

Phone (508) 653-8007
Fax (508) 653-8194



33 West Central Street
Natick, MA 01760-4503

November 7, 2018

Ms. Vanessa Calabrese
Chair, Hopedale Conservation Commission
78 Hopedale Street
P.O. Box 7
Hopedale, MA 01747

RE: 24 Hopedale Street Baseline Sampling Results
Release Tracking Number (RTN) #2-16138
MassDEP File Number #CE 187-0240

Dear Ms. Calabrese;

IRWIN Engineers, Inc. is pleased to present baseline sampling results above referenced property (the Site).

In accordance with the Order of Conditions issued on September 26, 2018 for MassDEP File Number #CE 187-0240 we have performed baseline sampling from surface water, groundwater, and sediment within the Mill River and from a downgradient monitoring well, MW-E. The attached Site Plan shows monitoring well locations. After collecting baseline samples we performed remedial additive injections at the Site on October 30, 2018.

Baseline Sampling Results

Other than two monitoring wells within the treatment area (DW-A and MW-C), no sampling points had contaminant concentrations above applicable standards. No contaminants were detected in surface water, sediment, or groundwater within the Mill River.

The tables below summarize baseline groundwater, sediment, and surface water sampling results from the Site.

Groundwater within Treatment Area:

	Sample Point			MA GW-1 Groundwater Standard
	DW-A	MW-C	DW-C	
Sample Date	7/27/2018	7/27/2018	7/27/2018	
Trichloroethylene (µg/L)	< 1.0	10	< 1.0	5
Vinyl Chloride (µg/L)	2.7	12	< 1.0	2

Groundwater Upgradient of Treatment Area:

	Sample Point		MA GW-1 Groundwater Standard
	MW-B	MW-D	
Sample Date	7/27/2018	7/27/2018	
Trichloroethylene (µg/L)	< 1.0	< 1.0	5
Vinyl Chloride (µg/L)	< 1.0	< 1.0	2

Groundwater Downgradient of Treatment Area:

	Sample Point			MA GW-1 Groundwater Standard
	MW-A	MW-E	PZ-1*	
Sample Date	7/27/2018	10/29/2018	10/29/2018	
Trichloroethylene (µg/L)	< 1.0	< 1.0	< 1.0	5
Vinyl Chloride (µg/L)	< 1.0	1.1	< 1.0	2

*PZ-1 is a piezometer installed in the Mill River for groundwater sampling (See Site Plan).

Sediment in Mill River Downgradient of Treatment Area:

	MR-SED	MA S-1/GW-1 Soil Standard*
Sample Date	10/29/2018	
Trichloroethylene (µg/kg)	< 8.5	300
Vinyl Chloride (µg/kg)	< 8.5	900

*MassDEP has not published Sediment Screening Criteria for Trichloroethylene or Vinyl Chloride. The S-1/GW-1 Soil Standard is listed above as a relevant, but not applicable, standard.

Surface Water in Mill River Downgradient of Treatment Area:

	MR-SW	EPA National Recommended Water Quality Criteria
Sample Date	10/29/2018	
Trichloroethylene (µg/L)	< 1.0	2.5
Vinyl Chloride (µg/L)	< 1.0	2.0

Remedial Additive Injections

IRWIN visited the Site on October 30th to conduct remedial additive injections in accordance with the Order of Conditions issued on September 26th. A total of 220 gallons of CL-Out® and 200 pounds of dextrose sugar were injected along with 220 gallons of water. Injections were made using a track-mounted Geoprobe at 8 points as indicated on the attached Site Plan. All injection points were within the approved Limit of Work although some injection points were relocated slightly from those originally projected in the Notice of Intent submitted on August 27th based upon subsurface conditions encountered.

Planned Future Work at the Site

IRWIN will return to the Site in January 2019 to perform our first quarterly monitoring event following remedial additive injections in October 2018. We will notify you of the date for that work once it has been scheduled.

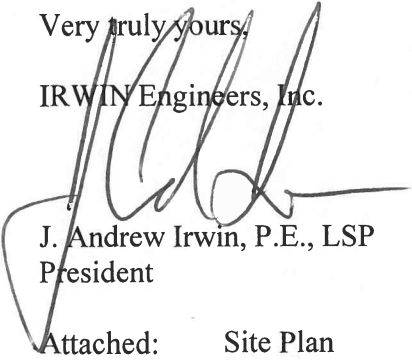
Upcoming Massachusetts Contingency Plan (MCP) Submittals

IRWIN will be preparing a Release Abatement Measure (RAM) Status Report to be submitted to MassDEP by December 8, 2018. You will be provided with a copy of that report when it is prepared.

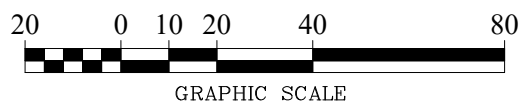
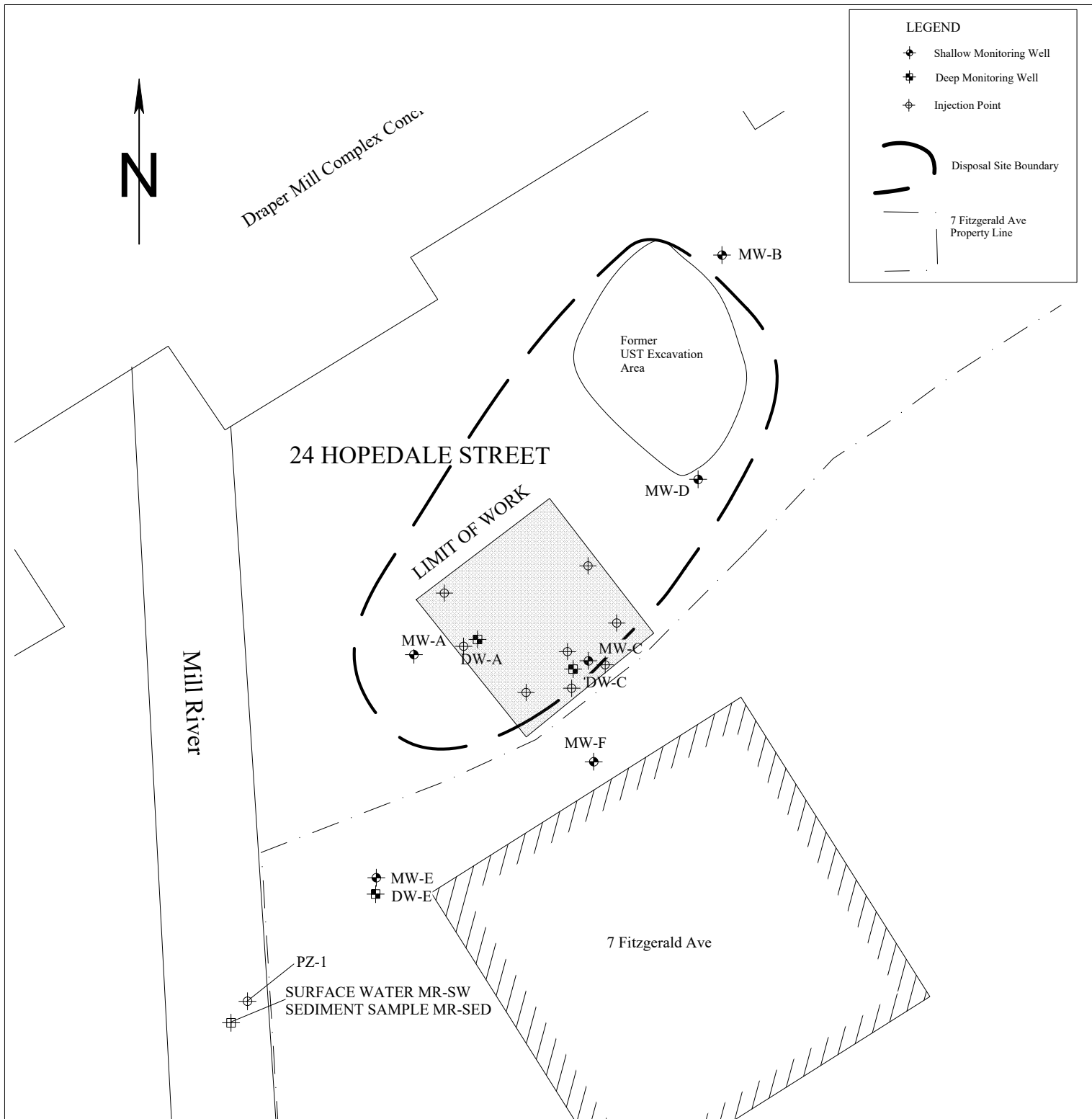
If you have any questions regarding the contents of this letter please contact us.

