Noyes, Gerold

From: Andy McMillan <amcmillan@velco.com>
Sent: Friday, February 05, 2016 4:02 PM
To: Noyes, Gerold
Cc: Mojo, Jennifer; Schwer, Chuck
Subject: RE: VELCO CRVP Substation Sampling Plans
Attachments: Chelsea Substation Assessment Report 020116.pdf

Importance: High

Good Afternoon Gerold,

Please see the attached Chelsea Substation Assessment Report prepared by TRC for the Connecticut River Valley Project. We are in the process of developing the Remedial Action Plan for the area of staining around the transformer foundation (as discussed in the report), which I will send for your review and comment as soon as it is complete.

In the meantime, please do not hesitate to contact me if you have any questions or require additional information.

PS – I'll follow up with the Hartford Substation Assessment Report via separate email submittal.

Thank you and have a great weekend.

Sincerely,

Andrew McMillan
Environmental Specialist
802.770.6439 office | 802.282.3805 cell
vermont electric power company
VELCO
366 pinnacle ridge road, rutland, vt 05701

From: Andy McMillan
Sent: Tuesday, January 12, 2016 1:26 PM
To: 'Noyes, Gerold'
Cc: Mojo, Jennifer; Schwer, Chuck
Subject: RE: VELCO CRVP Substation Sampling Plans

Hi Gerold,

We recently received the results from the lab for the soil and concrete sampling at the Hartford and Chelsea Substations. We are working on the summary report that will include all of the laboratory results and site maps showing all sample locations. While there were two sample locations where staining was observed and elevated TPH concentrations have been detected (above the industrial SSV), no PCBs were detected in the concrete or soil samples from either substation.

The report will address the two above mentioned impacted areas (one at each substation site) and will include suggested next steps (i.e. cleanup) for your review and comment.

The report will also detail the findings - and TRC's interpretation of - the total chromium results, which I understand were very similar to what we just saw with the Hartford "not a site" data (total chromium results above the industrial SSV for hexavalent chromium (5.6 mg/kg), reanalyzed samples for hexavalent chromium and confirmed non-detect for hexavalent chromium). It's my understanding that the total chromium results for Chelsea and Hartford range from 13 to 28 mg/kg. Given how low the total chromium results are and the fact that there's no known source of hexavalent chromium at either site, my initial thought is that analyzing for hexavalent chromium is unnecessary and the total chromium findings are likely a background condition (as confirmed recently at Hartford).

I wanted to pass this preliminary information along to you as a heads-up in advance of the pending summary report submittal.

If you have any questions, comments, or concerns please do not hesitate to contact me.

Thank you,

Andrew McMillan
Environmental Specialist
802.770.6439 office | 802.282.3805 cell
vermont electric power company
VELCO
366 pinnacle ridge road, rutland, vt 05701

From: Noyes, Gerold [mailto:Gerold.Noyes@vermont.gov]
Sent: Tuesday, December 15, 2015 3:33 PM
To: Andy McMillan
Cc: Mojo, Jennifer; Schwer, Chuck
Subject: RE: VELCO CRVP Substation Sampling Plans

Good afternoon Andy,

I reviewed the VELCO substation sampling plans for the Chelsea and Hartford substations and have the following comments. Composite soil samples are proposed for TPH, PCB and RCRA 8 metals; discrete sample analysis is proposed in the event that contaminants of concern are detected in the composite. This is acceptable for this stage of site characterization. Please note if discrete soil samples are analyzed, they should not exceed the laboratory method hold time.

VOC monitoring will be done by PID during site construction. If additional investigation is required, discrete sampling will be required. Composite VOC samples are not acceptable by the DEC Sites Management Section under any circumstance. If contaminated soil is excavated for off-site disposal, appropriate testing will be required for the waste receiving facility. Confirmatory sampling at the substation will also need to be performed.

Please e-mail with any questions,

Gerold Noyes, PE

VERMONT
Department of Environmental Conservation
Sites Management Section
1 National Life Drive - Davis 1

Montpelier, VT 05620-3704

gerold.noyes@vermont.gov
(the e-mail address formerly known as gerold.noyes@state.vt.us)
802-522-5614

From: Andy McMillan [mailto:amcmillan@velco.com]
Sent: Wednesday, November 25, 2015 3:03 PM
To: Noyes, Gerold; Schwer, Chuck
Cc: Mojo, Jennifer
Subject: VELCO CRVP Substation Sampling Plans

Hi Gerold,

While the timing of this submittal may not be the best given the upcoming holiday break, I wanted to get you the attached pre-characterization plans as soon as possible for the Chelsea and Hartford Substations, which VELCO plans to upgrade as part of the CRVP. I would greatly appreciate your expedited review so we can try to complete this work before the ground freezes. I kindly request your concurrence with the attached.

If you have any questions or concerns or require additional information, please do not hesitate to contact me at your earliest convenience at (802)282-3805 or by email at amcmillan@velco.com.

Have a great holiday.

Cheers!

Andrew McMillan
Environmental Specialist
802.770.6439 office | 802.282.3805 cell
vermont electric power company
VELCO
366 pinnacle ridge road, rutland, vt 05701

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670 N. Commercial Street
Suite 203
Manchester, NH 03101

603.621.9259 PHONE
603.621.9279 FAX

www.trcsolutions.com

February 1, 2016

Vermont Electric Company
366 Pinnacle Ridge Road
Rutland, VT 05701

Re: **Sampling Results Summary**
Chelsea Substation
45 East Randolph Road
Chelsea, Vermont

To Whom It May Concern:

TRC Environmental Corporation (TRC) has prepared this summary report to document the soil and concrete characterization sampling performed in December 2015 at VELCO's Chelsea Substation located at 45 East Randolph Road in Chelsea, Vermont (the "Site"). This characterization work was implemented to support subsequent decommissioning and construction activities proposed at the Site in association with the Connecticut River Valley Project (CRVP). Soil and concrete sampling was conducted in accordance with VELCO's "Environmental Management Plan for Decommissioning and Reclamation of Electrical Facilities" dated July 9, 2015, under a sampling plan approved by the Vermont Agency of Natural Resources (VTANR) on December 15, 2015, as summarized below.

Document Review

VELCO personnel conducted a file review at VELCO headquarters to determine if spills of oil and/or hazardous (OHM) materials have been recorded at the Site, and to provide information regarding the polychlorinated biphenyl (PCB) content of the mineral oil dielectric fluid (MODF) used within certain pieces of electrical equipment at the Site. TRC personnel also conducted a review of the online spill file database maintained by the Vermont Department of Conservation (VTDEC).

No records of a release of OHM were located in the VELCO files or in the online VTDEC database. This is consistent with information provided in the 2014 Spill Prevention Control and Countermeasure (SPCC) Plan for the Site, prepared by Vanasse Hangen Brustlin, Incorporated.

Documents obtained during the VELCO file review indicate that the MODF within breakers H75, H80, and H81 was tested in 1987 and 1988 and PCBs were not detected above the laboratory reporting limit of 1 part per million (ppm). The documents also indicate that the MODF within the main power transformer at the Site was tested in 1981 and determined to contain a PCB concentration of 5 ppm. The MODF in the station service transformers was tested on November 18, 1987 and PCBs

were detected at 210 ppm. The MODF within the station service transformers was tested again in 1996 and 1997 and the detected PCB concentrations were 226 ppm and 24 ppm, respectively.

Soil and concrete sample locations in the vicinity of the station service transformers were biased closer towards the equipment to assess whether a release of PCBs had occurred. PCBs were not detected above the laboratory reporting limits in the soil and concrete samples; therefore, it does not appear a release of PCBs has occurred from the station service transformers. During decommissioning activities at the Site, the MODF within the station service transformers will be drained and managed as Toxic Substances Control Act (TSCA; 40 CFR 761) waste, and the station service transformers will either be decontaminated in accordance with 40 CFR 761.79 prior to being recycled as scrap metal or managed as TSCA waste. No additional TSCA requirements apply to construction/decommissioning activities in the vicinity of the station service transformers due to the PCB concentrations in the MODF.

Relevant documents from the VELCO file review are provided in Attachment 1.

Site Inspection

On December 28, 2015, TRC personnel conducted a Site inspection within the substation to locate evidence of potential releases of OHM to the environment. Surficial staining was observed on the concrete pad and surficial gravel layer adjacent to (east of) the power transformer in the center of the Site, as shown on the attached Site Plan. The area of stained soil appeared to extend laterally approximately 12 to 18 inches from the pad and was present along the approximately 12-foot long southeastern side of the pad. As a result, two discrete soil samples were collected from soil below the stained trap rock at this location and analyzed individually, as discussed below. These two additional samples were not included in the original soil and concrete sampling proposal and thus represent a change in the sampling plan approved by VTANR on December 15, 2015.

No additional staining was observed within the proposed construction areas during the Site inspection.

Concrete Sampling

On December 28, 2015, TRC personnel collected three composite concrete samples (Conc-1, Conc-2, and Conc-3) and two discrete concrete samples (Conc-4 and Conc-5) from concrete footings and a concrete pad at the Site that support oil-filled equipment which is proposed for removal during the planned construction activities. The composite concrete samples were collected from footings beneath oil-containing circuit breakers, and the discrete concrete samples were collected from areas where petroleum staining was observed on the transformer pad. Concrete sample locations are shown on the attached Site Plans.

Concrete sampling was performed per the United States Environmental Protection Agency (EPA) Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)*. Approximately 20 to 30 holes were drilled approximately 1/2-inch into the concrete pad using a hammer drill to collect each analytical sample.

The five concrete samples were submitted to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts (Con-Test) on December 29, 2015 for analysis of PCBs and Total Petroleum Hydrocarbons Diesel Range Organics (TPH-DRO). Results are discussed below.

Soil Sampling

To characterize soil conditions in the proposed construction areas at the Site, TRC personnel collected 22 discrete soil samples to a depth of approximately 6 inches below grade on December 28, 2015 using hand tools. The locations of twenty discrete samples were determined using a 25-foot sampling grid system overlaid on the proposed construction areas, as shown on the attached Site Plans. Samples located proximate to oil-filled equipment were biased closer toward the equipment as part of the sampling design. The other two discrete samples were collected based on evidence of surficial staining during the Site Inspection, as discussed above.

Underlying the surficial gravel was a fine to coarse sand with some fine to coarse gravel, and some fines and trace cobbles. The uppermost six inches of soil below the surficial gravel layer was targeted for sampling at each location.

Twenty of the discrete soil samples were composited into five composite samples for laboratory analysis. Each analytical sample consisted of four discrete samples within each sample grid, which were combined and homogenized to create one composite sample. The five composite samples were submitted to Con-Test on December 29, 2015 for analysis of PCBs, TPH-DRO, and RCRA-8 Metals.

In addition, two boring locations with evidence of OHM in soil were observed and discrete samples were collected at those locations. Discrete samples SB-6 and SB-7 were collected based on the presence of surficial staining observed on the surficial gravel layer during the Site inspection. These two discrete samples were submitted to Con-Test on December 29, 2015 for analysis for PCBs and TPH-DRO. Results are discussed below.

Concrete Analytical Results

Concrete analytical results are summarized in the attached Table 1. PCBs were not detected in the concrete samples above the laboratory reporting limit (0.10 milligrams per kilogram [mg/kg]), which is below the applicable EPA action level of 1 mg/kg per 40 CFR 761. TPH-DRO results for the composite concrete samples (Conc-1 through Conc-3) ranged from 290 mg/kg to 390 mg/kg. TPH-DRO results for discrete concrete samples Conc-4 and Conc-5 were 14,000 mg/kg and 21,000 mg/kg, respectively, as expected since the samples were collected from visibly stained concrete. No reporting is required for the elevated TPH concentrations in concrete samples Conc-4 and Conc-5 (reporting requirements for impacted soil adjacent to the associated concrete pad are discussed below).

A copy of the laboratory report is attached.

Soil Analytical Results

As summarized in Table 2, PCBs were not detected above the laboratory reporting limits in the soil samples. Low concentrations of metals (barium, lead, and chromium[1]) were detected at levels below the VTDEC Soil Screening Values (SSVs).

[1] The total chromium detections are assumed to be trivalent chromium; hexavalent chromium is not a suspected contaminant at the Site and hexavalent chromium analysis was deemed unnecessary.

TPH-DRO was not detected in the five composite soil samples (SB-1 through SB-5). TPH-DRO was detected in discrete soil samples SB-6 and SB-7 at concentrations ranging from 7,100 mg/kg (SB-6) to 8,800 mg/kg (SB-7). The TPH concentrations in both samples exceed the VTDEC SSV for industrial properties, which represents a reportable condition per the VTDEC *Investigation and Remediation of Contaminated Properties* (IROCP). VELCO provided preliminary notification of the elevated TPH concentrations in soil to the VTDEC Site Management Section via email on January 12, 2016.

A copy of the laboratory report is attached.

Lead Based Paint Survey of Control Building

On December 28, 2015, TRC supervised the collection of building material samples from the Control Building at the Site which was conducted by Clay Point Associates, Incorporated, a Vermont certified Lead Consulting Entity. Samples of the roof, paint, interior walls, external walls, and concrete slab were collected and shipped to EMSL Analytical Incorporated in Cinnaminson, New Jersey for lead analysis via the Toxicity Characteristic Leaching Procedure (TCLP) method. The results were non-detect for leachable lead, with a laboratory reporting limit of 0.4 milligrams per Liter (mg/L), which is well below the applicable 5 mg/L regulatory limit.

A copy of the sampling and analysis report is attached.

Conclusions

- The VTDEC should be notified immediately of the TPH concentrations detected in soil samples SB-6 and SB-7 (completed on January12, 2016 as noted above and to be followed up with this report submittal).
- The concrete footings from which samples Conc-1 through Conc-3 were collected should be managed separately from the concrete pad that samples Conc-4 and Conc-5 were collected from.
    - The concrete footings which are represented by samples Conc-1 through Conc-3 contained low level TPH concentrations and did not contain PCBs; therefore, the concrete can be disposed of as non-hazardous waste. The concrete data for samples Conc-1 through Conc-3 should be provided to the construction contractor to facilitate off-site disposal of the associated footings.
    - The elevated TPH concentrations detected in samples Conc-4 and Conc-5 warrant disposal of the petroleum stained/impacted portions of the associated concrete pad at a facility licensed to accept petroleum impacted concrete. The concrete transformer pad should be demolished and the stained concrete separated from the non-stained concrete, for subsequent disposal at appropriate facilities. No PCBs were detected in the concrete so the material can be disposed of as non-hazardous waste at an appropriately licensed facility.
- The control building structure can be disposed of as non-hazardous waste. The electronics in the building should be managed as electronic waste ("e-waste").

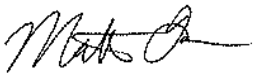
Proposed Remedial Action

A remedial action is warranted to address the elevated TPH concentrations identified in soil near the transformer prior to the initiation of below grade CRVP related construction activities within the existing Chelsea Substation Site. TRC will provide a proposal for preparation of a Remedial Action Plan (RAP) per the VTDEC IROCP to VELCO under separate cover.

The RAP will describe the approach to assessment and remediation of the elevated TPH concentrations identified in the vicinity of the transformer (SB-6 and SB-7) in accordance with Section 3 of the IROCP. The RAP will incorporate field screening techniques and analytical sampling to support lateral and vertical delineation of TPH concentrations above the industrial SSV in soil prior to the initiation of remediation work, pursuant to Section 3.1.4 of the IROCP. The RAP will also describe the proposed remedial approach which is anticipated to include soil excavation and off-site disposal as well as post-excavation confirmatory soil sampling. Given the staining observed in the field and non-PCB TPH concentrations, it is expected that the RAP will be limited to soil excavation via vacuum excavation techniques and off-site recycling/disposal of the excavated soil; however, the remediation work may need to be performed during a planned outage of the transformer unit.

Please do not hesitate to contact me at moliveira@trcsolutions.com or 603-621-9259 ext. 29 with any questions or concerns.

Sincerely,
TRC Environmental Corporation



Matthew Oliveira, LSP, CHMM
Project Manager

Attachment 1 – VELCO File Review Information
Attachment 2 – Figure 1 – Overall Site Plan
Figure 1 – Detailed Site Plan
Attachment 3 – Table 1 – Summary of Analytical Results for Concrete Samples -- December 2015
Table 2 – Summary of Analytical Results for Soil Samples -- December 2015
Attachment 4 – Laboratory Reports
Attachment 5 – Control Building Sampling and Analysis Report

Attachment 1

VELCO File Review Information

Chelsea Substation:

Oil Containing Breakers (OCBs): H75, H80, H81

Sampled in 1987 and 1988: non-detect (ND) (<1 ppm)

Main Transformer (H80)

Sampled in 1981: 5 ppm

Station Service Transformers (2) 108 gallons

Sampled in 1987: 210 ppm

Sampled in 1996: 226 ppm

Sampled in 1997: 24 ppm

Notes:
ND – non-detect
ppm – parts per million

D E X S I L
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

C E R T I F I C A T E O F A N A L Y S I S

TO: VERMONT ELECTRIC POWER COMPANY
Pinnacle Ridge Road
Rutland, VT 05701

Att: Mr. E.T. Congdon

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample was tested for polychlorinated biphenyl using gas chromatography.

