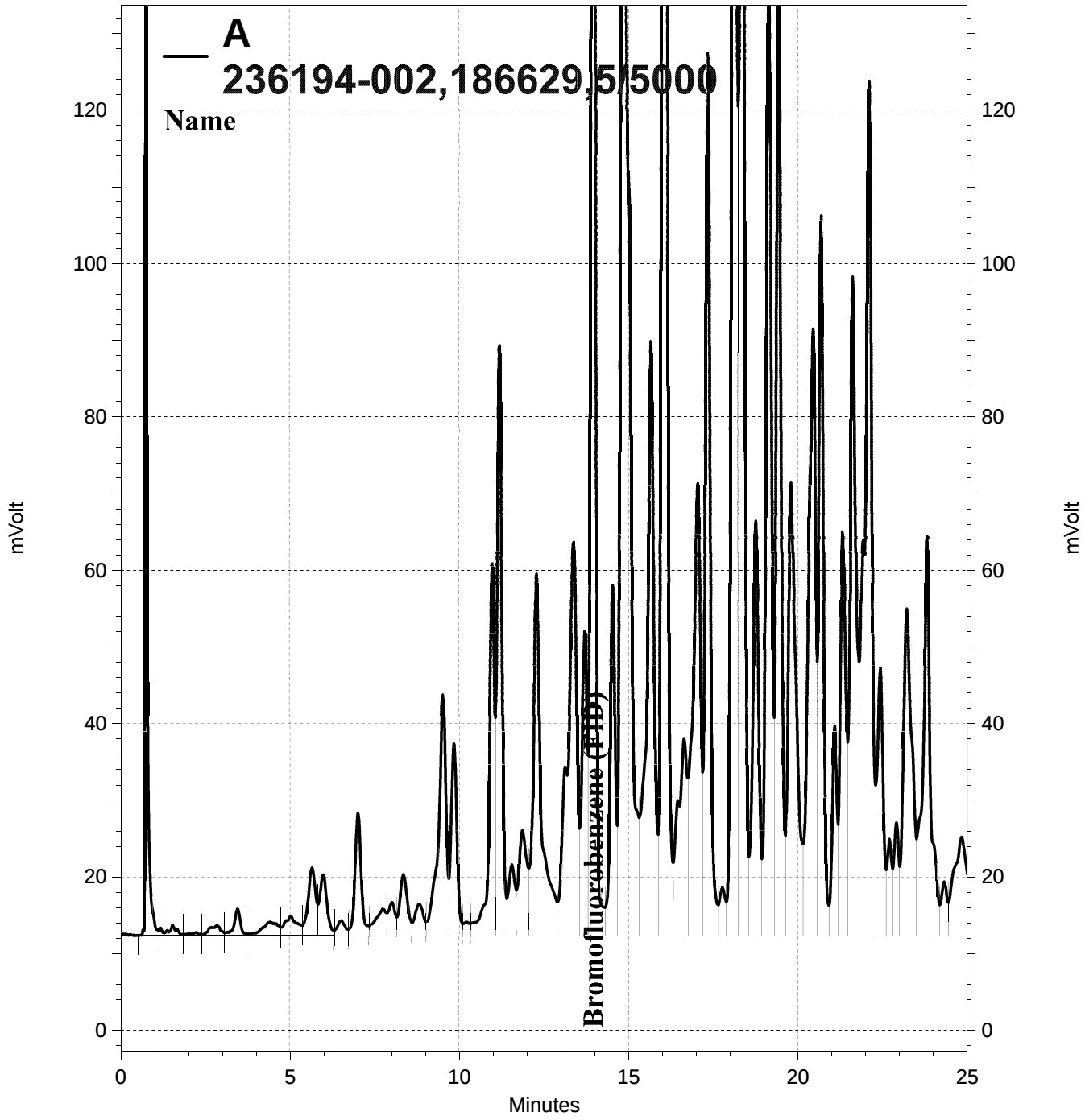
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	137 *	61-136

Type: MSD Lab ID: QC640329

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.901	9.604	-26 *	31-120	NC	57

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	61-136

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference



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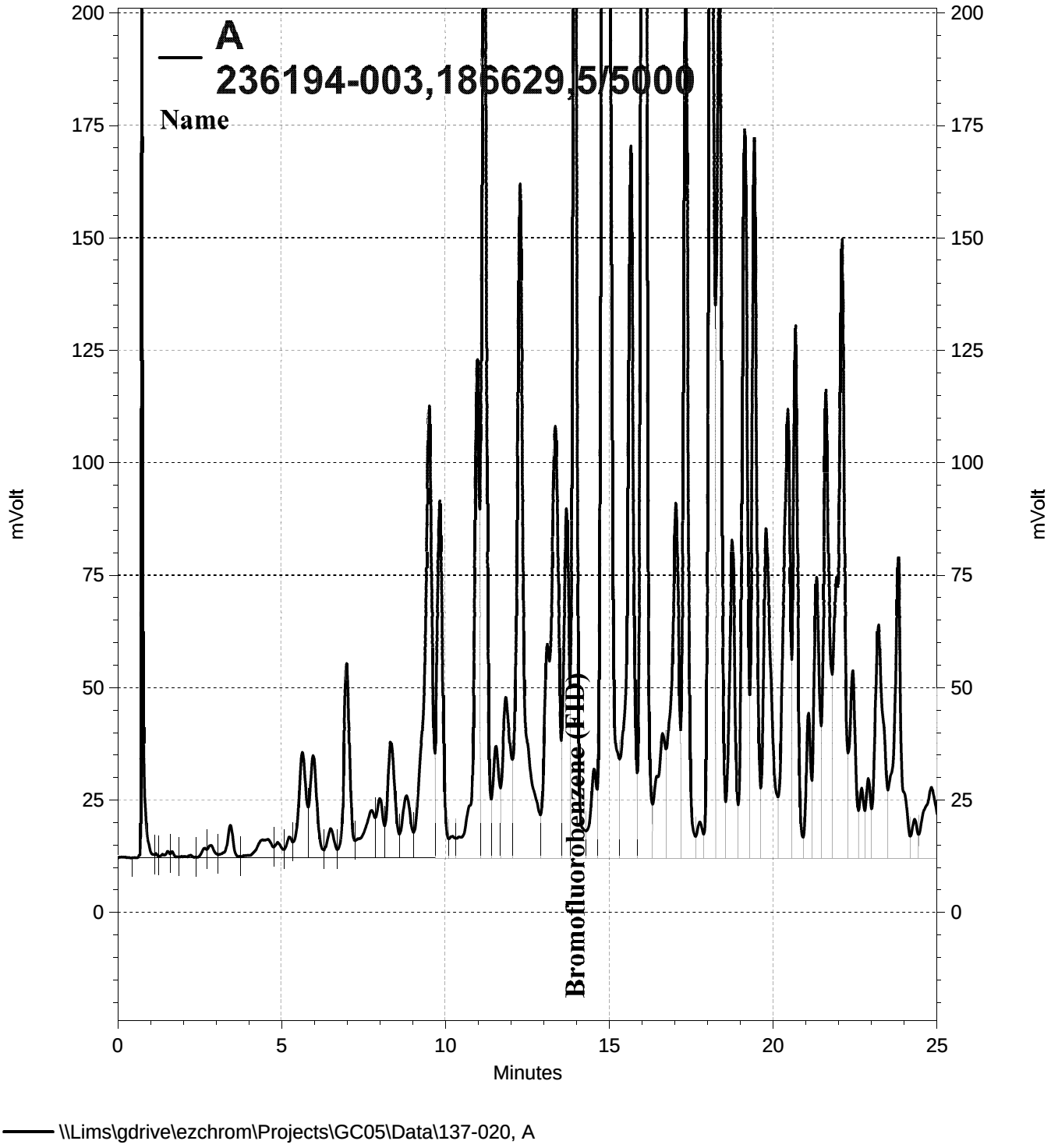
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mVolt
Minutes
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5
10
15
20
25
0
25
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75
100
125
150
175
200
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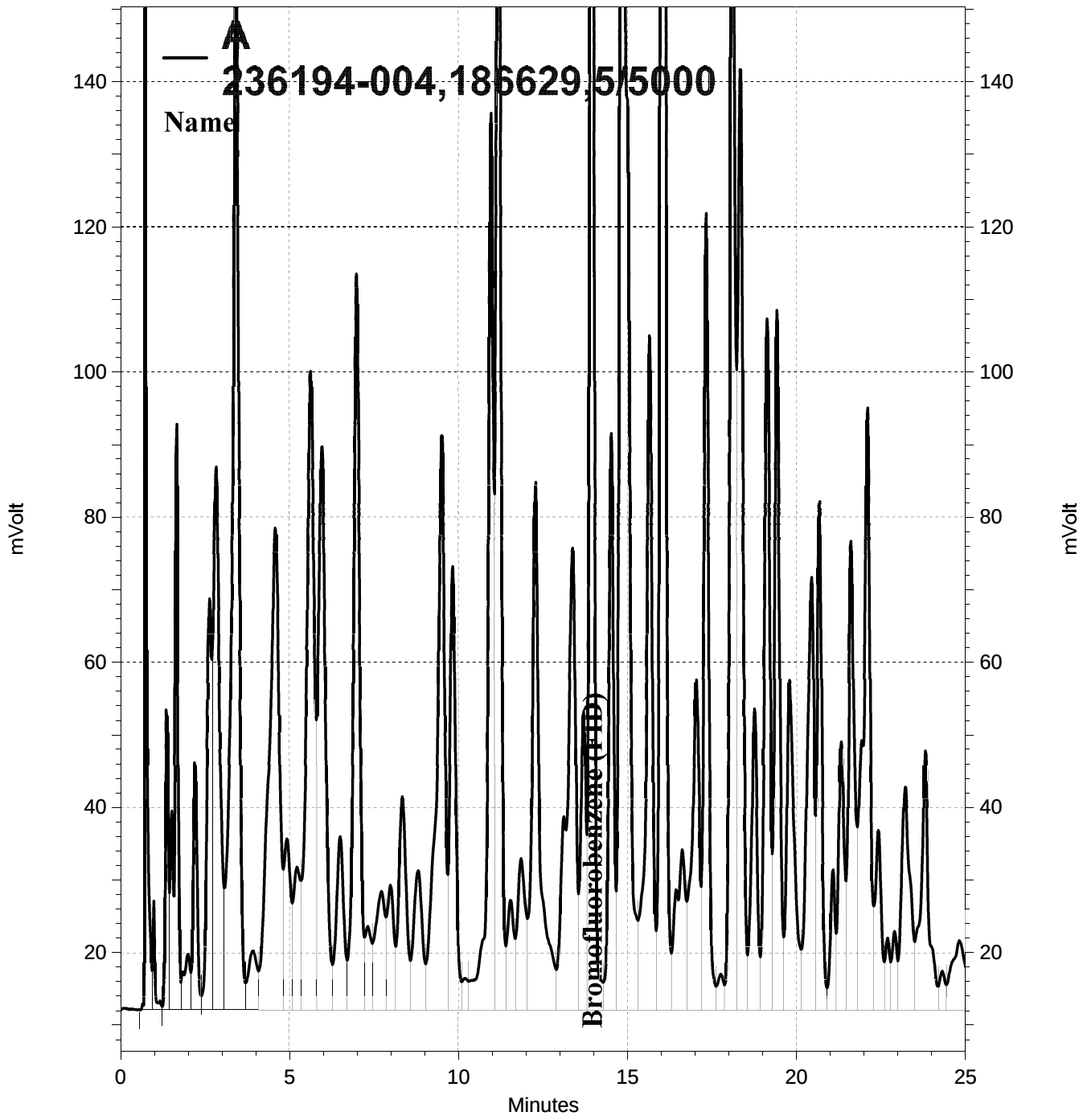

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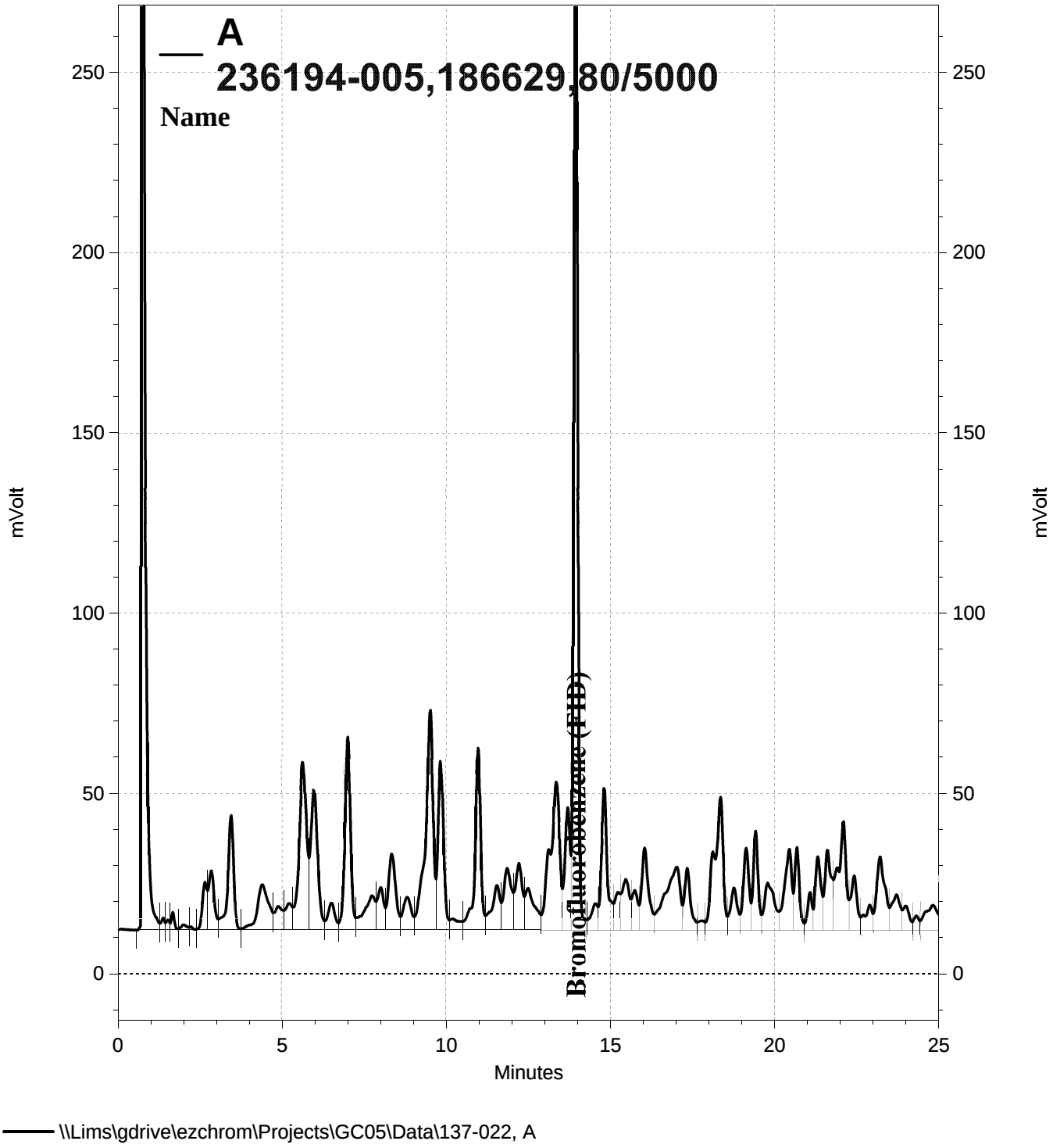
A
236194-005,186629,80/5000
Name
Bromofluorobenzene (FID)
mVolt
mVolt
Minutes
0
50
100
150
200
250
0
5
10
15
20
25
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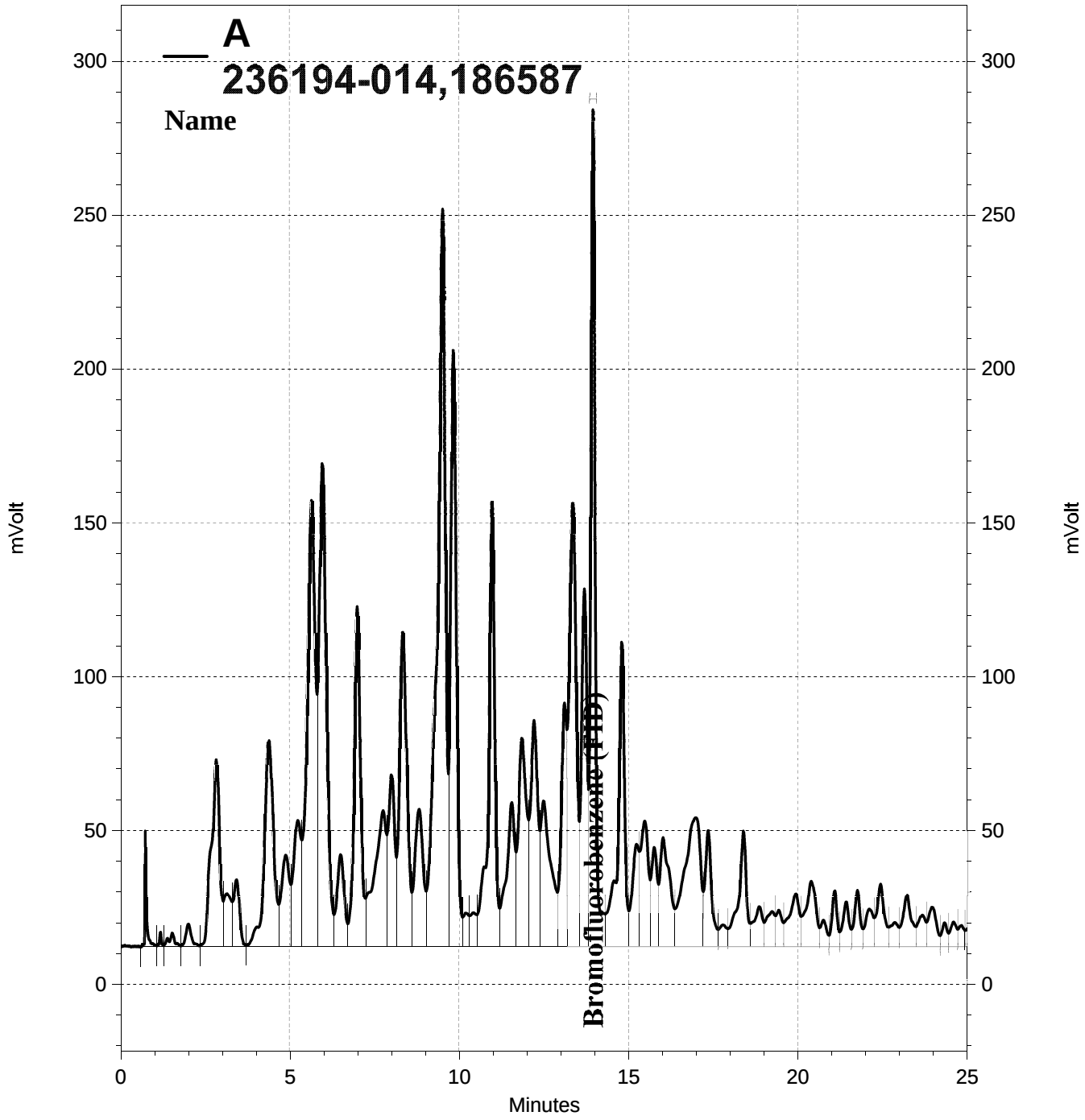

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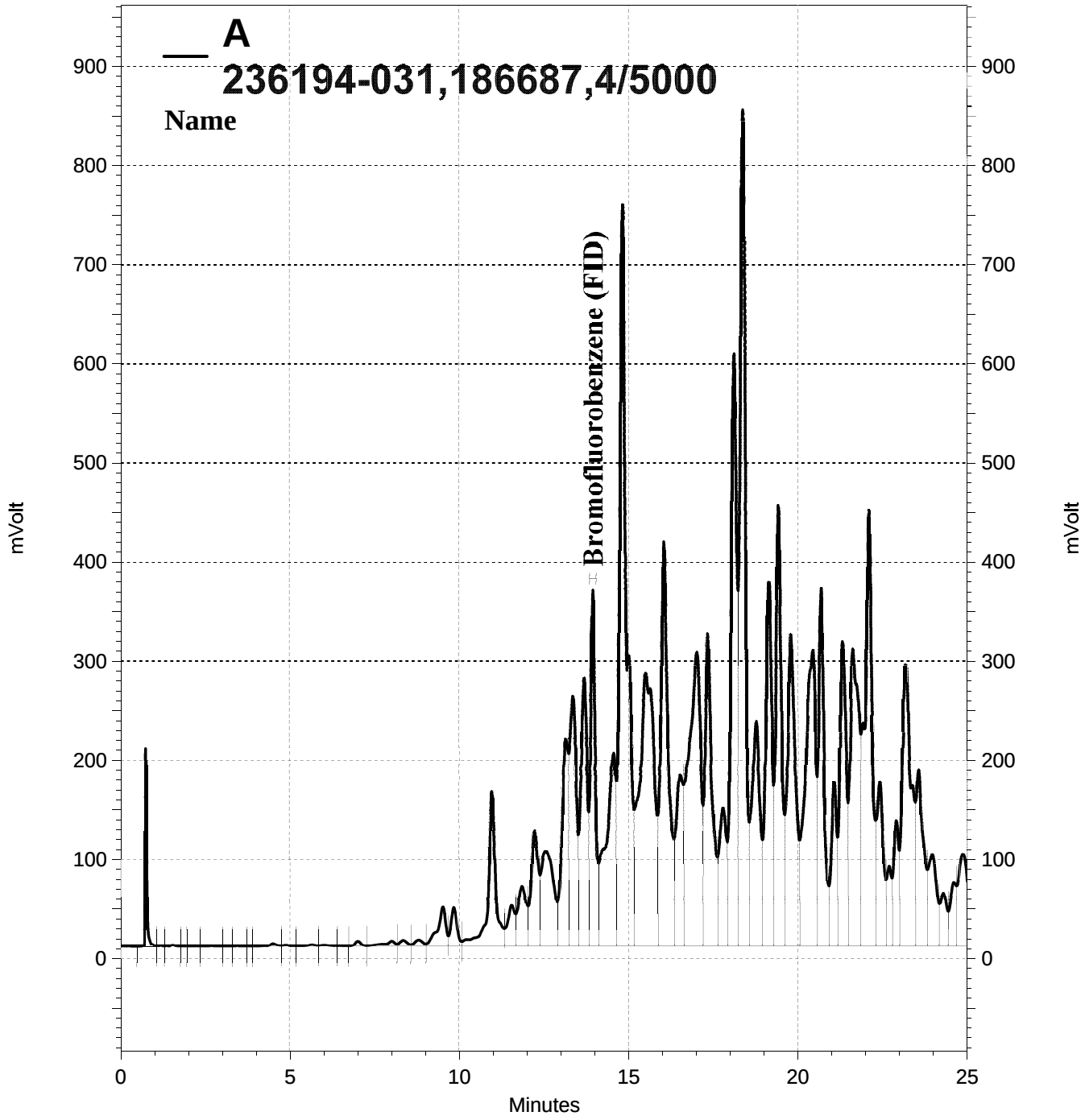