Very truly yours,

IRWIN Engineers, Inc.


J. Andrew Irwin, P.E., LSP
President

Attached: Site Plan
 Baseline Laboratory Report #SC49040
 Baseline Laboratory Report #SC51532



Notes:
 -20 gallons of CL-Out injected at each injection point
 -Followed by 20 gallons of water

 33 West Central Street Natick, MA 01760 (508) 653-8007	CLIENT Hopedale Properties LLC 100 Central St, PO Box 0646 Worcester, MA 01613			
	TITLE FIGURE #1 SITE PLAN RTN #2-16138			
	DRAWING BY: MTT	SIZE A	CAGE CODE	DWG NO 572-04 D001 P05.TCW
	CHECKED BY: MTT	SCALE GRAPHIC	DATE 2018/11/07	REV -
APPROVED BY: JAI			SHEET 1 / 1	

Laboratory Report SC49040

Irwin Engineers, Inc.
33 West Central Street
Natick, MA 01760
Attn: Matt Tate

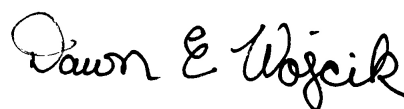
Project: 24 Hopedale - Hopedale, MA
Project #: 572-04F/001

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393



Authorized by:
Dawn Wojcik
Laboratory Director



Eurofins Spectrum Analytical holds primary certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 33 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

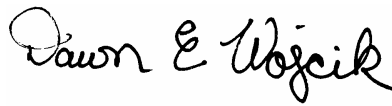
Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC49040
Project: 24 Hopedale - Hopedale, MA
Project Number: 572-04F/001

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC49040-01	MW-A	Ground Water	27-Jul-18 09:15	27-Jul-18 16:35
SC49040-02	DW-A	Ground Water	27-Jul-18 09:25	27-Jul-18 16:35
SC49040-03	MW-B	Ground Water	27-Jul-18 09:35	27-Jul-18 16:35
SC49040-04	MW-C	Ground Water	27-Jul-18 09:45	27-Jul-18 16:35
SC49040-05	DW-C	Ground Water	27-Jul-18 09:50	27-Jul-18 16:35
SC49040-06	MW-D	Ground Water	27-Jul-18 10:00	27-Jul-18 16:35
SC49040-07	TB-1	Trip Blank	27-Jul-18 00:00	27-Jul-18 16:35

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.			Project #: 572-04F/001		
Project Location: 24 Hopedale - Hopedale, MA			RTN:		
This form provides certifications for the following data set:			SC49040-01 through SC49040-07		
Matrices: Ground Water Trip Blank					
CAM Protocol					
✓ 8260 VOC CAM II A	7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B
Affirmative responses to questions A through F are required for Presumptive Certainty's status					
A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?				✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?				✓ Yes No
Responses to questions G, H and I below are required for Presumptive Certainty's status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				✓ Yes No
Data User Note: Data that achieve Presumptive Certainty's status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056 (2)(k) and WSC-07-350.					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?				✓ Yes No
All negative responses are addressed in a case narrative on the cover page of this report.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
 Dawn E. Wojcik Laboratory Director Date: 8/6/2018					

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 3.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

Subcontract Lab Case Narrative:

8260 Analysis:

1,2-Dibromoethane doesn't meet GW-1 criteria, this compound is analyzed by GC/FID to achieve this criteria.

Phoenix reporting levels may exceed those referenced in the CAM protocol. Please refer to criteria sheet for comparisons to requested MCP standards.

8260 Volatile Organics:

The following compounds from the MCP 8260 analyte list were not performed: TAME, diethyl ether, diisopropyl ether, 1,4 dioxane, and ETBE. 1,2-Dibromoethane doesn't meet GW-1 criteria, this compound is analyzed by GC/FID to achieve this criteria.

VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument:

CB01447, CB01448, CB01449, CB01450, CB01451, CB01452, CB01453

CHEM17 08/01/18-1 Michael Hahn, Chemist 08/01/18

Initial Calibration Verification (CHEM17/VT-S0731):

96% of target compounds met criteria.

The following compounds had %RSDs >20%: 1,2-Dibromo-3-chloropropane 22% (20%), Acetone 28% (20%), Bromoform 23% (20%)

The following compounds did not meet recommended response factors: 1,2-Dibromo-3-chloropropane 0.032 (0.05), 2-Hexanone 0.063 (0.1), 4-Methyl-2-pentanone 0.096 (0.1), Acetone 0.050 (0.1), Bromoform 0.075 (0.1), Methyl ethyl ketone 0.066 (0.1), Tetrahydrofuran (THF) 0.046 (0.05)

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM17/0801_15-VT-S0731) (MCP Compliance):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

96% of target compounds met criteria.

The following compounds did not meet % deviation criteria: Methyl ethyl ketone 21%H (20%)

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: 1,2-Dibromo-3-chloropropane 0.038 (0.05), 2-Hexanone 0.072 (0.1), Acetone 0.047 (0.1), Bromoform 0.081 (0.1), Methyl ethyl ketone 0.080 (0.1), Tetrahydrofuran (THF) 0.046 (0.05)

The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

CB01447, CB01448, CB01449, CB01450, CB01451, CB01452, CB01453

Batch 441490 (CB01453)

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.

I attest under the pains and penalties of perjury 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.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW8260C

Laboratory Control Samples:

CB01453-LCS

Laboratory Control Samples:CB01453-LCS

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

% 1,2-dichlorobenzene-d4
% Bromofluorobenzene
% Dibromofluoromethane
% Toluene-d8
1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
2,2-Dichloropropane
2-Chlorotoluene
2-Hexanone
2-Isopropyltoluene
4-Chlorotoluene
4-Methyl-2-pentanone
Acetone
Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methyl ethyl ketone
Methyl t-butyl ether (MTBE)
Methylene chloride

SW8260C

Laboratory Control Samples:

CB01453-LCS

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Naphthalene
n-Butylbenzene
n-Propylbenzene
o-Xylene
p-Isopropyltoluene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Tetrahydrofuran (THF)
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-dichloro-2-butene
Trichloroethene
Trichlorofluoromethane
Trichlorotrifluoroethane
Vinyl chloride

CB01453-BLK

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

% 1,2-dichlorobenzene-d4
% Bromofluorobenzene
% Dibromofluoromethane
% Toluene-d8
1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
2,2-Dichloropropane
2-Chlorotoluene
2-Hexanone
2-Isopropyltoluene
4-Chlorotoluene
4-Methyl-2-pentanone
Acetone
Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methyl ethyl ketone
Methyl t-butyl ether (MTBE)
Methylene chloride
Naphthalene
n-Butylbenzene

SW8260C

CB01453-BLK

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

n-Propylbenzene
o-Xylene
p-Isopropyltoluene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Tetrahydrofuran (THF)
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-dichloro-2-butene
Trichloroethene
Trichlorofluoromethane
Trichlorotrifluoroethane
Vinyl chloride

CB01453-LCSD

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

% 1,2-dichlorobenzene-d4
% Bromofluorobenzene
% Dibromofluoromethane
% Toluene-d8
1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
2,2-Dichloropropane
2-Chlorotoluene
2-Hexanone
2-Isopropyltoluene
4-Chlorotoluene
4-Methyl-2-pentanone
Acetone
Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methyl ethyl ketone
Methyl t-butyl ether (MTBE)
Methylene chloride
Naphthalene
n-Butylbenzene

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

n-Propylbenzene
o-Xylene
p-Isopropyltoluene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Tetrahydrofuran (THF)
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-dichloro-2-butene
Trichloroethene
Trichlorofluoromethane
Trichlorotrifluoroethane
Vinyl chloride

Sample Acceptance Check Form

Client: Irwin Engineers, Inc.
Project: 24 Hopedale - Hopedale, MA / 572-04F/001
Work Order: SC49040
Sample(s) received on: 7/27/2018

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	☐	☒	☐
Were custody seals intact?	☐	☐	☒
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	☒	☐	☐
Were samples refrigerated upon transfer to laboratory representative?	☒	☐	☐
Were sample containers received intact?	☒	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☒	☐	☐
Were samples accompanied by a Chain of Custody document?	☒	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☒	☐	☐
Did sample container labels agree with Chain of Custody document?	☒	☐	☐
Were samples received within method-specific holding times?	☒	☐	☐

Summary of Hits

Lab ID: SC49040-02

Client ID: DW-A

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	1.4		1.0	ug/l	SW8260C
Vinyl chloride	2.7		1.0	ug/l	SW8260C