==========

Samples Received: 11-18-1987 Results Reported: 12-07-1987

==========

Invoice No.: 14118

Customer ID: 33-H75 CHELSEA

Dexsil ID: DX-6378

Sample Type: TRANSFORMER OIL

Concentration ppm (wt/wt): NONE DETECTED

Aroclor: NONE

Method Used: EPA METHOD 600/4-81-045

Limit of detection: 1 ppm (wt/wt)

Timothy D. Lynn, Chemist
December 8, 1987

Approved Public Health Laboratory # PH0529

D E X S I L
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

C E R T I F I C A T E O F A N A L Y S I S

TO: VERMONT ELECTRIC POWER COMPANY
Pinnacle Ridge Road
Rutland, VT 05701

Att: Mr. E.T. Congdon

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample was tested for polychlorinated biphenyl using gas chromatography.

==========

Samples Received: 11-18-1987 Results Reported: 12-07-1987

==========

Invoice No.: 14118

Customer ID: 35-H81 CHLSA

Dexsil ID: DX-6380

Sample Type: TRANSFORMER OIL

Concentration ppm (wt/wt): NONE DETECTED

Aroclor: NONE

Method Used: EPA METHOD 600/4-81-045

Limit of detection: 1 ppm (wt/wt)

Timothy D. Lynn, Chemist
December 8, 1987

Approved Public Health Laboratory # PH0529

D E X S I L
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

C E R T I F I C A T E O F A N A L Y S I S

TO: VERMONT ELECTRIC POWER COMPANY
Pinnacle Ridge Road
Rutland, VT 05701

Att: Mr. E.T. Congdon

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample was tested for polychlorinated biphenyl using gas chromatography.

==========

Samples Received: 11-18-1987 Results Reported: 12-07-1987

==========

Invoice No.: 14118

Customer ID: 36-257868-68P CHLSA STA SVC

Dexsil ID: DX-6381

Sample Type: TRANSFORMER OIL

Concentration ppm (wt/wt): 210

Aroclor: 1260

Method Used: EPA METHOD 600/4-81-045

Limit of detection: 1 ppm (wt/wt)

Timothy D. Lynn, Chemist
December 8, 1987

Approved Public Health Laboratory # PH0529

CENTRAL VERMONT PUBLIC SERVICE CORPORATION
Environmental, Health, and Safety Department

Results of PCB Analysis

REPORT: JACO2
REPORT DATE: Tuesday, July 30, 1996

CVPS ID#	Your Initials	Location/POC	S/N	Shipped To	Date Shipped	Date Back	Results ppm PCB
96052	RJV	TRANSFORMER	M674353YLPA	JACO	7/12/96	7/30/96	1
96053	RJV	TRANSFORMER EMAC	H257867-68P	JACO	7/12/96	7/30/96	226
96054	RJV	TRANSFORMER BRADFORD SPILL	80A351324	JACO	7/12/96	7/30/96	1

— Vel to Chelsea

SD MYERS
THE TRANSFORMER CONSULTANTS

180 SOUTH AVENUE TALLMADGE, OHIO 44278

TC# 9039
ID#- 7123710
DATE PRINTED 7/11/97

CUST-VERMONT ELECTRIC POWER CO CITY- RUTLAND, VT LOCATION-
SUB NAME- UNIT# - OTHER -

NAMEPLATE DATA

MFG-
DATE MFG -
S/N- H257868-68P
KVA-
PRI-
SEC-
WEIGHT-

EQUIP TYPE - TRANSFORMER
TRANS CLASS -
IMPEDENCE -
PHASE/CYCLE -
LIQUID TYPE - OIL
GAL LIQUID -
OTHER ACCESS -

ADDITIONAL EQUIPMENT

RADIATORS -
FANS -
H20 COOLED -
OIL PUMPS - NO
TOP FPV -
BOTTOM FPV -

CONSERVATOR- NO
LTC COMPARTMENT-
BUSHING LOC- TOP & SIDE
FREE BREATHER-
HOSE LENGTH-
SERVICE ON-LINE-
POWER AVAILABLE-

VISUAL INSPECTION

DATE	LEVEL	TEMP	P/V	PAINT	LEAKS

FIELD SERVICE

DATE	SERVICE

LIQUID SCREEN TEST DATA

DATE	SERVICE	ACID	IFT	DIEL	COLOR	SP. GR.	VISUAL	SEDIMENT

INHIBITOR CONTENT

DATE	% BY WEIGHT

NOTE - THE INHIBITOR CONTENT TEST IS USEFUL TO PREDICT THE AGING OF THE TRANSFORMER'S PAPER INSULATION SYSTEM.

LIQUID POWER FACTOR

DATE	25 C	100 C

THE POWER FACTOR OF THE OIL AT 25 AND 100 DEGREES CELSIUS IS A A VERY MEANINGFUL TEST IN EVALUATING IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

KEY TO ABBREVIATIONS: AC — ACCEPTABLE QU — QUESTIONABLE UN — UNACCEPTABLE

SD MYERS
THE TRANSFORMER CONSULTANTS

180 SOUTH AVENUE TALLMADGE, OHIO 44278

TC# 9039

CUST-VERMONT ELECTRIC POWER CO ID#- 7123710 DATE PRINTED 7/11/97

MFG- KVA- PRIMARY- SUB NAME- UNIT #-

S/N- H257868-68P GAL- SECONDARY- LOCATION-

KARL FISCHER TESTING MOISTURE CONTENT EXPRESSED IN PPM

DATE	TEMP	PPM	PERCENT SATURATION	PERCENT DRY WEIGHT	AGING FACTOR	GRADE

FURAN ANALYSIS EXPRESSED IN PPB

DATE	5H2F	2FOL	2FAL	2ACF	5M2F	TOTAL

ANALYZING YOUR TRANSFORMER OIL OR SILICONE FLUID FOR FURAN CONTENT WILL HELP DETERMINE THE AMOUNT OF SOLID INSULATION DEGRADATION.

GAS-IN-OIL ANALYSIS GAS CHROMATOGRAPHY EXPRESSED IN PPM

DATE	HYDROGEN	OXYGEN	NITROGEN	METHANE	CARBON MONOXIDE	CARBON DIOXIDE	ETHANE	ETHYLENE	ACETYLENE	TOTAL COMBUSTIBLE	TOTAL GAS

THIS TEST IS AN INVALUABLE TOOL USED TO EVALUATE THE OPERATION OF IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

ICP METALS-IN-OIL EXPRESSED IN PPM

DATE	ALUMINUM	IRON	COPPER

A DISSOLVED METALS-IN-OIL TEST CAN BE MEANINGFUL IN EVALUATING IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

PCB CONTENT EXPRESSED IN PPM

DATE	1242	1254	1260	OTHER	TOTAL
06/27/97			24		24

COLOR LABEL - GREEN CLASS NON-PCB

SDMYERS
THE TRANSFORMER CONSULTANTS

180 SOUTH AVENUE TALLMADGE, OHIO 44278

TC# 9038
ID#- 7123710
DATE PRINTED 7/11/97

CUST-VERMONT ELECTRIC POWER CO CITY- RUTLAND, VT LOCATION- OUTDOOR/
SUB NAME- UNIT# - OTHER -

NAMEPLATE DATA

MFG- GE
DATE MFG -
S/N- H257867-68P
KVA-
PRI-
SEC-
WEIGHT-

EQUIP TYPE - TRANSFORMER
TRANS CLASS -
IMPEDENCE -
PHASE/CYCLE -
LIQUID TYPE - OIL
GAL LIQUID - 108
OTHER ACCESS -

ADDITIONAL EQUIPMENT

RADIATORS - NO
FANS - NO
H2O COOLED - NO
OIL PUMPS - NO
TOP FPV -
BOTTOM FPV - 1.00 IN PLUG

CONSERVATOR- NO
LTC COMPARTMENT- NO
BUSHING LOC- TOP & SIDE
FREE BREATHER- NO
HOSE LENGTH- 100 FEET
SERVICE ON-LINE- YES
POWER AVAILABLE- YES

VISUAL INSPECTION

DATE	LEVEL	TEMP	P/V	PAINT	LEAKS

FIELD SERVICE

DATE	SERVICE

LIQUID SCREEN TEST DATA

DATE	SERVICE	ACID	IFT	DIEL	COLOR	SP. GR.	VISUAL	SEDIMENT
11/27/96	PROOF	.030 AC	32.8 AC	45 AC	2.00 AC	.880 AC	CLEAR AC	NONE AC

INHIBITOR CONTENT

DATE	% BY WEIGHT

NOTE - THE INHIBITOR CONTENT TEST IS USEFUL TO PREDICT THE AGING OF THE TRANSFORMER'S PAPER INSULATION SYSTEM.

LIQUID POWER FACTOR

DATE	25 C	100 C

THE POWER FACTOR OF THE OIL AT 25 AND 100 DEGREES CELSIUS IS A A VERY MEANINGFUL TEST IN EVALUATING IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

KEY TO ABBREVIATIONS: AC — ACCEPTABLE QU — QUESTIONABLE UN — UNACCEPTABLE

SD MYERS
THE TRANSFORMER CONSULTANTS

180 SOUTH AVENUE TALLMADGE, OHIO 44278

TC# 9038

CUST-VERMONT ELECTRIC POWER CO ID#- 7123710 DATE PRINTED 7/11/97

MFG- GE KVA- PRIMARY- SUB NAME- UNIT #-

S/N- H257867-68P GAL- 108 SECONDARY- LOCATION- OUTDOOR/

KARL FISCHER TESTING MOISTURE CONTENT EXPRESSED IN PPM

DATE	TEMP	PPM	PERCENT SATURATION	PERCENT DRY WEIGHT	AGING FACTOR	GRADE

FURAN ANALYSIS EXPRESSED IN PPB

DATE	5H2F	2FOL	2FAL	2ACF	5M2F	TOTAL

ANALYZING YOUR TRANSFORMER OIL OR SILICONE FLUID FOR FURAN CONTENT WILL HELP DETERMINE THE AMOUNT OF SOLID INSULATION DEGRADATION.

GAS-IN-OIL ANALYSIS GAS CHROMATOGRAPHY EXPRESSED IN PPM

DATE	HYDROGEN	OXYGEN	NITROGEN	METHANE	CARBON MONOXIDE	CARBON DIOXIDE	ETHANE	ETHYLENE	ACETYLENE	TOTAL COMBUSTIBLE	TOTAL GAS

THIS TEST IS AN INVALUABLE TOOL USED TO EVALUATE THE OPERATION OF IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

ICP METALS-IN-OIL EXPRESSED IN PPM

DATE	ALUMINUM	IRON	COPPER

A DISSOLVED METALS-IN-OIL TEST CAN BE MEANINGFUL IN EVALUATING IN-SERVICE AND SERVICE-AGED TRANSFORMERS FOR MAX-LIFE RESULTS.

PCB CONTENT EXPRESSED IN PPM

DATE	1242	1254	1260	OTHER	TOTAL
06/27/97			24		24

COLOR LABEL - GREEN CLASS NON-PCB

EASTERN ANALYTICAL, INC.
RFD 2, CLINTON STREET, CONCORD, NH 03301 (603) 228-0525

LABORATORY TEST REPORT FOR:

MR. ED CONGDON
VERMONT ELECTRIC
POWER COMPANY, INC.
P.O. BOX #548
77 GROVE STREET
RUTLAND, VERMONT 05701

DATE REPORTED: 08/10/1981
DATE RECEIVED: 08/05/1981
LAB ID NUMBER: 1906

SAMPLE IDENTIFICATION:
PCB ANALYSES ON 13 MINERAL OIL SAMPLES

SAMPLE ID		CONCENTRATION	
K52 GRANITE	S/N 0139A803-203	<1	PARTS PER MILLION
K19 SNDBAR	S/N 0202A9486-203	<1	PARTS PER MILLION
VT YANKEE (W)	S/N 1-38Y2994	4	PARTS PER MILLION
K51 GRANITE	S/N 0139A5803-202	2	PARTS PER MILLION
IRAS TRANS	S/N D366686	4	PARTS PER MILLION
K22W SANDBAR	S/N 0202A9486-201	<1	PARTS PER MILLION
K40 VT YANKEE	S/N 1-38Y2995	<1	PARTS PER MILLION
CHELSEA	S/N RMP-1878-2	5	PARTS PER MILLION
GRANITE	S/N H409118	<1	PARTS PER MILLION
K53 GRANITE	S/N 0139A5803-201	<1	PARTS PER MILLION
K22E SNDBAR	S/N 0202A9486-202	<1	PARTS PER MILLION
TRANSPORT	S/N K547335	<1	PARTS PER MILLION
K186 VT YKE	S/N 138Y2996	<1	PARTS PER MILLION

< = LESS THAN
ALL TESTING IS PERFORMED ACCORDING TO EPA APPROVED PROCEDURES

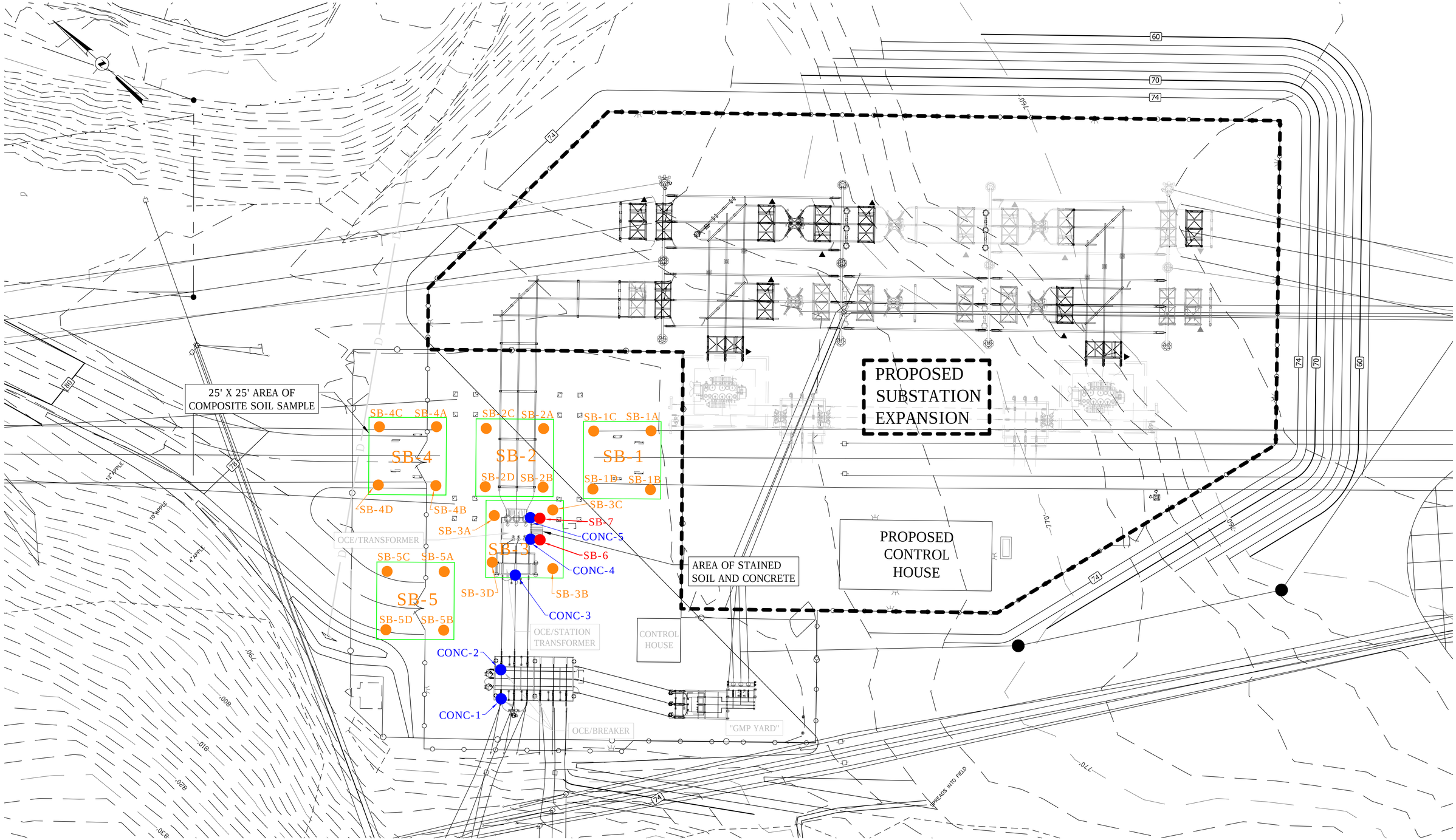
AUTHORIZED SIGNATURE: William Brunkhorst

152

AUG 11 1981

Attachment 2

Figure 1 – Overall Site Plan
Figure 2 – Detailed Site Plan



LEGEND

- SURVEY POINT
- PERMANENT CONTROL POINT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE ANCHOR
- APPROXIMATE BOUNDARY LINE
- APPROXIMATE RIGHT-OF-WAY
- EXISTING SWITCHYARD FENCE
- EXISTING TREELINE
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING WETLAND
- WETLAND BUFFER
- PROPOSED UTILITY POLE
- PROPOSED UTILITY POLE ANCHOR
- PROPOSED SUBSTATION FENCE
- PROPOSED RIGHT-OF-WAY
- PROPOSED 10' CONTOUR
- PROPOSED TREELINE
- SB-1A — DISCRETE SOIL SAMPLE LOCATION AND ID
- SB-6 — DISCRETE SOIL SAMPLE LOCATION AND ID EXHIBITING TPH CONCENTRATION ABOVE VTDEC SOIL SCREENING VALUE
- SB-1 — COMPOSITE SOIL SAMPLE LOCATION AND ID
- CONC-1 — CONCRETE SAMPLE LOCATION AND ID

OCE = OIL-CONTAINING EQUIPMENT

GENERAL NOTES:
--THIS PLAN DOES NOT CONSTITUTE A BOUNDARY SURVEY.