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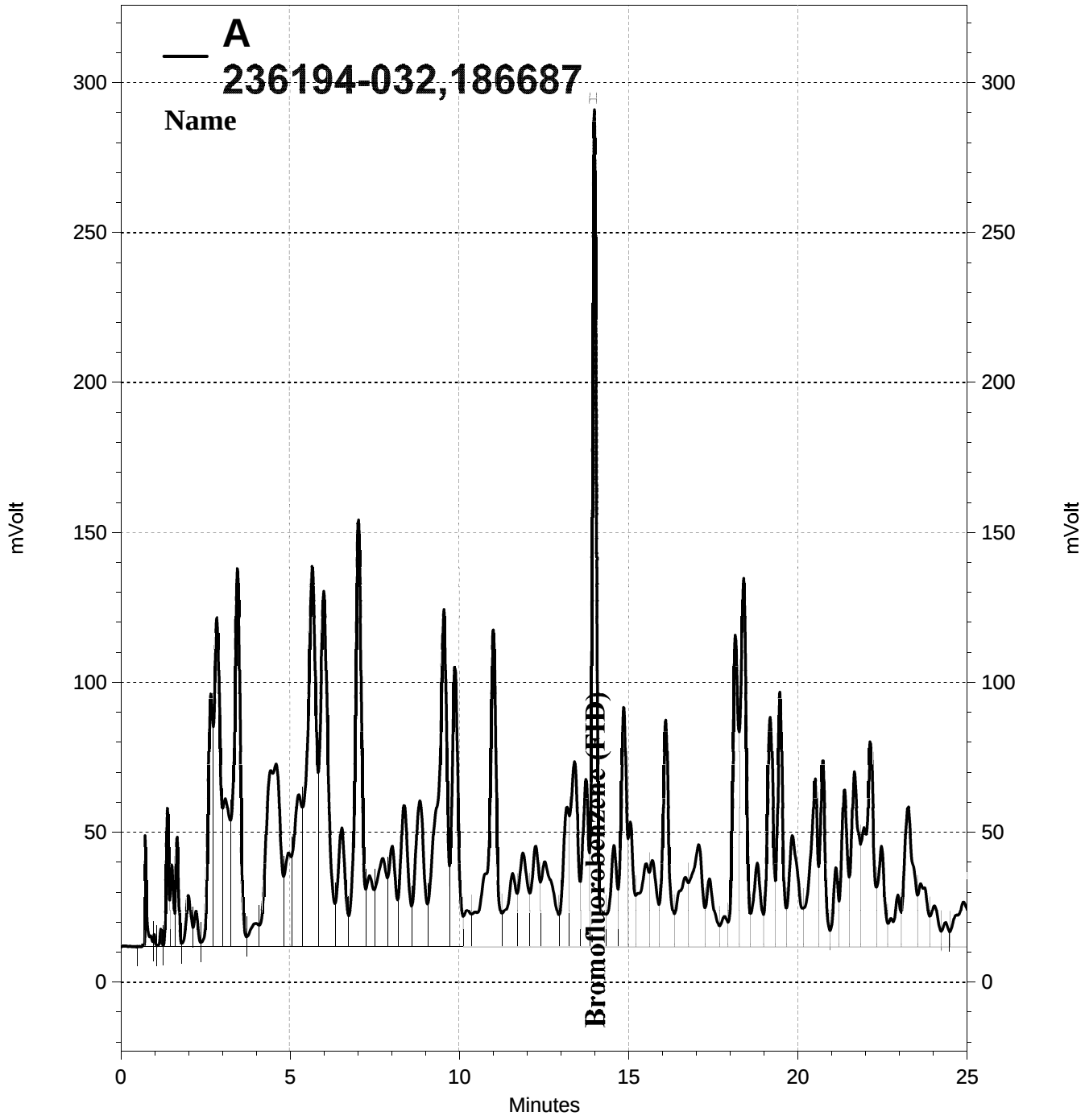
A
236194-032,186687
Name
Bromofluorobenzene (FID)
mVolt
mVolt
Minutes
0
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10
15
20
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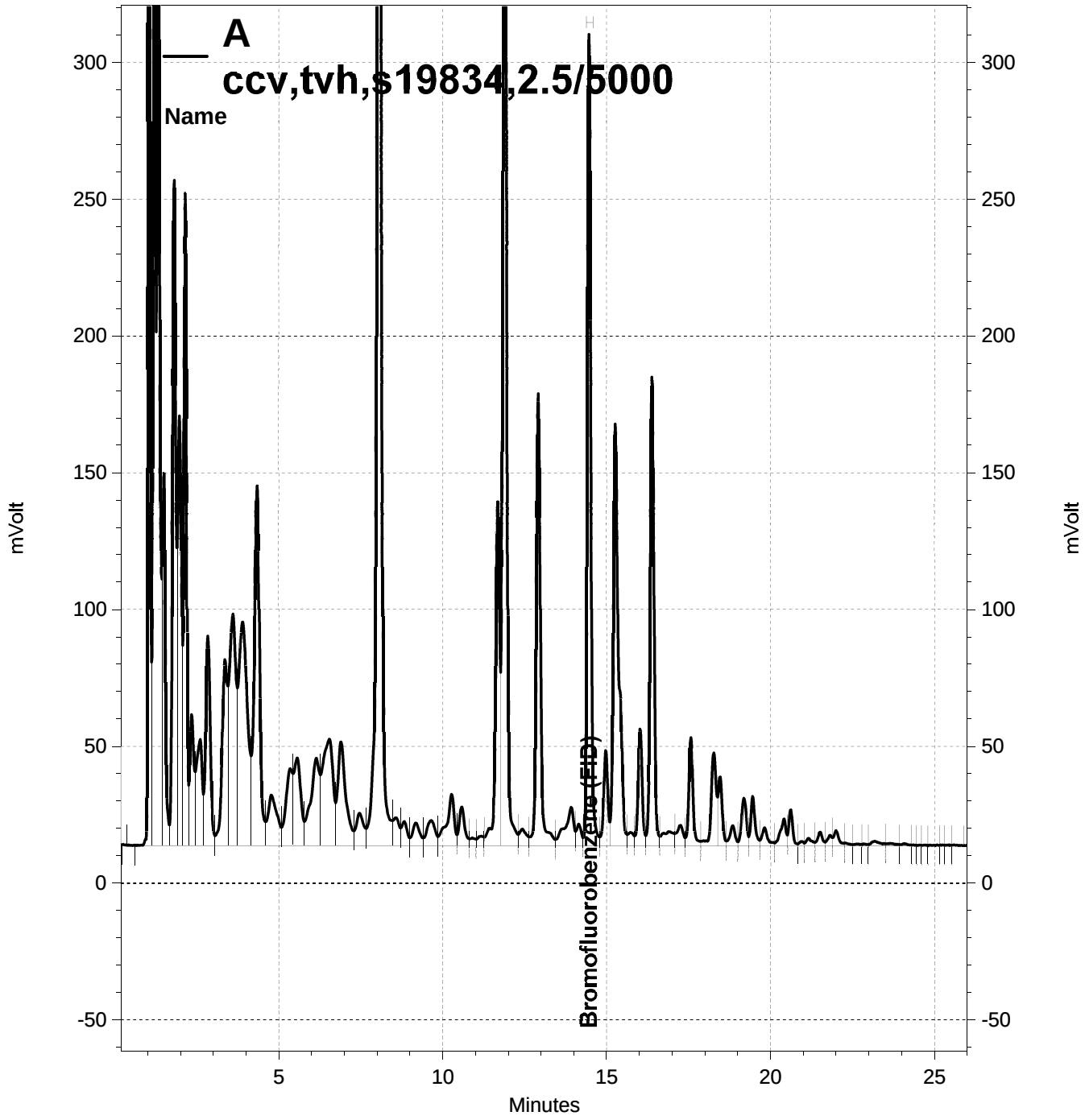
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mVolt
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250
200
150
100
50
0
-50
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10
15
20
25
Minutes
Bromofluorobenzene (FID)
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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB1-5	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-001	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	111	49-128

Field ID:	CSB1-7	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-002	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	180 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	49-128

Field ID:	CSB1-10	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-003	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	550 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	49-128

Field ID:	CSB1-12	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-004	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	490 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	93	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB1-12A	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-005	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	40 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	49-128

Field ID:	CSB1-15	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-006	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.3 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	73	49-128

Field ID:	CSB1-18	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-007	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.2 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	108	49-128

Field ID:	CSB2-5	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-008	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.4 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB2-7	Batch#:	186635
Type:	SAMPLE	Prepared:	05/16/12
Lab ID:	236194-009	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.1 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	49-128

Field ID:	CSB2-10	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-010	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	104	49-128

Field ID:	CSB3-5	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-011	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	108	49-128

Field ID:	CSB3-7	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-012	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.6 Y	1.0
Motor Oil C24-C36	7.4	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB3-10	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-013	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	100	49-128

Field ID:	CSB3-12	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-014	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.9 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	106	49-128

Field ID:	CSB3-15	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-015	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	109	49-128

Field ID:	CSB3-18	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-016	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	96	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB4-5'	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-017	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	90	49-128

Field ID:	CSB4-10'	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-018	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.1 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	49-128

Field ID:	CSB4-7'	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-019	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	53 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	49-128

Field ID:	CSB4-13	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-020	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.0 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB4-12	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-021	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	90	49-128

Field ID:	CSB4-15	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-022	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	97	49-128

Field ID:	CSB5-5	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-023	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	114	49-128

Field ID:	CSB5-10	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-024	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	103	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB5-7	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-025	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	123	49-128

Field ID:	CSB5-12	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-026	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	107	49-128

Field ID:	CSB5-15	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-027	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	101	49-128

Field ID:	CSB5-18	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-028	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	101	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB6-5	Batch#:	186656
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-029	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.2 Y	0.99
Motor Oil C24-C36	27	5.0

Surrogate	%REC	Limits
o-Terphenyl	96	49-128

Field ID:	CSB6-7	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-030	Analyzed:	05/21/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.2 Y	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

Field ID:	CSB6-10	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-031	Analyzed:	05/21/12
Diln Fac:	20.00	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	3,500 Y	20
Motor Oil C24-C36	ND	100

Surrogate	%REC	Limits
o-Terphenyl	DO	49-128

Field ID:	CSB6-13	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-032	Analyzed:	05/22/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.0 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB6-15	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-033	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	115	49-128

Field ID:	CSB7-5	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-034	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

Field ID:	CSB7-7	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-035	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	109	49-128

Field ID:	CSB7-10	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-036	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	112	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB7-13	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-037	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	110	49-128

Field ID:	CSB7-15	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-038	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	102	49-128

Field ID:	CSB8-5	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-039	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.9 Y	1.0
Motor Oil C24-C36	9.8	5.0

Surrogate	%REC	Limits
o-Terphenyl	121	49-128

Field ID:	CSB8-7	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-040	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB8-10	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-041	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	117	49-128

Field ID:	CSB8-12	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-042	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	107	49-128

Field ID:	CSB8-15	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-043	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	123	49-128

Field ID:	CSB8-18	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-044	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	114	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Field ID:	CSB2-15	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-045	Analyzed:	05/19/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.3 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	111	49-128

Field ID:	CSB2-18	Batch#:	186693
Type:	SAMPLE	Prepared:	05/17/12
Lab ID:	236194-046	Analyzed:	05/19/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C

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

Surrogate	%REC	Limits
o-Terphenyl	110	49-128

Type:	BLANK	Prepared:	05/16/12
Lab ID:	QC640090	Analyzed:	05/17/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	186635		

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

Surrogate	%REC	Limits
o-Terphenyl	114	49-128

Type:	BLANK	Prepared:	05/17/12
Lab ID:	QC640183	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	186656		

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

Surrogate	%REC	Limits
o-Terphenyl	116	49-128

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/10/12
Units:	mg/Kg	Received:	05/14/12
Basis:	as received		

Type:	BLANK	Prepared:	05/17/12
Lab ID:	QC640330	Analyzed:	05/18/12
Diln Fac:	1.000	Cleanup Method:	EPA 3630C
Batch#:	186693		

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

Surrogate	%REC	Limits
o-Terphenyl	109	49-128

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640091	Batch#:	186635
Matrix:	Soil	Prepared:	05/16/12
Units:	mg/Kg	Analyzed:	05/17/12

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.93	49.36	99	47-132

Surrogate	%REC	Limits
o-Terphenyl	107	49-128

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	186635
MSS Lab ID:	236196-008	Sampled:	05/14/12
Matrix:	Soil	Received:	05/14/12
Units:	mg/Kg	Prepared:	05/16/12
Basis:	as received	Analyzed:	05/17/12
Diln Fac:	1.000		

Type: MS Lab ID: QC640092

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	163.1	50.13	258.5	190 *	32-143

Surrogate	%REC	Limits
o-Terphenyl	105	49-128

Type: MSD Lab ID: QC640093

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.38	278.7	230 *	32-143	7	54

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640184	Batch#:	186656
Matrix:	Soil	Prepared:	05/17/12
Units:	mg/Kg	Analyzed:	05/18/12

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.79	48.21	97	47-132

Surrogate	%REC	Limits
o-Terphenyl	101	49-128

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	CSB4-12	Batch#:	186656
MSS Lab ID:	236194-021	Sampled:	05/10/12
Matrix:	Soil	Received:	05/14/12
Units:	mg/Kg	Prepared:	05/17/12
Basis:	as received	Analyzed:	05/18/12
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC640185

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.3979	49.86	45.05	90	32-143

Surrogate	%REC	Limits
o-Terphenyl	96	49-128

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC640186

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.30	40.55	80	32-143	11	54

Surrogate	%REC	Limits
o-Terphenyl	84	49-128

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640331	Batch#:	186693
Matrix:	Soil	Prepared:	05/17/12
Units:	mg/Kg	Analyzed:	05/18/12

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.85	53.37	107	47-132

Surrogate	%REC	Limits
o-Terphenyl	126	49-128

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3550B
Project#:	1409-1417	Analysis:	EPA 8015B
Field ID:	CSB8-10	Batch#:	186693
MSS Lab ID:	236194-041	Sampled:	05/10/12
Matrix:	Soil	Received:	05/14/12
Units:	mg/Kg	Prepared:	05/17/12
Basis:	as received	Analyzed:	05/18/12
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC640332

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.8958	49.55	55.34	110	32-143

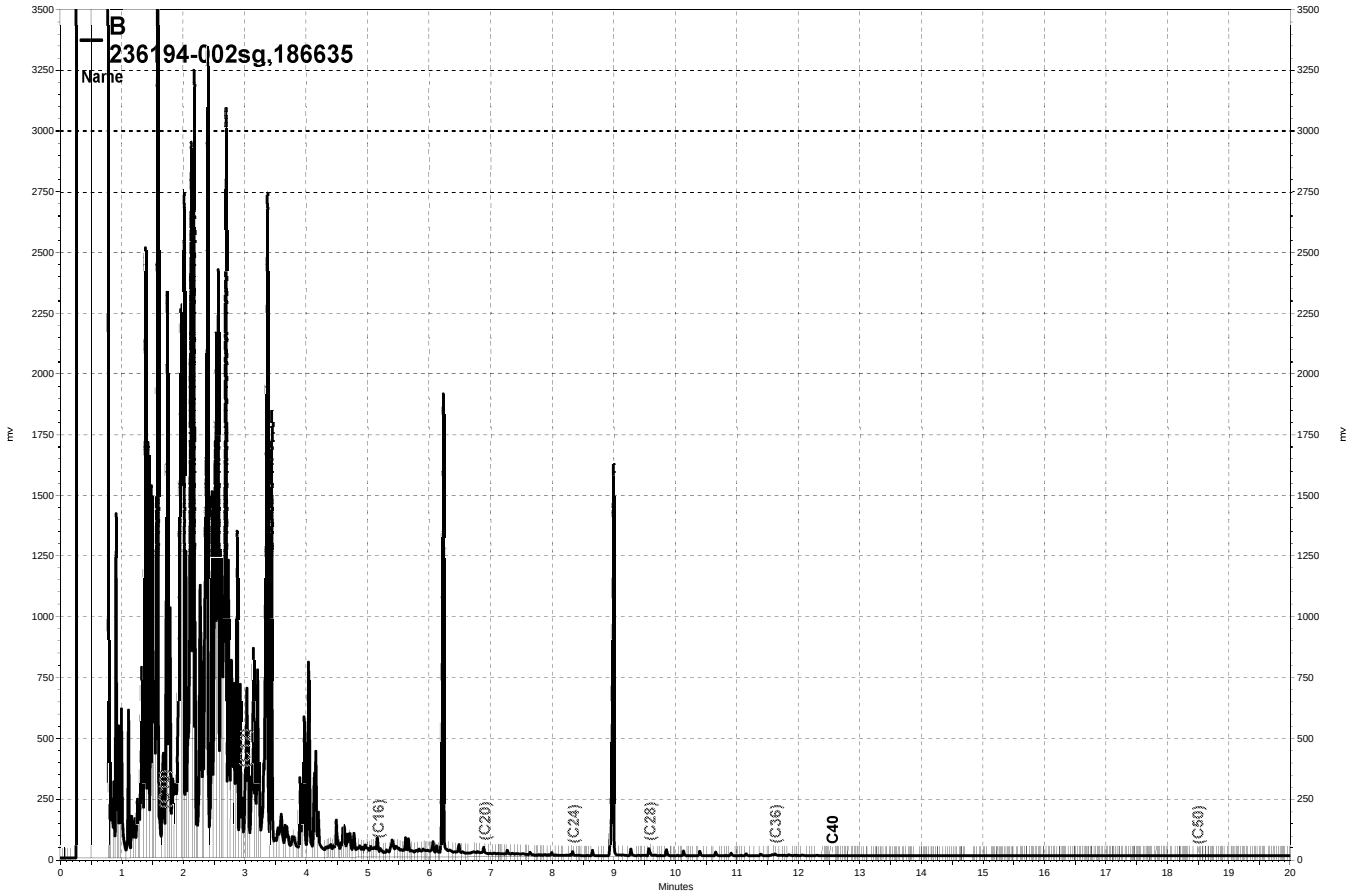
Surrogate	%REC	Limits
o-Terphenyl	124	49-128