Lab ID: SC49040-04

Client ID: MW-C

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	12		1.0	ug/l	SW8260C
Methyl ethyl ketone	5.3		5.0	ug/l	SW8260C
Tetrahydrofuran (THF)	2.6		2.5	ug/l	SW8260C
Trichloroethene	10		1.0	ug/l	SW8260C
Vinyl chloride	12		1.0	ug/l	SW8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

MW-A

SC49040-01

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:15

Received

27-Jul-18

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:15	01-Aug-18 18:13	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"

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Sample Identification

MW-A

SC49040-01

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:15

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:15	01-Aug-18 18:13	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	95			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	97			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	94			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	95			70-130 %		"	"	"	"	"	

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Sample Identification

DW-A
SC49040-02

Client Project #
572-04F/001

Matrix
Ground Water

Collection Date/Time
27-Jul-18 09:25

Received
27-Jul-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Subcontracted AnalysesSubcontracted Analyses

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:25	01-Aug-18 18:38	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	1.4		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	

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Sample Identification

DW-A

SC49040-02

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:25

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:25	01-Aug-18 18:38	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	2.7		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	96			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	99			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	95			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	96			70-130 %		"	"	"	"	"	

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Sample Identification

MW-B

SC49040-03

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:35

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:35	01-Aug-18 19:02	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

MW-B

SC49040-03

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:35

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:35	01-Aug-18 19:02	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	94			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	98			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	95			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	95			70-130 %		"	"	"	"	"	

Sample IdentificationMW-C
SC49040-04Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:45

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:45	01-Aug-18 19:27	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	"
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	12		ug/l	1.0	1.0	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"

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Sample IdentificationMW-C
SC49040-04Client Project #
572-04F/001Matrix
Ground WaterCollection Date/Time
27-Jul-18 09:45Received
27-Jul-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Subcontracted AnalysesSubcontracted Analyses

Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:45	01-Aug-18 19:27	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	5.3		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	2.6		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	10		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	12		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	97			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	100			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	96			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	99			70-130 %		"	"	"	"	"	

Sample Identification

DW-C

SC49040-05

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:50

Received

27-Jul-18

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:50	01-Aug-18 19:51	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	

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Sample Identification

DW-C

SC49040-05

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 09:50

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 09:50	01-Aug-18 19:51	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	94			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	98			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	95			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	96			70-130 %		"	"	"	"	"	

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Sample Identification

MW-D

SC49040-06

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 10:00

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 10:00	01-Aug-18 20:16	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	

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Sample Identification

MW-D

SC49040-06

Client Project #

572-04F/001

Matrix

Ground Water

Collection Date/Time

27-Jul-18 10:00

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18 10:00	01-Aug-18 20:16	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	95			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	98			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	98			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	96			70-130 %		"	"	"	"	"	

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Sample Identification

TB-1

SC49040-07

Client Project #

572-04F/001

Matrix

Trip Blank

Collection Date/Time

27-Jul-18 00:00

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18	01-Aug-18 16:10	M-CT007	441490A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/l	0.60	0.60	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/l	0.70	0.70	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	

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Sample Identification

TB-1

SC49040-07

Client Project #

572-04F/001

Matrix

Trip Blank

Collection Date/Time

27-Jul-18 00:00

Received

27-Jul-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. *- MACT007*

74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	27-Jul-18	01-Aug-18 16:10	M-CT007	441490A	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
91-20-3	Naphthalene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 5.0		ug/l	5.0	5.0	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	96			70-130 %		"	"	"	"	"	
460-00-4	% Bromofluorobenzene	98			70-130 %		"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	95			70-130 %		"	"	"	"	"	
2037-26-5	% Toluene-d8	95			70-130 %		"	"	"	"	"	