APPROXIMATE GRAPHIC SCALE

20 0 20 40 60 80

VELCO
CHELSEA SUBSTATION
CHELSEA, VT

SITE PLAN

TRC
670 N Commercial Street
Manchester, NH 03101
(603) 621-9259

DRAWN BY: BJM
CHECKED BY: JPS
DATE: JAN 2016

FIGURE 1

FILE: J:\Projects\244640 - VELCO Chelsea Substation\CAD\Filing\New Layout 206-61000.dwg

25' X 25' AREA OF COMPOSITE SOIL SAMPLE

SB-4C SB-4A SB-4 SB-4D SB-4B

SB-2C SB-2A SB-2 SB-2D SB-2B

SB-1C SB-1A SB-1 SB-1D SB-1B

SB-3C SB-3A SB-3 SB-3D SB-3B

SB-7 CONC-5 SB-6 CONC-4 CONC-3

SB-5C SB-5A SB-5 SB-5D SB-5B

OCE/TRANSFORMER

OCE/STATION TRANSFORMER

CONC-2 CONC-1

OCE/BREAKER

AREA OF STAINED SOIL AND CONCRETE

CONTROL HOUSE

"GMP YARD"

78

10" APPLE

4" APPLE

790'

800'

810'

LEGEND

SURVEY POINT
PERMANENT CONTROL POINT
EXISTING UTILITY POLE
EXISTING UTILITY POLE ANCHOR
APPROXIMATE BOUNDARY LINE
APPROXIMATE RIGHT-OF-WAY
EXISTING SWITCHYARD FENCE
EXISTING TREELINE
EXISTING 2' CONTOUR
EXISTING 10' CONTOUR
EXISTING 2' CONTOUR
EXISTING WETLAND
WETLAND BUFFER
PROPOSED UTILITY POLE
PROPOSED UTILITY POLE ANCHOR
PROPOSED SUBSTATION FENCE
PROPOSED RIGHT-OF-WAY
PROPOSED 10' CONTOUR
PROPOSED TREELINE

SB-1A — DISCRETE SOIL SAMPLE LOCATION AND ID

SB-6 — DISCRETE SOIL SAMPLE LOCATION AND ID EXHIBITING TPH CONCENTRATION ABOVE VTDEC SOIL SCREENING VALUE

SB-1 — COMPOSITE SOIL SAMPLE LOCATION AND ID

CONC-1 — CONCRETE SAMPLE LOCATION AND ID

OCE = OIL-CONTAINING EQUIPMENT

GENERAL NOTES:
--THIS PLAN DOES NOT CONSTITUTE A BOUNDARY SURVEY.

APPROXIMATE GRAPHIC SCALE

10 0 10 20 30 40

VELCO
CHELSEA SUBSTATION
CHELSEA, VT

SITE PLAN DETAIL

TRC
670 N Commerical Street
Manchester, NH 03101
(603) 621-9259

DRAWN BY: BJM
CHECKED BY: JPS
DATE: JAN 2016

FIGURE 2

FILE: J:\Projects\244640 - VELCO Chelsea Substation\CAD\Eling\Detail 206-61000.dwg

Attachment 3

Table 1 – Summary of Concrete Analytical Results
Table 2 – Summary of Soil Analytical Results

Table 1
Summary of Analytical Results for Concrete Samples -- December 2015
VELCO Chelsea Substation
45 East Randolph Road
Chelsea, Vermont

Analysis	Analyte	Sample ID:	Conc-1	Conc-2	Conc-3	Conc-4	Conc-5
		Sample Date:	12/28/2015	12/28/2015	12/28/2015	12/28/2015	12/28/2015
		TSCA					
PCBs							
(mg/kg)	Aroclor 1016	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1221	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1232	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1242	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1248	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1254	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1260	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1262	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Aroclor 1268	N/A	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
	Total PCBs	1	0.10 U	0.099 U	0.10 U	0.10 U	0.10 U
Total Petroleum Hydrocarbons							
(mg/kg)	Diesel Range Organics	N/A	**290**	**300**	**370**	**14,000**	**21,000**

Notes:

mg/kg - milligrams per kilogram or parts per million (ppm).

N/A - Not applicable.

U - Analyte was not detected at specified quantitation limit.

Values in **Bold** indicate the compound was detected.

PCBs - Polychlorinated Biphenyls.

TSCA - Toxic Substances Control Act.

Table 2
Summary of Analytical Results for Soil Samples -- December 2015
VELCO Chelsea Substation
45 East Randolph Road
Chelsea, Vermont

Analysis	Analyte	Soil Screening Values (SSVs)* Residential	Soil Screening Values (SSVs)* Industrial	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7
			Sample Depth (ft.):	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
			Sample Date:	12/28/2015	12/28/2015	12/28/2015	12/28/2015	12/28/2015	12/28/2015	12/28/2015
PCBs										
(mg/kg)	Aroclor 1016	3.9	21	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1221	0.14	0.54	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1232	0.14	0.54	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1242	0.22	0.74	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1248	0.22	0.74	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1254	0.22	0.74	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1260	0.22	0.74	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1262	NS	NS	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Aroclor 1268	NS	NS	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
	Total PCBs	0.22	0.74	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Total Petroleum Hydrocarbons										
(mg/kg)	Diesel Range Organics	82^	420^	8.9 U	9.0 U	8.8 U	9.0 U	9.0 U	**7,100**	**8,800**
Metals, total										
(mg/kg)	Arsenic	0.61	2.4	0.49 U	0.49 U	0.49 U	0.49 U	0.50 U	NA	NA
	Barium	15,000	190,000	**20**	**5.2**	**7.4**	**21**	**18**	NA	NA
	Cadmium	70	800	0.27 U	0.27 U	0.26 U	0.27 U	0.27 U	NA	NA
	Chromium	120,000**	1,500,000**	**21**	**20**	**19**	**21**	**18**	NA	NA
	Lead	400	800	**7.4**	**9.2**	**6.8**	**8.4**	**8.7**	NA	NA
	Mercury	10	43	0.026 U	0.027 U	0.026 U	0.027 U	0.027 U	NA	NA
	Selenium	390	5,100	5.3 U	5.4 U	5.3 U	5.4 U	5.4 U	NA	NA
	Silver	390	5,100	0.53 U	0.54 U	0.53 U	0.54 U	0.54 U	NA	NA

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

MDL - Method detection limit.

NA - Sample not analyzed for the listed analyte.

NS - No SSVs exist for this analyte.

U - Analyte was not detected at specified quantitation limit (with the exception of arsenic:

U - Analyte was not detected at specified MDL).

Values in **Bold** indicate the compound was detected.

Values shown in Bold and shaded type exceed one or more of the listed VT DEC SSVs.

PCBs - Polychlorinated Biphenyls.

^ - Used lowest of all TPH Aliphatic and Aromatic RSLs.

* - VT DEC, Soil Screening Values (SSVs), Waste Management Division/Site Management Section, Investigation and Remediation of Contaminated Properties Procedures, December 2013.

** - SSVs for Chromium (III) used.

Attachment 4

Laboratory Reports

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

January 6, 2016

Jamie Stapleton
TRC Environmental Corporation - New Hampshire
670 N. Commercial Street
Manchester, NH 03101

Project Location: 45 E. Randolph Rd., Chelsea, VT
Client Job Number:
Project Number: 244640
Laboratory Work Order Number: 15L1386

Enclosed are results of analyses for samples received by the laboratory on December 29, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

TRC Environmental Corporation - New Hampshire
670 N. Commercial Street
Manchester, NH 03101
ATTN: Jamie Stapleton

REPORT DATE: 1/6/2016

PURCHASE ORDER NUMBER: 90720

PROJECT NUMBER: 244640

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15L1386

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 45 E. Randolph Rd., Chelsea, VT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Conc-1	15L1386-01	Concrete		SW-846 8015C	
				SW-846 8082A	
Conc-2	15L1386-02	Concrete		SW-846 8015C	
				SW-846 8082A	
Conc-3	15L1386-03	Concrete		SW-846 8015C	
				SW-846 8082A	
Conc-4	15L1386-04	Concrete		SW-846 8015C	
				SW-846 8082A	
Conc-5	15L1386-05	Concrete		SW-846 8015C	
				SW-846 8082A	

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8015C

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

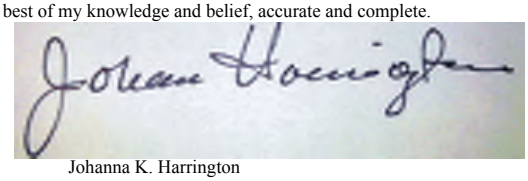
o-Terphenyl

15L1386-04[Conc-4], 15L1386-05[Conc-5]

SW-846 8015C

Diesel Range Organics (C10-C28) is quantitated against a calibration made with a #2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington
Manager, Laboratory Reporting

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-1 Sampled: 12/28/2015 09:30

Sample ID: 15L1386-01

Sample Matrix: Concrete

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1221 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1232 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1242 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1248 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1254 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1260 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1262 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB
Aroclor-1268 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:23	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	106	30-150		1/5/16 17:23
Decachlorobiphenyl [2]	106	30-150		1/5/16 17:23
Tetrachloro-m-xylene [1]	99.5	30-150		1/5/16 17:23
Tetrachloro-m-xylene [2]	92.1	30-150		1/5/16 17:23

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-1 Sampled: 12/28/2015 09:30

Sample ID: 15L1386-01

Sample Matrix: Concrete

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	290	8.3	mg/Kg	1		SW-846 8015C	1/4/16	1/5/16 10:21	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	79.7	40-140		1/5/16 10:21

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-2 Sampled: 12/28/2015 10:00

Sample ID: 15L1386-02

Sample Matrix: Concrete

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1221 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1232 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1242 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1248 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1254 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1260 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1262 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB
Aroclor-1268 [1]	ND	0.099	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:35	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	106	30-150		1/5/16 17:35
Decachlorobiphenyl [2]	105	30-150		1/5/16 17:35
Tetrachloro-m-xylene [1]	97.9	30-150		1/5/16 17:35
Tetrachloro-m-xylene [2]	90.7	30-150		1/5/16 17:35

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-2 Sampled: 12/28/2015 10:00

Sample ID: 15L1386-02

Sample Matrix: Concrete

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	300	8.3	mg/Kg	1		SW-846 8015C	1/4/16	1/5/16 10:39	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	85.1	40-140		1/5/16 10:39

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-3 Sampled: 12/28/2015 10:30

Sample ID: 15L1386-03

Sample Matrix: Concrete

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1221 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1232 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1242 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1248 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1254 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1260 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1262 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB
Aroclor-1268 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 17:48	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.3	30-150		1/5/16 17:48
Decachlorobiphenyl [2]	92.7	30-150		1/5/16 17:48
Tetrachloro-m-xylene [1]	86.5	30-150		1/5/16 17:48
Tetrachloro-m-xylene [2]	79.9	30-150		1/5/16 17:48

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-3 Sampled: 12/28/2015 10:30

Sample ID: 15L1386-03

Sample Matrix: Concrete

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	370	8.3	mg/Kg	1		SW-846 8015C	1/4/16	1/5/16 10:56	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	82.3	40-140		1/5/16 10:56

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT
Sample Description:
Work Order: 15L1386
Date Received: 12/29/2015
Field Sample #: Conc-4
Sampled: 12/28/2015 11:00
Sample ID: 15L1386-04
Sample Matrix: Concrete

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1221 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1232 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1242 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1248 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1254 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1260 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1262 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB
Aroclor-1268 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:00	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	79.9	30-150		1/5/16 18:00
Decachlorobiphenyl [2]	81.2	30-150		1/5/16 18:00
Tetrachloro-m-xylene [1]	72.9	30-150		1/5/16 18:00
Tetrachloro-m-xylene [2]	70.6	30-150		1/5/16 18:00

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-4 Sampled: 12/28/2015 11:00

Sample ID: 15L1386-04

Sample Matrix: Concrete

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	14000	420	mg/Kg	50		SW-846 8015C	1/4/16	1/5/16 12:37	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	*	40-140	S-01	1/5/16 12:37

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-5 Sampled: 12/28/2015 11:30

Sample ID: 15L1386-05

Sample Matrix: Concrete

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1221 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1232 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1242 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1248 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1254 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1260 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1262 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB
Aroclor-1268 [1]	ND	0.10	mg/Kg	1		SW-846 8082A	1/4/16	1/5/16 18:13	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	85.1	30-150		1/5/16 18:13
Decachlorobiphenyl [2]	87.2	30-150		1/5/16 18:13
Tetrachloro-m-xylene [1]	81.1	30-150		1/5/16 18:13
Tetrachloro-m-xylene [2]	77.6	30-150		1/5/16 18:13

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT
Sample Description:
Work Order: 15L1386

Date Received: 12/29/2015

Field Sample #: Conc-5
Sampled: 12/28/2015 11:30

Sample ID: 15L1386-05

Sample Matrix: Concrete

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	21000	830	mg/Kg	100		SW-846 8015C	1/4/16	1/5/16 12:37	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	*	40-140	S-01	1/5/16 12:37

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1386-01 [Conc-1]	B138996	6.00	1.00	01/04/16
15L1386-02 [Conc-2]	B138996	6.00	1.00	01/04/16
15L1386-03 [Conc-3]	B138996	6.00	1.00	01/04/16
15L1386-04 [Conc-4]	B138996	6.01	1.00	01/04/16
15L1386-05 [Conc-5]	B138996	6.00	1.00	01/04/16

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1386-01 [Conc-1]	B138997	2.00	10.0	01/04/16
15L1386-02 [Conc-2]	B138997	2.02	10.0	01/04/16
15L1386-03 [Conc-3]	B138997	2.00	10.0	01/04/16
15L1386-04 [Conc-4]	B138997	2.00	10.0	01/04/16
15L1386-05 [Conc-5]	B138997	2.00	10.0	01/04/16

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138997 - SW-846 3546										
Blank (B138997-BLK1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	ND	0.10	mg/Kg							
Aroclor-1016 [2C]	ND	0.10	mg/Kg							
Aroclor-1221	ND	0.10	mg/Kg							
Aroclor-1221 [2C]	ND	0.10	mg/Kg							
Aroclor-1232	ND	0.10	mg/Kg							
Aroclor-1232 [2C]	ND	0.10	mg/Kg							
Aroclor-1242	ND	0.10	mg/Kg							
Aroclor-1242 [2C]	ND	0.10	mg/Kg							
Aroclor-1248	ND	0.10	mg/Kg							
Aroclor-1248 [2C]	ND	0.10	mg/Kg							
Aroclor-1254	ND	0.10	mg/Kg							
Aroclor-1254 [2C]	ND	0.10	mg/Kg							
Aroclor-1260	ND	0.10	mg/Kg							
Aroclor-1260 [2C]	ND	0.10	mg/Kg							
Aroclor-1262	ND	0.10	mg/Kg							
Aroclor-1262 [2C]	ND	0.10	mg/Kg							
Aroclor-1268	ND	0.10	mg/Kg							
Aroclor-1268 [2C]	ND	0.10	mg/Kg							
Surrogate: Decachlorobiphenyl	*1.06*		mg/Kg	1.00		106	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.06*		mg/Kg	1.00		106	30-150			
Surrogate: Tetrachloro-m-xylene	*0.977*		mg/Kg	1.00		97.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.906*		mg/Kg	1.00		90.6	30-150			
LCS (B138997-BS1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.25	0.10	mg/Kg	0.250		100	40-140			
Aroclor-1016 [2C]	0.29	0.10	mg/Kg	0.250		114	40-140			
Aroclor-1260	0.31	0.10	mg/Kg	0.250		122	40-140			
Aroclor-1260 [2C]	0.30	0.10	mg/Kg	0.250		119	40-140			
Surrogate: Decachlorobiphenyl	*1.20*		mg/Kg	1.00		120	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.20*		mg/Kg	1.00		120	30-150			
Surrogate: Tetrachloro-m-xylene	*1.11*		mg/Kg	1.00		111	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*1.03*		mg/Kg	1.00		103	30-150			
LCS Dup (B138997-BSD1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.23	0.10	mg/Kg	0.250		91.5	40-140	9.12	30	
Aroclor-1016 [2C]	0.26	0.10	mg/Kg	0.250		105	40-140	8.57	30	
Aroclor-1260	0.28	0.10	mg/Kg	0.250		111	40-140	9.25	30	
Aroclor-1260 [2C]	0.27	0.10	mg/Kg	0.250		109	40-140	8.90	30	
Surrogate: Decachlorobiphenyl	*1.06*		mg/Kg	1.00		106	30-150			
Surrogate: Decachlorobiphenyl [2C]	*1.06*		mg/Kg	1.00		106	30-150			
Surrogate: Tetrachloro-m-xylene	*0.951*		mg/Kg	1.00		95.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.883*		mg/Kg	1.00		88.3	30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138996 - SW-846 3546										
Blank (B138996-BLK1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Diesel Range Organics	ND	8.3	mg/Kg							
Surrogate: o-Terphenyl	*12.6*		mg/Kg	16.7		75.3	40-140			
LCS (B138996-BS1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Diesel Range Organics	122	8.3	mg/Kg	167		73.4	40-140			
Surrogate: o-Terphenyl	*13.6*		mg/Kg	16.7		81.7	40-140			
LCS Dup (B138996-BSD1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Diesel Range Organics	118	8.3	mg/Kg	167		71.0	40-140	3.29		
Surrogate: o-Terphenyl	*12.7*		mg/Kg	16.7		76.0	40-140			