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC640333

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.81	49.35	97	32-143	12	54

Surrogate	%REC	Limits
o-Terphenyl	113	49-128

RPD= Relative Percent Difference



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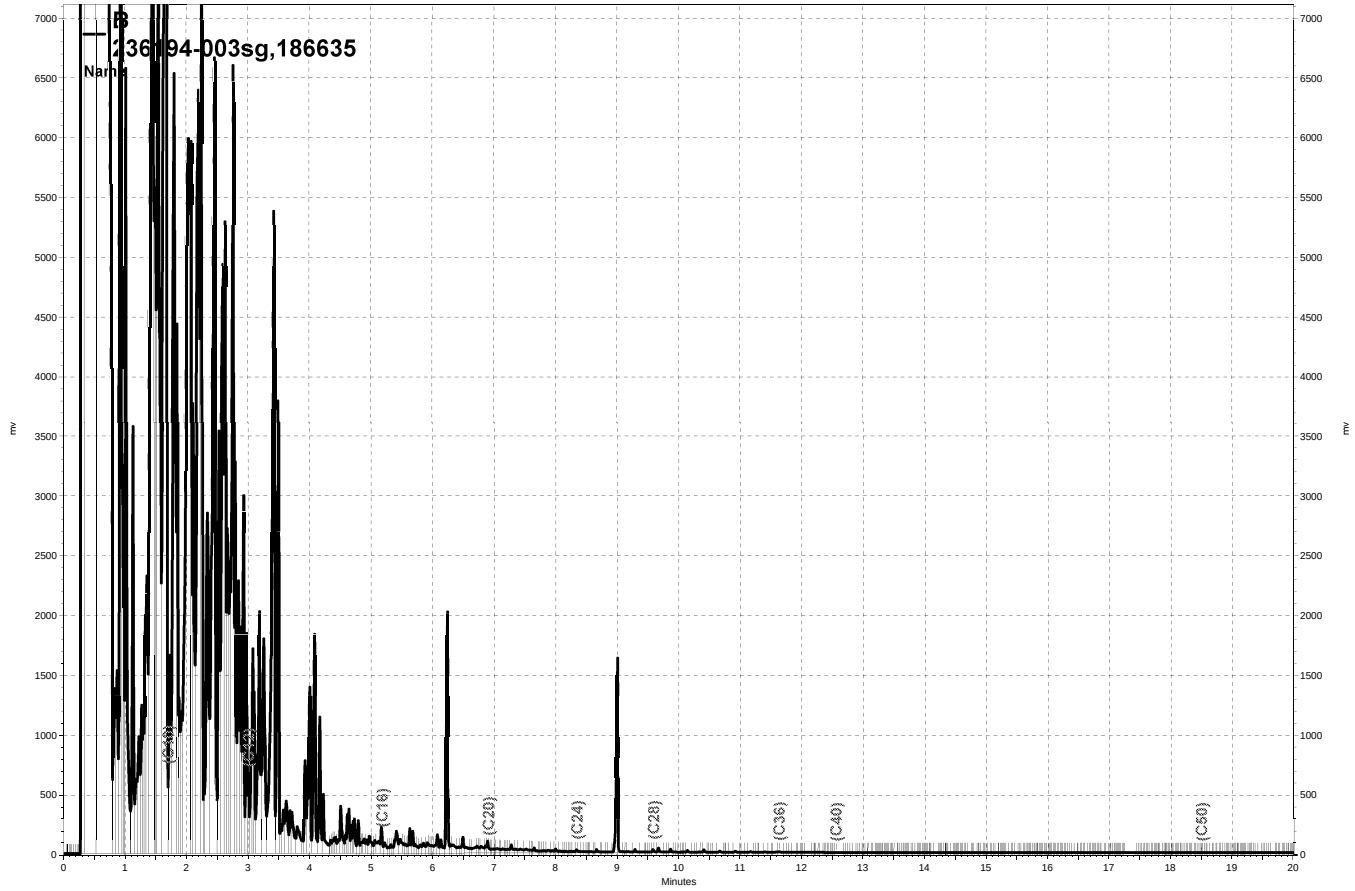

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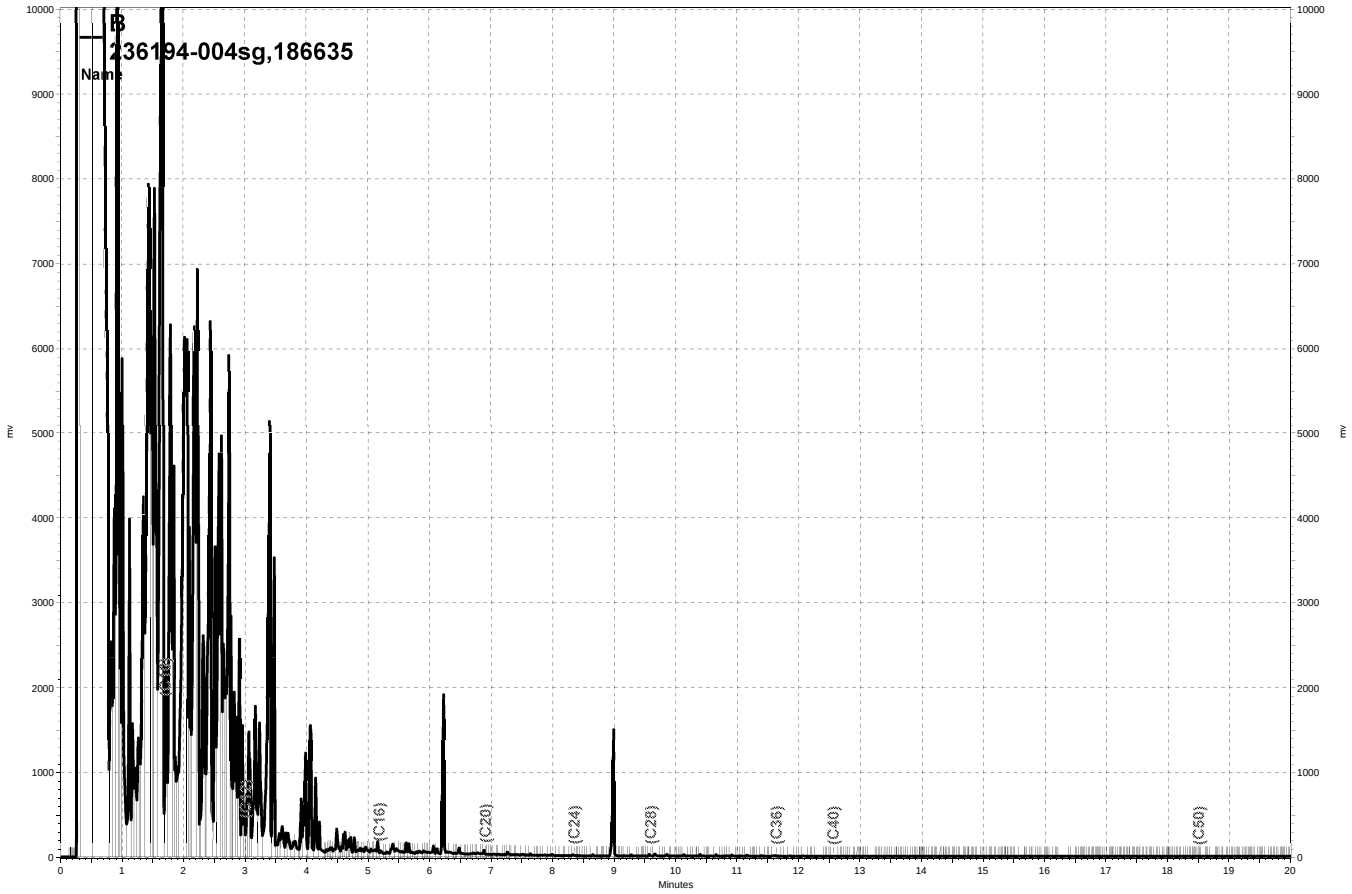

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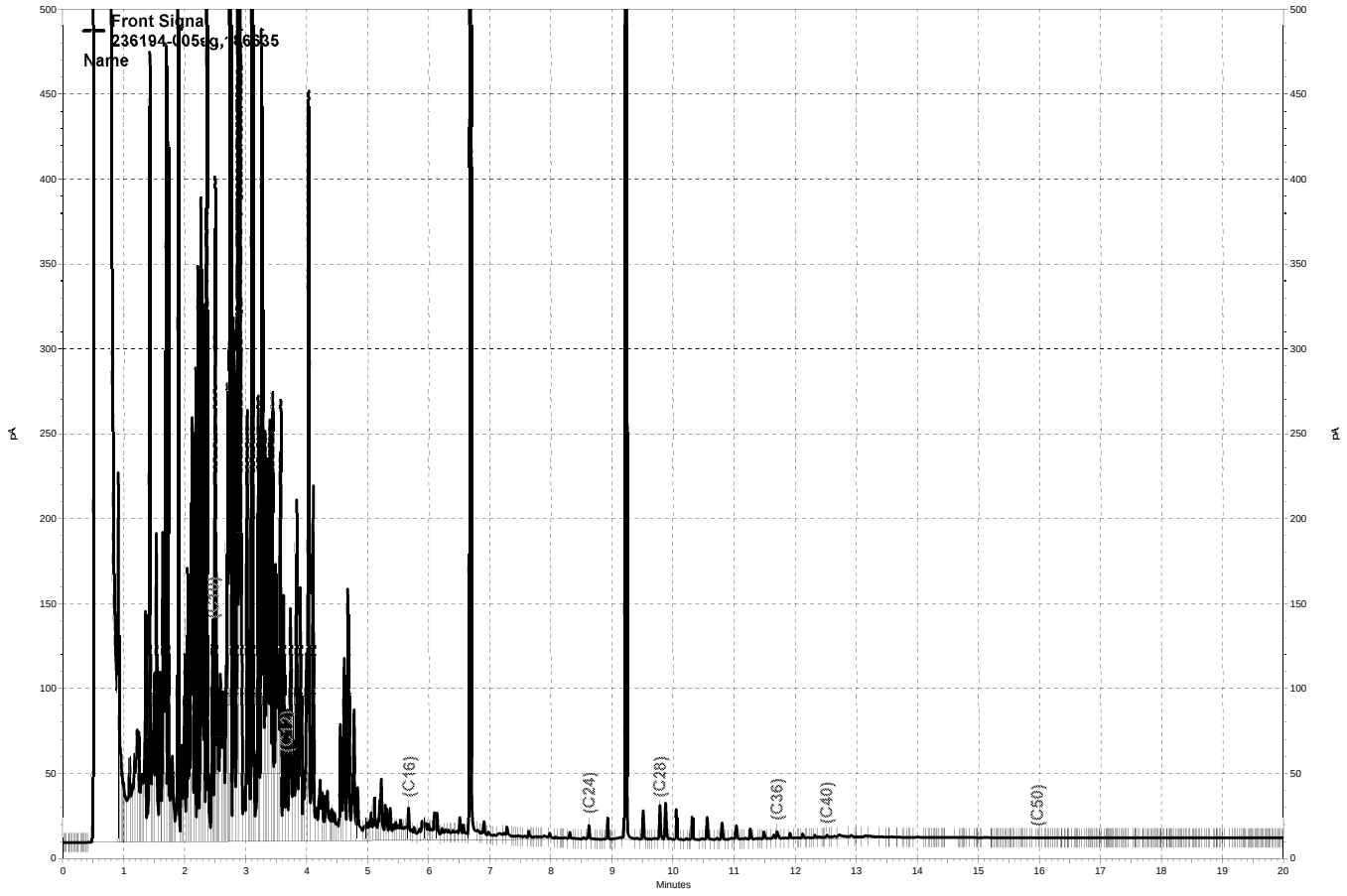

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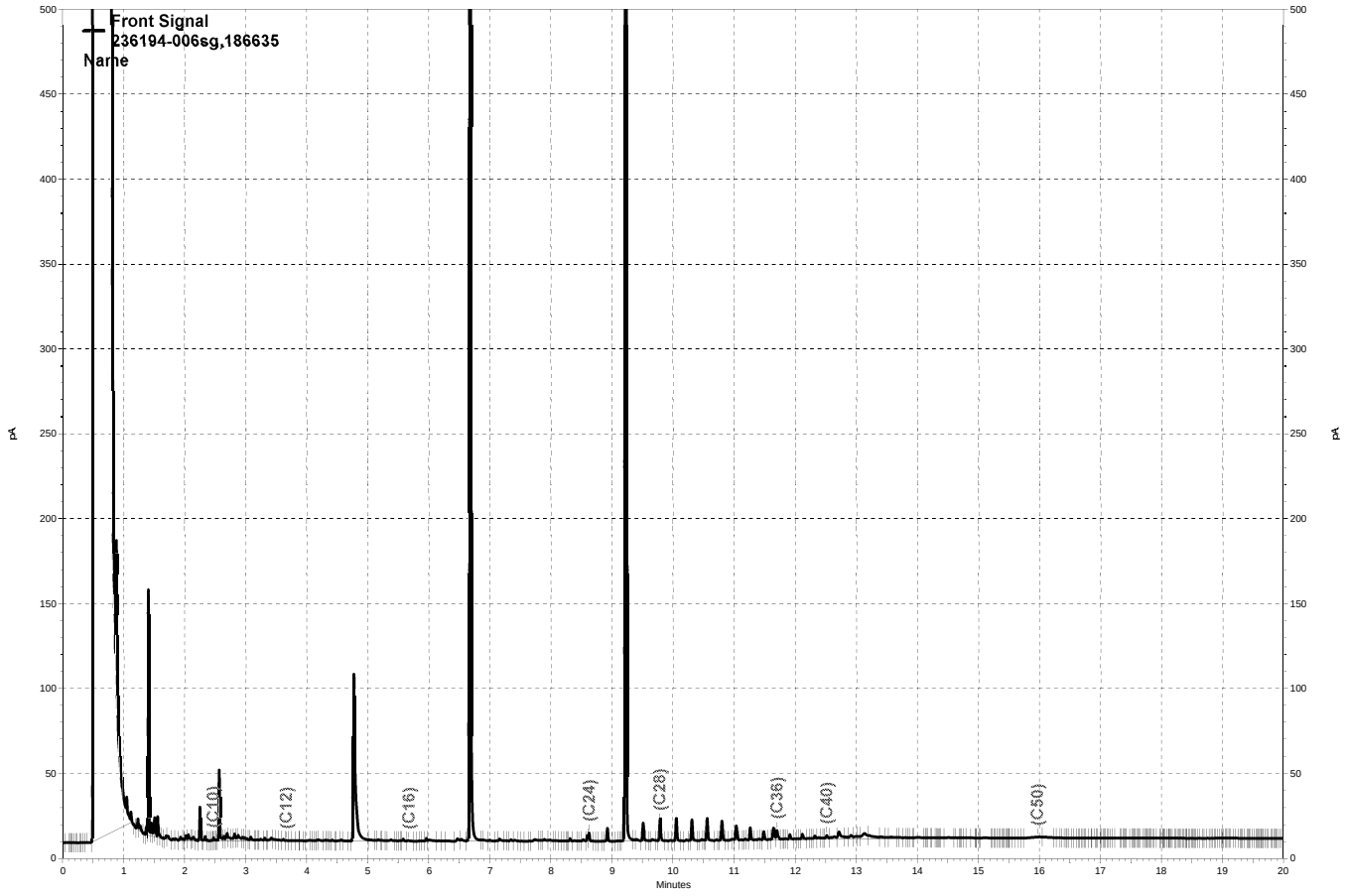

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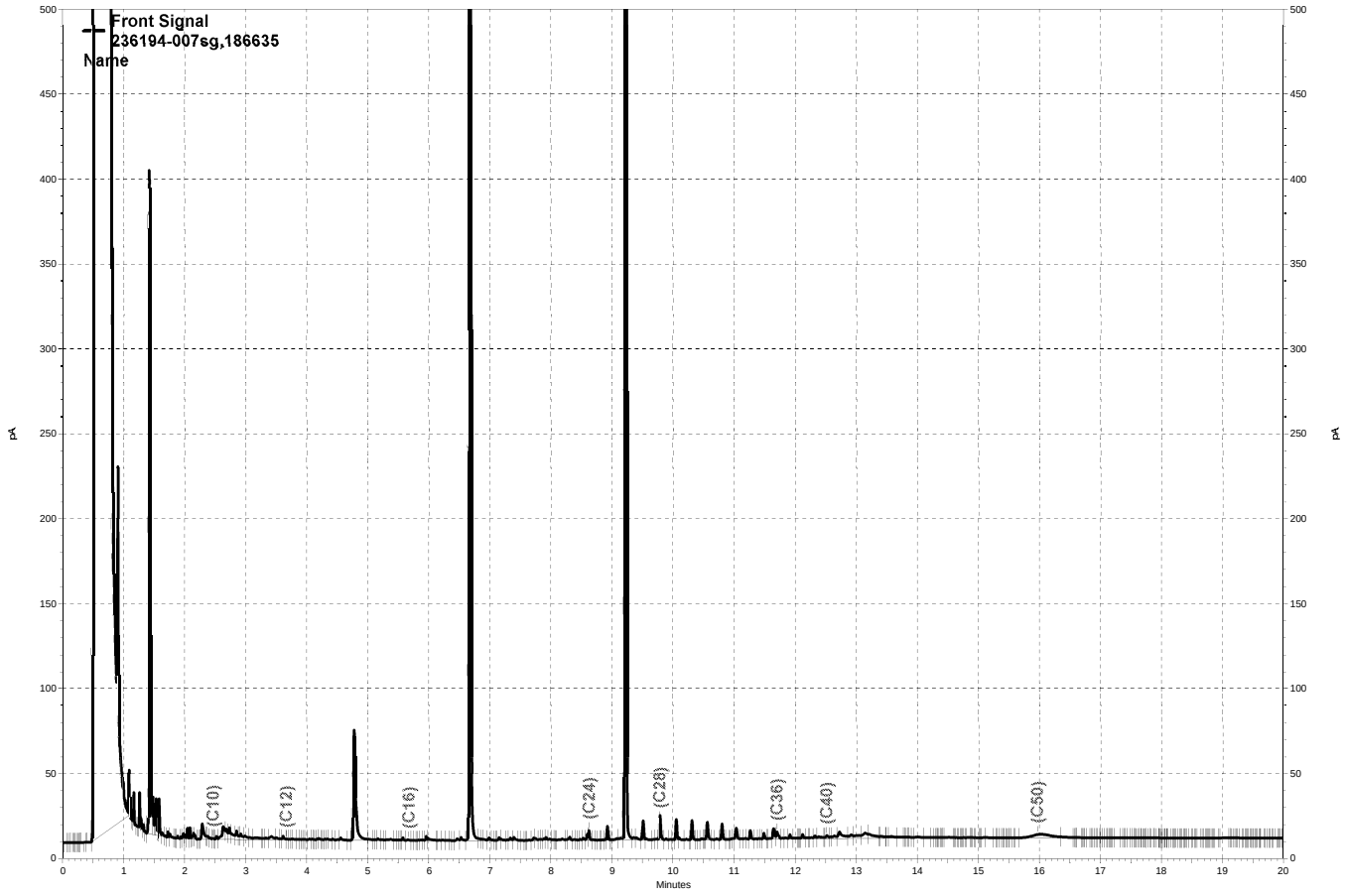

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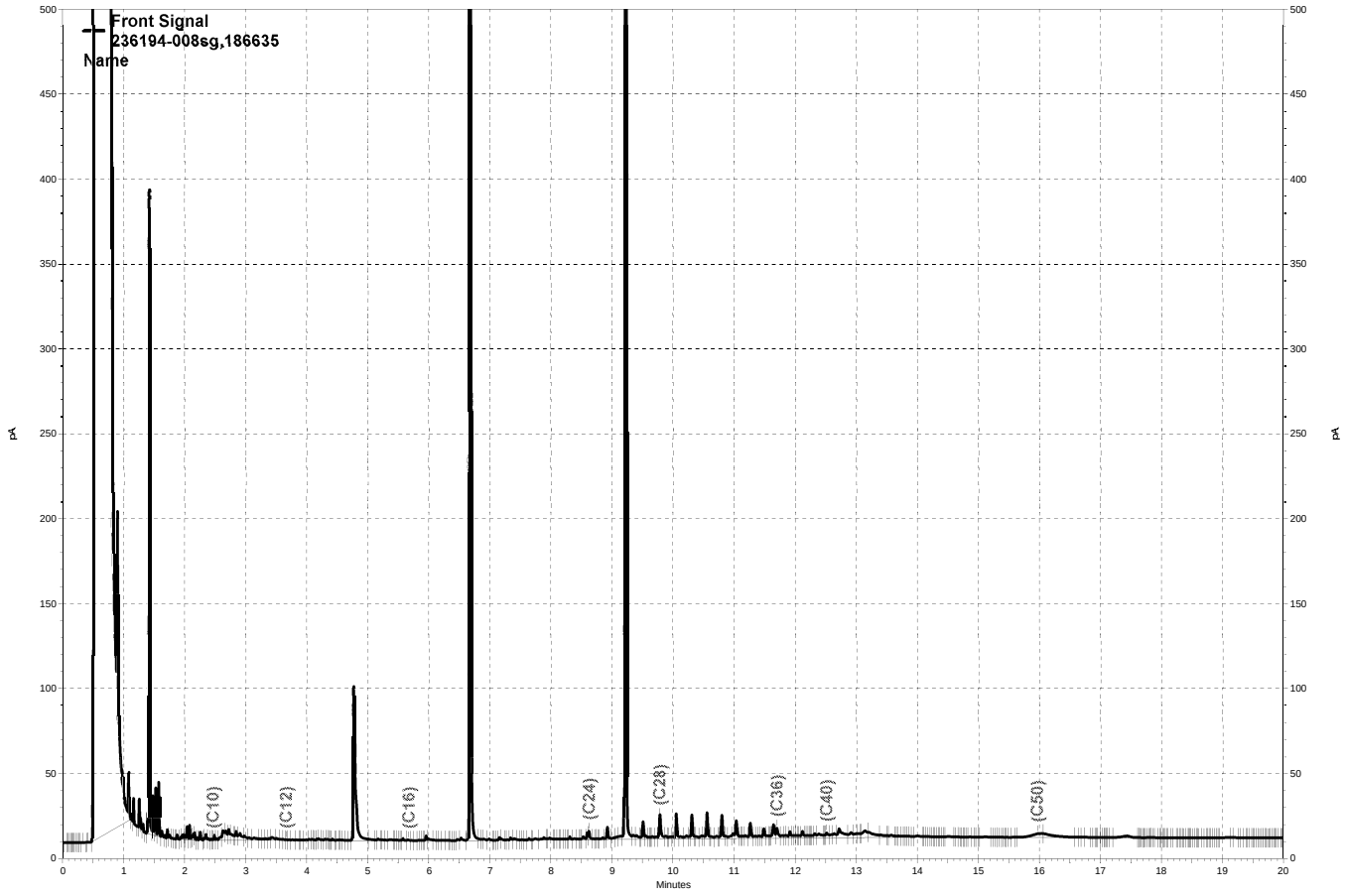