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 441490A -										
<u>BLK (CB01453-BLK)</u>	Prepared: Analyzed: 01-Aug-18									
cis-1,3-Dichloropropene	< 0.40	c1	ug/l	0.40				-		
Bromomethane	< 1.0	c1	ug/l	1.0				-		
m&p-Xylene	< 1.0	c1	ug/l	1.0				-		
Isopropylbenzene	< 1.0	c1	ug/l	1.0				-		
Hexachlorobutadiene	< 0.40	c1	ug/l	0.40				-		
Ethylbenzene	< 1.0	c1	ug/l	1.0				-		
Dichlorodifluoromethane	< 1.0	c1	ug/l	1.0				-		
Naphthalene	< 1.0	c1	ug/l	1.0				-		
Dibromochloromethane	< 0.50	c1	ug/l	0.50				-		
n-Butylbenzene	< 1.0	c1	ug/l	1.0				-		
cis-1,2-Dichloroethene	< 1.0	c1	ug/l	1.0				-		
Chloromethane	< 1.0	c1	ug/l	1.0				-		
Chloroform	< 1.0	c1	ug/l	1.0				-		
Chloroethane	< 1.0	c1	ug/l	1.0				-		
Chlorobenzene	< 1.0	c1	ug/l	1.0				-		
Carbon tetrachloride	< 1.0	c1	ug/l	1.0				-		
Carbon Disulfide	< 1.0	c1	ug/l	1.0				-		
Dibromomethane	< 1.0	c1	ug/l	1.0				-		
Tetrahydrofuran (THF)	< 2.5	c1	ug/l	2.5				-		
Vinyl chloride	< 1.0	c1	ug/l	1.0				-		
Trichlorotrifluoroethane	< 1.0	c1	ug/l	1.0				-		
Trichlorofluoromethane	< 1.0	c1	ug/l	1.0				-		
Trichloroethene	< 1.0	c1	ug/l	1.0				-		
trans-1,4-dichloro-2-butene	< 5.0	c1	ug/l	5.0				-		
trans-1,3-Dichloropropene	< 0.40	c1	ug/l	0.40				-		
Methyl t-butyl ether (MTBE)	< 1.0	c1	ug/l	1.0				-		
Toluene	< 1.0	c1	ug/l	1.0				-		
Methyl ethyl ketone	< 5.0	c1	ug/l	5.0				-		
Tetrachloroethene	< 1.0	c1	ug/l	1.0				-		
tert-Butylbenzene	< 1.0	c1	ug/l	1.0				-		
Styrene	< 1.0	c1	ug/l	1.0				-		
sec-Butylbenzene	< 1.0	c1	ug/l	1.0				-		
p-Isopropyltoluene	< 1.0	c1	ug/l	1.0				-		
o-Xylene	< 1.0	c1	ug/l	1.0				-		
n-Propylbenzene	< 1.0	c1	ug/l	1.0				-		
trans-1,2-Dichloroethene	< 1.0	c1	ug/l	1.0				-		
1,2,3-Trichlorobenzene	< 1.0	c1	ug/l	1.0				-		
Bromoform	< 1.0	c1	ug/l	1.0				-		
1,2-Dichloroethane	< 1.0	c1	ug/l	1.0				-		
1,2-Dichlorobenzene	< 1.0	c1	ug/l	1.0				-		
1,2-Dibromoethane	< 1.0	c1	ug/l	1.0				-		
1,2-Dibromo-3-chloropropane	< 1.0	c1	ug/l	1.0				-		
1,2,4-Trimethylbenzene	< 1.0	c1	ug/l	1.0				-		
Methylene chloride	< 1.0	c1	ug/l	1.0				-		
1,2,3-Trichloropropane	< 1.0	c1	ug/l	1.0				-		
1,2-Dichloropropane	< 1.0	c1	ug/l	1.0				-		
1,1-Dichloropropene	< 1.0	c1	ug/l	1.0				-		
1,1-Dichloroethene	< 1.0	c1	ug/l	1.0				-		
1,1-Dichloroethane	< 1.0	c1	ug/l	1.0				-		
1,1,2-Trichloroethane	< 1.0	c1	ug/l	1.0				-		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 441490A -										
<u>BLK (CB01453-BLK)</u>	<u>Prepared: Analyzed: 01-Aug-18</u>									
1,1,2,2-Tetrachloroethane	< 0.50	c1	ug/l	0.50				-		
1,1,1-Trichloroethane	< 1.0	c1	ug/l	1.0				-		
1,1,1,2-Tetrachloroethane	< 1.0	c1	ug/l	1.0				-		
1,2,4-Trichlorobenzene	< 1.0	c1	ug/l	1.0				-		
2-Isopropyltoluene	< 1.0	c1	ug/l	1.0				-		
Bromodichloromethane	< 0.50	c1	ug/l	0.50				-		
Bromochloromethane	< 1.0	c1	ug/l	1.0				-		
Bromobenzene	< 1.0	c1	ug/l	1.0				-		
Benzene	< 0.70	c1	ug/l	0.70				-		
Acrylonitrile	< 5.0	c1	ug/l	5.0				-		
Acetone	< 5.0	c1	ug/l	5.0				-		
4-Chlorotoluene	< 1.0	c1	ug/l	1.0				-		
2-Hexanone	< 5.0	c1	ug/l	5.0				-		
2-Chlorotoluene	< 1.0	c1	ug/l	1.0				-		
2,2-Dichloropropane	< 1.0	c1	ug/l	1.0				-		
1,4-Dichlorobenzene	< 1.0	c1	ug/l	1.0				-		
1,3-Dichloropropane	< 1.0	c1	ug/l	1.0				-		
1,3-Dichlorobenzene	< 1.0	c1	ug/l	1.0				-		
1,3,5-Trimethylbenzene	< 1.0	c1	ug/l	1.0				-		
4-Methyl-2-pentanone	< 5.0	c1	ug/l	5.0				-		
Surrogate: % Toluene-d8	95	c1	ug/l		10			70-130		
Surrogate: % 1,2-dichlorobenzene-d4	96	c1	ug/l		10			70-130		
Surrogate: % Bromofluorobenzene	99	c1	ug/l		10			70-130		
Surrogate: % Dibromofluoromethane	98	c1	ug/l		10			70-130		
<u>LCS (CB01453-LCS)</u>	<u>Prepared: Analyzed: 01-Aug-18</u>									
4-Methyl-2-pentanone	11.31	c1	ug/l	5.0	10		113	40-160		30
1,3-Dichloropropane	10.50	c1	ug/l	1.0	10		105	70-130		30
1,4-Dichlorobenzene	9.912	c1	ug/l	1.0	10		99	70-130		30
2,2-Dichloropropane	10.12	c1	ug/l	1.0	10		101	70-130		30
2-Chlorotoluene	9.570	c1	ug/l	1.0	10		96	70-130		30
2-Hexanone	11.26	c1	ug/l	5.0	10		113	40-160		30
4-Chlorotoluene	9.582	c1	ug/l	1.0	10		96	70-130		30
1,2-Dichloropropane	10.03	c1	ug/l	1.0	10		100	70-130		30
Acetone	9.754	c1	ug/l	5.0	10		98	40-160		30
Acrylonitrile	9.985	c1	ug/l	5.0	10		100	70-130		30
Benzene	9.230	c1	ug/l	0.70	10		92	70-130		30
Bromobenzene	10.12	c1	ug/l	1.0	10		101	70-130		30
Bromochloromethane	9.498	c1	ug/l	1.0	10		95	70-130		30
Bromomethane	8.584	c1	ug/l	1.0	10		86	40-160		30
Bromoform	11.62	c1	ug/l	1.0	10		116	70-130		30
2-Isopropyltoluene	9.846	c1	ug/l	1.0	10		98	70-130		30
1,2,3-Trichlorobenzene	12.66	c1	ug/l	1.0	10		127	70-130		30
Carbon Disulfide	9.605	c1	ug/l	1.0	10		96	70-130		30
1,1,1,2-Tetrachloroethane	10.48	c1	ug/l	1.0	10		105	70-130		30
1,1,1-Trichloroethane	9.443	c1	ug/l	1.0	10		94	70-130		30
1,1,2,2-Tetrachloroethane	11.35	c1	ug/l	0.50	10		114	70-130		30
1,1,2-Trichloroethane	10.13	c1	ug/l	1.0	10		101	70-130		30
1,1-Dichloroethane	9.272	c1	ug/l	1.0	10		93	70-130		30
1,3-Dichlorobenzene	9.793	c1	ug/l	1.0	10		98	70-130		30
1,1-Dichloropropene	10.32	c1	ug/l	1.0	10		103	70-130		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 441490A -										
<u>LCS (CB01453-LCS)</u>						Prepared: Analyzed: 01-Aug-18				
1,3,5-Trimethylbenzene	9.711	c1	ug/l	1.0	10		97	70-130		30
1,2,3-Trichloropropane	10.57	c1	ug/l	1.0	10		106	70-130		30
1,2,4-Trichlorobenzene	11.27	c1	ug/l	1.0	10		113	70-130		30
1,2,4-Trimethylbenzene	9.767	c1	ug/l	1.0	10		98	70-130		30
1,2-Dibromo-3-chloropropane	12.21	c1	ug/l	1.0	10		122	70-130		30
1,2-Dibromoethane	10.56	c1	ug/l	1.0	10		106	70-130		30
1,2-Dichlorobenzene	10.20	c1	ug/l	1.0	10		102	70-130		30
1,2-Dichloroethane	10.38	c1	ug/l	1.0	10		104	70-130		30
1,1-Dichloroethene	9.881	c1	ug/l	1.0	10		99	70-130		30
trans-1,2-Dichloroethene	9.554	c1	ug/l	1.0	10		96	70-130		30
o-Xylene	9.817	c1	ug/l	1.0	10		98	70-130		30
p-Isopropyltoluene	9.884	c1	ug/l	1.0	10		99	70-130		30
sec-Butylbenzene	9.915	c1	ug/l	1.0	10		99	70-130		30
Styrene	10.01	c1	ug/l	1.0	10		100	70-130		30
tert-Butylbenzene	9.493	c1	ug/l	1.0	10		95	70-130		30
Tetrachloroethene	10.04	c1	ug/l	1.0	10		100	70-130		30
n-Butylbenzene	10.15	c1	ug/l	1.0	10		101	70-130		30
Toluene	9.703	c1	ug/l	1.0	10		97	70-130		30
Naphthalene	12.26	c1	ug/l	1.0	10		123	70-130		30
trans-1,3-Dichloropropene	10.43	c1	ug/l	0.40	10		104	70-130		30
trans-1,4-dichloro-2-butene	56.98	c1	ug/l	5.0	50		114	70-130		30
Trichloroethene	9.709	c1	ug/l	1.0	10		97	70-130		30
Trichlorofluoromethane	9.531	c1	ug/l	1.0	10		95	70-130		30
Trichlorotrifluoroethane	10.02	c1	ug/l	1.0	10		100	70-130		30
Vinyl chloride	9.956	c1	ug/l	1.0	10		100	70-130		30
Carbon tetrachloride	9.652	c1	ug/l	1.0	10		97	70-130		30
Tetrahydrofuran (THF)	26.34	c1	ug/l	2.5	25		105	70-130		30
Dichlorodifluoromethane	10.96	c1	ug/l	1.0	10		110	40-160		30
Chlorobenzene	9.722	c1	ug/l	1.0	10		97	70-130		30
Bromodichloromethane	10.39	c1	ug/l	0.50	10		104	70-130		30
Chloroethane	9.525	c1	ug/l	1.0	10		95	70-130		30
Chloroform	9.420	c1	ug/l	1.0	10		94	70-130		30
Chloromethane	9.016	c1	ug/l	1.0	10		90	40-160		30
cis-1,2-Dichloroethene	9.544	c1	ug/l	1.0	10		95	70-130		30
cis-1,3-Dichloropropene	10.27	c1	ug/l	0.40	10		103	70-130		30
n-Propylbenzene	9.658	c1	ug/l	1.0	10		97	70-130		30
Dibromomethane	10.47	c1	ug/l	1.0	10		105	70-130		30
Ethylbenzene	9.601	c1	ug/l	1.0	10		96	70-130		30
Hexachlorobutadiene	11.16	c1	ug/l	0.40	10		112	70-130		30
Isopropylbenzene	9.434	c1	ug/l	1.0	10		94	70-130		30
m&p-Xylene	19.28	c1	ug/l	1.0	20		96	70-130		30
Methyl ethyl ketone	12.74	c1	ug/l	5.0	10		127	40-160		30
Methyl t-butyl ether (MTBE)	10.31	c1	ug/l	1.0	10		103	70-130		30
Methylene chloride	9.260	c1	ug/l	1.0	10		93	70-130		30
Dibromochloromethane	11.67	c1	ug/l	0.50	10		117	70-130		30
Surrogate: % Dibromofluoromethane	9.267	c1	ug/l		10		93	70-130		
Surrogate: % Bromofluorobenzene	10.09	c1	ug/l		10		101	70-130		
Surrogate: % Toluene-d8	9.962	c1	ug/l		10		100	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	10.06	c1	ug/l		10		101	70-130		
<u>LCSD (CB01453-LCSD)</u>						Prepared: Analyzed: 01-Aug-18				