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B138997-BS1

Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.25	
	2	0.00	0.00	0.00	0.29	14
Aroclor-1260	1	0.00	0.00	0.00	0.31	
	2	0.00	0.00	0.00	0.30	2

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B138997-BSD1 Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.23	
	2	0.00	0.00	0.00	0.26	13
Aroclor-1260	1	0.00	0.00	0.00	0.28	
	2	0.00	0.00	0.00	0.27	3

con-test® ANALYTICAL LABORATORY

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Product/Solid	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NY,NC,VA
Aroclor-1262 [2C]	NY,NC,VA
Aroclor-1268	NY,NC,VA
Aroclor-1268 [2C]	NY,NC,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

con-test ANALYTICAL LABORATORY

Phone: 413-525-2332
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Email: info@contestlabs.com
www.contestlabs.com

CHAIN OF CUSTODY RECORD

15L1386

Rev 04.05.12

39 Spruce Street
East longmeadow, MA 01028

Company Name: TRC
Address: 670 N. Commercial St
Manchester NH 03101
Attention: Jamie Stapleton
Project Location: 45 E. Randolph Rd, Chelsea, VT
Sampled By: Bryan MacDonald

Telephone: 603-325-5480
Project #: 244640
Client PO#: 90720

DATA DELIVERY (check all that apply)
○ FAX ✓ EMAIL ○ WEBSITE
Fax #
Email: jstapleton@trcsolutions.com
Format: ✓ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

ANALYSIS REQUESTED

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	PCBs (SIA)	TPH-DRO (OIA)
01	Conc-1	12/28/15	0930	X		S	L	X	X
02	Conc-2	↓	1000	X		↓	↓	X	X
03	Conc-3		1030	X				X	X
04	Conc-4		1100	X				X	X
05	Conc-5	↓	1130	X		↓	↓	X	X

# of Containers
** Preservation
***Container Code

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other _____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other _____

Comments: Samples are powdered concrete

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) Jamie Stapleton	12/29/15	Date/Time: 1530
Received by: (signature) [illegible]	12/29	Date/Time: 1.35
Relinquished by: (signature) [illegible]	12/29	Date/Time: [illegible]
Received by: (signature) [illegible] 4.6	12/29/15	Date/Time: 1750

Turnaround ††
☐ 7-Day
☐ 10-Day
☑ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other:

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Table of Contents

39 Spruce St.
East Longmeadow, MA 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: TRC **RECEIVED BY:** ODL **DATE:** 12/29/15

1) **Was the chain(s) of custody relinquished and signed?** Yes No No CoC included
2) **Does the chain agree with the samples?** Yes No
   If not, explain:
3) **Are all the samples in good condition?** Yes No
   If not, explain:
4) **How were the samples received:**
   On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒
   Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A
   Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.6
5) **Are there Dissolved samples for the lab to filter?** Yes No
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HOLDING TIME samples?** Yes No
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** 19

   Permission to subcontract samples? Yes No
   (Walk-in clients only) if not already approved
   Client Signature: _____
8) **Do all samples have the proper Acid pH:** Yes No N/A _____
9) **Do all samples heve the proper Base pH:** Yes No N/A _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8oz amber/clear jar	5
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

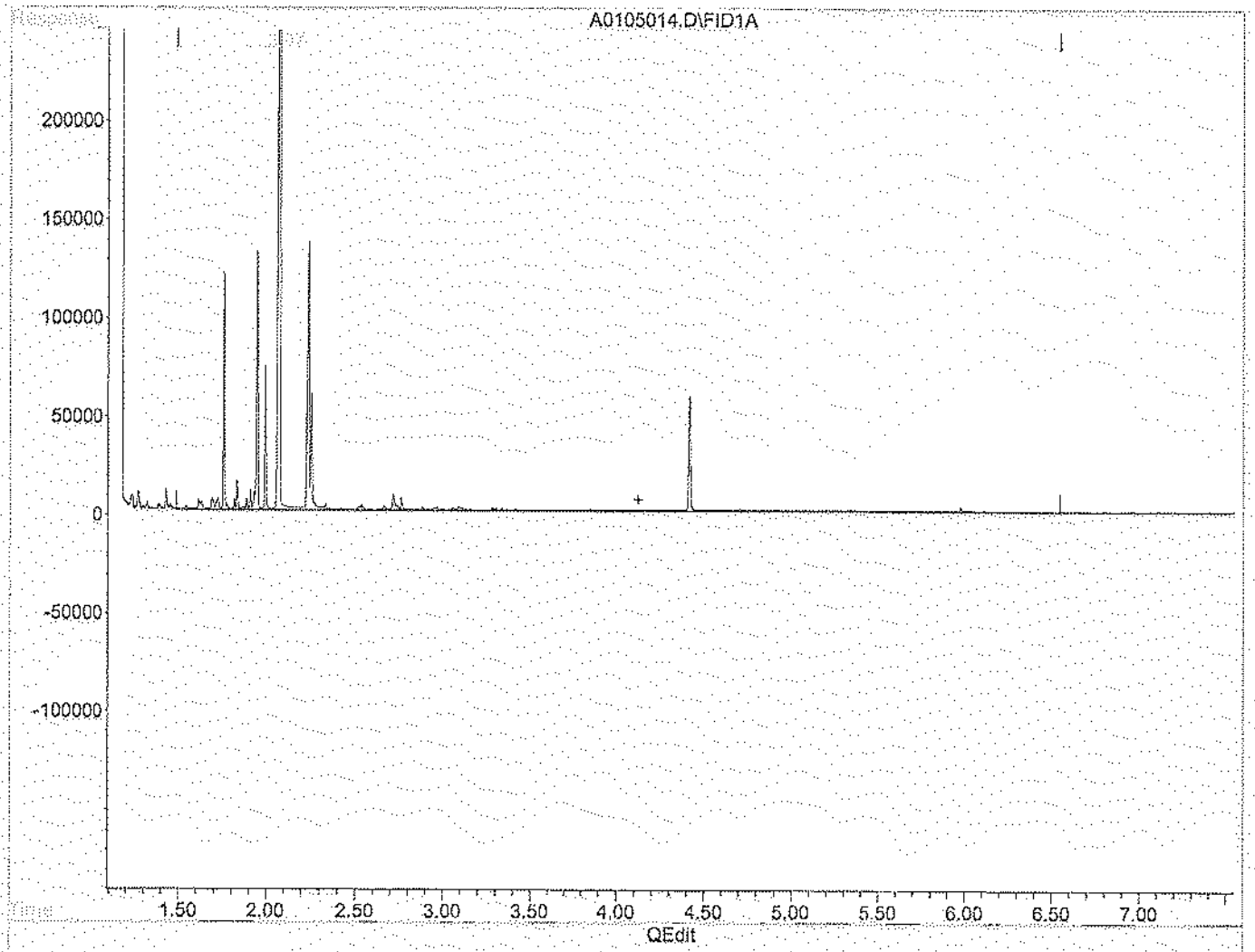
Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** JDL **Date/Time:** 12/29/15 1750

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\A010516\A0105014.D Vial: 10
Acq On : 5 Jan 2016 10:21 am Operator: SCS
Sample : 15L1386-01 Inst : 5890DFID
Misc : Multiplr: 1.00
IntFile : PETROF.E
Quant Time: Jan 6 8:00 2016 Quant Results File: D080915F.RES

Method : C:\HPCHEM\1\PETRO METHODS\D080915F.M (Chemstation Integrator)
Title : 8015 DRO FRONT
Last Update : Mon Nov 09 10:44:26 2015
Response via : Multiple Level Calibration



(2) 8015 DRO (H)

4.13min 1761.003ug/mL m

response 7870604

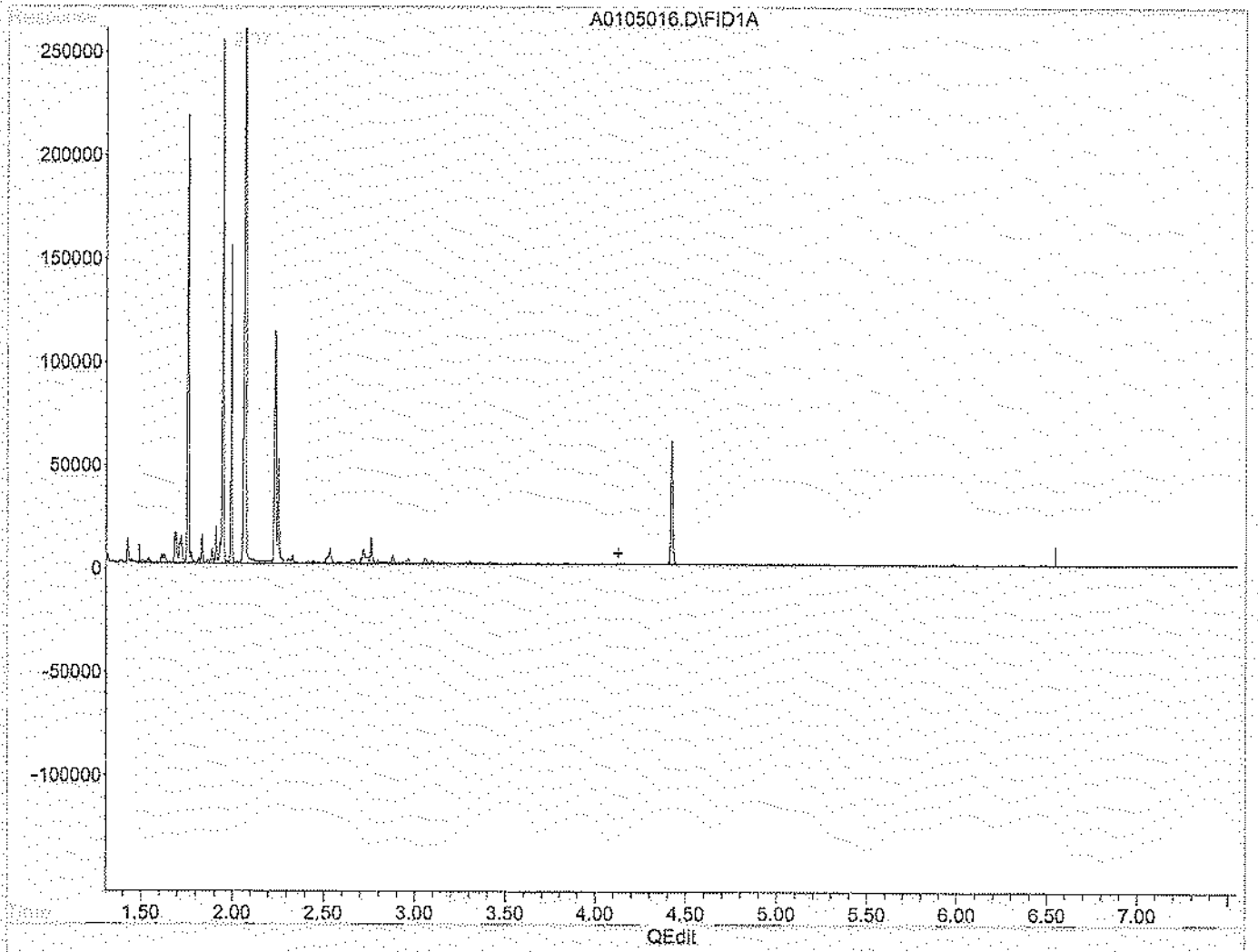
(+) = Expected Retention Time

A0105014.D D080915F.M Wed Jan 06 08:53:02 2016

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\A010516\A0105016.D Vial: 12
Acq On : 5 Jan 2016 10:39 am Operator: SCS
Sample : 15L1386-02 Inst : 5890DFID
Misc : Multiplr: 1.00
IntFile : PETROF.E
Quant Time: Jan 6 8:00 2016 Quant Results File: D080915F.RES

Method : C:\HPCHEM\1\PETRO METHODS\D080915F.M (Chemstation Integrator)
Title : 8015 DRO FRONT
Last Update : Mon Nov 09 10:44:26 2015
Response via : Multiple Level Calibration



(2) 8015 DRO (H)

4.13min 1789.722ug/mL m

response 7998963

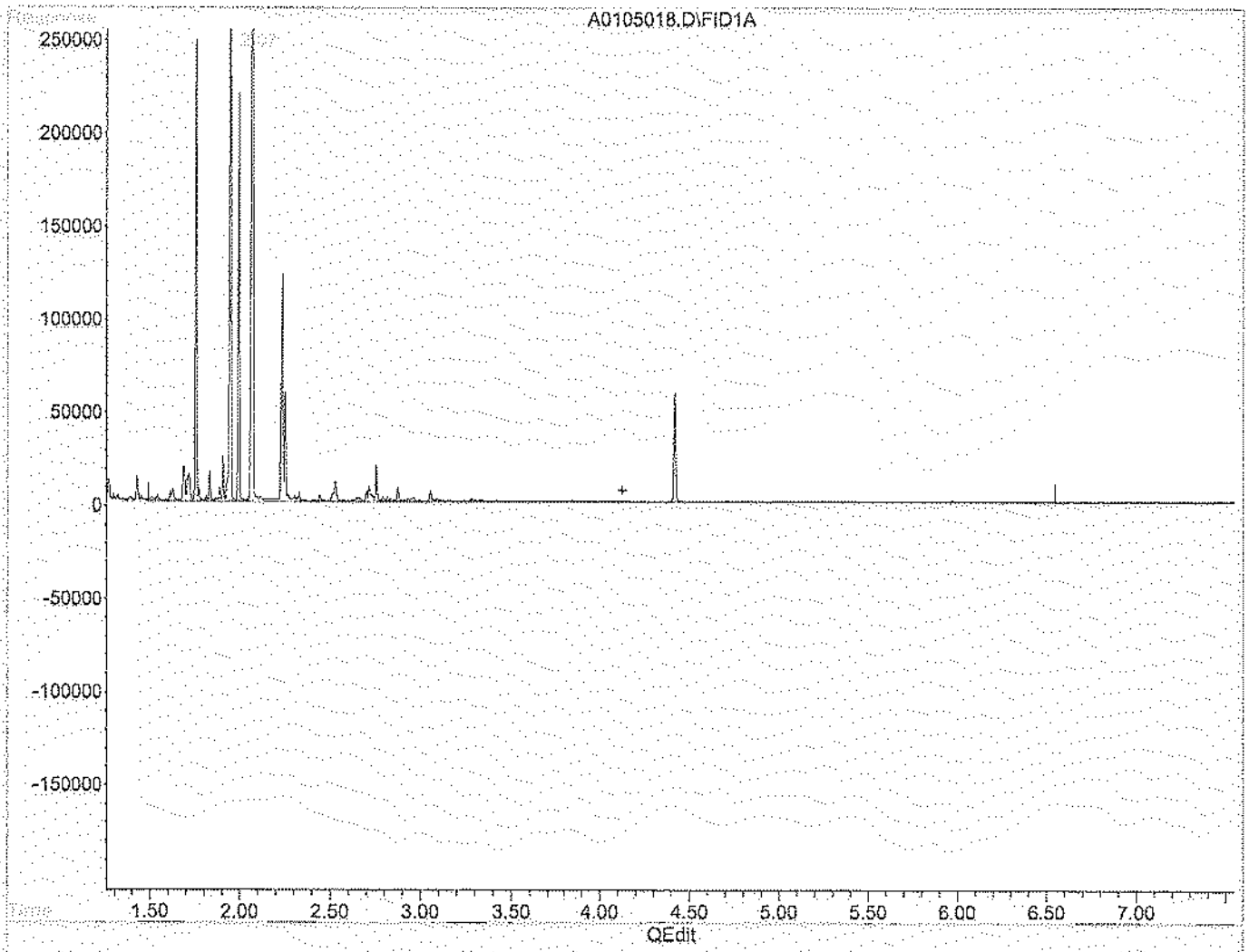
(+) = Expected Retention Time

A0105016.D D080915F.M Wed Jan 06 08:53:17 2016

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\A010516\A0105018.D Vial: 14
Acq On : 5 Jan 2016 10:56 am Operator: SCS
Sample : 15L1386-03 Inst : 5890DFID
Misc : Multiplr: 1.00
IntFile : PETROF.E
Quant Time: Jan 6 8:00 2016 Quant Results File: D080915F.RES

Method : C:\HPCHEM\1\PETRO METHODS\D080915F.M (Chemstation Integrator)
Title : 8015 DRO FRONT
Last Update : Mon Nov 09 10:44:26 2015
Response via : Multiple Level Calibration



(2) 8015 DRO (H)