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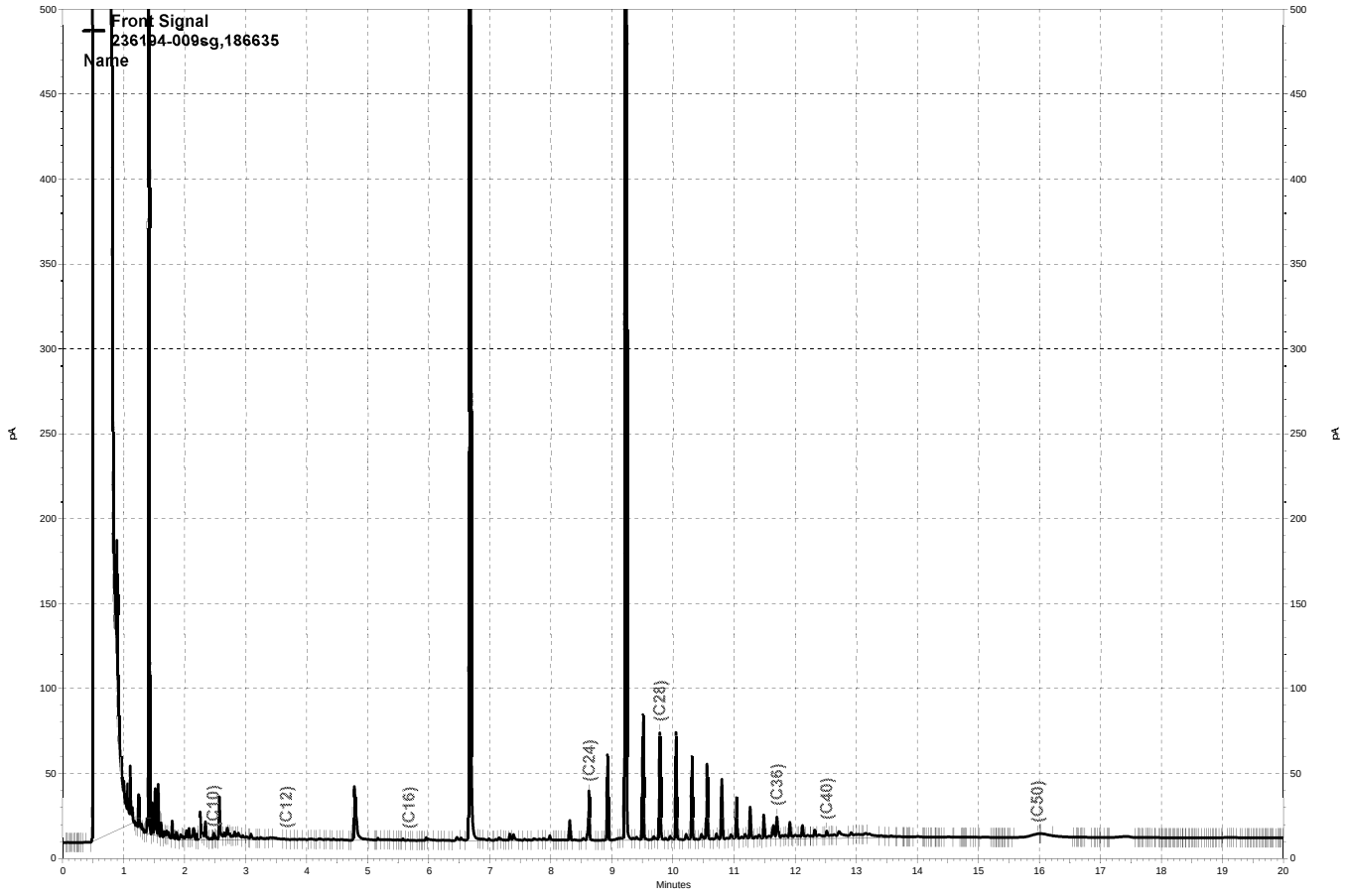

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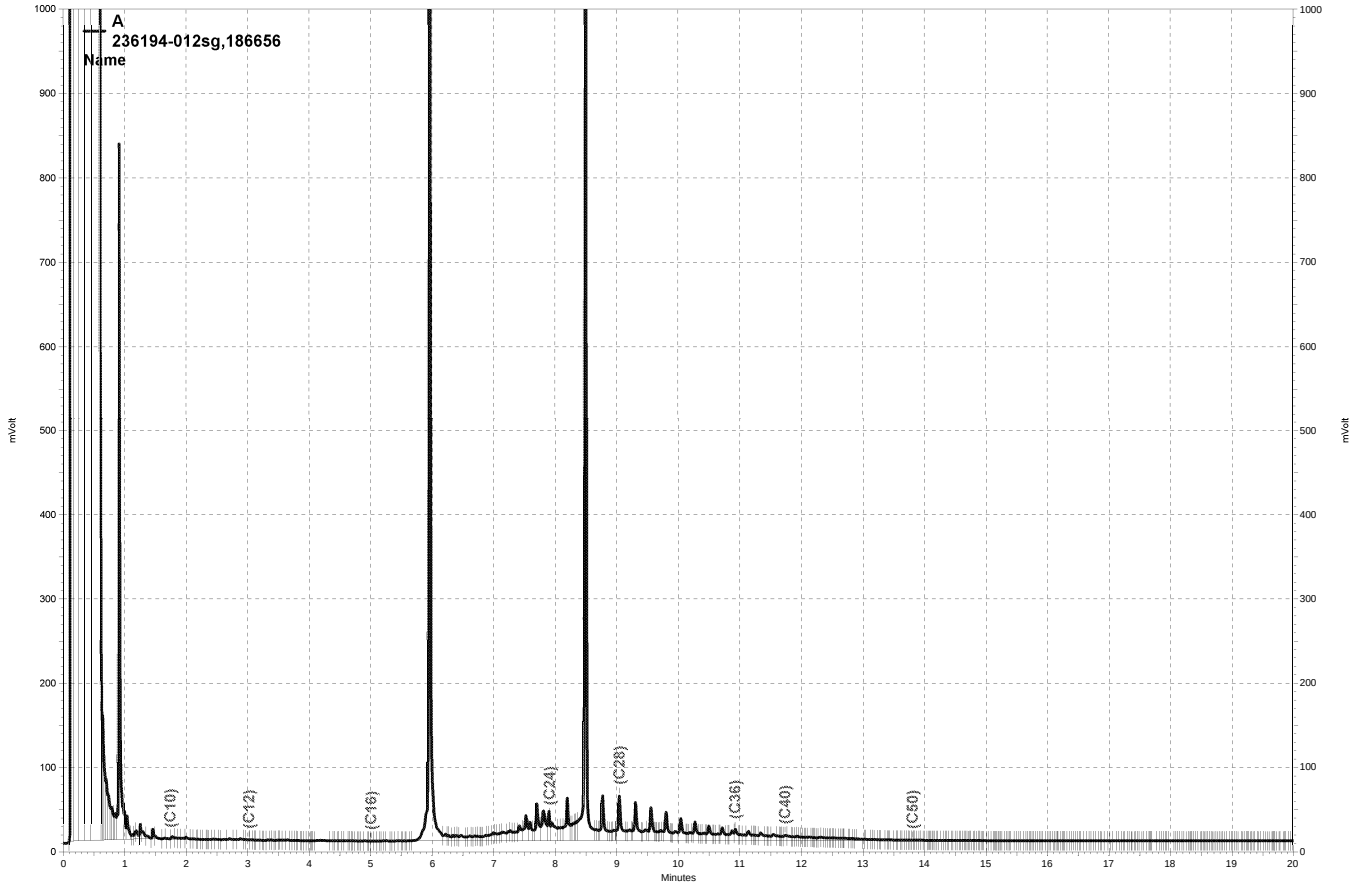

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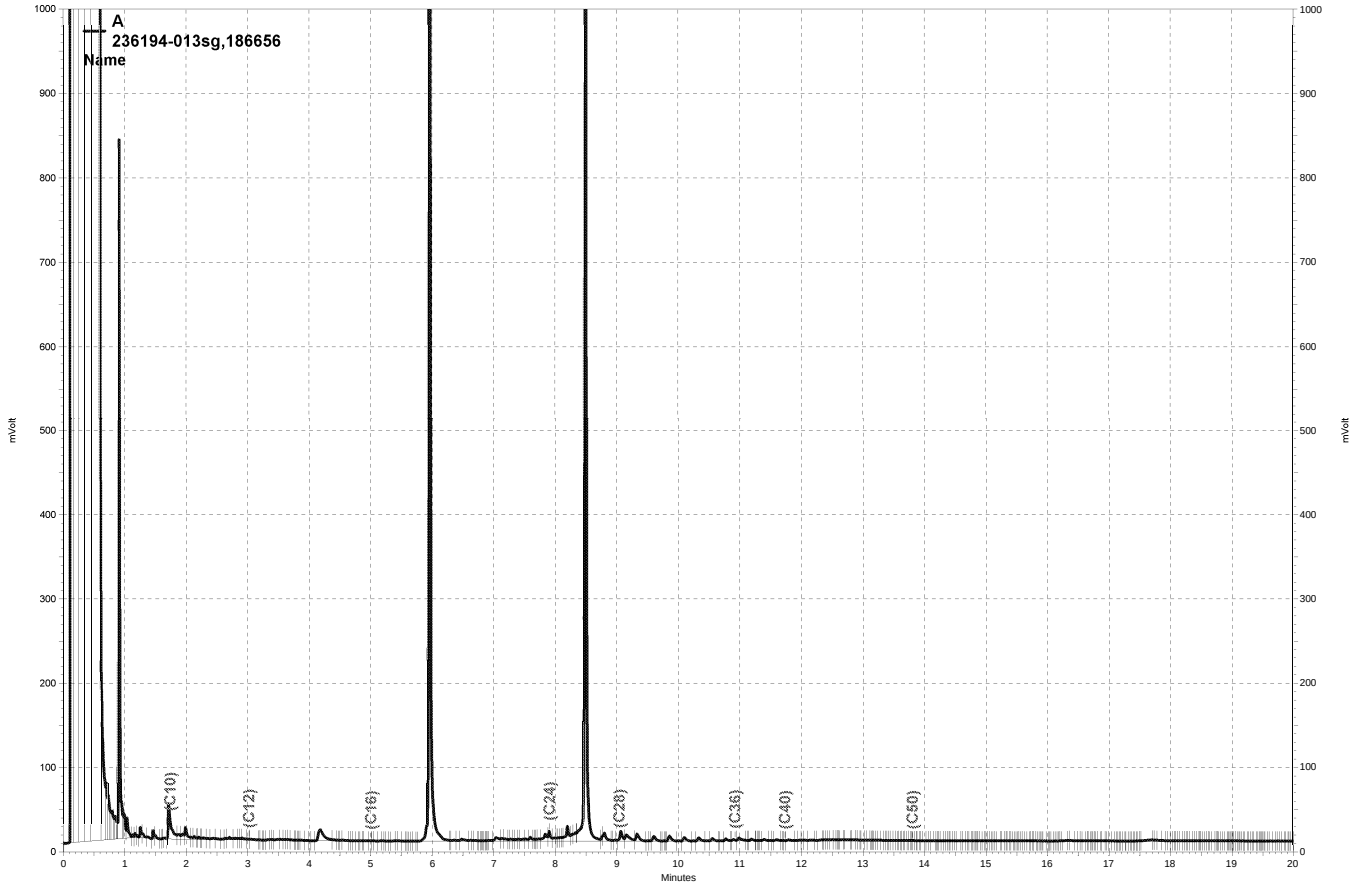

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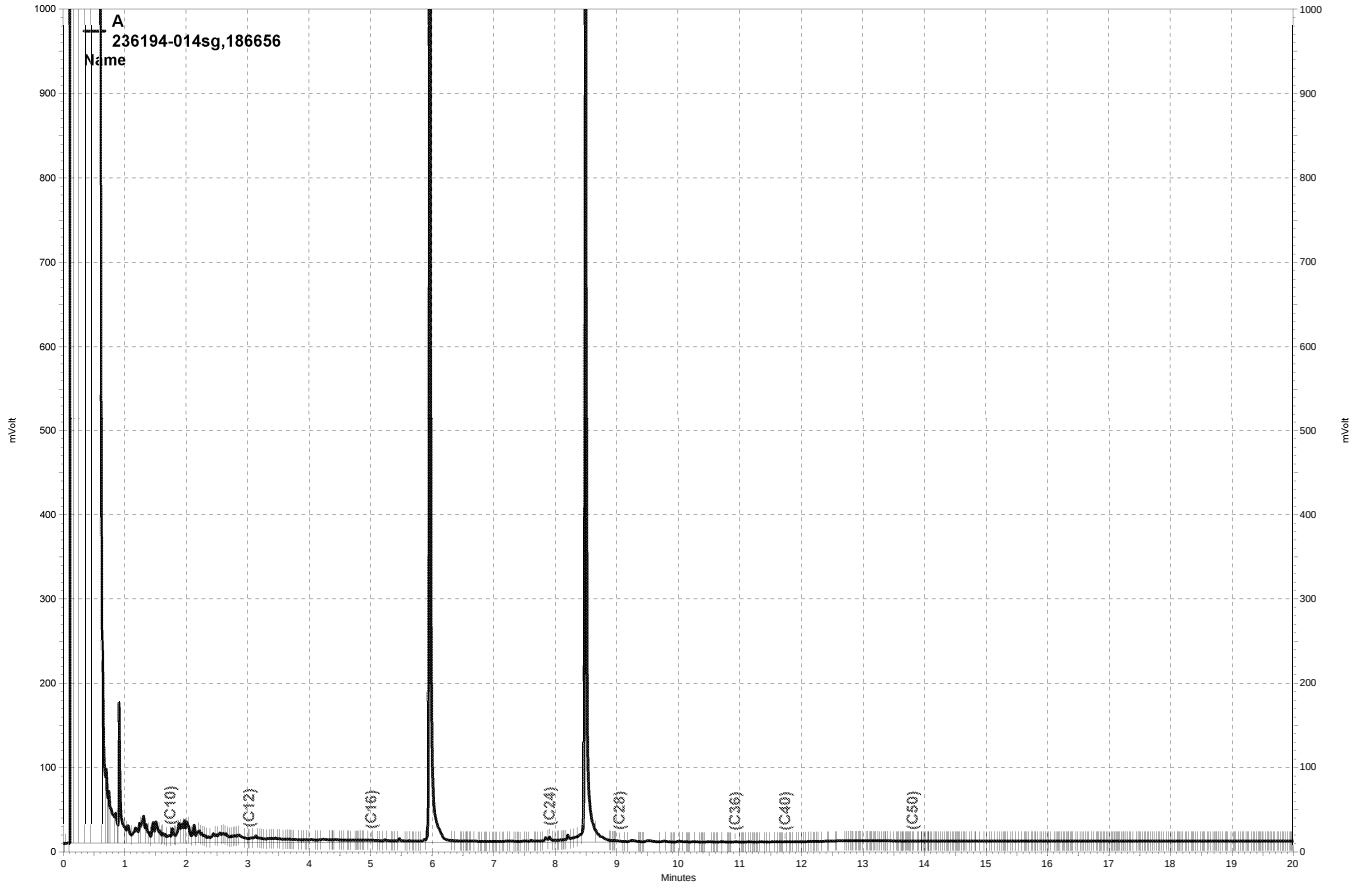

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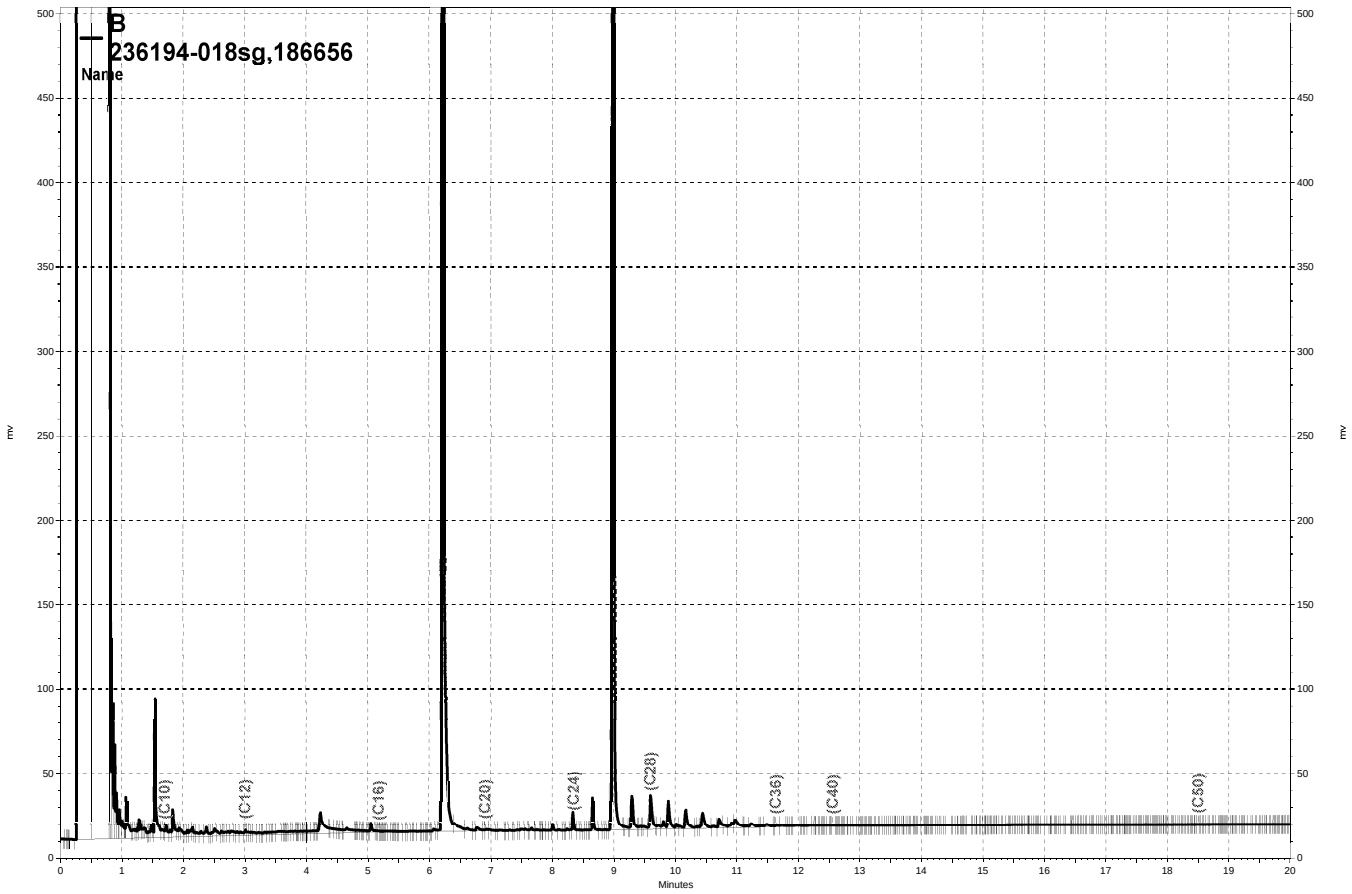

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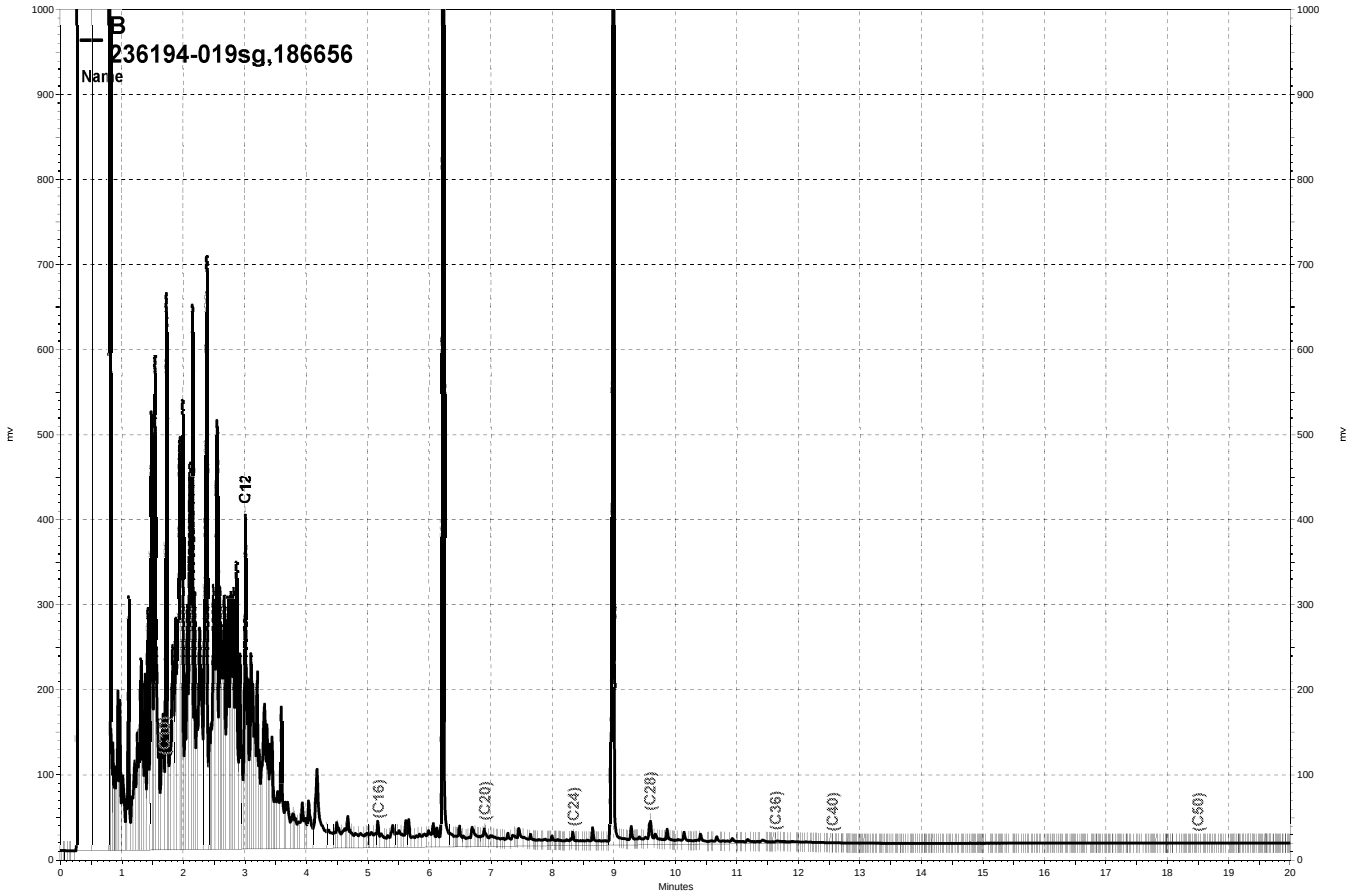