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 441490A -										
LCSD (CB01453-LCSD)	Prepared: Analyzed: 01-Aug-18									
cis-1,3-Dichloropropene	10.54	c1	%	%	10		105	70-130	1.9	30
Methyl t-butyl ether (MTBE)	10.37	c1	%	%	10		104	70-130	1.0	30
Methyl ethyl ketone	12.59	c1	%	%	10		126	40-160	0.8	30
m&p-Xylene	19.88	c1	%	%	20		99	70-130	3.1	30
Isopropylbenzene	9.627	c1	%	%	10		96	70-130	2.1	30
Hexachlorobutadiene	11.25	c1	%	%	10		112	70-130	0.0	30
Ethylbenzene	9.934	c1	%	%	10		99	70-130	3.1	30
Dichlorodifluoromethane	11.31	c1	%	%	10		113	40-160	2.7	30
Dibromochloromethane	11.54	c1	%	%	10		115	70-130	1.7	30
cis-1,2-Dichloroethene	9.695	c1	%	%	10		97	70-130	2.1	30
Chloromethane	9.338	c1	%	%	10		93	40-160	3.3	30
Chloroform	9.682	c1	%	%	10		97	70-130	3.1	30
Chloroethane	9.675	c1	%	%	10		97	70-130	2.1	30
Chlorobenzene	9.944	c1	%	%	10		99	70-130	2.0	30
Carbon tetrachloride	9.873	c1	%	%	10		99	70-130	2.0	30
Carbon Disulfide	9.919	c1	%	%	10		99	70-130	3.1	30
Dibromomethane	10.58	c1	%	%	10		106	70-130	0.9	30
tert-Butylbenzene	9.787	c1	%	%	10		98	70-130	3.1	30
Bromomethane	8.988	c1	%	%	10		90	40-160	4.5	30
Trichlorofluoromethane	9.732	c1	%	%	10		97	70-130	2.1	30
Trichloroethene	10.22	c1	%	%	10		102	70-130	5.0	30
trans-1,4-dichloro-2-butene	56.98	c1	%	%	50		114	70-130	0.0	30
trans-1,3-Dichloropropene	10.68	c1	%	%	10		107	70-130	2.8	30
trans-1,2-Dichloroethene	9.725	c1	%	%	10		97	70-130	1.0	30
Toluene	10.09	c1	%	%	10		101	70-130	4.0	30
Trichlorotrifluoroethane	10.21	c1	%	%	10		102	70-130	2.0	30
Tetrachloroethene	10.42	c1	%	%	10		104	70-130	3.9	30
Methylene chloride	9.371	c1	%	%	10		94	70-130	1.1	30
Styrene	10.03	c1	%	%	10		100	70-130	0.0	30
sec-Butylbenzene	10.42	c1	%	%	10		104	70-130	4.9	30
p-Isopropyltoluene	10.18	c1	%	%	10		102	70-130	3.0	30
o-Xylene	9.934	c1	%	%	10		99	70-130	1.0	30
n-Propylbenzene	9.995	c1	%	%	10		100	70-130	3.0	30
n-Butylbenzene	10.56	c1	%	%	10		106	70-130	4.8	30
Naphthalene	12.10	c1	%	%	10		121	70-130	1.6	30
1,2-Dibromoethane	10.90	c1	%	%	10		109	70-130	2.8	30
Tetrahydrofuran (THF)	25.51	c1	%	%	25		102	70-130	2.9	30
1,1-Dichloroethene	9.881	c1	%	%	10		99	70-130	0.0	30
1,2-Dichlorobenzene	10.33	c1	%	%	10		103	70-130	1.0	30
1,2-Dichloroethane	10.64	c1	%	%	10		106	70-130	1.9	30
1,2,4-Trimethylbenzene	9.945	c1	%	%	10		99	70-130	1.0	30
1,2,4-Trichlorobenzene	11.30	c1	%	%	10		113	70-130	0.0	30
1,2,3-Trichloropropane	10.47	c1	%	%	10		105	70-130	0.9	30
Bromoform	11.67	c1	%	%	10		117	70-130	0.9	30
1,1-Dichloropropene	10.73	c1	%	%	10		107	70-130	3.8	30
1,2-Dichloropropane	10.33	c1	%	%	10		103	70-130	3.0	30
1,1-Dichloroethane	9.482	c1	%	%	10		95	70-130	2.1	30
1,1,2-Trichloroethane	10.66	c1	%	%	10		107	70-130	5.8	30
1,1,2,2-Tetrachloroethane	11.34	c1	%	%	10		113	70-130	0.9	30
1,1,1-Trichloroethane	9.607	c1	%	%	10		96	70-130	2.1	30

This laboratory report is not valid without an authorized signature on the cover page.

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 441490A -										
LCSD (CB01453-LCSD)	Prepared: Analyzed: 01-Aug-18									
1,1,1,2-Tetrachloroethane	10.73	c1	%	%	10		107	70-130	1.9	30
Vinyl chloride	10.26	c1	%	%	10		103	70-130	3.0	30
1,2,3-Trichlorobenzene	12.42	c1	%	%	10		124	70-130	2.4	30
4-Methyl-2-pentanone	11.67	c1	%	%	10		117	40-160	3.5	30
Bromodichloromethane	10.63	c1	%	%	10		106	70-130	1.9	30
Bromochloromethane	9.665	c1	%	%	10		97	70-130	2.1	30
Bromobenzene	10.23	c1	%	%	10		102	70-130	1.0	30
Benzene	9.778	c1	%	%	10		98	70-130	6.3	30
1,2-Dibromo-3-chloropropane	12.64	c1	%	%	10		126	70-130	3.2	30
Acetone	8.307	c1	%	%	10		83	40-160	16.6	30
1,3,5-Trimethylbenzene	9.946	c1	%	%	10		99	70-130	2.0	30
4-Chlorotoluene	9.797	c1	%	%	10		98	70-130	2.1	30
2-Isopropyltoluene	10.05	c1	%	%	10		101	70-130	3.0	30
2-Hexanone	11.60	c1	%	%	10		116	40-160	2.6	30
2-Chlorotoluene	9.698	c1	%	%	10		97	70-130	1.0	30
2,2-Dichloropropane	10.10	c1	%	%	10		101	70-130	0.0	30
1,4-Dichlorobenzene	10.06	c1	%	%	10		101	70-130	2.0	30
1,3-Dichloropropane	10.50	c1	%	%	10		105	70-130	0.0	30
1,3-Dichlorobenzene	10.01	c1	%	%	10		100	70-130	2.0	30
Acrylonitrile	10.03	c1	%	%	10		100	70-130	0.0	30
Surrogate: % Toluene-d8	10.12	c1	%		10		101	70-130		
Surrogate: % Dibromofluoromethane	9.330	c1	%		10		93	70-130		
Surrogate: % Bromofluorobenzene	10.04	c1	%		10		100	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	10.06	c1	%		10		101	70-130		

Notes and Definitions

c1	A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.



Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling: R.R 18634

☐ Standard TAT - 7 to 10 business days☒ Rush TAT - Date Needed: 5-day

All TATs subject to laboratory approval

Min. 24-hr notification needed for rushes

Samples disposed after 30 days unless otherwise instructed.

Report To: IRWIN Engineers
33 W. COMM ST
Natick, MA 01760

Invoice To: Same

Project No: 572-04F/001

Site Name: 24 Hope Dale

Location: Hope Dale State: MA

Sampler(s): MTT

Telephone #: 508-653-8007

Project Mgr: Matt Tar

P.O. No.: Quote #:

F=Field Filtered 1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid
7=CH₃OH 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=

List Preservative Code below:

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water

O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= Trip Blank X2= X3=

G= Grab

C=Composite

Containers

Analysis

Check if chlorinated

MA DEP MCP CAM Report? ☒ Yes ☐ NoCT DPH RCP Report? ☐ Yes ☒ No☒ Standard ☐ No QC☐ DQA*☐ ASP A*☐ ASP B*☐ NJ Reduced*☐ NJ Full*☐ Tier II*☐ Tier IV*☐ Other: _____

State-specific reporting standards:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOC	Check if chlorinated
49040-01	MW-A	7/27	09:15	G	GW	3				X	☐
02	DW-A	7/27	09:25	G	GW	3				X	☐
03	MW-B	7/27	09:35	G	GW	3				X	☐
04	MW-C	7/27	09:45	G	GW	3				X	☐
05	DW-C	7/27	09:50	G	GW	3				X	☐
06	MW-D	7/27	10:00	G	GW	3				X	☐
07	TB-1	7/27	—	G	GW	1				X	☐
											☐
											☐
											☐
											☐
											☐
											☐

Relinquished by:

Received by:

Date:

Time:

Temp °C

☐ EDD format: mtt@irwineng.com☒ E-mail to: _____

Observed

Correction Factor

Corrected

IR ID #

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Batch Summary

441490A

Subcontracted Analyses

CB01453-BLK

CB01453-LCS

CB01453-LCSD

SC49040-01 (MW-A)

SC49040-02 (DW-A)

SC49040-03 (MW-B)

SC49040-04 (MW-C)

SC49040-05 (DW-C)

SC49040-06 (MW-D)

SC49040-07 (TB-1)

Laboratory Report SC51532

Irwin Engineers, Inc.
33 West Central Street
Natick, MA 01760
Attn: Matt Tate

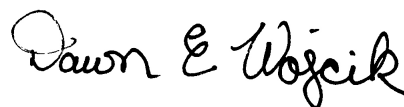
Project: 24 Hopedale - Hopedale, MA
Project #: 572-04F/002

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393



Authorized by:
Dawn Wojcik
Laboratory Director



Eurofins Spectrum Analytical holds primary certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 37 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

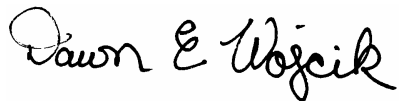
Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC51532
Project: 24 Hopedale - Hopedale, MA
Project Number: 572-04F/002

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC51532-01	MR-SED	Sediment	29-Oct-18 09:00	30-Oct-18 14:35
SC51532-02	MR-SW	Surface Water	29-Oct-18 09:00	30-Oct-18 14:35
SC51532-03	PZ-1	Ground Water	29-Oct-18 09:00	30-Oct-18 14:35
SC51532-04	MW-E	Ground Water	29-Oct-18 10:30	30-Oct-18 14:35
SC51532-05	TB-1	Trip Blank	29-Oct-18 00:00	30-Oct-18 14:35
SC51532-06	TB-2	Trip Blank	29-Oct-18 00:00	30-Oct-18 14:35

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.			Project #: 572-04F/002		
Project Location: 24 Hopedale - Hopedale, MA			RTN:		
This form provides certifications for the following data set:			SC51532-01 through SC51532-06		
Matrices: Ground Water Sediment Surface Water Trip Blank					
CAM Protocol					
✓ 8260 VOC CAM II A	7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B
Affirmative responses to questions A through F are required for Presumptive Certainty's Status					
A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?				✓ Yes No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?				✓ Yes No
Responses to questions G, H and I below are required for Presumptive Certainty's Status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				✓ Yes No
Data User Note: Data that achieve Presumptive Certainty's Status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056 (2)(k) and WSC-07-350.					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				✓ Yes No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?				Yes ✓ No
All negative responses are addressed in a case narrative on the cover page of this report.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.					
 Dawn E. Wojcik Laboratory Director Date: 11/6/2018					

This laboratory report is not valid without an authorized signature on the cover page.

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 2.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Soils are run on a manual load instrument. 100ug of sample (MEOH) is spiked into 5ml DI water along with the surrogate and added directly onto the instrument. Additional dilution factors may be required to keep analyte concentration within instrument calibration range.

Subcontract Lab Case Narrative:

VOA Narration

Were all QA/QC performance criteria specified in the MADEP document CAM achieved? Yes.

Instrument:

CB85993

CHEM14 11/03/18-1 Raman Makol, Chemist 11/03/18

Initial Calibration Verification (CHEM14/vt-1026):

93% of target compounds met criteria.

The following compounds had %RSDs >20%: 1,2-Dibromo-3-chloropropane 30% (20%), Bromoform 22% (20%), Dibromochloromethane 22% (20%), trans-1,4-dichloro-2-butene 21% (20%)

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM14/1103_03-vt-1026) (MCP Compliance):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

94% of target compounds met criteria.

The following compounds did not meet % deviation criteria: Chloromethane 26%L (20%), trans-1,4-dichloro-2-butene 21%H (20%)

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

CB85994, CB85997

CHEM15 10/31/18-3 Harry Mullin, Chemist 10/31/18

Initial Calibration Verification (CHEM15/VOA15-102918):

100% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM15/1031B53-VOA15-102918) (MCP Compliance):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

98% of target compounds met criteria.

The following compounds did not meet % deviation criteria: 2,2-Dichloropropane 23%L (20%), Bromomethane 38%L (20%)

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

CB85995, CB85996

CHEM15 11/02/18-1 Harry Mullin, Chemist 11/02/18

Initial Calibration Verification (CHEM15/VOA15-110118):

100% of target compounds met criteria.

The following compounds had %RSDs >20%: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM15/1102B02-VOA15-110118) (MCP Compliance):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

96% of target compounds met criteria.

The following compounds did not meet % deviation criteria: Bromomethane 22%L (20%), Methylene chloride 23%L (20%), trans-1,2-Dichloroethene 22%L (20%)

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

CB85998, CB86279

CHEM26 11/01/18-1 Harry Mullin, Chemist 11/01/18

Initial Calibration Verification (CHEM26/VT-1101):

98% of target compounds met criteria.

The following compounds had %RSDs >20%: Chloroethane 24% (20%)

The following compounds did not meet recommended response factors: None.

The following compounds did not meet a minimum response factors: None.

Continuing Calibration Verification (CHEM26/1101_10-VT-1101) (MCP Compliance):

Internal standard areas were within 50 to 200% of the initial calibration with the following exceptions: None.

99% of target compounds met criteria.

The following compounds did not meet % deviation criteria: None.

The following compounds did not meet maximum % deviations: None.

The following compounds did not meet recommended response factors: None.

The following compounds did not meet minimum response factors: None.

QC (Batch Specific):

CB85994, CB85997

Batch 454607 (CB85994)

All LCS recoveries were within 70 - 130 with the following exceptions: None.

All LCSD recoveries were within 70 - 130 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
CB85998, CB86279

Batch 454641 (CB85991)

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
CB85993

Batch 454848 (CB87810)

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
CB85995, CB85996

Batch 454850 (CB85996)

All LCS recoveries were within 70 - 130 with the following exceptions: None.
All LCSD recoveries were within 70 - 130 with the following exceptions: None.
All LCS/LCSD RPDs were less than 30% with the following exceptions: None.
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.
Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW8260C

CB85991-MS

This parameter is outside laboratory ms/msd specified recovery limits.

Vinyl chloride

CB85991-MSD

This parameter is outside laboratory ms/msd specified recovery limits.

Vinyl chloride

Sample Acceptance Check Form

Client: Irwin Engineers, Inc.
Project: 24 Hopedale - Hopedale, MA / 572-04F/002
Work Order: SC51532
Sample(s) received on: 10/30/2018

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	☐	☒	☐
Were custody seals intact?	☐	☐	☒
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	☒	☐	☐
Were samples refrigerated upon transfer to laboratory representative?	☒	☐	☐
Were sample containers received intact?	☒	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☒	☐	☐
Were samples accompanied by a Chain of Custody document?	☒	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☒	☐	☐
Did sample container labels agree with Chain of Custody document?	☒	☐	☐
Were samples received within method-specific holding times?	☒	☐	☐

Summary of Hits

Lab ID: SC51532-04

Client ID: MW-E

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Vinyl chloride	1.1		1.0	ug/l	SW8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses , this summary does not include hits from these analyses if included in this work order .

Sample Identification

MR-SED

SC51532-01

Client Project #

572-04F/002

Matrix

Sediment

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<u>Prepared by method SW8260C</u>													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 8.5		ug/kg	8.5	8.5	1	SW8260C	29-Oct-18 09:00	03-Nov-18 20:18	M-CT007	454848A	
71-55-6	1,1,1-Trichloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-25-2	Bromoform	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
74-83-9	Bromomethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-00-3	Chloroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
67-66-3	Chloroform	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
74-87-3	Chloromethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 17		ug/kg	17	17	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 8.5		ug/kg	8.5	8.5	1	"	"	"	"	"	

Surrogate recoveries:

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

MR-SED

SC51532-01

Client Project #

572-04F/002

Matrix

Sediment

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*

2199-69-1	% 1,2-dichlorobenzene-d4	96			70-130 %			SW8260C	29-Oct-18	-Nov-18 20:09:00	M-CT007	454848A	
460-00-4	% Bromofluorobenzene	92			70-130 %			"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	106			70-130 %			"	"	"	"	"	
2037-26-5	% Toluene-d8	90			70-130 %			"	"	"	"	"	

Prepared by method SW846-%Solid*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

Percent Solid	56	%				1	SW846-%Solid	"	31-Oct-18	21:40	M-CT007	'[none]'	
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Sample Identification

MR-SW

SC51532-02

Client Project #

572-04F/002

Matrix

Surface Water

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<u>Prepared by method SW8260C</u>													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007</i>													
630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	29-Oct-18 09:00	01-Nov-18 11:51	M-CT007	454607A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Surrogate recoveries:

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

MR-SW

SC51532-02

Client Project #

572-04F/002

Matrix

Surface Water

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*

2199-69-1	% 1,2-dichlorobenzene-d4	100			70-130 %			SW8260C	29-Oct-18	-Nov-18 11:M-CT007 454607A 09:00			
460-00-4	% Bromofluorobenzene	91			70-130 %			"	"	"	"	"	"
1868-53-7	% Dibromofluoromethane	104			70-130 %			"	"	"	"	"	"
2037-26-5	% Toluene-d8	102			70-130 %			"	"	"	"	"	"

Sample Identification

PZ-1

SC51532-03

Client Project #

572-04F/002

Matrix

Ground Water

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW8260C													
Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007													
630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	29-Oct-18 09:00	02-Nov-18 08:56	M-CT007	454850A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	"
110-57-6	trans-1,4-dichloro-2-buten e	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	"
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	"

Surrogate recoveries:

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification**PZ-1**

SC51532-03

Client Project #

572-04F/002

Matrix

Ground Water

Collection Date/Time

29-Oct-18 09:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*

2199-69-1	% 1,2-dichlorobenzene-d4	101			70-130 %			SW8260C	29-Oct-18	-Nov-18 08:09:00	M-CT007	454850A	
460-00-4	% Bromofluorobenzene	96			70-130 %			"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	96			70-130 %			"	"	"	"	"	
2037-26-5	% Toluene-d8	98			70-130 %			"	"	"	"	"	

Sample Identification

MW-E

SC51532-04

Client Project #

572-04F/002

Matrix

Ground Water

Collection Date/Time

29-Oct-18 10:30

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted AnalysesPrepared by method SW8260C*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	29-Oct-18 10:30	02-Nov-18 09:22	M-CT007	454850A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	1.1		ug/l	1.0	1.0	1	"	"	"	"	"	

*Surrogate recoveries:**This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-E

SC51532-04

Client Project #

572-04F/002

Matrix

Ground Water

Collection Date/Time

29-Oct-18 10:30

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*

2199-69-1	% 1,2-dichlorobenzene-d4	98			70-130 %			SW8260C	29-Oct-18	-Nov-18 09:10:30	M-CT007	454850A	
460-00-4	% Bromofluorobenzene	93			70-130 %			"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	83			70-130 %			"	"	"	"	"	
2037-26-5	% Toluene-d8	101			70-130 %			"	"	"	"	"	

Sample Identification

TB-1

SC51532-05

Client Project #

572-04F/002

Matrix

Trip Blank

Collection Date/Time

29-Oct-18 00:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted AnalysesPrepared by method SW8260C*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	29-Oct-18	01-Nov-18 07:15	M-CT007	454607A	
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/l	0.40	0.40	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 2.5		ug/l	2.5	2.5	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

*Surrogate recoveries:**This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

TB-1

SC51532-05

Client Project #

572-04F/002

Matrix

Trip Blank

Collection Date/Time

29-Oct-18 00:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*

2199-69-1	% 1,2-dichlorobenzene-d4	107			70-130 %			SW8260C	29-Oct-18	-Nov-18 07:M-CT007	454607A		
460-00-4	% Bromofluorobenzene	85			70-130 %			"	"	"	"	"	"
1868-53-7	% Dibromofluoromethane	96			70-130 %			"	"	"	"	"	"
2037-26-5	% Toluene-d8	100			70-130 %			"	"	"	"	"	"

Sample Identification

TB-2

SC51532-06

Client Project #

572-04F/002

Matrix

Trip Blank

Collection Date/Time

29-Oct-18 00:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted AnalysesPrepared by method SW8260C*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

630-20-6	1,1,1,2-Tetrachloroethane	< 250		ug/kg	250	250	50	SW8260C	29-Oct-18	02-Nov-18 02:26	M-CT007	454641A	
71-55-6	1,1,1-Trichloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 250		ug/kg	250	250	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 250		ug/kg	250	250	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 250		ug/kg	250	250	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 250		ug/kg	250	250	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 250		ug/kg	250	250	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 250		ug/kg	250	250	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 250		ug/kg	250	250	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 250		ug/kg	250	250	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 250		ug/kg	250	250	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 250		ug/kg	250	250	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-25-2	Bromoform	< 250		ug/kg	250	250	50	"	"	"	"	"	
74-83-9	Bromomethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 250		ug/kg	250	250	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-00-3	Chloroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
67-66-3	Chloroform	< 250		ug/kg	250	250	50	"	"	"	"	"	
74-87-3	Chloromethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 250		ug/kg	250	250	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 250		ug/kg	250	250	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 250		ug/kg	250	250	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 250		ug/kg	250	250	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 250		ug/kg	250	250	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 250		ug/kg	250	250	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 1300		ug/kg	1300	1300	50	"	"	"	"	"	
79-01-6	Trichloroethene	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 250		ug/kg	250	250	50	"	"	"	"	"	
75-01-4	Vinyl chloride	< 250		ug/kg	250	250	50	"	"	"	"	"	

*Surrogate recoveries:**This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

TB-2

SC51532-06

Client Project #

572-04F/002

Matrix

Trip Blank

Collection Date/Time

29-Oct-18 00:00

Received

30-Oct-18

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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Subcontracted AnalysesSubcontracted Analyses

Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007

2199-69-1	% 1,2-dichlorobenzene-d4	100			70-130 %			SW8260C	29-Oct-18	-Nov-18 02:M-CT007	454641A		
460-00-4	% Bromofluorobenzene	100			70-130 %			"	"	"	"	"	"
1868-53-7	% Dibromofluoromethane	94			70-130 %			"	"	"	"	"	"
2037-26-5	% Toluene-d8	100			70-130 %			"	"	"	"	"	"

Subcontracted Analyses

Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007

630-20-6	1,1,1,2-Tetrachloroethane	< 5.0		ug/kg	5.0	5.0	1	SW8260C LOW	"	02-Nov-18 01:41	M-CT007	"	"
71-55-6	1,1,1-Trichloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-25-2	Bromoform	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
56-23-5	Carbon tetrachloride	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
67-66-3	Chloroform	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-09-2	Methylene chloride	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
110-57-6	trans-1,4-dichloro-2-buten e	< 10		ug/kg	10	10	1	"	"	"	"	"	"

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Sample Identification

TB-2

SC51532-06

Client Project #

572-04F/002

Matrix

Trip Blank

Collection Date/Time

29-Oct-18 00:00

Received

30-Oct-18

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*

79-01-6	Trichloroethene	< 5.0		ug/kg	5.0	5.0	1	SW8260C LOW	29-Oct-18	02-Nov-18 01:41	M-CT007	454641A	
75-69-4	Trichlorofluoromethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
76-13-1	Trichlorotrifluoroethane	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"
75-01-4	Vinyl chloride	< 5.0		ug/kg	5.0	5.0	1	"	"	"	"	"	"

Surrogate recoveries:

2199-69-1	% 1,2-dichlorobenzene-d4	100			70-130 %			"	"	"	"	"	
460-00-4	% Bromofluorobenzene	98			70-130 %			"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	99			70-130 %			"	"	"	"	"	
2037-26-5	% Toluene-d8	99			70-130 %			"	"	"	"	"	