4.13min 2248.619ug/mL m

response 10049950

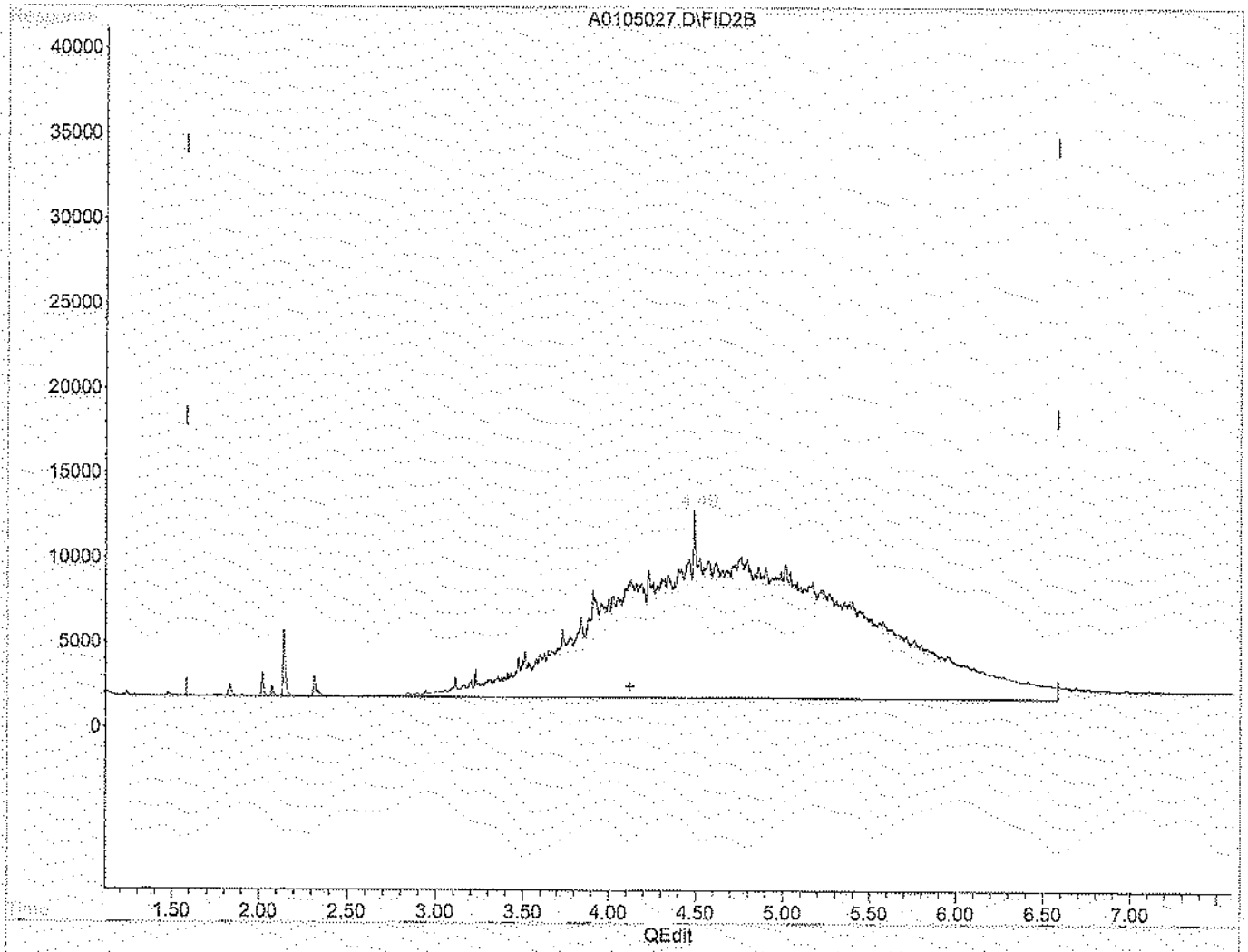
(+) = Expected Retention Time

A0105018.D D080915F.M Wed Jan 06 08:53:28 2016

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\A010516.SEC\A0105027.D Vial: 23
Acq On : 5 Jan 2016 12:37 pm Operator: SCS
Sample : 15L1386-04@50X Inst : 5890DFID
Misc : Multiplr: 1.00
IntFile : ETPHF.E
Quant Time: Jan 6 8:24 2016 Quant Results File: D080915B.RES

Method : C:\HPCHEM\1\PETRO METHODS\E080915B.M (Chemstation Integrator)
Title : ETPH BACK
Last Update : Thu Dec 17 16:25:04 2015
Response via : Multiple Level Calibration



(2) 8015 DRO (H)

4.12min 1683.852ug/mL m

response 8869631

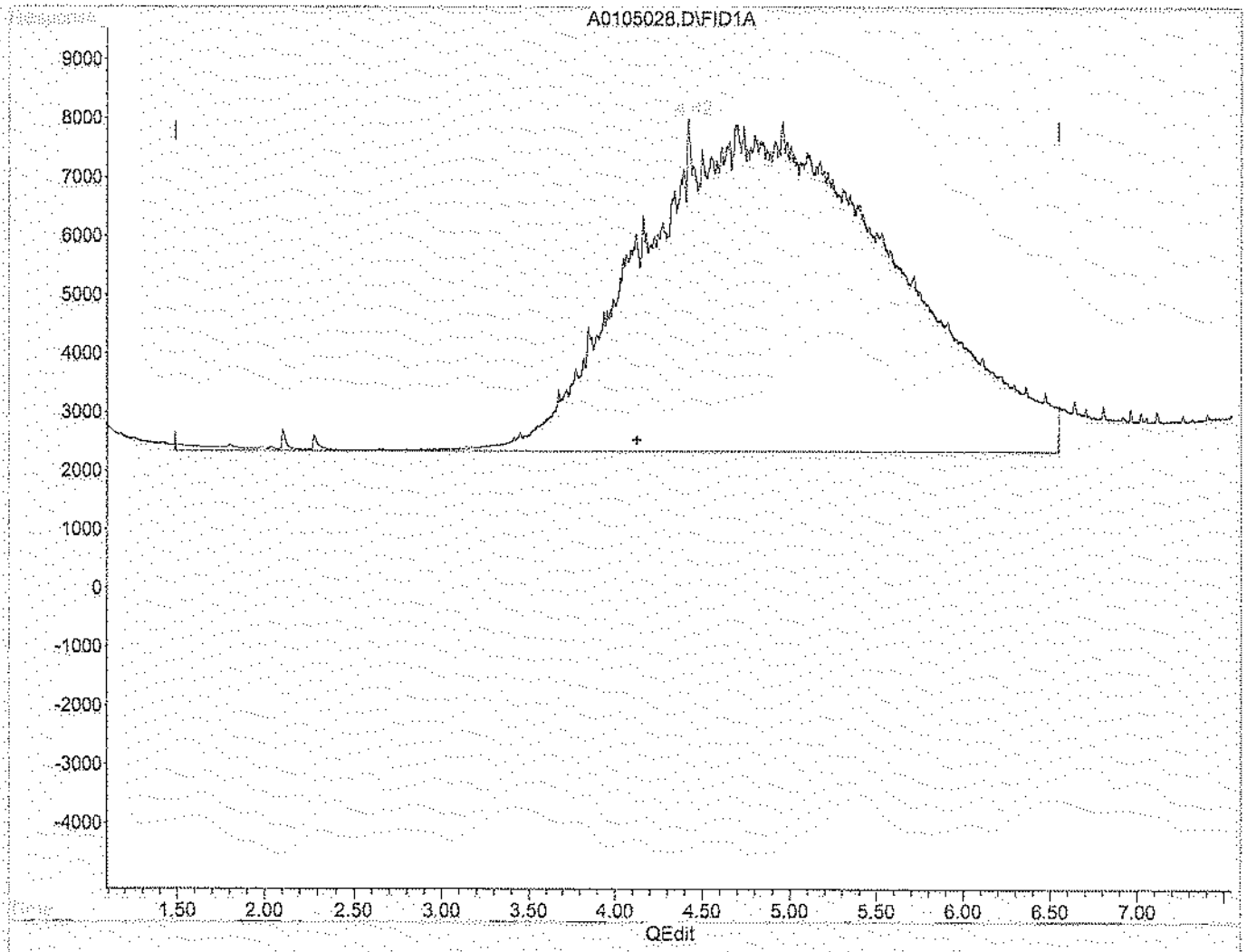
(+) = Expected Retention Time

A0105027.D E080915B.M Wed Jan 06 08:56:40 2016

Quantitation Report (Qedit)

Data File : D:\HPCHEM\1\DATA\A010516\A0105028.D Vial: 24
Acq On : 5 Jan 2016 12:37 pm Operator: SCS
Sample : 15L1386-05@100X Inst : 5890DFID
Misc : Multiplr: 1.00
IntFile : PETROF.E
Quant Time: Jan 6 8:00 2016 Quant Results File: D080915F.RES

Method : C:\HPCHEM\1\PETRO METHODS\D080915F.M (Chemstation Integrator)
Title : 8015 DRO FRONT
Last Update : Mon Nov 09 10:44:26 2015
Response via : Multiple Level Calibration



(2) 8015 DRO (H)

4.13min 1263.844ug/mL m

response 5648609

(+) = Expected Retention Time

A0105028.D D080915F.M Wed Jan 06 08:54:01 2016

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

January 8, 2016

Jamie Stapleton
TRC Environmental Corporation - New Hampshire
670 N. Commercial Street
Manchester, NH 03101

Project Location: 45 E. Randolph Rd., Chelsea, VT
Client Job Number:
Project Number: 244640
Laboratory Work Order Number: 15L1385

Enclosed are results of analyses for samples received by the laboratory on December 29, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

TRC Environmental Corporation - New Hampshire
670 N. Commercial Street
Manchester, NH 03101
ATTN: Jamie Stapleton

REPORT DATE: 1/8/2016

PURCHASE ORDER NUMBER: 90720

PROJECT NUMBER: 244640

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15L1385

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 45 E. Randolph Rd., Chelsea, VT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SB-1 (0-0.5')	15L1385-01	Soil		SM 2540G	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8015C	
				SW-846 8082A	
SB-2 (0-0.5')	15L1385-02	Soil		SM 2540G	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8015C	
				SW-846 8082A	
SB-3 (0-0.5')	15L1385-03	Soil		SM 2540G	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8015C	
				SW-846 8082A	
SB-4 (0-0.5')	15L1385-04	Soil		SM 2540G	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8015C	
				SW-846 8082A	
SB-5 (0-0.5')	15L1385-05	Soil		SM 2540G	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8015C	
				SW-846 8082A	
SB-6 (0-0.5')	15L1385-06	Soil		SM 2540G	
				SW-846 8015C	
				SW-846 8082A	
SB-7 (0-0.5')	15L1385-07	Soil		SM 2540G	
				SW-846 8015C	
				SW-846 8082A	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED REPORT - 1/8/2016 - Arsenic reported down to the MDL.

SW-846 6010C

Qualifications:

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Chromium

15L1385-03[SB-3 (0-0.5')], B138785-MS1

Selenium

15L1385-03[SB-3 (0-0.5')], B138785-MS1

SW-846 8015C

Qualifications:

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

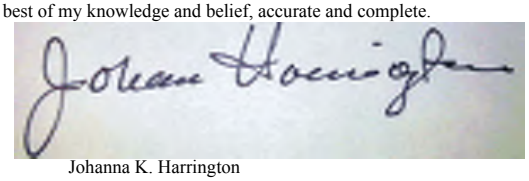
o-Terphenyl

15L1385-06[SB-6 (0-0.5')], 15L1385-07[SB-7 (0-0.5')]

SW-846 8015C

Diesel Range Organics (C10-C28) is quantitated against a calibration made with a #2 fuel oil standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington
Manager, Laboratory Reporting

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-1 (0-0.5') Sampled: 12/28/2015 12:10

Sample ID: 15L1385-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 19:54	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.6	30-150		1/5/16 19:54
Decachlorobiphenyl [2]	94.9	30-150		1/5/16 19:54
Tetrachloro-m-xylene [1]	84.0	30-150		1/5/16 19:54
Tetrachloro-m-xylene [2]	86.9	30-150		1/5/16 19:54

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-1 (0-0.5') Sampled: 12/28/2015 12:10

Sample ID: 15L1385-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	ND	8.9	mg/Kg dry	1		SW-846 8015C	1/4/16	1/4/16 21:53	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	64.4	40-140		1/4/16 21:53

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-1 (0-0.5') Sampled: 12/28/2015 12:10

Sample ID: 15L1385-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	0.49	mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Barium	20	2.7		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Cadmium	ND	0.27		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Chromium	21	0.53		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Lead	7.4	0.80		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Mercury	ND	0.026		mg/Kg dry	1		SW-846 7471B	12/30/15	12/31/15 11:28	SCB
Selenium	ND	5.3		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME
Silver	ND	0.53		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:27	AME

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-1 (0-0.5') Sampled: 12/28/2015 12:10

Sample ID: 15L1385-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.9		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-2 (0-0.5') Sampled: 12/28/2015 12:35

Sample ID: 15L1385-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:07	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	98.7	30-150		1/5/16 20:07
Decachlorobiphenyl [2]	99.7	30-150		1/5/16 20:07
Tetrachloro-m-xylene [1]	94.3	30-150		1/5/16 20:07
Tetrachloro-m-xylene [2]	97.4	30-150		1/5/16 20:07

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-2 (0-0.5') Sampled: 12/28/2015 12:35

Sample ID: 15L1385-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	ND	9.0	mg/Kg dry	1		SW-846 8015C	1/4/16	1/4/16 22:10	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	71.9	40-140		1/4/16 22:10

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-2 (0-0.5') Sampled: 12/28/2015 12:35

Sample ID: 15L1385-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	0.49	mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Barium	5.2	2.7		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Cadmium	ND	0.27		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Chromium	20	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Lead	9.2	0.80		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Mercury	ND	0.027		mg/Kg dry	1		SW-846 7471B	12/30/15	12/31/15 11:29	SCB
Selenium	ND	5.4		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME
Silver	ND	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:31	AME

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT
Sample Description:
Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-2 (0-0.5')
Sampled: 12/28/2015 12:35

Sample ID: 15L1385-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.0		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-3 (0-0.5') Sampled: 12/28/2015 13:00

Sample ID: 15L1385-03

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:21	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	78.3	30-150		1/5/16 20:21
Decachlorobiphenyl [2]	79.6	30-150		1/5/16 20:21
Tetrachloro-m-xylene [1]	74.5	30-150		1/5/16 20:21
Tetrachloro-m-xylene [2]	78.0	30-150		1/5/16 20:21

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-3 (0-0.5') Sampled: 12/28/2015 13:00

Sample ID: 15L1385-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	ND	8.8	mg/Kg dry	1		SW-846 8015C	1/4/16	1/4/16 22:28	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	68.0	40-140		1/4/16 22:28

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-3 (0-0.5') Sampled: 12/28/2015 13:00

Sample ID: 15L1385-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.6	0.49	mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:22	AME
Barium	7.4	2.6		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:22	AME
Cadmium	ND	0.26		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:22	AME
Chromium	19	0.53		mg/Kg dry	1	MS-22	SW-846 6010C	12/30/15	12/31/15 14:22	AME
Lead	6.8	0.79		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:22	AME
Mercury	ND	0.026		mg/Kg dry	1		SW-846 7471B	12/30/15	12/31/15 11:31	SCB
Selenium	ND	5.3		mg/Kg dry	1	MS-22	SW-846 6010C	12/30/15	12/31/15 14:22	AME
Silver	ND	0.53		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:22	AME

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-3 (0-0.5') Sampled: 12/28/2015 13:00

Sample ID: 15L1385-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	94.3		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-4 (0-0.5') Sampled: 12/28/2015 13:25

Sample ID: 15L1385-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:34	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	82.4	30-150		1/5/16 20:34
Decachlorobiphenyl [2]	84.0	30-150		1/5/16 20:34
Tetrachloro-m-xylene [1]	76.6	30-150		1/5/16 20:34
Tetrachloro-m-xylene [2]	81.0	30-150		1/5/16 20:34

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-4 (0-0.5') Sampled: 12/28/2015 13:25

Sample ID: 15L1385-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	ND	9.0	mg/Kg dry	1		SW-846 8015C	1/4/16	1/4/16 22:46	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	71.8	40-140		1/4/16 22:46

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-4 (0-0.5') Sampled: 12/28/2015 13:25

Sample ID: 15L1385-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	0.49	mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Barium	21	2.7		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Cadmium	ND	0.27		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Chromium	21	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Lead	8.4	0.81		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Mercury	ND	0.027		mg/Kg dry	1		SW-846 7471B	12/30/15	12/31/15 11:32	SCB
Selenium	ND	5.4		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME
Silver	ND	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:36	AME

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT
Sample Description:
Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-4 (0-0.5')
Sampled: 12/28/2015 13:25

Sample ID: 15L1385-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.5		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-5 (0-0.5') Sampled: 12/28/2015 13:50

Sample ID: 15L1385-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 20:47	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.1	30-150		1/5/16 20:47
Decachlorobiphenyl [2]	94.9	30-150		1/5/16 20:47
Tetrachloro-m-xylene [1]	89.1	30-150		1/5/16 20:47
Tetrachloro-m-xylene [2]	91.5	30-150		1/5/16 20:47

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-5 (0-0.5') Sampled: 12/28/2015 13:50

Sample ID: 15L1385-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	ND	9.0	mg/Kg dry	1		SW-846 8015C	1/4/16	1/4/16 23:03	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	67.6	40-140		1/4/16 23:03

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-5 (0-0.5') Sampled: 12/28/2015 13:50

Sample ID: 15L1385-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.7	0.50	mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Barium	18	2.7		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Cadmium	ND	0.27		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Chromium	18	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Lead	8.7	0.81		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Mercury	ND	0.027		mg/Kg dry	1		SW-846 7471B	12/30/15	12/31/15 11:34	SCB
Selenium	ND	5.4		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME
Silver	ND	0.54		mg/Kg dry	1		SW-846 6010C	12/30/15	12/31/15 14:40	AME

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT
Sample Description:
Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-5 (0-0.5')
Sampled: 12/28/2015 13:50

Sample ID: 15L1385-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.3		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-6 (0-0.5') Sampled: 12/28/2015 13:55

Sample ID: 15L1385-06

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:00	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	79.0	30-150		1/5/16 21:00
Decachlorobiphenyl [2]	77.4	30-150		1/5/16 21:00
Tetrachloro-m-xylene [1]	68.9	30-150		1/5/16 21:00
Tetrachloro-m-xylene [2]	66.2	30-150		1/5/16 21:00