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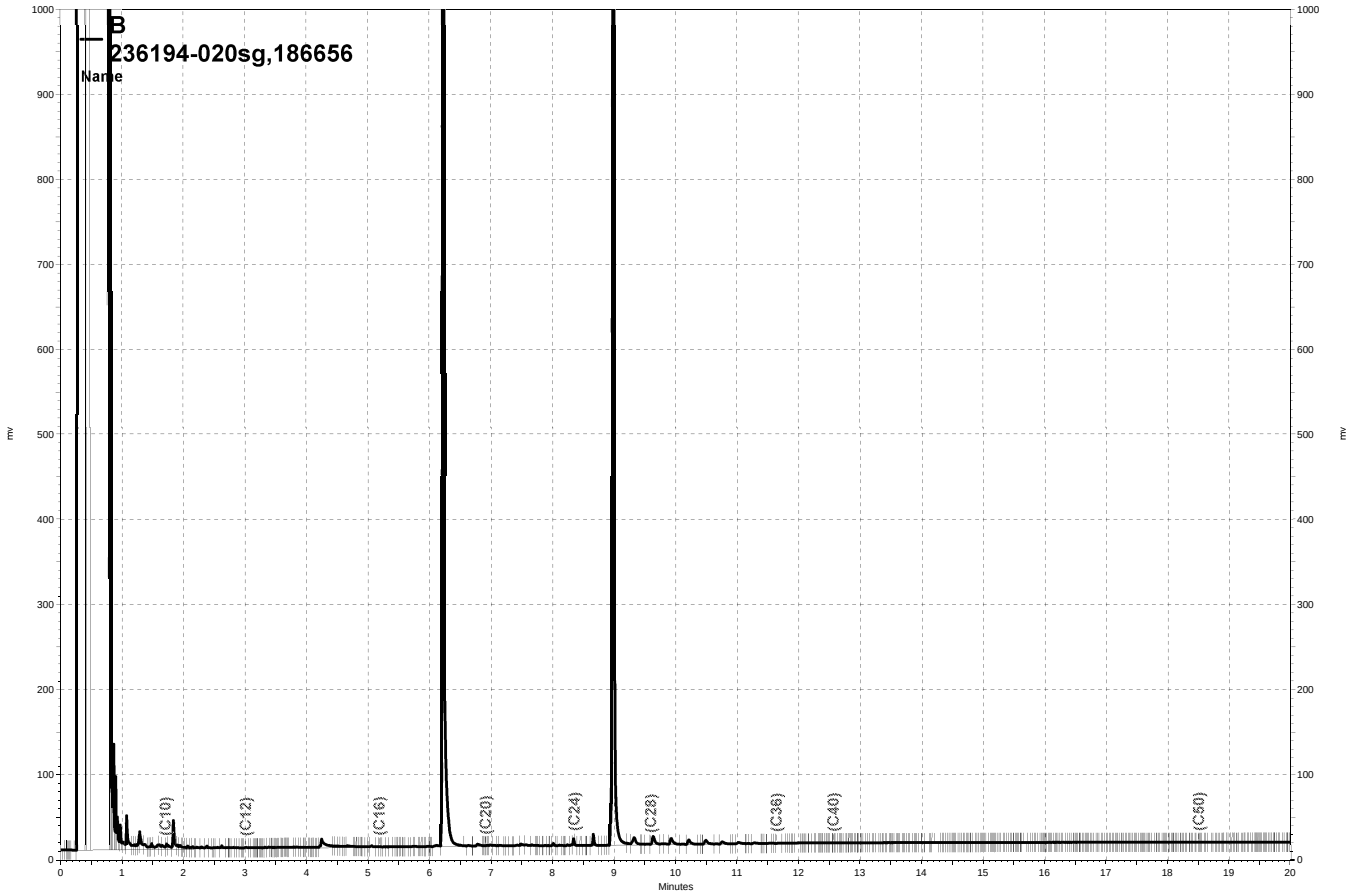

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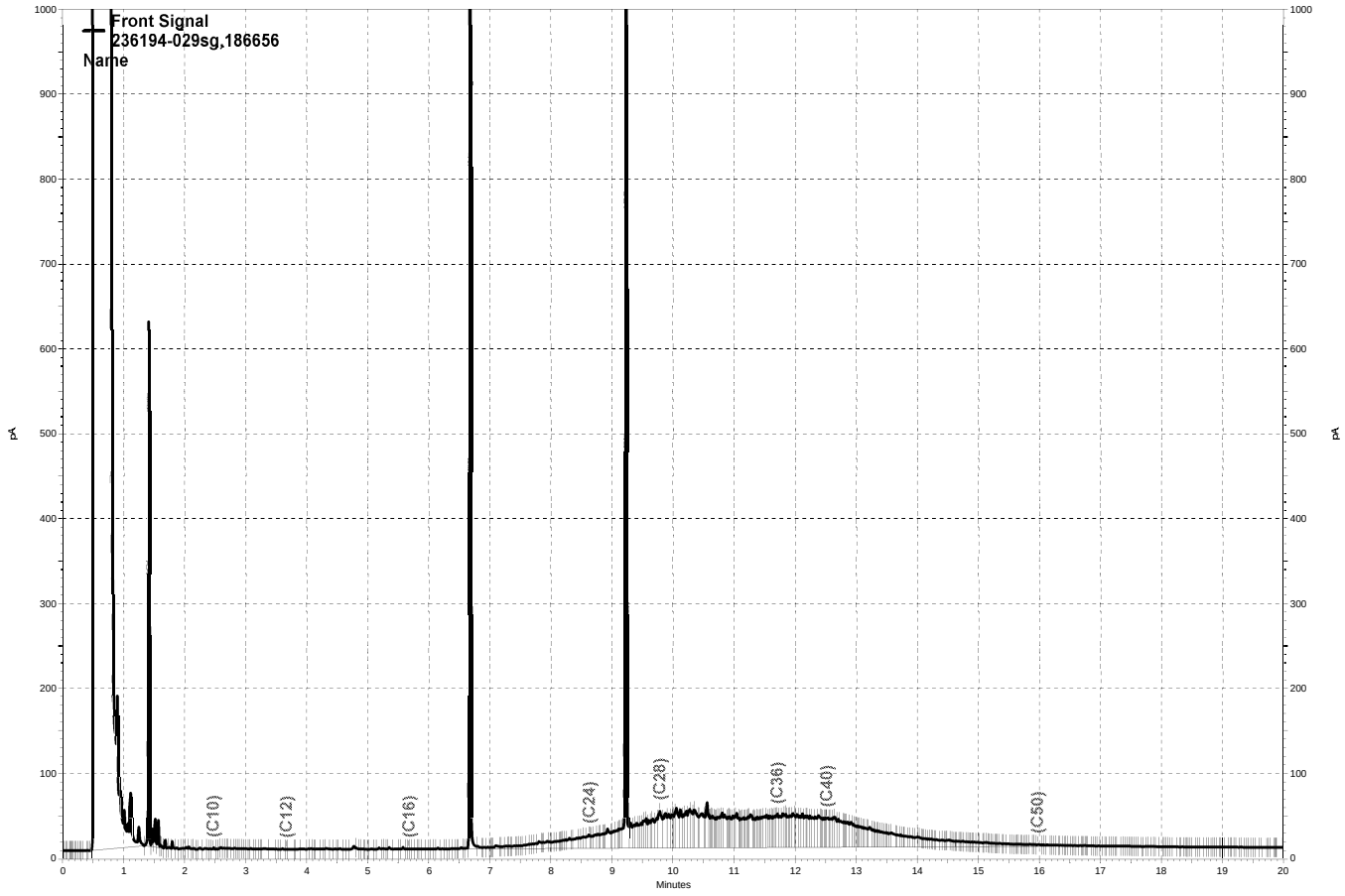

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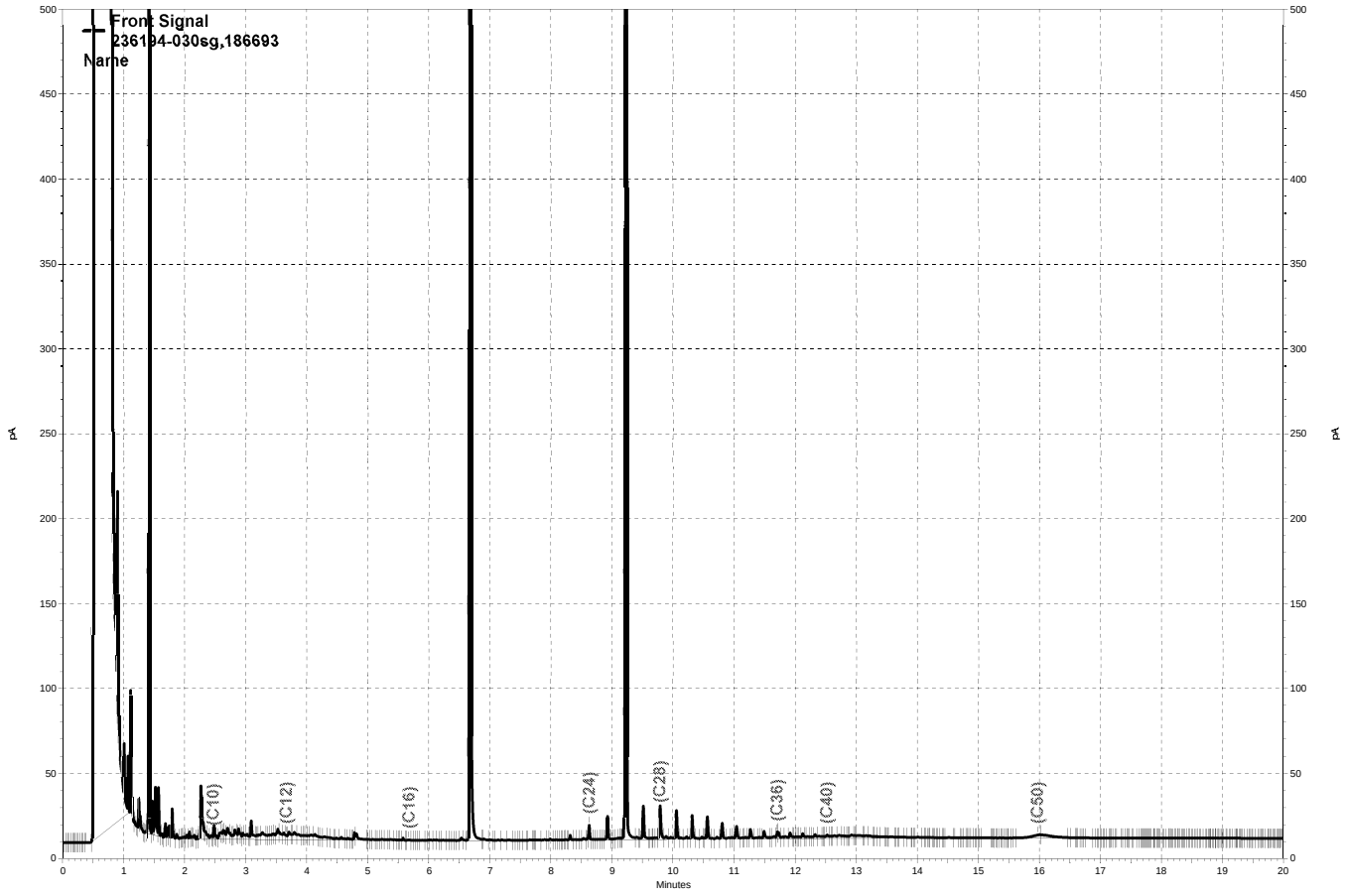

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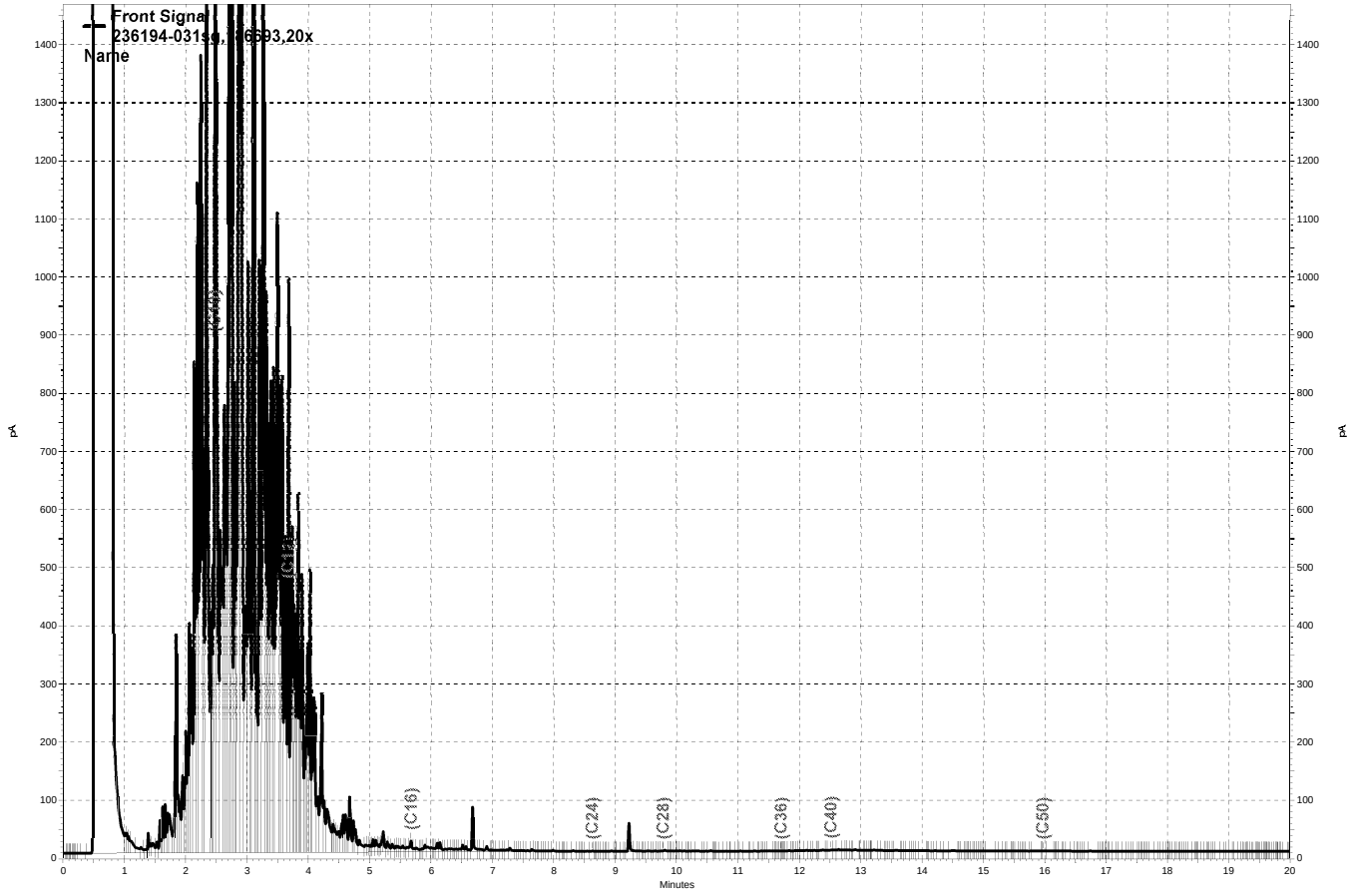

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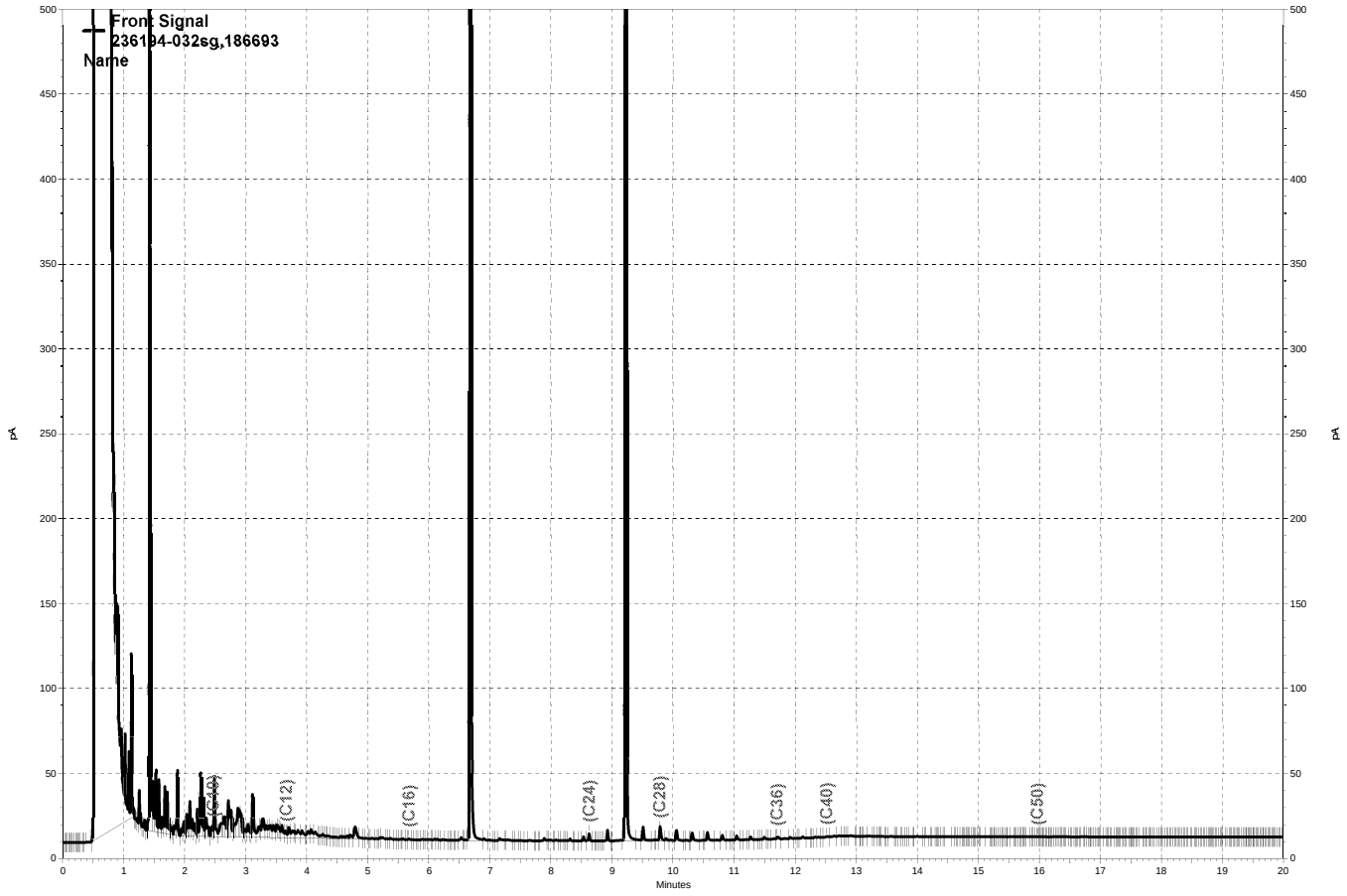