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-6 (0-0.5') Sampled: 12/28/2015 13:55

Sample ID: 15L1385-06

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	7100	890	mg/Kg dry	100		SW-846 8015C	1/4/16	1/5/16 12:01	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	*	40-140	S-01	1/5/16 12:01

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-6 (0-0.5') Sampled: 12/28/2015 13:55

Sample ID: 15L1385-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	93.2		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-7 (0-0.5') Sampled: 12/28/2015 14:00

Sample ID: 15L1385-07

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/16	1/5/16 21:13	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	77.8	30-150		1/5/16 21:13
Decachlorobiphenyl [2]	76.4	30-150		1/5/16 21:13
Tetrachloro-m-xylene [1]	66.0	30-150		1/5/16 21:13
Tetrachloro-m-xylene [2]	62.5	30-150		1/5/16 21:13

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-7 (0-0.5') Sampled: 12/28/2015 14:00

Sample ID: 15L1385-07

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diesel Range Organics	8800	900	mg/Kg dry	100		SW-846 8015C	1/4/16	1/5/16 12:19	SCS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
o-Terphenyl	*	40-140	S-01	1/5/16 12:19

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: 45 E. Randolph Rd., Chelsea, VT Sample Description: Work Order: 15L1385

Date Received: 12/29/2015

Field Sample #: SB-7 (0-0.5') Sampled: 12/28/2015 14:00

Sample ID: 15L1385-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.7		% Wt	1		SM 2540G	1/5/16	1/6/16 10:14	MRL

con-test® ANALYTICAL LABORATORY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
15L1385-01 [SB-1 (0-0.5')]	B139097	01/05/16
15L1385-02 [SB-2 (0-0.5')]	B139097	01/05/16
15L1385-03 [SB-3 (0-0.5')]	B139097	01/05/16
15L1385-04 [SB-4 (0-0.5')]	B139097	01/05/16
15L1385-05 [SB-5 (0-0.5')]	B139097	01/05/16
15L1385-06 [SB-6 (0-0.5')]	B139097	01/05/16
15L1385-07 [SB-7 (0-0.5')]	B139097	01/05/16

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1385-01 [SB-1 (0-0.5')]	B138785	1.00	50.0	12/30/15
15L1385-02 [SB-2 (0-0.5')]	B138785	1.00	50.0	12/30/15
15L1385-03 [SB-3 (0-0.5')]	B138785	1.00	50.0	12/30/15
15L1385-04 [SB-4 (0-0.5')]	B138785	1.00	50.0	12/30/15
15L1385-05 [SB-5 (0-0.5')]	B138785	1.00	50.0	12/30/15

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1385-01 [SB-1 (0-0.5')]	B138781	0.609	50.0	12/30/15
15L1385-02 [SB-2 (0-0.5')]	B138781	0.605	50.0	12/30/15
15L1385-03 [SB-3 (0-0.5')]	B138781	0.608	50.0	12/30/15
15L1385-04 [SB-4 (0-0.5')]	B138781	0.606	50.0	12/30/15
15L1385-05 [SB-5 (0-0.5')]	B138781	0.603	50.0	12/30/15

Prep Method: SW-846 3546-SW-846 8015C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1385-01 [SB-1 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-02 [SB-2 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-03 [SB-3 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-04 [SB-4 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-05 [SB-5 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-06 [SB-6 (0-0.5')]	B138990	30.0	1.00	01/04/16
15L1385-07 [SB-7 (0-0.5')]	B138990	30.0	1.00	01/04/16

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
15L1385-01 [SB-1 (0-0.5')]	B138991	10.0	10.0	01/04/16
15L1385-02 [SB-2 (0-0.5')]	B138991	10.0	10.0	01/04/16
15L1385-03 [SB-3 (0-0.5')]	B138991	10.0	10.0	01/04/16
15L1385-04 [SB-4 (0-0.5')]	B138991	10.0	10.0	01/04/16
15L1385-05 [SB-5 (0-0.5')]	B138991	10.1	10.0	01/04/16
15L1385-06 [SB-6 (0-0.5')]	B138991	10.0	10.0	01/04/16
15L1385-07 [SB-7 (0-0.5')]	B138991	10.0	10.0	01/04/16

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138991 - SW-846 3546										
Blank (B138991-BLK1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.168*		mg/Kg wet	0.200		84.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.159*		mg/Kg wet	0.200		79.5	30-150			
Surrogate: Tetrachloro-m-xylene	*0.164*		mg/Kg wet	0.200		82.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.158*		mg/Kg wet	0.200		78.8	30-150			
LCS (B138991-BS1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.16	0.020	mg/Kg wet	0.200		78.4	40-140			
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		77.1	40-140			
Aroclor-1260	0.16	0.020	mg/Kg wet	0.200		78.9	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		80.5	40-140			
Surrogate: Decachlorobiphenyl	*0.173*		mg/Kg wet	0.200		86.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.164*		mg/Kg wet	0.200		81.9	30-150			
Surrogate: Tetrachloro-m-xylene	*0.162*		mg/Kg wet	0.200		80.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.154*		mg/Kg wet	0.200		77.1	30-150			
LCS Dup (B138991-BSD1)				Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		84.8	40-140	7.84	30	
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		85.1	40-140	9.82	30	
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		84.2	40-140	6.47	30	
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		85.5	40-140	6.06	30	
Surrogate: Decachlorobiphenyl	*0.182*		mg/Kg wet	0.200		90.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.171*		mg/Kg wet	0.200		85.4	30-150			
Surrogate: Tetrachloro-m-xylene	*0.172*		mg/Kg wet	0.200		86.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.163*		mg/Kg wet	0.200		81.3	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138991 - SW-846 3546										
Matrix Spike (B138991-MS1)		**Source: 15L1385-03**		Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.19	0.11	mg/Kg dry	0.212	ND	88.5	40-140			
Aroclor-1016 [2C]	0.19	0.11	mg/Kg dry	0.212	ND	88.5	40-140			
Aroclor-1260	0.18	0.11	mg/Kg dry	0.212	ND	85.9	40-140			
Aroclor-1260 [2C]	0.19	0.11	mg/Kg dry	0.212	ND	90.6	40-140			
Surrogate: Decachlorobiphenyl	*0.188*		mg/Kg dry	0.212		88.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.189*		mg/Kg dry	0.212		89.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.185*		mg/Kg dry	0.212		87.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.193*		mg/Kg dry	0.212		90.8	30-150			
Matrix Spike Dup (B138991-MSD1)		**Source: 15L1385-03**		Prepared: 01/04/16 Analyzed: 01/05/16						
Aroclor-1016	0.17	0.11	mg/Kg dry	0.212	ND	80.4	40-140	9.52	30	
Aroclor-1016 [2C]	0.16	0.11	mg/Kg dry	0.212	ND	75.8	40-140	15.5	30	
Aroclor-1260	0.17	0.11	mg/Kg dry	0.212	ND	80.1	40-140	6.93	30	
Aroclor-1260 [2C]	0.18	0.11	mg/Kg dry	0.212	ND	85.0	40-140	6.43	30	
Surrogate: Decachlorobiphenyl	*0.171*		mg/Kg dry	0.212		80.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.174*		mg/Kg dry	0.212		82.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.155*		mg/Kg dry	0.212		73.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.163*		mg/Kg dry	0.212		76.6	30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138990 - SW-846 3546										
Blank (B138990-BLK1)				Prepared & Analyzed: 01/04/16						
Diesel Range Organics	ND	8.3	mg/Kg wet							
Surrogate: o-Terphenyl	*2.79*		mg/Kg wet	3.33		83.6	40-140			
LCS (B138990-BS1)				Prepared & Analyzed: 01/04/16						
Diesel Range Organics	22.4	8.3	mg/Kg wet	33.3		67.1	40-140			
Surrogate: o-Terphenyl	*2.31*		mg/Kg wet	3.33		69.3	40-140			
LCS Dup (B138990-BSD1)				Prepared & Analyzed: 01/04/16						
Diesel Range Organics	22.4	8.3	mg/Kg wet	33.3		67.3	40-140	0.178		
Surrogate: o-Terphenyl	*2.29*		mg/Kg wet	3.33		68.8	40-140			
Matrix Spike (B138990-MS1)	**Source: 15L1385-03**			Prepared & Analyzed: 01/04/16						
Diesel Range Organics	46.2	8.8	mg/Kg dry	35.3	3.76	120	40-140			
Surrogate: o-Terphenyl	*2.49*		mg/Kg dry	3.53		70.5	40-140			
Matrix Spike Dup (B138990-MSD1)	**Source: 15L1385-03**			Prepared: 01/04/16 Analyzed: 01/05/16						
Diesel Range Organics	34.2	8.8	mg/Kg dry	35.3	3.76	86.1	40-140	29.8	30	
Surrogate: o-Terphenyl	*2.28*		mg/Kg dry	3.53		64.5	40-140			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B138781 - SW-846 7471										
Blank (B138781-BLK1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	ND	0.025	mg/Kg wet							
LCS (B138781-BS1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	8.32	0.81	mg/Kg wet	7.10		117	73.7-126.3			
LCS Dup (B138781-BSD1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	7.86	0.81	mg/Kg wet	7.10		111	73.7-126.3	5.74	30	
Duplicate (B138781-DUP1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	ND	0.026	mg/Kg dry		ND			NC	35	
Matrix Spike (B138781-MS1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	0.229	0.026	mg/Kg dry	0.176	0.0154	122	75-125			
Matrix Spike Dup (B138781-MSD1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15						
Mercury	0.234	0.026	mg/Kg dry	0.175	0.0154	125	75-125	2.05	35	
Batch B138785 - SW-846 3050B										
Blank (B138785-BLK1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Selenium	ND	5.0	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
LCS (B138785-BS1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Arsenic	101	5.1	mg/Kg wet	98.5		103	77.8-122.1			
Barium	321	5.1	mg/Kg wet	308		104	82-117.4			
Cadmium	152	0.51	mg/Kg wet	146		104	81.9-118.2			
Chromium	193	1.0	mg/Kg wet	182		106	78.7-120.6			
Lead	133	1.5	mg/Kg wet	130		102	82.4-117.8			
Selenium	154	10	mg/Kg wet	154		100	77.1-122.3			
Silver	41.2	1.0	mg/Kg wet	40.9		101	74.3-125.4			
LCS Dup (B138785-BSD1)				Prepared: 12/30/15 Analyzed: 12/31/15						
Arsenic	101	5.0	mg/Kg wet	98.5		102	77.8-122.1	0.409	30	
Barium	309	5.0	mg/Kg wet	308		100	82-117.4	3.90	30	
Cadmium	156	0.50	mg/Kg wet	146		107	81.9-118.2	2.34	30	
Chromium	193	1.0	mg/Kg wet	182		106	78.7-120.6	0.158	30	
Lead	131	1.5	mg/Kg wet	130		101	82.4-117.8	1.24	30	
Selenium	155	10	mg/Kg wet	154		101	77.1-122.3	0.416	30	
Silver	41.3	1.0	mg/Kg wet	40.9		101	74.3-125.4	0.426	30	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B138785 - SW-846 3050B											
Duplicate (B138785-DUP1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15							
Arsenic	ND	2.6	mg/Kg dry		ND				NC	35	
Barium	6.30	2.6	mg/Kg dry		7.43				16.4	35	
Cadmium	ND	0.26	mg/Kg dry		ND				NC	35	
Chromium	21.2	0.53	mg/Kg dry		18.6				13.0	35	
Lead	7.69	0.79	mg/Kg dry		6.82				12.0	35	
Selenium	ND	5.3	mg/Kg dry		ND				NC	35	
Silver	ND	0.53	mg/Kg dry		ND				NC	35	
MRL Check (B138785-MRL1)				Prepared: 12/30/15 Analyzed: 12/31/15							
Lead	0.753	0.74	mg/Kg wet	0.736		102		80-120			
Matrix Spike (B138785-MS1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15							
Arsenic	26.2	2.6	mg/Kg dry	26.4	ND	99.2		75-125			
Barium	33.0	2.6	mg/Kg dry	26.4	7.43	96.8		75-125			
Cadmium	27.3	0.26	mg/Kg dry	26.4	ND	103		75-125			
Chromium	59.3	0.53	mg/Kg dry	26.4	18.6	**154**	*	75-125			MS-22
Lead	32.3	0.79	mg/Kg dry	26.4	6.82	96.4		75-125			
Selenium	36.5	5.3	mg/Kg dry	26.4	ND	**138**	*	75-125			MS-22
Silver	26.8	0.53	mg/Kg dry	26.4	ND	101		75-125			
Matrix Spike Dup (B138785-MSD1)		**Source: 15L1385-03**		Prepared: 12/30/15 Analyzed: 12/31/15							
Arsenic	24.8	2.6	mg/Kg dry	26.4	ND	93.8		75-125	5.58	35	
Barium	33.9	2.6	mg/Kg dry	26.4	7.43	100		75-125	2.65	35	
Cadmium	27.3	0.26	mg/Kg dry	26.4	ND	103		75-125	0.168	35	
Chromium	48.6	0.53	mg/Kg dry	26.4	18.6	113		75-125	19.9	35	
Lead	32.6	0.79	mg/Kg dry	26.4	6.82	97.7		75-125	1.03	35	
Selenium	29.8	5.3	mg/Kg dry	26.4	ND	113		75-125	20.1	35	
Silver	26.8	0.53	mg/Kg dry	26.4	ND	101		75-125	0.155	35	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B139097 - % Solids										
Duplicate (B139097-DUP3)		**Source: 15L1385-03**		Prepared: 01/05/16 Analyzed: 01/06/16						
% Solids	93.2		% Wt		94.3			1.17	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B138991-BS1

Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1):

Instrument ID (2):

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.16	
	2	0.00	0.00	0.00	0.15	5
Aroclor-1260	1	0.00	0.00	0.00	0.16	
	2	0.00	0.00	0.00	0.16	1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B138991-BSD1 Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.17	0
Aroclor-1260	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.17	1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B138991-MS1 Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.19	1
Aroclor-1260	1	0.00	0.00	0.00	0.18	
	2	0.00	0.00	0.00	0.19	4

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B138991-MSD1 Date(s) Analyzed: 01/05/2016 01/05/2016

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.16	7
Aroclor-1260	1	0.00	0.00	0.00	0.17	
	2	0.00	0.00	0.00	0.18	6

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
DL	Method Detection Limit
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010C in Soil	
Arsenic	CT,NH,NY,ME,NC,VA
Barium	CT,NH,NY,ME,NC,VA
Cadmium	CT,NH,NY,ME,NC,VA
Chromium	CT,NH,NY,ME,NC,VA
Lead	CT,NH,NY,AIHA,ME,NC,VA
Selenium	CT,NH,NY,ME,NC,VA
Silver	CT,NH,NY,ME,NC,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8015C in Soil	
Diesel Range Organics	NY,VA,NH
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NY,NC,VA
Aroclor-1262 [2C]	NY,NC,VA
Aroclor-1268	NY,NC,VA
Aroclor-1268 [2C]	NY,NC,VA

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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2017
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2016
NC	North Carolina Div. of Water Quality	652	12/31/2016
NJ	New Jersey DEP	MA007 NELAP	06/30/2016
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2016
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2016

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
Fax: 413-525-6405
Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

15L1385

Rev 04.05.12

Company Name: TRC
Address: 670 N. Commercial St
Manchester NH 03101
Attention: Jamie Stapleton
Project Location: 45 E. Randolph Rd Chelsea, VT
Sampled By: Jamie Stapleton/Bryan MacDonald

Project Proposal Provided? (for billing purposes)
○ yes _____ proposal date

Telephone: 603-325-5480
Project # 244640
Client PO# 90720

DATA DELIVERY (check all that apply)
○ FAX ☒ EMAIL ○ WEBSITE
Fax #
Email: jstapleton@trcsolutions.com
Format: ☒ PDF ○ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code	TPH-DRO	PCB	RCRA 8 Metals									
							# of Containers	8	1	1									
							** Preservation	I	I	I									
							***Container Code	A	A	A									
01	SB-1 (0-0.5')	12/29/15	1210	X		S	L	X	X	X									
02	SB-2 (0-0.5')		1235	X			L	X	X	X									
03	SB-3 (0-0.5')		1300	X			L	X	X	X									
04	SB-4 (0-0.5')		1325	X			L	X	X	X									
05	SB-5 (0-0.5')		1350	X			L	X	X	X									
06	SB-6 (0-0.5')		1355		X		M	X	X										
07	SB-7 (0-0.5')		1400		X		M	X	X										

ANALYSIS REQUESTED

Comments: MS for RCRA 8 Metals on SB-3
Extra jar provided

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) Jamie Stapleton 12/29	Date/Time: 1330	
Received by: (signature) 12/29	Date/Time: 1:35	
Relinquished by: (signature) 12/29	Date/Time: 1:50	
Received by: (signature) 4.6 12/29/15	Date/Time: 1750	

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other 5
RUSH †
☐ †24-Hr ☐ †48-Hr
☐ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: VT SGVs

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # _____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other _____

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other _____

Dissolved Metals
○ Field Filtered
○ Lab to Filter

Table of Contents

39 Spruce St.
East Longmeadow, MA 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

con-test ANALYTICAL LABORATORY

Sample Receipt Checklist

CLIENT NAME: TRC **RECEIVED BY:** JAL **DATE:** 12/29/15

1) **Was the chain(s) of custody relinquished and signed?** Yes No No CoC Included
2) **Does the chain agree with the samples?** Yes No
   If not, explain:
3) **Are all the samples in good condition?** Yes No
   If not, explain:
4) **How were the samples received:**

On Ice [X] Direct from Sampling [ ] Ambient [ ] In Cooler(s) [X]

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.6

5) **Are there Dissolved samples for the lab to filter?** Yes No
   Who was notified _____ Date _____ Time _____
6) **Are there any RUSH or SHORT HDLDING TIME samples?** Yes No
   Who was notified _____ Date _____ Time _____
7) **Location where samples are stored:** 14

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No N/A _____
9) **Do all samples have the proper Base pH:** Yes No N/A _____
10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	3
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below		Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____
Bisulfate _____ # DI Water _____
Thiosulfate _____ Unpreserved

Time and Date Frozen:

Doc# 277
Rev. 4 August 2013

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

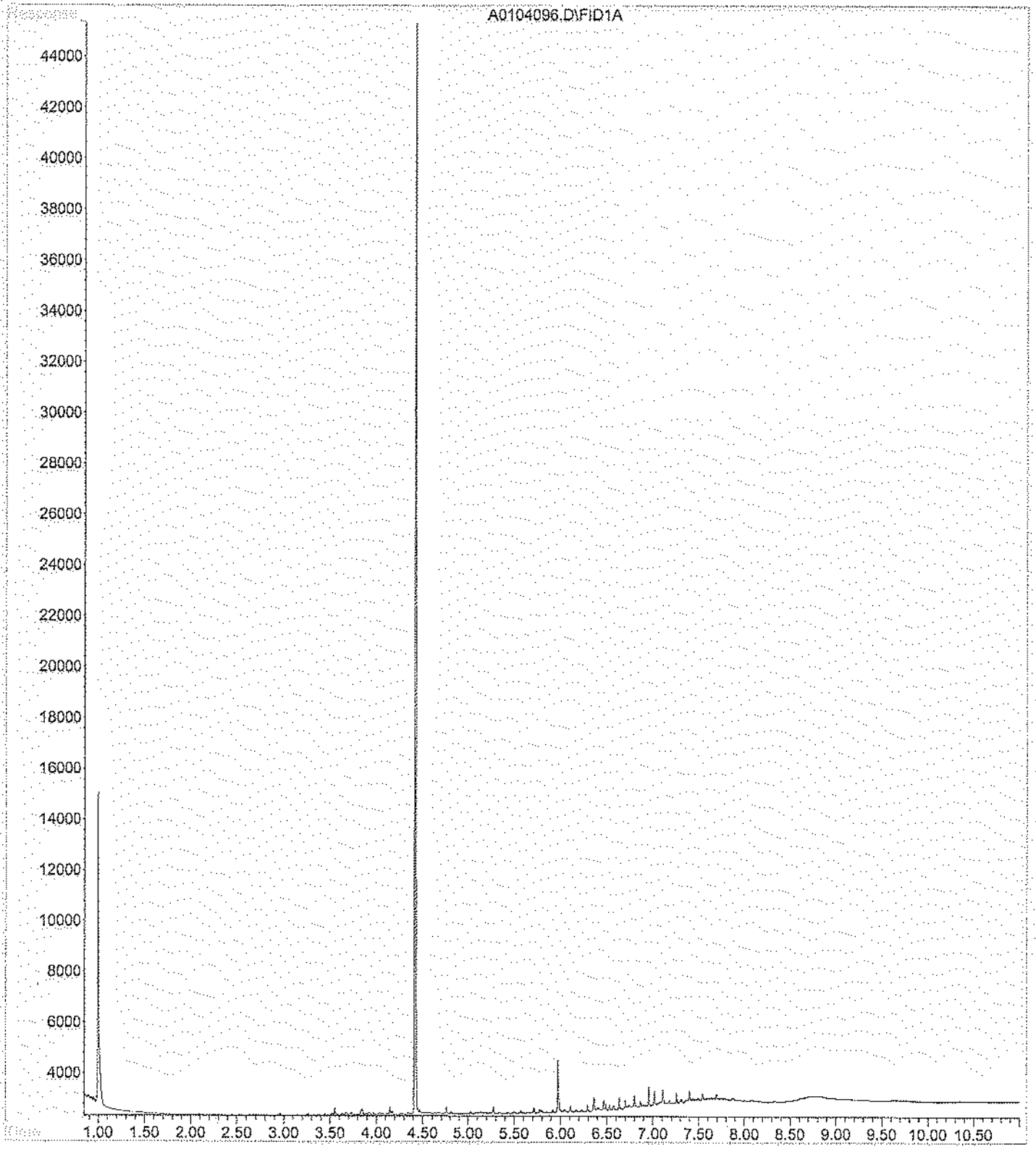
Any False statement will be brought to the attention of Client

Question	Answer (True/False) T/F/NA	Comment
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requsted analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

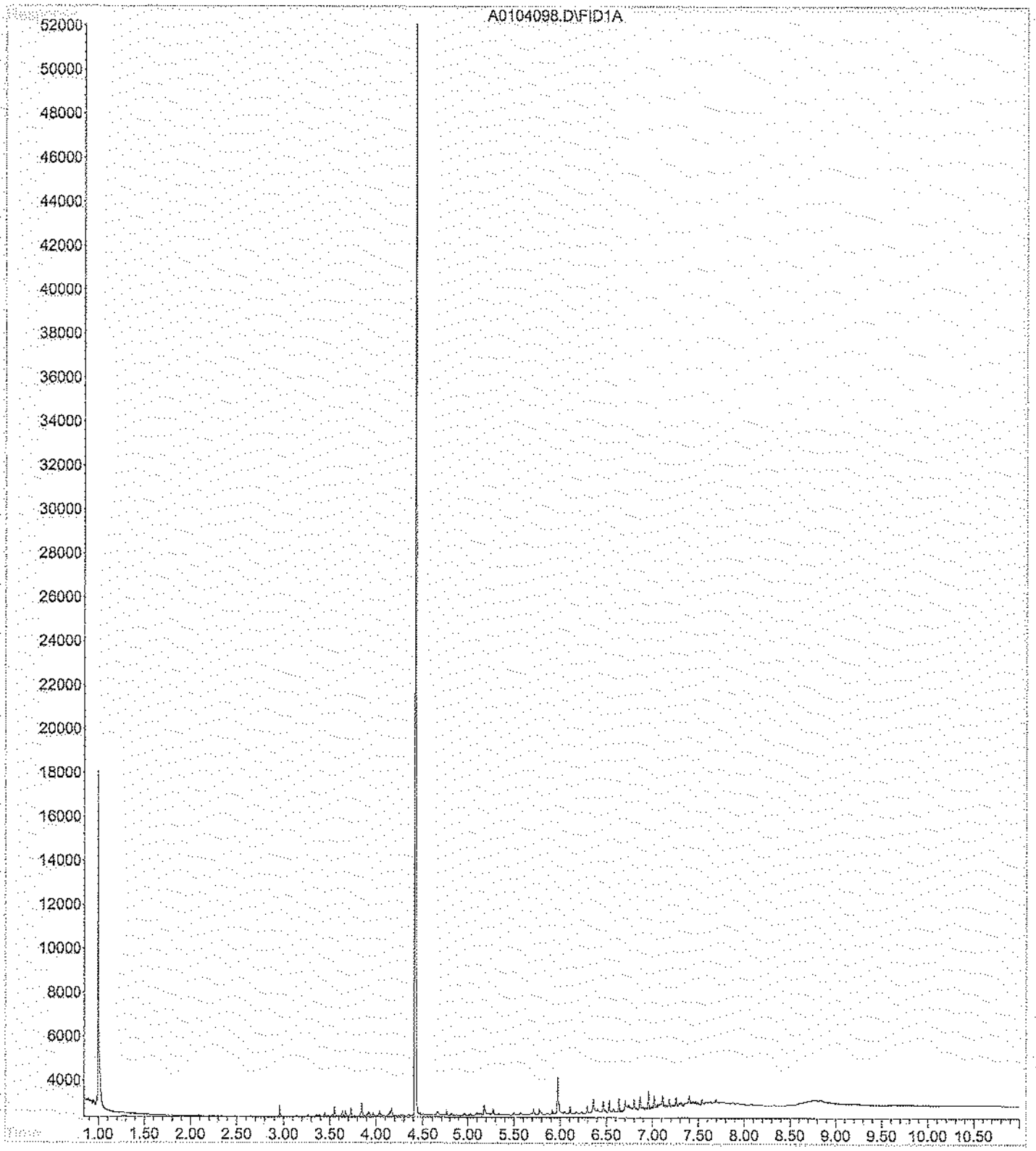
Who notified of False statements? **Date/Time:**

Doc #277 Rev. 4 August 2013 **Log-In Technician Initials:** JDL **Date/Time:** 12/29/15 1750

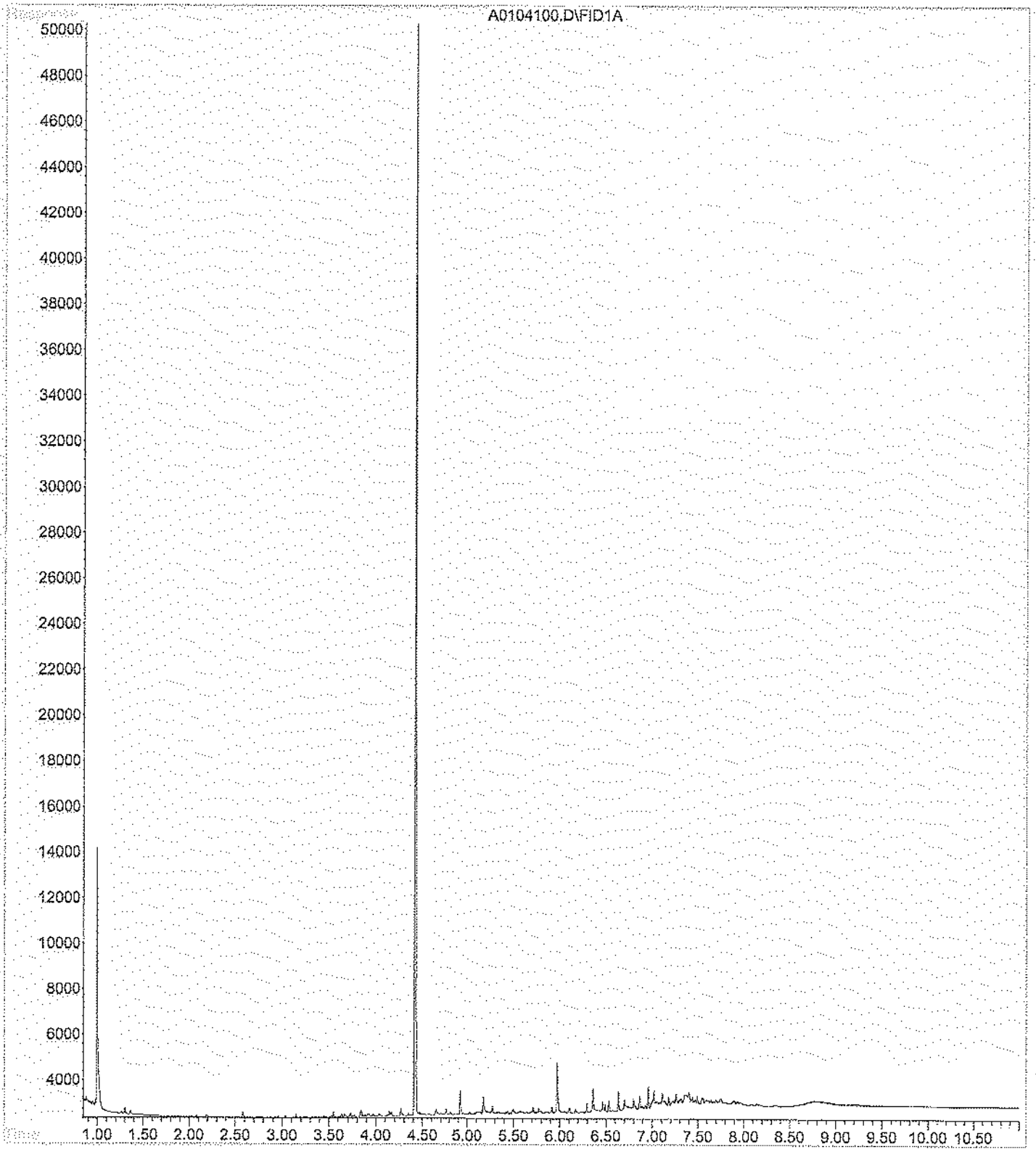
File : D:\HPCHEM\1\DATA\A010416\A0104096.D
Operator : SCS
Acquired : 4 Jan 2016 9:53 pm using AcqMethod ETPH06.M
Instrument : 5890DFID
Sample Name: 15L1385-01
Misc Info :
Vial Number: 26



File : D:\HPCHEM\1\DATA\A010416\A0104098.D
Operator : SCS
Acquired : 4 Jan 2016 10:10 pm using AcqMethod ETPH06.M
Instrument : 5890DFID
Sample Name: 15L1385-02
Misc Info :
Vial Number: 28



File : D:\HPCHEM\1\DATA\A010416\A0104100.D
Operator : SCS
Acquired : 4 Jan 2016 10:28 pm using AcqMethod ETPH06.M
Instrument : 5890DFID
Sample Name: 15L1385-03
Misc Info :
Vial Number: 30