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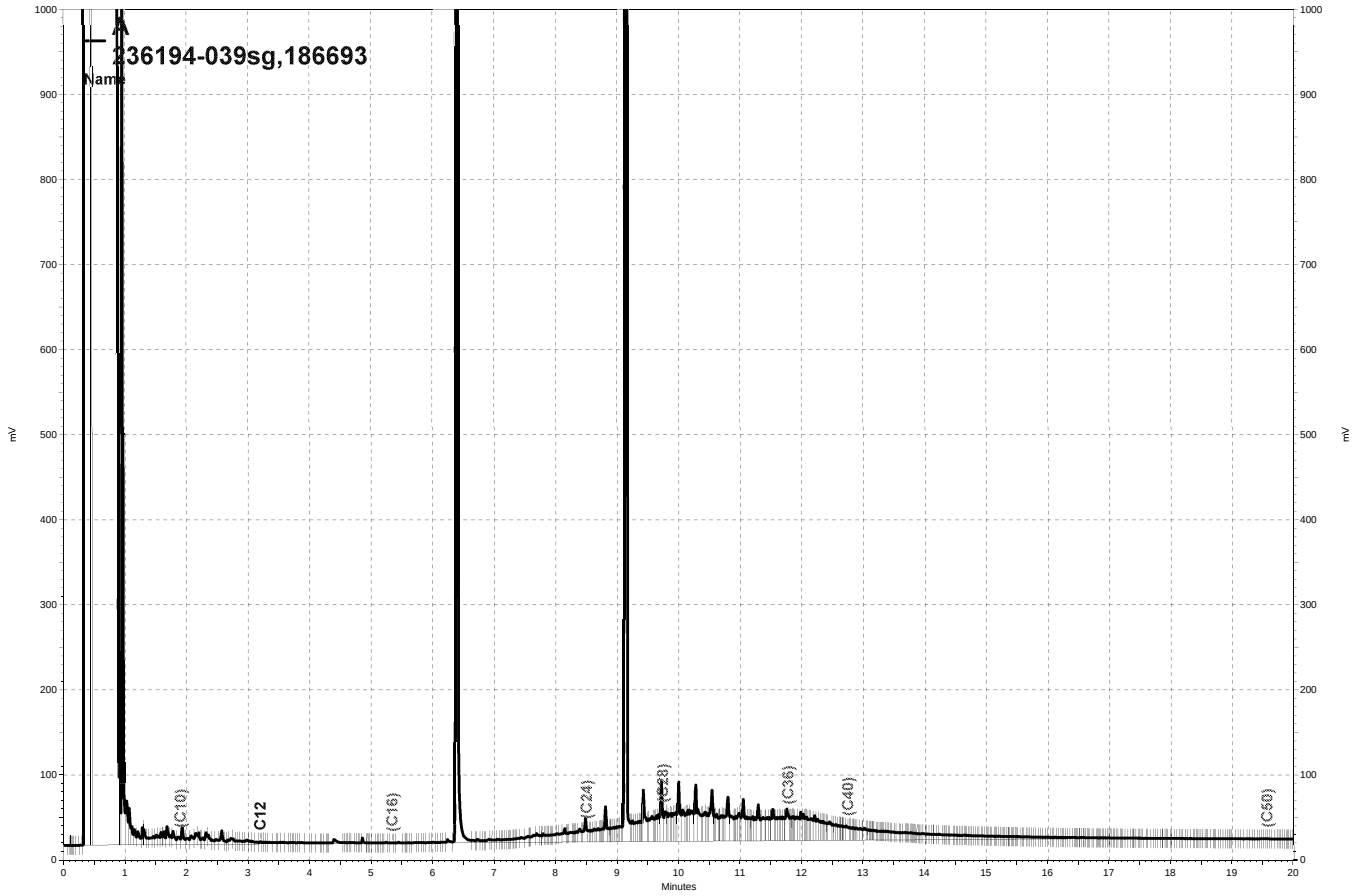

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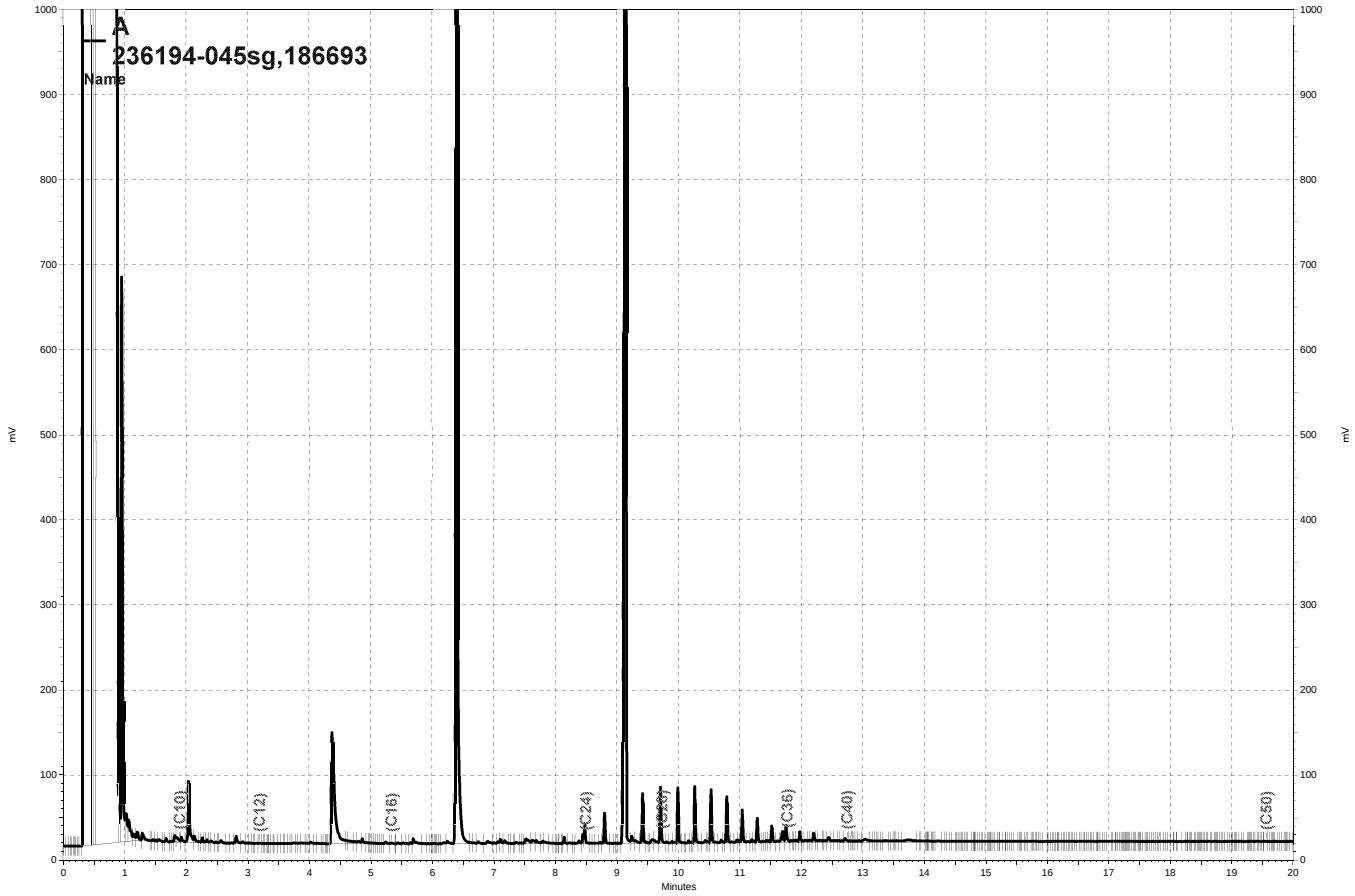

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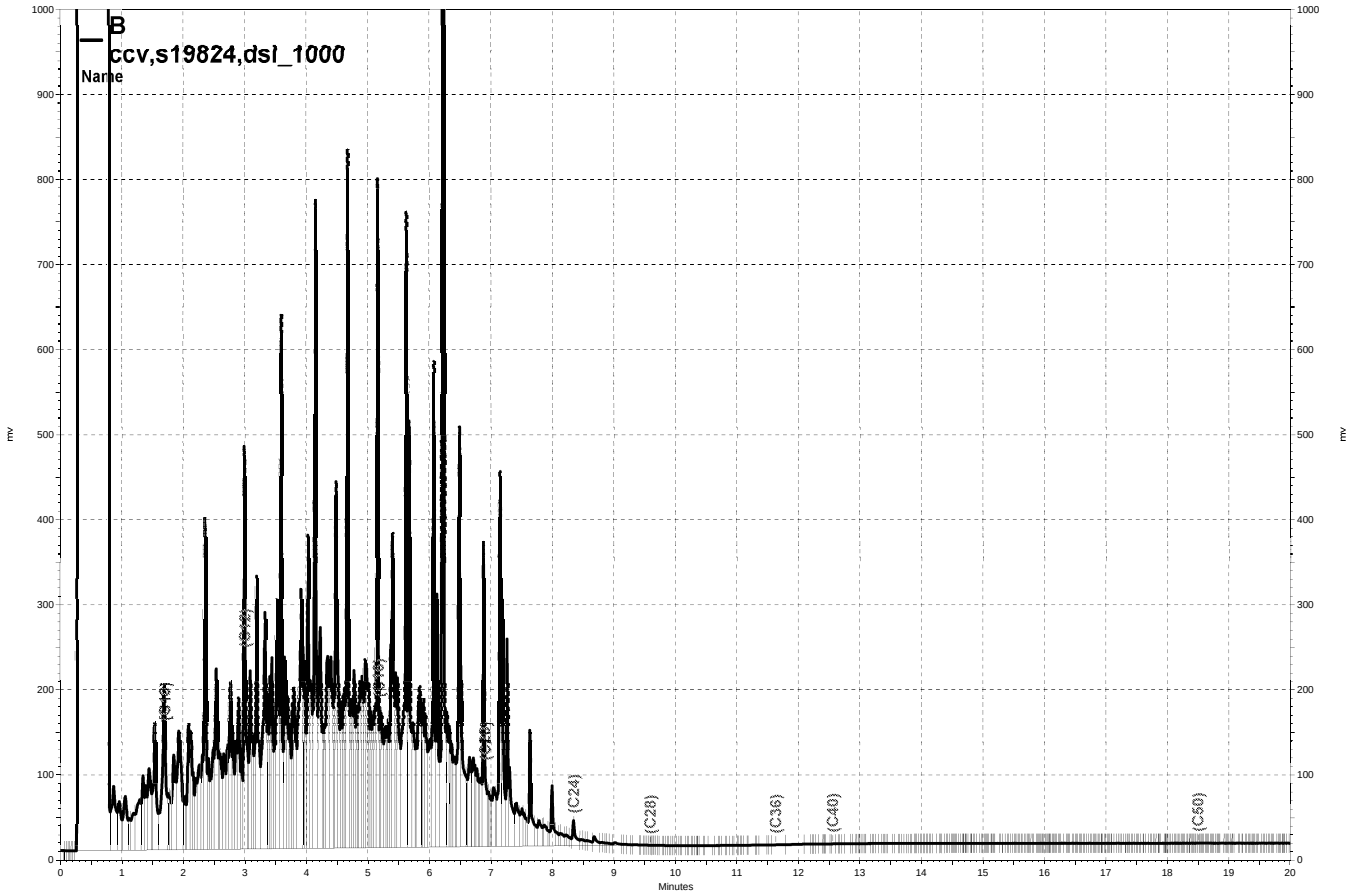

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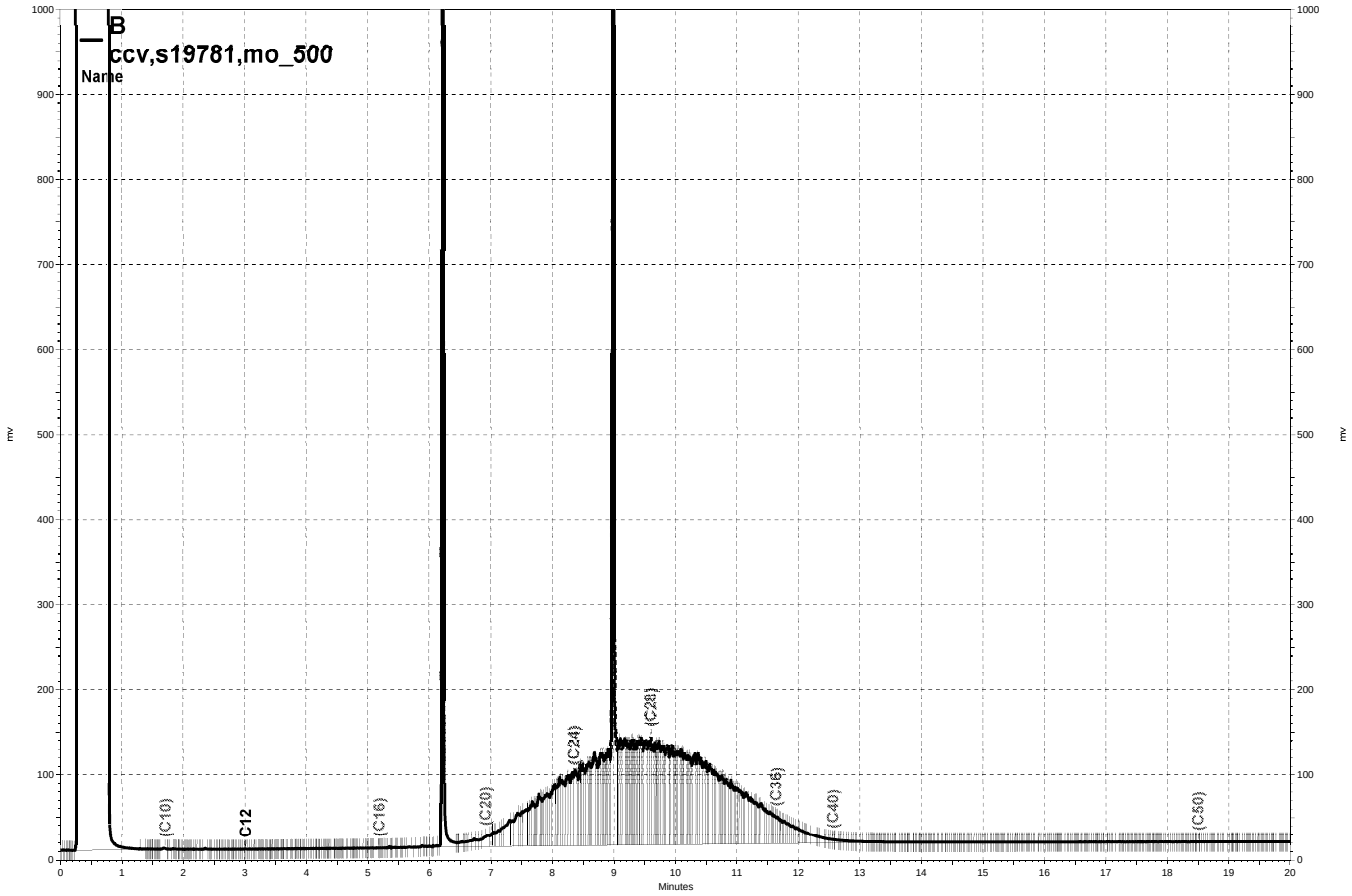

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Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-5	Diln Fac:	0.9690
Lab ID:	236194-001	Batch#:	186570
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/15/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	98	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-7	Diln Fac:	250.0
Lab ID:	236194-002	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	25,000
MTBE	ND	1,300
Isopropyl Ether (DIPE)	ND	1,300
Ethyl tert-Butyl Ether (ETBE)	ND	1,300
1,2-Dichloroethane	ND	1,300
Benzene	ND	1,300
Methyl tert-Amyl Ether (TAME)	ND	1,300
Toluene	ND	1,300
1,2-Dibromoethane	ND	1,300
Ethylbenzene	3,100	1,300
m,p-Xylenes	21,000	1,300
o-Xylene	9,900	1,300

Surrogate	%REC	Limits
Dibromofluoromethane	95	74-133
1,2-Dichloroethane-d4	102	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	106	77-130
Trifluorotoluene (MeOH)	98	60-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-10	Diln Fac:	166.7
Lab ID:	236194-003	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	17,000
MTBE	ND	830
Isopropyl Ether (DIPE)	ND	830
Ethyl tert-Butyl Ether (ETBE)	ND	830
1,2-Dichloroethane	ND	830
Benzene	ND	830
Methyl tert-Amyl Ether (TAME)	ND	830
Toluene	ND	830
1,2-Dibromoethane	ND	830
Ethylbenzene	990	830
m,p-Xylenes	55,000	830
o-Xylene	30,000	830

Surrogate	%REC	Limits
Dibromofluoromethane	94	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	101	80-120
Bromofluorobenzene	112	77-130
Trifluorotoluene (MeOH)	98	60-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-12	Diln Fac:	250.0
Lab ID:	236194-004	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	25,000
MTBE	ND	1,300
Isopropyl Ether (DIPE)	ND	1,300
Ethyl tert-Butyl Ether (ETBE)	ND	1,300
1,2-Dichloroethane	ND	1,300
Benzene	ND	1,300
Methyl tert-Amyl Ether (TAME)	ND	1,300
Toluene	ND	1,300
1,2-Dibromoethane	ND	1,300
Ethylbenzene	25,000	1,300
m,p-Xylenes	81,000	1,300
o-Xylene	24,000	1,300

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-133
1,2-Dichloroethane-d4	103	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	108	77-130
Trifluorotoluene (MeOH)	100	60-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-12A	Diln Fac:	0.9901
Lab ID:	236194-005	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	99
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	105	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	102	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-15	Diln Fac:	0.9634
Lab ID:	236194-006	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	97	74-136
Toluene-d8	94	80-120
Bromofluorobenzene	98	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB1-18	Diln Fac:	0.9470
Lab ID:	236194-007	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	105	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	113	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-5	Diln Fac:	0.9960
Lab ID:	236194-008	Batch#:	186616
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	98	80-120
Bromofluorobenzene	103	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-7	Diln Fac:	0.9560
Lab ID:	236194-009	Batch#:	186616
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	103	74-136
Toluene-d8	96	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-10	Diln Fac:	0.9980
Lab ID:	236194-010	Batch#:	186616
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	98	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-5	Diln Fac:	0.9960
Lab ID:	236194-011	Batch#:	186616
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	96	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-7	Diln Fac:	0.9328
Lab ID:	236194-012	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	113	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	109	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-10	Diln Fac:	1.000
Lab ID:	236194-013	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	109	74-133
1,2-Dichloroethane-d4	109	74-136
Toluene-d8	112	80-120
Bromofluorobenzene	112	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-12	Diln Fac:	0.9843
Lab ID:	236194-014	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	109	74-133
1,2-Dichloroethane-d4	113	74-136
Toluene-d8	112	80-120
Bromofluorobenzene	112	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-15	Diln Fac:	0.9225
Lab ID:	236194-015	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	92
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	108	74-133
1,2-Dichloroethane-d4	111	74-136
Toluene-d8	109	80-120
Bromofluorobenzene	110	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB3-18	Diln Fac:	0.9470
Lab ID:	236194-016	Batch#:	186615
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/16/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	111	74-133
1,2-Dichloroethane-d4	118	74-136
Toluene-d8	112	80-120
Bromofluorobenzene	115	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-5'	Diln Fac:	0.9843
Lab ID:	236194-017	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	94	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-10'	Diln Fac:	0.9785
Lab ID:	236194-018	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	99	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-7'	Diln Fac:	0.9843
Lab ID:	236194-019	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	99	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-13	Diln Fac:	0.9542
Lab ID:	236194-020	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	93	80-120
Bromofluorobenzene	98	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-12	Diln Fac:	0.9653
Lab ID:	236194-021	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	93	80-120
Bromofluorobenzene	98	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-15	Diln Fac:	0.9141
Lab ID:	236194-022	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	93	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-5	Diln Fac:	0.9747
Lab ID:	236194-023	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	98	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-10	Diln Fac:	0.9728
Lab ID:	236194-024	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	104	74-136
Toluene-d8	97	80-120
Bromofluorobenzene	98	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-7	Diln Fac:	0.9747
Lab ID:	236194-025	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	103	74-136
Toluene-d8	93	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-12	Diln Fac:	0.9747
Lab ID:	236194-026	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-133
1,2-Dichloroethane-d4	103	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-15	Diln Fac:	0.9470
Lab ID:	236194-027	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	103	74-136
Toluene-d8	94	80-120
Bromofluorobenzene	99	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB5-18	Diln Fac:	0.9560
Lab ID:	236194-028	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	108	74-136
Toluene-d8	110	80-120
Bromofluorobenzene	106	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB6-5	Diln Fac:	0.9597
Lab ID:	236194-029	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-133
1,2-Dichloroethane-d4	108	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	109	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB6-7	Diln Fac:	0.9597
Lab ID:	236194-030	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-133
1,2-Dichloroethane-d4	112	74-136
Toluene-d8	107	80-120
Bromofluorobenzene	105	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB6-10	Diln Fac:	2,500
Lab ID:	236194-031	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/19/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	250,000
MTBE	ND	13,000
Isopropyl Ether (DIPE)	ND	13,000
Ethyl tert-Butyl Ether (ETBE)	ND	13,000
1,2-Dichloroethane	ND	13,000
Benzene	ND	13,000
Methyl tert-Amyl Ether (TAME)	ND	13,000
Toluene	ND	13,000
1,2-Dibromoethane	ND	13,000
Ethylbenzene	ND	13,000
m,p-Xylenes	ND	13,000
o-Xylene	ND	13,000

Surrogate	%REC	Limits
Dibromofluoromethane	96	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	105	77-130
Trifluorotoluene (MeOH)	DO	60-135