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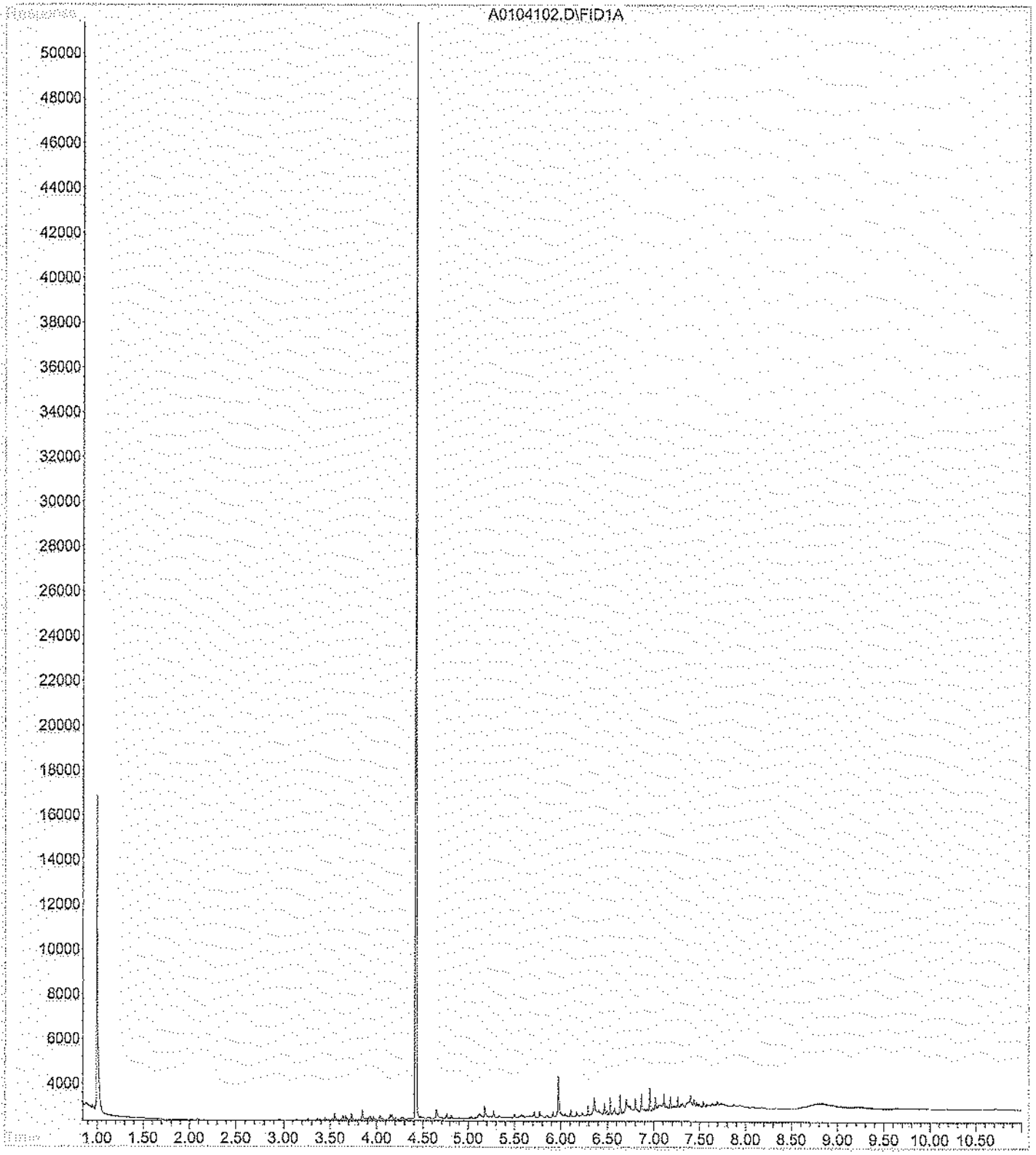
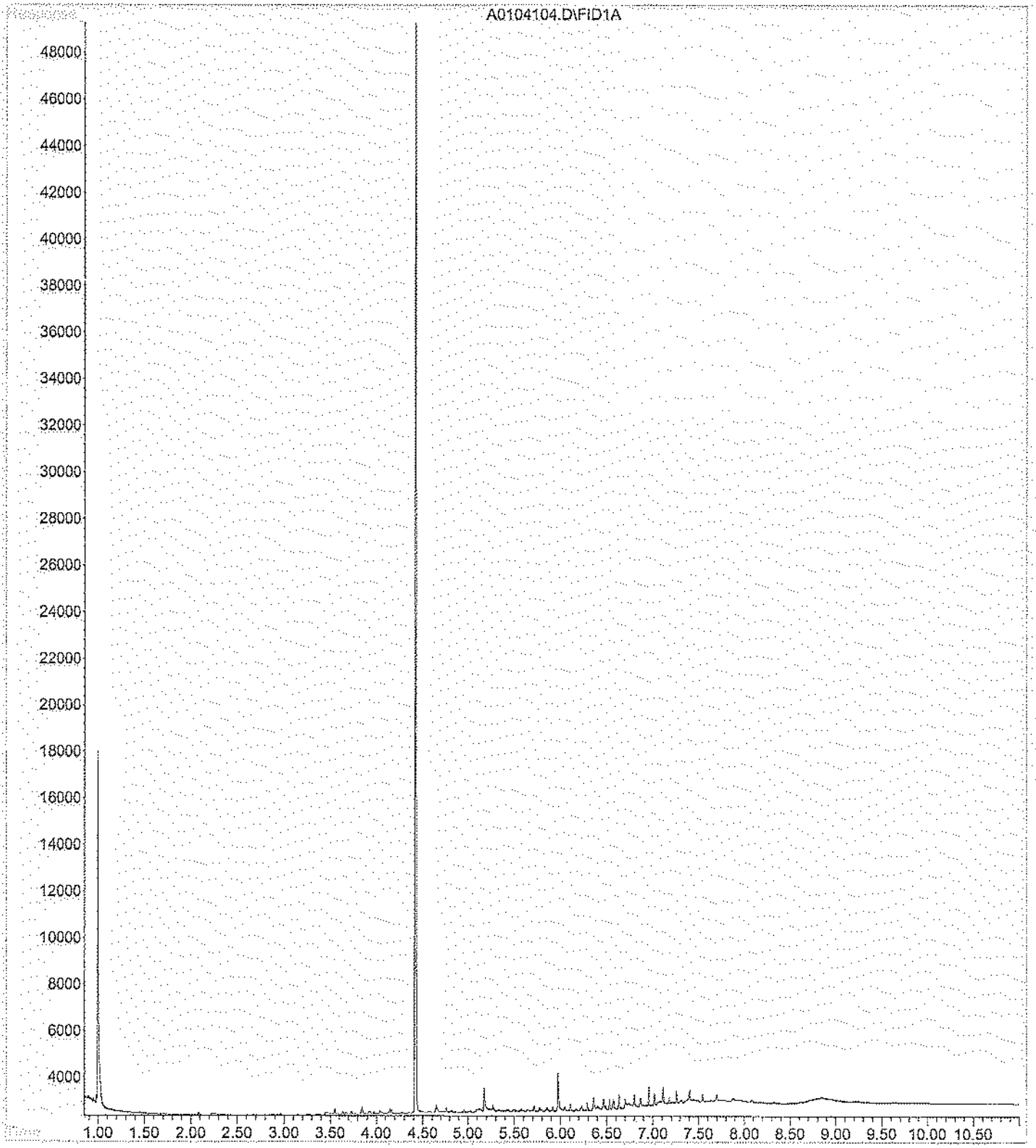
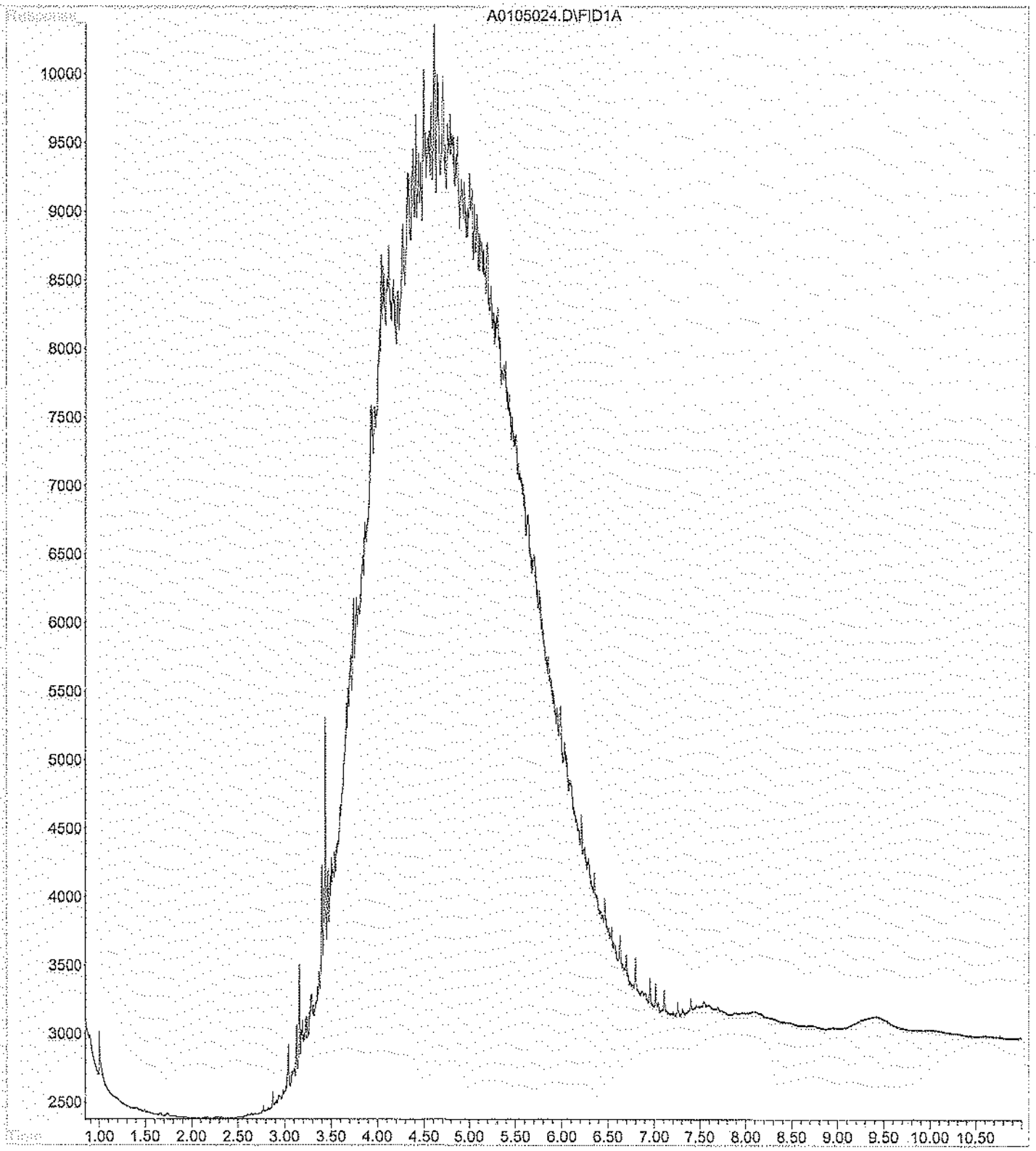
File        : D:\HPCHEM\1\DATA\A010416\A0104102.D
Operator    : SCS
Acquired    :  4 Jan 2016  10:46 pm using AcqMethod ETPH06.M
Instrument  :   5890DFID
Sample Name: 15L1385-04
Misc Info   :
Vial Number: 32
```



```
File        : D:\HPCHEM\1\DATA\A010416\A0104104.D
Operator    : SCS
Acquired    :  4 Jan 2016  11:03 pm using AcqMethod ETPH06.M
Instrument  :   5890DFID
Sample Name: 15L1385-05
Misc Info   :
Vial Number: 34
```



```
File        : D:\HPCHEM\1\DATA\A010516\A0105024.D
Operator    : SCS
Acquired    :  5 Jan 2016  12:01 pm using AcqMethod ETPH06.M
Instrument  :   5890DFID
Sample Name: 15L1385-06@100X
Misc Info   :
Vial Number: 20
```



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File        : D:\HPCHEM\1\DATA\A010516\A0105026.D
Operator    : SCS
Acquired    :  5 Jan 2016  12:19 pm using AcqMethod ETPH06.M
Instrument  :   5890DFID
Sample Name: 15L1385-07@100X
Misc Info   :
Vial Number: 22
```

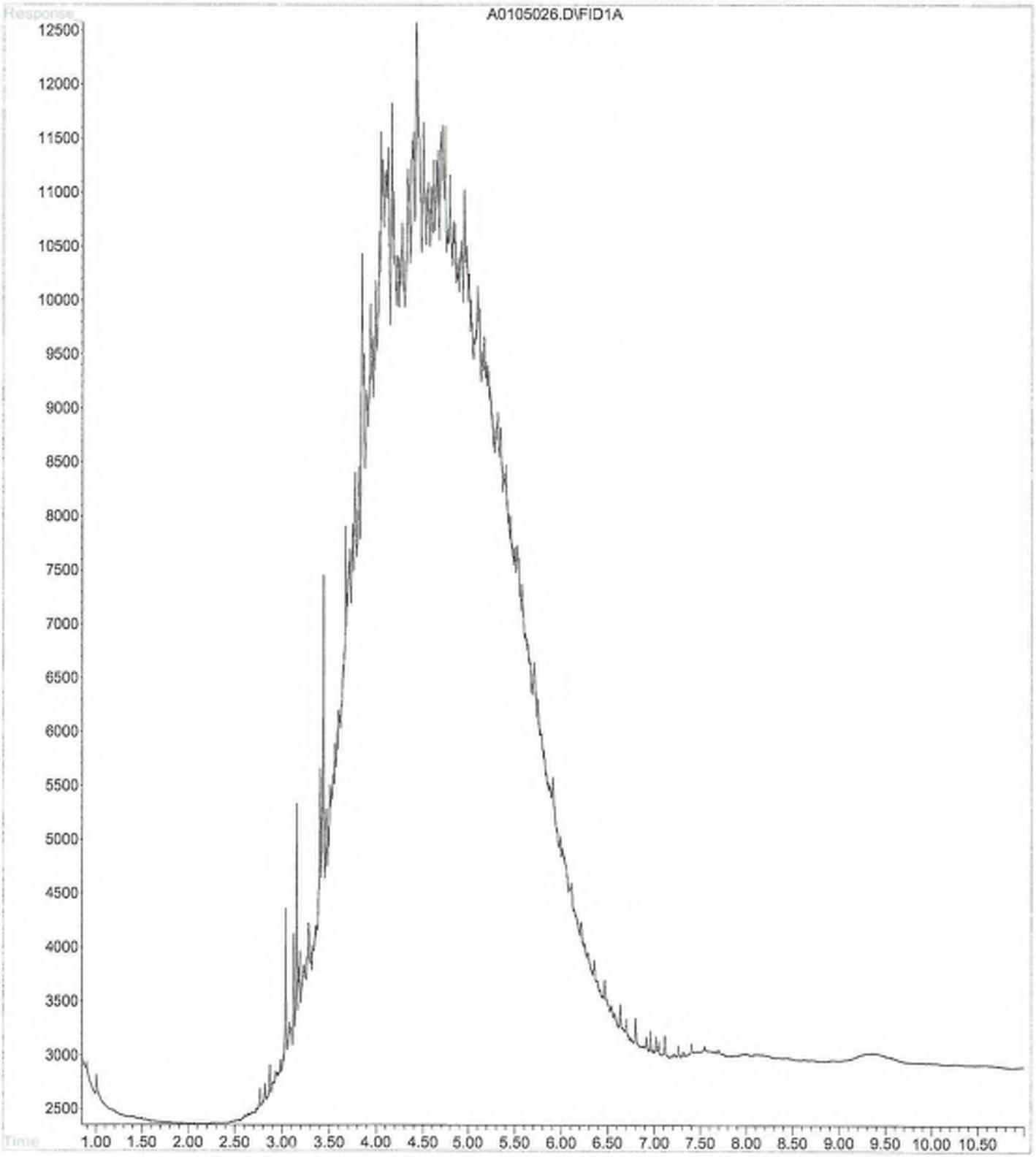

Attachment 5

Control Building Sampling and Analysis Report

Clay Point Associates, Inc.
www.claypointassociates.com

January 11, 2016

Mr. Jamie Stapleton
Project Manager/Senior Geologist
TRC Environmental Corporation
670 N. Commercial Street, Suite 203
Manchester, New Hampshire, 03101

Re: Summary of TCLP Testing (Lead)
Control Building, VELCO Substation, 45 East Randolph Road, Chelsea, Vermont
CPAI Project #13033

Dear Mr. Stapleton:

The following correspondence summarizes Toxicity Characteristic Leaching Procedure (TCLP) sample collection activities performed by Clay Point Associates, Inc. (CPAI) on December 28, 2015. On this date, CPAI collected samples of representative building materials comprising the future waste stream to be generated during planned demolition of the Control Building at the VELCO Substation located at 45 East Randolph Road, Chelsea, Vermont.

On December 28, 2015, CPAI collected thirty (30) aliquots from building materials within the planned demolition waste stream. The aliquots were composited into one (1) sample that was submitted to a Vermont certified Lead Analytical Entity for analysis by the Toxicity Characteristic Leaching Procedure (SW846, 1311/7420).

State of Vermont Hazardous Waste Regulations list a limit for lead of 5.0 milligrams per liter (mg/L) (ppm). Materials that are subject to a TCLP test and exceed this limit must be considered as hazardous waste.

The lead concentration of the sample collected on December 28, 2015 was reported to be less than the reporting limit of 0.40 mg/L. This concentration of lead is below the limit of 5.0 mg/L, therefore, all waste generated during demolition can be considered as construction and demolition waste.

The TCLP Sample Collection/Analysis Data (Table 1), the analytical service analysis report and CPAI/analytical service certification documents are attached for your review.

P.O. BOX 1254 • WILLISTON, VERMONT • 05495-1254 • 802-879-2600

Thank you for the opportunity to service your professional environmental management needs. If you have any questions concerning this correspondence, please contact us at (802) 879-2600.

Sincerely,
CLAY POINT ASSOCIATES, INC.

Kari A. Paritz
Environmental Specialist

Clay Point Associates, Inc.
www.claypointassociates.com

Table 1
TCLP (LEAD) Sample Collection/Analysis Data

CPAI Project #	13033
Client:	TRC Environmental Corporation
Location:	VELCO Substation Control Building 45 East Randolph Road Chelsea, Vermont

CPAI Sample #	Laboratory I.D.#	Date Sampled	Location	Concentration (Lead)
12281513033 -01-TCLP	0001	12/28/15	VELCO Substation, Control Building, 45 East Randolph Road Chelsea, Vermont	< 0.40 mg/L

Thirty (30) aliquots including: composition board, fiberglass insulation, foam insulation board, metal casing, plywood, concrete, metal flashing, caulking material, metal siding, metal roof (painted).

State of Vermont Regulations list a limit for lead of 5.0 milligrams per liter (ppm). Materials which are subject to a TCLP test and exceed this limit must be considered as lead hazardous waste

P.O. BOX 1254 • WILLISTON, VERMONT • 05495-1254 • 802-879-2600

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201514655
CustomerID:	CLAY53
CustomerPO:	
ProjectID:	

Attn: **Kari Paritz**
Clay Point Asaociates, Inc.
P.O. Box 1254
Williaton, VT 05495

Phone:	(802) 879-2600
Fax:	
Received:	12/30/15 9:35 AM
Collected:	12/28/2015

Project: 13033

Test Report: Toxicity Characteristic Leaching Procedure (SW846, 1311/7420)

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Lead Concentration*
12281513033-01-TCLP	*201514655-0001*	12/28/2015	1/6/2016	<0.40 mg/L
	Site: TCLP			

Bill Chamberlin, Laboratory Director
or other approved signatory
or other approved signatory

The test results contained within this report meet the requirements of NELAC unless otherwise noted. This report relates only to those items tested. Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit.
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

Initial report from 01/07/2016 10:41:26

LEAD CONSULTING ENTITY

CLAY POINT ASSOCIATES INC.
P.O. BOX 1254
WILLISTON, VT 05495-1254

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: LC200999 EXPIRES: Wednesday, March 23, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME.
THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE MUST BE ON SITE AT ALL TIMES.

LEAD INSPECTOR/RISK ASSESSOR

KARI A. PARITZ
86 LAWRENCE FARM ROAD
MORRISTOWN, VT 05661

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: RA935705

EXPIRES: Thursday, January 21, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME. THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE AND PHOTO ID CARD MUST BE ON SITE AT ALL TIMES.

LEAD LABORATORY

EMSL ANALYTICAL INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077

Vermont Department of Health
Environmental Health
P.O. Box 70 - Drawer 30
Burlington, VT 05402-0070

LICENSE: LL379642 EXPIRES: Wednesday, July 20, 2016

CERTIFICATE OF LICENSE
VERMONT LEAD REGULATORY PROGRAM

THIS CERTIFICATE SHALL REMAIN IN FORCE UNTIL THE EXPIRATION DATE UNLESS REVOKED OR VOIDED BEFORE THAT TIME.
THIS CERTIFICATE IS NOT TRANSFERABLE AND IS VALID ONLY FOR THE ABOVE PARTY.

COPY OF THIS CERTIFICATE MUST BE ON SITE AT ALL TIMES.

ANALYSIS OF SOIL, DUST AND PAINT CHIPS