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

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB6-13	Diln Fac:	0.9470
Lab ID:	236194-032	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-133
1,2-Dichloroethane-d4	112	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	99	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB6-15	Diln Fac:	0.9785
Lab ID:	236194-033	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	96	74-136
Toluene-d8	107	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-5	Diln Fac:	0.8772
Lab ID:	236194-034	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	88
MTBE	ND	4.4
Isopropyl Ether (DIPE)	ND	4.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.4
1,2-Dichloroethane	ND	4.4
Benzene	ND	4.4
Methyl tert-Amyl Ether (TAME)	ND	4.4
Toluene	ND	4.4
1,2-Dibromoethane	ND	4.4
Ethylbenzene	ND	4.4
m,p-Xylenes	ND	4.4
o-Xylene	ND	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	111	74-136
Toluene-d8	110	80-120
Bromofluorobenzene	106	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-7	Diln Fac:	0.9843
Lab ID:	236194-035	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	114	74-136
Toluene-d8	107	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-10	Diln Fac:	0.9671
Lab ID:	236194-036	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	109	74-133
1,2-Dichloroethane-d4	108	74-136
Toluene-d8	108	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-13	Diln Fac:	0.8803
Lab ID:	236194-037	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	88
MTBE	ND	4.4
Isopropyl Ether (DIPE)	ND	4.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.4
1,2-Dichloroethane	ND	4.4
Benzene	ND	4.4
Methyl tert-Amyl Ether (TAME)	ND	4.4
Toluene	ND	4.4
1,2-Dibromoethane	ND	4.4
Ethylbenzene	ND	4.4
m,p-Xylenes	ND	4.4
o-Xylene	ND	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-133
1,2-Dichloroethane-d4	110	74-136
Toluene-d8	108	80-120
Bromofluorobenzene	107	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-15	Diln Fac:	0.9058
Lab ID:	236194-038	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
1,2-Dichloroethane	ND	4.5
Benzene	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
Toluene	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethylbenzene	ND	4.5
m,p-Xylenes	ND	4.5
o-Xylene	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	74-133
1,2-Dichloroethane-d4	112	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	102	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-5	Diln Fac:	0.8897
Lab ID:	236194-039	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/17/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	89
MTBE	ND	4.4
Isopropyl Ether (DIPE)	ND	4.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.4
1,2-Dichloroethane	ND	4.4
Benzene	ND	4.4
Methyl tert-Amyl Ether (TAME)	ND	4.4
Toluene	ND	4.4
1,2-Dibromoethane	ND	4.4
Ethylbenzene	ND	4.4
m,p-Xylenes	ND	4.4
o-Xylene	ND	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-133
1,2-Dichloroethane-d4	113	74-136
Toluene-d8	112	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-7	Diln Fac:	0.8666
Lab ID:	236194-040	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	87
MTBE	ND	4.3
Isopropyl Ether (DIPE)	ND	4.3
Ethyl tert-Butyl Ether (ETBE)	ND	4.3
1,2-Dichloroethane	ND	4.3
Benzene	ND	4.3
Methyl tert-Amyl Ether (TAME)	ND	4.3
Toluene	ND	4.3
1,2-Dibromoethane	ND	4.3
Ethylbenzene	ND	4.3
m,p-Xylenes	ND	4.3
o-Xylene	ND	4.3

Surrogate	%REC	Limits
Dibromofluoromethane	98	74-133
1,2-Dichloroethane-d4	106	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	99	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-10	Diln Fac:	0.9107
Lab ID:	236194-041	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	98	74-133
1,2-Dichloroethane-d4	107	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	102	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-12	Diln Fac:	0.9074
Lab ID:	236194-042	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
1,2-Dichloroethane	ND	4.5
Benzene	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
Toluene	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethylbenzene	ND	4.5
m,p-Xylenes	ND	4.5
o-Xylene	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-133
1,2-Dichloroethane-d4	106	74-136
Toluene-d8	106	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-15	Diln Fac:	0.9091
Lab ID:	236194-043	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	91
MTBE	ND	4.5
Isopropyl Ether (DIPE)	ND	4.5
Ethyl tert-Butyl Ether (ETBE)	ND	4.5
1,2-Dichloroethane	ND	4.5
Benzene	ND	4.5
Methyl tert-Amyl Ether (TAME)	ND	4.5
Toluene	ND	4.5
1,2-Dibromoethane	ND	4.5
Ethylbenzene	ND	4.5
m,p-Xylenes	ND	4.5
o-Xylene	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	108	74-136
Toluene-d8	104	80-120
Bromofluorobenzene	102	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-18	Diln Fac:	0.9191
Lab ID:	236194-044	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	92
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	106	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	102	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-15	Diln Fac:	0.9542
Lab ID:	236194-045	Batch#:	186777
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/21/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	107	74-133
1,2-Dichloroethane-d4	116	74-136
Toluene-d8	108	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-18	Diln Fac:	0.9328
Lab ID:	236194-046	Batch#:	186718
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received	Analyzed:	05/18/12

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	109	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC639808	Batch#:	186570
Matrix:	Soil	Analyzed:	05/15/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	134.5	108	46-135
MTBE	25.00	25.51	102	62-120
Isopropyl Ether (DIPE)	25.00	25.15	101	59-120
Ethyl tert-Butyl Ether (ETBE)	25.00	24.26	97	64-120
1,2-Dichloroethane	25.00	26.24	105	74-126
Benzene	25.00	26.96	108	78-125
Methyl tert-Amyl Ether (TAME)	25.00	23.17	93	68-120
Toluene	25.00	25.27	101	79-120
1,2-Dibromoethane	25.00	24.66	99	77-120
Ethylbenzene	25.00	25.78	103	80-120
m,p-Xylenes	50.00	50.30	101	80-120
o-Xylene	25.00	23.71	95	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-133
1,2-Dichloroethane-d4	104	74-136
Toluene-d8	98	80-120
Bromofluorobenzene	100	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC639809	Batch#:	186570
Matrix:	Soil	Analyzed:	05/15/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	74-133
1,2-Dichloroethane-d4	102	74-136
Toluene-d8	99	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	186570
MSS Lab ID:	236121-019	Sampled:	05/08/12
Matrix:	Soil	Received:	05/09/12
Units:	ug/Kg	Analyzed:	05/15/12
Basis:	as received		

Type: MS Diln Fac: 0.9766
Lab ID: QC639874

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<15.31	244.1	231.5	95	44-128
MTBE	<1.481	48.83	43.06	88	51-120
Isopropyl Ether (DIPE)	<1.263	48.83	43.49	89	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.9521	48.83	41.82	86	55-120
1,2-Dichloroethane	<0.9153	48.83	43.28	89	55-121
Benzene	<0.9497	48.83	50.28	103	58-122
Methyl tert-Amyl Ether (TAME)	<0.6201	48.83	41.69	85	55-120
Toluene	<1.282	48.83	46.38	95	54-120
1,2-Dibromoethane	<0.5891	48.83	40.58	83	52-120
Ethylbenzene	<1.179	48.83	47.30	97	47-120
m,p-Xylenes	<0.6046	97.66	90.84	93	47-120
o-Xylene	<1.104	48.83	42.04	86	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	97	80-120
Bromofluorobenzene	101	77-130

Type: MSD Diln Fac: 1.000
Lab ID: QC639875

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	248.0	99	44-128	5	39
MTBE	50.00	43.70	87	51-120	1	32
Isopropyl Ether (DIPE)	50.00	43.15	86	50-120	3	32
Ethyl tert-Butyl Ether (ETBE)	50.00	42.47	85	55-120	1	32
1,2-Dichloroethane	50.00	46.28	93	55-121	4	33
Benzene	50.00	52.95	106	58-122	3	37
Methyl tert-Amyl Ether (TAME)	50.00	42.49	85	55-120	0	34
Toluene	50.00	49.36	99	54-120	4	35
1,2-Dibromoethane	50.00	43.71	87	52-120	5	35
Ethylbenzene	50.00	50.47	101	47-120	4	40
m,p-Xylenes	100.0	97.03	97	47-120	4	40
o-Xylene	50.00	44.76	90	47-120	4	40

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	102	74-136
Toluene-d8	96	80-120
Bromofluorobenzene	103	77-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640000	Batch#:	186615
Matrix:	Soil	Analyzed:	05/16/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	110.4	88	46-135
MTBE	25.00	21.46	86	62-120
Isopropyl Ether (DIPE)	25.00	23.26	93	59-120
Ethyl tert-Butyl Ether (ETBE)	25.00	23.28	93	64-120
1,2-Dichloroethane	25.00	23.02	92	74-126
Benzene	25.00	24.33	97	78-125
Methyl tert-Amyl Ether (TAME)	25.00	21.56	86	68-120
Toluene	25.00	27.19	109	79-120
1,2-Dibromoethane	25.00	25.79	103	77-120
Ethylbenzene	25.00	26.60	106	80-120
m,p-Xylenes	50.00	51.98	104	80-120
o-Xylene	25.00	24.17	97	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	109	80-120
Bromofluorobenzene	105	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640001	Batch#:	186615
Matrix:	Soil	Analyzed:	05/16/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	94	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	110	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640002	Batch#:	186616
Matrix:	Soil	Analyzed:	05/16/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	121.4	97	46-135
MTBE	25.00	23.13	93	62-120
Isopropyl Ether (DIPE)	25.00	22.30	89	59-120
Ethyl tert-Butyl Ether (ETBE)	25.00	22.75	91	64-120
1,2-Dichloroethane	25.00	26.42	106	74-126
Benzene	25.00	28.47	114	78-125
Methyl tert-Amyl Ether (TAME)	25.00	24.19	97	68-120
Toluene	25.00	26.62	106	79-120
1,2-Dibromoethane	25.00	25.15	101	77-120
Ethylbenzene	25.00	26.87	107	80-120
m,p-Xylenes	50.00	53.95	108	80-120
o-Xylene	25.00	25.03	100	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	96	80-120
Bromofluorobenzene	102	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640003	Batch#:	186616
Matrix:	Soil	Analyzed:	05/16/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	99	74-136
Toluene-d8	99	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB2-5	Batch#:	186616
MSS Lab ID:	236194-008	Sampled:	05/10/12
Matrix:	Soil	Received:	05/14/12
Units:	ug/Kg	Analyzed:	05/16/12
Basis:	as received		

Type: MS Diln Fac: 0.9843
Lab ID: QC640018

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<15.53	246.1	199.6	81	44-128
MTBE	<1.501	49.21	37.26	76	51-120
Isopropyl Ether (DIPE)	<1.281	49.21	36.43	74	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.9653	49.21	36.83	75	55-120
1,2-Dichloroethane	<0.9281	49.21	37.18	76	55-121
Benzene	<0.9630	49.21	41.17	84	58-122
Methyl tert-Amyl Ether (TAME)	<0.6288	49.21	40.51	82	55-120
Toluene	<1.299	49.21	39.42	80	54-120
1,2-Dibromoethane	<0.5973	49.21	35.97	73	52-120
Ethylbenzene	<1.196	49.21	40.76	83	47-120
m,p-Xylenes	<0.6130	98.43	78.88	80	47-120
o-Xylene	<1.120	49.21	36.16	73	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	99	74-136
Toluene-d8	96	80-120
Bromofluorobenzene	102	77-130

Type: MSD Diln Fac: 0.9766
Lab ID: QC640019

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	244.1	226.4	93	44-128	13	39
MTBE	48.83	42.60	87	51-120	14	32
Isopropyl Ether (DIPE)	48.83	41.76	86	50-120	14	32
Ethyl tert-Butyl Ether (ETBE)	48.83	42.40	87	55-120	15	32
1,2-Dichloroethane	48.83	44.22	91	55-121	18	33
Benzene	48.83	48.95	100	58-122	18	37
Methyl tert-Amyl Ether (TAME)	48.83	45.54	93	55-120	12	34
Toluene	48.83	47.10	96	54-120	19	35
1,2-Dibromoethane	48.83	42.61	87	52-120	18	35
Ethylbenzene	48.83	46.83	96	47-120	15	40
m,p-Xylenes	97.66	94.10	96	47-120	18	40
o-Xylene	48.83	44.02	90	47-120	20	40

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	98	80-120
Bromofluorobenzene	100	77-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	186615
MSS Lab ID:	236164-003	Sampled:	05/09/12
Matrix:	Soil	Received:	05/10/12
Units:	ug/Kg	Analyzed:	05/16/12
Basis:	as received		

Type: MS Diln Fac: 0.9843
Lab ID: QC640055

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.832	246.1	211.6	86	44-128
MTBE	<0.1524	49.21	38.53	78	51-120
Isopropyl Ether (DIPE)	<0.1994	49.21	43.75	89	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.1466	49.21	42.36	86	55-120
1,2-Dichloroethane	<0.3408	49.21	43.80	89	55-121
Benzene	<0.4328	49.21	43.66	89	58-122
Methyl tert-Amyl Ether (TAME)	<0.2284	49.21	38.85	79	55-120
Toluene	<0.3144	49.21	47.00	95	54-120
1,2-Dibromoethane	<0.2108	49.21	44.44	90	52-120
Ethylbenzene	<0.3762	49.21	46.63	95	47-120
m,p-Xylenes	<0.8989	98.43	89.56	91	47-120
o-Xylene	<0.2687	49.21	41.16	84	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	74-133
1,2-Dichloroethane-d4	113	74-136
Toluene-d8	109	80-120
Bromofluorobenzene	102	77-130

Type: MSD Diln Fac: 0.9823
Lab ID: QC640056

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	245.6	219.1	89	44-128	4	39
MTBE	49.12	41.32	84	51-120	7	32
Isopropyl Ether (DIPE)	49.12	45.48	93	50-120	4	32
Ethyl tert-Butyl Ether (ETBE)	49.12	43.25	88	55-120	2	32
1,2-Dichloroethane	49.12	45.82	93	55-121	5	33
Benzene	49.12	45.59	93	58-122	5	37
Methyl tert-Amyl Ether (TAME)	49.12	41.71	85	55-120	7	34
Toluene	49.12	48.07	98	54-120	2	35
1,2-Dibromoethane	49.12	45.93	94	52-120	3	35
Ethylbenzene	49.12	49.18	100	47-120	6	40
m,p-Xylenes	98.23	92.87	95	47-120	4	40
o-Xylene	49.12	44.72	91	47-120	8	40

Surrogate	%REC	Limits
Dibromofluoromethane	110	74-133
1,2-Dichloroethane-d4	110	74-136
Toluene-d8	109	80-120
Bromofluorobenzene	101	77-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640234	Batch#:	186670
Matrix:	Soil	Analyzed:	05/17/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	107	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	108	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640235	Batch#:	186670
Matrix:	Soil	Analyzed:	05/17/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	94.61	95	46-135
MTBE	20.00	18.15	91	62-120
Isopropyl Ether (DIPE)	20.00	18.70	93	59-120
Ethyl tert-Butyl Ether (ETBE)	20.00	17.52	88	64-120
1,2-Dichloroethane	20.00	20.35	102	74-126
Benzene	20.00	19.44	97	78-125
Methyl tert-Amyl Ether (TAME)	20.00	17.45	87	68-120
Toluene	20.00	20.81	104	79-120
1,2-Dibromoethane	20.00	21.31	107	77-120
Ethylbenzene	20.00	20.85	104	80-120
m,p-Xylenes	40.00	40.45	101	80-120
o-Xylene	20.00	17.68	88	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	105	74-136
Toluene-d8	108	80-120
Bromofluorobenzene	101	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB7-13	Basis:	as received
MSS Lab ID:	236194-037	Batch#:	186670
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12

Type:	MS	Diln Fac:	0.9225
Lab ID:	QC640236	Analyzed:	05/17/12

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.625	230.6	181.0	78	44-128
MTBE	<0.1352	46.13	39.81	86	51-120
Isopropyl Ether (DIPE)	<0.1770	46.13	42.52	92	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.1301	46.13	42.41	92	55-120
1,2-Dichloroethane	<0.3024	46.13	45.56	99	55-121
Benzene	<0.3840	46.13	46.31	100	58-122
Methyl tert-Amyl Ether (TAME)	<0.2027	46.13	41.55	90	55-120
Toluene	<0.2790	46.13	47.98	104	54-120
1,2-Dibromoethane	<0.1871	46.13	44.56	97	52-120
Ethylbenzene	<0.3338	46.13	48.44	105	47-120
m,p-Xylenes	<0.7976	92.25	95.20	103	47-120
o-Xylene	<0.2384	46.13	44.66	97	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	112	74-136
Toluene-d8	109	80-120
Bromofluorobenzene	94	77-130

Type:	MSD	Diln Fac:	0.9398
Lab ID:	QC640237	Analyzed:	05/18/12

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	235.0	208.6	89	44-128	12	39
MTBE	46.99	43.35	92	51-120	7	32
Isopropyl Ether (DIPE)	46.99	44.76	95	50-120	3	32
Ethyl tert-Butyl Ether (ETBE)	46.99	45.23	96	55-120	5	32
1,2-Dichloroethane	46.99	46.73	99	55-121	1	33
Benzene	46.99	46.91	100	58-122	1	37
Methyl tert-Amyl Ether (TAME)	46.99	43.67	93	55-120	3	34
Toluene	46.99	49.56	105	54-120	1	35
1,2-Dibromoethane	46.99	48.47	103	52-120	7	35
Ethylbenzene	46.99	49.72	106	47-120	1	40
m,p-Xylenes	93.98	96.52	103	47-120	0	40
o-Xylene	46.99	44.72	95	47-120	2	40

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-133
1,2-Dichloroethane-d4	109	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	99	77-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640293	Batch#:	186686
Matrix:	Soil	Analyzed:	05/17/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	93	80-120
Bromofluorobenzene	100	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640294	Batch#:	186686
Matrix:	Soil	Analyzed:	05/17/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	104.0	104	46-135
MTBE	20.00	21.18	106	62-120
Isopropyl Ether (DIPE)	20.00	20.42	102	59-120
Ethyl tert-Butyl Ether (ETBE)	20.00	22.44	112	64-120
1,2-Dichloroethane	20.00	21.02	105	74-126
Benzene	20.00	23.18	116	78-125
Methyl tert-Amyl Ether (TAME)	20.00	20.17	101	68-120
Toluene	20.00	21.68	108	79-120
1,2-Dibromoethane	20.00	20.18	101	77-120
Ethylbenzene	20.00	20.84	104	80-120
m,p-Xylenes	40.00	43.66	109	80-120
o-Xylene	20.00	20.16	101	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	98	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	99	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB4-5'	Dil'n Fac:	1.000
MSS Lab ID:	236194-017	Batch#:	186686
Matrix:	Soil	Sampled:	05/10/12
Units:	ug/Kg	Received:	05/14/12
Basis:	as received		

Type: MS Analyzed: 05/17/12
Lab ID: QC640295

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<15.34	250.0	262.1	105	44-128
MTBE	<1.484	50.00	47.97	96	51-120
Isopropyl Ether (DIPE)	<1.266	50.00	45.31	91	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.9539	50.00	46.25	93	55-120
1,2-Dichloroethane	<0.9171	50.00	48.53	97	55-121
Benzene	<0.9516	50.00	51.66	103	58-122
Methyl tert-Amyl Ether (TAME)	<0.6214	50.00	46.73	93	55-120
Toluene	<1.284	50.00	49.03	98	54-120
1,2-Dibromoethane	<0.5902	50.00	46.11	92	52-120
Ethylbenzene	<1.181	50.00	50.14	100	47-120
m,p-Xylenes	<0.6058	100.0	96.81	97	47-120
o-Xylene	<1.106	50.00	46.15	92	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	96	74-136
Toluene-d8	97	80-120
Bromofluorobenzene	104	77-130

Type: MSD Analyzed: 05/18/12
Lab ID: QC640296

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	250.0	234.7	94	44-128	11	39
MTBE	50.00	48.49	97	51-120	1	32
Isopropyl Ether (DIPE)	50.00	46.11	92	50-120	2	32
Ethyl tert-Butyl Ether (ETBE)	50.00	45.34	91	55-120	2	32
1,2-Dichloroethane	50.00	49.52	99	55-121	2	33
Benzene	50.00	54.87	110	58-122	6	37
Methyl tert-Amyl Ether (TAME)	50.00	48.42	97	55-120	4	34
Toluene	50.00	50.07	100	54-120	2	35
1,2-Dibromoethane	50.00	46.35	93	52-120	1	35
Ethylbenzene	50.00	51.63	103	47-120	3	40
m,p-Xylenes	100.0	98.90	99	47-120	2	40
o-Xylene	50.00	47.89	96	47-120	4	40

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	95	74-136
Toluene-d8	95	80-120
Bromofluorobenzene	104	77-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640443	Batch#:	186718
Matrix:	Soil	Analyzed:	05/18/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	74-133
1,2-Dichloroethane-d4	102	74-136
Toluene-d8	103	80-120
Bromofluorobenzene	101	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	CSB8-18	Batch#:	186718
MSS Lab ID:	236194-044	Sampled:	05/10/12
Matrix:	Soil	Received:	05/14/12
Units:	ug/Kg	Analyzed:	05/19/12
Basis:	as received		

Type: MS Diln Fac: 0.9470
Lab ID: QC640517

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<14.33	236.7	194.1	82	44-128
MTBE	<1.385	47.35	38.58	81	51-120
Isopropyl Ether (DIPE)	<1.182	47.35	37.37	79	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.8908	47.35	40.83	86	55-120
1,2-Dichloroethane	<0.8564	47.35	39.56	84	55-121
Benzene	<0.8886	47.35	45.17	95	58-122
Methyl tert-Amyl Ether (TAME)	<0.5802	47.35	38.86	82	55-120
Toluene	<1.199	47.35	47.69	101	54-120
1,2-Dibromoethane	<0.5512	47.35	43.05	91	52-120
Ethylbenzene	<1.103	47.35	48.92	103	47-120
m,p-Xylenes	<0.5657	94.70	94.80	100	47-120
o-Xylene	<1.033	47.35	44.61	94	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	101	77-130

Type: MSD Diln Fac: 0.9881
Lab ID: QC640518

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	247.0	217.0	88	44-128	7	39
MTBE	49.41	40.79	83	51-120	1	32
Isopropyl Ether (DIPE)	49.41	44.48	90	50-120	13	32
Ethyl tert-Butyl Ether (ETBE)	49.41	42.46	86	55-120	0	32
1,2-Dichloroethane	49.41	37.64	76	55-121	9	33
Benzene	49.41	41.85	85	58-122	12	37
Methyl tert-Amyl Ether (TAME)	49.41	40.22	81	55-120	1	34
Toluene	49.41	45.59	92	54-120	9	35
1,2-Dibromoethane	49.41	40.99	83	52-120	9	35
Ethylbenzene	49.41	46.00	93	47-120	10	40
m,p-Xylenes	98.81	91.72	93	47-120	8	40
o-Xylene	49.41	41.24	83	47-120	12	40

Surrogate	%REC	Limits
Dibromofluoromethane	100	74-133
1,2-Dichloroethane-d4	100	74-136
Toluene-d8	103	80-120
Bromofluorobenzene	104	77-130

RPD= Relative Percent Difference

74.0

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC640685	Batch#:	186718
Matrix:	Soil	Analyzed:	05/18/12
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	122.1	98	46-135
MTBE	25.00	23.17	93	62-120
Isopropyl Ether (DIPE)	25.00	22.40	90	59-120
Ethyl tert-Butyl Ether (ETBE)	25.00	24.24	97	64-120
1,2-Dichloroethane	25.00	24.25	97	74-126
Benzene	25.00	26.88	108	78-125
Methyl tert-Amyl Ether (TAME)	25.00	23.38	94	68-120
Toluene	25.00	27.67	111	79-120
1,2-Dibromoethane	25.00	25.93	104	77-120
Ethylbenzene	25.00	27.69	111	80-120
m,p-Xylenes	50.00	55.40	111	80-120
o-Xylene	25.00	26.35	105	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	74-133
1,2-Dichloroethane-d4	101	74-136
Toluene-d8	106	80-120
Bromofluorobenzene	102	77-130

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC640689	Batch#:	186777
Matrix:	Soil	Analyzed:	05/21/12
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-133
1,2-Dichloroethane-d4	117	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	109	77-130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	186777
Units:	ug/Kg	Analyzed:	05/21/12
Diln Fac:	1.000		

Type: BS Lab ID: QC640690

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	114.2	114	46-135
MTBE	20.00	19.25	96	62-120
Isopropyl Ether (DIPE)	20.00	21.29	106	59-120
Ethyl tert-Butyl Ether (ETBE)	20.00	20.08	100	64-120
1,2-Dichloroethane	20.00	20.71	104	74-126
Benzene	20.00	19.84	99	78-125
Methyl tert-Amyl Ether (TAME)	20.00	17.81	89	68-120
Toluene	20.00	20.76	104	79-120
1,2-Dibromoethane	20.00	20.36	102	77-120
Ethylbenzene	20.00	20.95	105	80-120
m,p-Xylenes	40.00	40.20	101	80-120
o-Xylene	20.00	17.51	88	79-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	74-133
1,2-Dichloroethane-d4	116	74-136
Toluene-d8	111	80-120
Bromofluorobenzene	108	77-130

Type: BSD Lab ID: QC640691

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	88.32	88	46-135	26	36
MTBE	20.00	19.33	97	62-120	0	22
Isopropyl Ether (DIPE)	20.00	21.31	107	59-120	0	21
Ethyl tert-Butyl Ether (ETBE)	20.00	21.38	107	64-120	6	20
1,2-Dichloroethane	20.00	20.26	101	74-126	2	20
Benzene	20.00	19.59	98	78-125	1	20
Methyl tert-Amyl Ether (TAME)	20.00	17.05	85	68-120	4	20
Toluene	20.00	20.77	104	79-120	0	20
1,2-Dibromoethane	20.00	19.60	98	77-120	4	20
Ethylbenzene	20.00	20.67	103	80-120	1	20
m,p-Xylenes	40.00	38.71	97	80-120	4	20
o-Xylene	20.00	17.48	87	79-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-133
1,2-Dichloroethane-d4	108	74-136
Toluene-d8	108	80-120
Bromofluorobenzene	109	77-130

RPD= Relative Percent Difference

77.0

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	236194	Location:	1409-1417 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	1409-1417	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Dil'n Fac:	0.9728
MSS Lab ID:	236326-001	Batch#:	186777
Matrix:	Soil	Sampled:	05/17/12
Units:	ug/Kg	Received:	05/18/12
Basis:	as received	Analyzed:	05/22/12

Type: MS Lab ID: QC640765

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.726	243.2	260.9	107	44-128
MTBE	<0.1436	48.64	45.19	93	51-120
Isopropyl Ether (DIPE)	<0.1879	48.64	49.57	102	50-120
Ethyl tert-Butyl Ether (ETBE)	<0.1381	48.64	48.45	100	55-120
1,2-Dichloroethane	<0.3211	48.64	51.57	106	55-121
Benzene	<0.4077	48.64	48.33	99	58-122
Methyl tert-Amyl Ether (TAME)	<0.2152	48.64	45.30	93	55-120
Toluene	<0.2962	48.64	47.34	97	54-120
1,2-Dibromoethane	<0.1986	48.64	46.20	95	52-120
Ethylbenzene	<0.3544	48.64	46.90	96	47-120
m,p-Xylenes	<0.8468	97.28	89.11	92	47-120
o-Xylene	<0.2531	48.64	41.75	86	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	74-133
1,2-Dichloroethane-d4	120	74-136
Toluene-d8	105	80-120
Bromofluorobenzene	102	77-130

Type: MSD Lab ID: QC640766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	243.2	223.6	92	44-128	15	39
MTBE	48.64	45.31	93	51-120	0	32
Isopropyl Ether (DIPE)	48.64	49.27	101	50-120	1	32
Ethyl tert-Butyl Ether (ETBE)	48.64	48.78	100	55-120	1	32
1,2-Dichloroethane	48.64	49.59	102	55-121	4	33
Benzene	48.64	48.41	100	58-122	0	37
Methyl tert-Amyl Ether (TAME)	48.64	46.44	95	55-120	2	34
Toluene	48.64	47.38	97	54-120	0	35
1,2-Dibromoethane	48.64	45.65	94	52-120	1	35
Ethylbenzene	48.64	46.72	96	47-120	0	40
m,p-Xylenes	97.28	89.97	92	47-120	1	40
o-Xylene	48.64	41.22	85	47-120	1	40

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-133
1,2-Dichloroethane-d4	117	74-136
Toluene-d8	107	80-120
Bromofluorobenzene	99	77-130

RPD= Relative Percent Difference

Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790

RE: 1409-1417 12th St.,Oakland

Work Order No.: 1208254

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 6 sample(s) on August 29, 2012 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

September 06, 2012
Date

Date: 9/6/2012

Client: Impact Environmental Services

Project: 1409-1417 12th St.,Oakland

Work Order: 1208254

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

CSV-1 1208254-001A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

CSV-2 1208254-002A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

CSV-3 1208254-003A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

CSV-4 1208254-004A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

CSV-6 1208254-005A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

CSV-7

1208254-006A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-1	**Lab Sample ID:**	1208254-001A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 16:24	**Certified Clean WO # :**	
Canister/Tube ID:	1223	**Received PSI :**	14.7
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-1		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	101 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-2	**Lab Sample ID:**	1208254-002A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 17:32	**Certified Clean WO # :**	
Canister/Tube ID:	527	**Received PSI :**	14.9
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-2		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	101 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-3	**Lab Sample ID:**	1208254-003A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 18:34	**Certified Clean WO # :**	
Canister/Tube ID:	1238	**Received PSI :**	14.9
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-3		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	107 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-4	**Lab Sample ID:**	1208254-004A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 16:52	**Certified Clean WO # :**	
Canister/Tube ID:	1417	**Received PSI :**	14.8
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-4		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	107 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-6	**Lab Sample ID:**	1208254-005A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 16:46	**Certified Clean WO # :**	
Canister/Tube ID:	1419	**Received PSI :**	14.7
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-6		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	107 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/29/12
Date Reported: 09/06/12

Client Sample ID:	CSV-7	**Lab Sample ID:**	1208254-006A
Project Name/Location:	1409-1417 12th St.,Oakland	**Sample Matrix:**	Air
Project Number:	Site Closure verification Soil Vapor		
Date/Time Sampled:	08/25/12 / 18:08	**Certified Clean WO # :**	
Canister/Tube ID:	1251	**Received PSI :**	14.9
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	CSV-7		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	106 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1208254	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.30	1.00	ND	
1,1-Difluoroethane	0.18	0.500	ND	
1,2-Dichlorotetrafluoroethane	0.70	2.00	ND	
Chloromethane	0.15	0.500	ND	
Vinyl Chloride	0.26	1.00	ND	
1,3-Butadiene	0.20	0.500	ND	
Bromomethane	0.18	0.500	ND	
Chloroethane	0.19	0.500	ND	
Trichlorofluoromethane	0.32	1.00	ND	
1,1-Dichloroethene	0.15	0.500	ND	
Freon 113	0.11	0.500	ND	
Carbon Disulfide	0.26	1.00	ND	
2-Propanol (Isopropyl Alcohol)	0.39	4.00	ND	
Methylene Chloride	0.17	0.500	ND	
Acetone	0.37	4.00	ND	
trans-1,2-Dichloroethene	0.16	0.500	ND	
Hexane	0.15	0.500	ND	
MTBE	0.24	0.500	ND	
tert-Butanol	0.22	2.00	ND	
Diisopropyl ether (DIPE)	0.21	0.500	ND	
1,1-Dichloroethane	0.18	0.500	ND	
ETBE	0.16	0.500	ND	
cis-1,2-Dichloroethene	0.13	0.500	ND	
Chloroform	0.25	1.00	ND	
Vinyl Acetate	0.16	0.500	ND	
Carbon Tetrachloride	0.14	0.500	ND	
1,1,1-Trichloroethane	0.15	0.500	ND	
2-Butanone (MEK)	0.21	0.500	ND	
Ethyl Acetate	0.21	0.500	ND	
Tetrahydrofuran	0.10	0.500	ND	
Benzene	0.21	0.500	ND	
TAME	0.086	0.500	ND	
1,2-Dichloroethane (EDC)	0.24	0.500	ND	
Trichloroethylene	0.26	1.00	ND	
1,2-Dichloropropane	0.29	1.00	ND	
Bromodichloromethane	0.13	0.500	ND	
1,4-Dioxane	0.35	1.00	ND	
trans-1,3-Dichloropropene	0.19	0.500	ND	
Toluene	0.25	0.500	ND	
4-Methyl-2-Pentanone (MIBK)	0.21	0.500	ND	
cis-1,3-Dichloropropene	0.25	0.500	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1208254	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Tetrachloroethylene	0.13	0.500	ND	
1,1,2-Trichloroethane	0.17	0.500	ND	
Dibromochloromethane	0.20	0.500	ND	
1,2-Dibromoethane (EDB)	0.27	1.00	ND	
2-Hexanone	0.27	1.00	ND	
Ethyl Benzene	0.23	0.500	ND	
Chlorobenzene	0.15	0.500	ND	
1,1,1,2-Tetrachloroethane	0.15	0.500	ND	
m,p-Xylene	0.38	1.00	ND	
o-Xylene	0.19	0.500	ND	
Styrene	0.16	0.500	ND	
Bromoform	0.11	0.500	ND	
1,1,2,2-Tetrachloroethane	0.10	0.500	ND	
4-Ethyl Toluene	0.17	0.500	ND	
1,3,5-Trimethylbenzene	0.15	0.500	ND	
1,2,4-Trimethylbenzene	0.14	0.500	ND	
1,4-Dichlorobenzene	0.11	0.500	ND	
1,3-Dichlorobenzene	0.14	0.500	ND	
Benzyl Chloride	0.12	0.500	ND	
1,2-Dichlorobenzene	0.15	0.500	ND	
Hexachlorobutadiene	0.22	0.500	ND	
1,2,4-Trichlorobenzene	0.46	1.00	ND	
Naphthalene	0.28	1.00	ND	
(S) 4-Bromofluorobenzene			102	

Work Order:	1208254	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO3	**Analyzed Date:**	08/31/12	**Analytical Batch:**	411301
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	50	100	ND	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1208254	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.15	0.500	ND	20	91.3	102	10.9	65 - 135	30	
Benzene	0.21	0.500	ND	20	103	105	1.35	65 - 135	30	
Trichloroethylene	0.26	1.00	ND	20	101	105	4.09	65 - 135	30	
Toluene	0.25	0.500	ND	20	103	106	2.35	65 - 135	30	
Chlorobenzene	0.15	0.500	ND	20	101	101	0.000	65 - 135	30	
(S) 4-Bromofluorobenzene			ND	20	105	105		65 - 135		

Work Order:	1208254	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO3	**Analyzed Date:**	08/31/12	**Analytical Batch:**	411301
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	50	100	ND	500	111	91.4	19.8	50 - 150	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Impact Environmental Services

Project Name: 1409-1417 12th St.,Oakland

Work Order No.: 1208254

Date and Time Received: 8/29/2012 14:16

Received By: navin

Physically Logged By: lorna

Checklist Completed By: lorna

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes		
Container/Temp Blank temperature in compliance?	No	Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted		
Water-pH acceptable upon receipt?	N/A		

pH Checked by: n/a

pH Adjusted by: n/a

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 1208254

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409-1417 12TH ST., OAKLAND
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SOIL VAPOR
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON		P.O. #: EMAIL: JAC21462@AOL.COM

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☑ Air
☐ Waste Water ☐ Other
☐ Ground Water
☐ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-15/MT015 (TPHG & BTEX&MTBE	REMARKS
-001A	1223	CSV-1	8-25-12 4:24pm	Vapor	1	Summa	✓	
-002A	527	CSV-2	8-25-12 5:32pm	Vapor	1	Summa	✓	
-003A	1238	CSV-3	8-25-12 6:34pm	Vapor	1	Summa	✓	
-004A	1417	CSV-4	8-25-12 4:52pm	Vapor	1	Summa	✓	
-005A	1419	CSV-6	8-25-12 4:46pm	Vapor	1	Summa	✓	
-006A	1251	CSV-7	8-25-12 6:08pm	Vapor	1	Summa	✓	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	8-29-12	2:16 PM		NAVIN G.	8-29-12	2:16 P.M.
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Were Samples Received in Good Condition? ☑ Yes ☐ NO Samples on Ice? ☐ Yes ☑ NO Method of Shipment D/O Sample seals intact? ☐ Yes ☐ NO ☑ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp ____ °C Page 1 of 1

Log In By: Date: 8/29/12 Log In Reviewed By: Date: Rev. 1

Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790

RE: 1409-1417 12th St Oakland

Work Order No.: 1208267

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 1 sample(s) on August 30, 2012 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

September 06, 2012
Date

Date: 9/6/2012

Client: Impact Environmental Services

Project: 1409-1417 12th St Oakland

Work Order: 1208267

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/30/12
Date Reported: 09/06/12

CSV-5

1208267-001A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3

All compounds were non-detectable for this sample.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 08/30/12
Date Reported: 09/06/12

Client Sample ID:	CSV-5	**Lab Sample ID:**	1208267-001A
Project Name/Location:	1409-1417 12th St Oakland	**Sample Matrix:**	Air
Project Number:	Site closure Verification		
Date/Time Sampled:	08/29/12 / 18:00	**Certified Clean WO # :**	
Canister/Tube ID:	1250	**Received PSI :**	14.6
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	08/30/12	1	0.50	27	ND	ND		411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	08/30/12	1	0.87	1.8	ND	ND		411297	NA
Benzene	ETO15	NA	08/30/12	1	0.68	1.6	ND	ND		411297	NA
Toluene	ETO15	NA	08/30/12	1	0.95	1.9	ND	ND		411297	NA
Ethyl Benzene	ETO15	NA	08/30/12	1	1.0	2.2	ND	ND		411297	NA
m,p-Xylene	ETO15	NA	08/30/12	1	1.6	4.3	ND	ND		411297	NA
o-Xylene	ETO15	NA	08/30/12	1	0.82	2.2	ND	ND		411297	NA
(S) 4-Bromofluorobenzene	ETO15	NA	08/30/12	1	65	135	108 %			411297	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO3	NA	08/31/12	1	180	350	ND	ND		411301	NA

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1208267	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.30	1.00	ND	
1,1-Difluoroethane	0.18	0.500	ND	
1,2-Dichlorotetrafluoroethane	0.70	2.00	ND	
Chloromethane	0.15	0.500	ND	
Vinyl Chloride	0.26	1.00	ND	
1,3-Butadiene	0.20	0.500	ND	
Bromomethane	0.18	0.500	ND	
Chloroethane	0.19	0.500	ND	
Trichlorofluoromethane	0.32	1.00	ND	
1,1-Dichloroethene	0.15	0.500	ND	
Freon 113	0.11	0.500	ND	
Carbon Disulfide	0.26	1.00	ND	
2-Propanol (Isopropyl Alcohol)	0.39	4.00	ND	
Methylene Chloride	0.17	0.500	ND	
Acetone	0.37	4.00	ND	
trans-1,2-Dichloroethene	0.16	0.500	ND	
Hexane	0.15	0.500	ND	
MTBE	0.24	0.500	ND	
tert-Butanol	0.22	2.00	ND	
Diisopropyl ether (DIPE)	0.21	0.500	ND	
1,1-Dichloroethane	0.18	0.500	ND	
ETBE	0.16	0.500	ND	
cis-1,2-Dichloroethene	0.13	0.500	ND	
Chloroform	0.25	1.00	ND	
Vinyl Acetate	0.16	0.500	ND	
Carbon Tetrachloride	0.14	0.500	ND	
1,1,1-Trichloroethane	0.15	0.500	ND	
2-Butanone (MEK)	0.21	0.500	ND	
Ethyl Acetate	0.21	0.500	ND	
Tetrahydrofuran	0.10	0.500	ND	
Benzene	0.21	0.500	ND	
TAME	0.086	0.500	ND	
1,2-Dichloroethane (EDC)	0.24	0.500	ND	
Trichloroethylene	0.26	1.00	ND	
1,2-Dichloropropane	0.29	1.00	ND	
Bromodichloromethane	0.13	0.500	ND	
1,4-Dioxane	0.35	1.00	ND	
trans-1,3-Dichloropropene	0.19	0.500	ND	
Toluene	0.25	0.500	ND	
4-Methyl-2-Pentanone (MIBK)	0.21	0.500	ND	
cis-1,3-Dichloropropene	0.25	0.500	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1208267	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Tetrachloroethylene	0.13	0.500	ND	
1,1,2-Trichloroethane	0.17	0.500	ND	
Dibromochloromethane	0.20	0.500	ND	
1,2-Dibromoethane (EDB)	0.27	1.00	ND	
2-Hexanone	0.27	1.00	ND	
Ethyl Benzene	0.23	0.500	ND	
Chlorobenzene	0.15	0.500	ND	
1,1,1,2-Tetrachloroethane	0.15	0.500	ND	
m,p-Xylene	0.38	1.00	ND	
o-Xylene	0.19	0.500	ND	
Styrene	0.16	0.500	ND	
Bromoform	0.11	0.500	ND	
1,1,2,2-Tetrachloroethane	0.10	0.500	ND	
4-Ethyl Toluene	0.17	0.500	ND	
1,3,5-Trimethylbenzene	0.15	0.500	ND	
1,2,4-Trimethylbenzene	0.14	0.500	ND	
1,4-Dichlorobenzene	0.11	0.500	ND	
1,3-Dichlorobenzene	0.14	0.500	ND	
Benzyl Chloride	0.12	0.500	ND	
1,2-Dichlorobenzene	0.15	0.500	ND	
Hexachlorobutadiene	0.22	0.500	ND	
1,2,4-Trichlorobenzene	0.46	1.00	ND	
Naphthalene	0.28	1.00	ND	
(S) 4-Bromofluorobenzene			102	

Work Order:	1208267	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO3	**Analyzed Date:**	08/31/12	**Analytical Batch:**	411301
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	50	100	ND	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1208267	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	08/30/12	**Analytical Batch:**	411297
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.15	0.500	ND	20	91.3	102	10.9	65 - 135	30	
Benzene	0.21	0.500	ND	20	103	105	1.35	65 - 135	30	
Trichloroethylene	0.26	1.00	ND	20	101	105	4.09	65 - 135	30	
Toluene	0.25	0.500	ND	20	103	106	2.35	65 - 135	30	
Chlorobenzene	0.15	0.500	ND	20	101	101	0.000	65 - 135	30	
(S) 4-Bromofluorobenzene			ND	20	105	105		65 - 135		

Work Order:	1208267	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO3	**Analyzed Date:**	08/31/12	**Analytical Batch:**	411301
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	50	100	ND	500	111	91.4	19.8	50 - 150	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Impact Environmental Services

Project Name: 1409-1417 12th St Oakland

Work Order No.: 1208267

Date and Time Received: 8/30/2012 18:30

Received By: navin

Physically Logged By: lorna

Checklist Completed By: lorna

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes		
Container/Temp Blank temperature in compliance?	No	Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted		
Water-pH acceptable upon receipt?	N/A		

pH Checked by: n/a

pH Adjusted by: n/a

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 1208267

Company Name: IMPACT ENVIRONMENTAL	☑ Env. ☐ IH ☐ Food ☐ Special		Location of Sampling: 1409-1417 12TH ST., OAKLAND
Address: 39120 ARGONAUT WAY, #223			Purpose: SITE CLOSURE VERIFICATION SOIL VAPOR
City: CA	State: CA	Zip Code: 94538	Special Instructions / Comments:
Telephone: 510-703-5420	FAX:		
REPORT TO: JOSEPH COTTON	SAMPLER: JOSEPH COTTON		P.O. #: EMAIL: JAC21462@AOL.COM

TURNAROUND TIME:
☐ 10 Work Days ☐ 4 Work Days ☐ 1 Work Day
☐ 7 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☑ 5 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours

SAMPLE TYPE:
☐ Storm Water ☑ Air
☐ Waste Water ☐ Other
☐ Ground Water
☐ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☑ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CANISTER I.D.	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-15 / TO15 (TPHG & BTEX&MTBE / 4 PFA	REMARKS
-001A		CSV-5	8-29-12 6:00?	AIR	1	SUMMA	✓	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		JOSEPH COTTON	8-30-12	18:30		NAVIN G	8/30/12	18:30
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment D / D Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Temp ____°C Page ____ of ____

Log In By: Date: 8/30/12 Log In Reviewed By: Date: Rev. 1