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 454607A - SW8260C										
<u>BLK (CB85994-BLK)</u>	Prepared: Analyzed: 01-Nov-18									
Dichlorodifluoromethane	ND		ug/l	1.0			ND	-		
Bromoform	ND		ug/l	1.0			ND	-		
Bromomethane	ND		ug/l	1.0			ND	-		
Carbon tetrachloride	ND		ug/l	1.0			ND	-		
Chlorobenzene	ND		ug/l	1.0			ND	-		
Chloroethane	ND		ug/l	1.0			ND	-		
Chloroform	ND		ug/l	1.0			ND	-		
Chloromethane	ND		ug/l	1.0			ND	-		
cis-1,2-Dichloroethene	ND		ug/l	1.0			ND	-		
Bromodichloromethane	ND		ug/l	0.50			ND	-		
Dibromochloromethane	ND		ug/l	0.50			ND	-		
cis-1,3-Dichloropropene	ND		ug/l	0.40			ND	-		
Methylene chloride	ND		ug/l	1.0			ND	-		
Tetrachloroethene	ND		ug/l	1.0			ND	-		
trans-1,2-Dichloroethene	ND		ug/l	1.0			ND	-		
trans-1,3-Dichloropropene	ND		ug/l	0.40			ND	-		
trans-1,4-dichloro-2-butene	ND		ug/l	5.0			ND	-		
Trichloroethene	ND		ug/l	1.0			ND	-		
Trichlorofluoromethane	ND		ug/l	1.0			ND	-		
Trichlorotrifluoroethane	ND		ug/l	1.0			ND	-		
Vinyl chloride	ND		ug/l	1.0			ND	-		
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0			ND	-		
Dibromomethane	ND		ug/l	1.0			ND	-		
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0			ND	-		
1,1,1-Trichloroethane	ND		ug/l	1.0			ND	-		
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50			ND	-		
1,1,2-Trichloroethane	ND		ug/l	1.0			ND	-		
1,1-Dichloroethane	ND		ug/l	1.0			ND	-		
1,1-Dichloroethene	ND		ug/l	1.0			ND	-		
Bromobenzene	ND		ug/l	1.0			ND	-		
1,2,3-Trichloropropane	ND		ug/l	1.0			ND	-		
1,2-Dibromoethane	ND		ug/l	1.0			ND	-		
1,2-Dichlorobenzene	ND		ug/l	1.0			ND	-		
1,2-Dichloroethane	ND		ug/l	1.0			ND	-		
1,2-Dichloropropane	ND		ug/l	1.0			ND	-		
1,3-Dichlorobenzene	ND		ug/l	1.0			ND	-		
1,3-Dichloropropane	ND		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	ND		ug/l	1.0			ND	-		
2,2-Dichloropropane	ND		ug/l	1.0			ND	-		
1,1-Dichloropropene	ND		ug/l	1.0			ND	-		
Surrogate: % Dibromofluoromethane	96		ug/l		10		96	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	98		ug/l		10		98	70-130		
Surrogate: % Toluene-d8	98		ug/l		10		98	70-130		
Surrogate: % Bromofluorobenzene	87		ug/l		10		87	70-130		
<u>LCS (CB85994-LCS)</u>	Prepared: Analyzed: 01-Nov-18									
1,2,3-Trichloropropane	10.07		ug/l	1.0	10		101	70-130		30
2,2-Dichloropropane	10.54		ug/l	1.0	10		105	70-130		30
1,4-Dichlorobenzene	9.447		ug/l	1.0	10		94	70-130		30
Trichlorotrifluoroethane	9.670		ug/l	1.0	10		97	70-130		30
1,3-Dichloropropane	9.496		ug/l	1.0	10		95	70-130		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 454607A - SW8260C										
<u>LCS (CB85994-LCS)</u>					Prepared: Analyzed: 01-Nov-18					
1,3-Dichlorobenzene	9.684		ug/l	1.0	10		97	70-130		30
1,2-Dichloropropane	9.631		ug/l	1.0	10		96	70-130		30
1,2-Dichloroethane	9.013		ug/l	1.0	10		90	70-130		30
1,2-Dichlorobenzene	9.581		ug/l	1.0	10		96	70-130		30
Vinyl chloride	10.04		ug/l	1.0	10		100	70-130		30
1,2-Dibromo-3-chloropropane	10.88		ug/l	1.0	10		109	70-130		30
1,1-Dichloropropene	10.04		ug/l	1.0	10		100	70-130		30
1,1-Dichloroethene	9.388		ug/l	1.0	10		94	70-130		30
1,1-Dichloroethane	9.375		ug/l	1.0	10		94	70-130		30
1,1,2-Trichloroethane	9.759		ug/l	1.0	10		98	70-130		30
1,1,2,2-Tetrachloroethane	10.37		ug/l	0.50	10		104	70-130		30
1,1,1-Trichloroethane	9.795		ug/l	1.0	10		98	70-130		30
Bromobenzene	9.404		ug/l	1.0	10		94	70-130		30
1,1,1,2-Tetrachloroethane	9.852		ug/l	1.0	10		99	70-130		30
1,2-Dibromoethane	9.838		ug/l	1.0	10		98	70-130		30
Dibromomethane	9.706		ug/l	1.0	10		97	70-130		30
Trichlorofluoromethane	9.752		ug/l	1.0	10		98	70-130		30
trans-1,4-dichloro-2-butene	56.12		ug/l	5.0	50		112	70-130		30
trans-1,3-Dichloropropene	9.122		ug/l	0.40	10		91	70-130		30
trans-1,2-Dichloroethene	9.261		ug/l	1.0	10		93	70-130		30
Tetrachloroethene	10.12		ug/l	1.0	10		101	70-130		30
Trichloroethene	9.619		ug/l	1.0	10		96	70-130		30
Dichlorodifluoromethane	9.587		ug/l	1.0	10		96	40-160		30
Bromodichloromethane	9.793		ug/l	0.50	10		98	70-130		30
Dibromochloromethane	10.01		ug/l	0.50	10		100	70-130		30
cis-1,3-Dichloropropene	9.520		ug/l	0.40	10		95	70-130		30
cis-1,2-Dichloroethene	9.090		ug/l	1.0	10		91	70-130		30
Chloromethane	8.860		ug/l	1.0	10		89	40-160		30
Chloroform	9.452		ug/l	1.0	10		95	70-130		30
Chloroethane	9.161		ug/l	1.0	10		92	70-130		30
Chlorobenzene	9.157		ug/l	1.0	10		92	70-130		30
Carbon tetrachloride	9.903		ug/l	1.0	10		99	70-130		30
Bromomethane	7.975		ug/l	1.0	10		80	40-160		30
Bromoform	9.818		ug/l	1.0	10		98	70-130		30
Methylene chloride	9.207		ug/l	1.0	10		92	70-130		30
Surrogate: % Toluene-d8	10.10		ug/l		10		101	70-130		
Surrogate: % Dibromofluoromethane	9.435		ug/l		10		94	70-130		
Surrogate: % Bromofluorobenzene	9.626		ug/l		10		96	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	10.04		ug/l		10		100	70-130		
<u>LCSD (CB85994-LCSD)</u>					Prepared: Analyzed: 01-Nov-18					
Bromodichloromethane	9.955		ug/l	0.50	10		100	70-130	2.0	30
1,2-Dibromo-3-chloropropane	10.91		ug/l	1.0	10		109	70-130	0.0	30
2,2-Dichloropropane	10.39		ug/l	1.0	10		104	70-130	1.0	30
Bromomethane	8.091		ug/l	1.0	10		81	40-160	1.2	30
1,4-Dichlorobenzene	9.593		ug/l	1.0	10		96	70-130	2.1	30
1,3-Dichloropropane	9.639		ug/l	1.0	10		96	70-130	1.0	30
1,3-Dichlorobenzene	9.824		ug/l	1.0	10		98	70-130	1.0	30
1,2-Dichloropropane	9.434		ug/l	1.0	10		94	70-130	2.1	30
1,2-Dichloroethane	9.667		ug/l	1.0	10		97	70-130	7.5	30
Vinyl chloride	10.01		ug/l	1.0	10		100	70-130	0.0	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454607A - SW8260C										
LCSD (CB85994-LCSD)						Prepared: Analyzed: 01-Nov-18				
1,2-Dibromoethane	10.16		ug/l	1.0	10		102	70-130	4.0	30
Bromobenzene	9.387		ug/l	1.0	10		94	70-130	0.0	30
1,2,3-Trichloropropane	10.14		ug/l	1.0	10		101	70-130	0.0	30
1,1-Dichloropropene	9.969		ug/l	1.0	10		100	70-130	0.0	30
1,1-Dichloroethene	9.626		ug/l	1.0	10		96	70-130	2.1	30
1,1-Dichloroethane	9.372		ug/l	1.0	10		94	70-130	0.0	30
1,1,2-Trichloroethane	9.485		ug/l	1.0	10		95	70-130	3.1	30
1,1,2,2-Tetrachloroethane	10.55		ug/l	0.50	10		105	70-130	1.0	30
1,1,1-Trichloroethane	9.911		ug/l	1.0	10		99	70-130	1.0	30
1,1,1,2-Tetrachloroethane	9.866		ug/l	1.0	10		99	70-130	0.0	30
1,2-Dichlorobenzene	9.768		ug/l	1.0	10		98	70-130	2.1	30
Dichlorodifluoromethane	9.260		ug/l	1.0	10		93	40-160	3.2	30
Trichlorotrifluoroethane	9.988		ug/l	1.0	10		100	70-130	3.0	30
Trichlorofluoromethane	9.426		ug/l	1.0	10		94	70-130	4.2	30
Trichloroethene	9.430		ug/l	1.0	10		94	70-130	2.1	30
trans-1,4-dichloro-2-butene	55.63		ug/l	5.0	50		111	70-130	0.9	30
trans-1,3-Dichloropropene	9.258		ug/l	0.40	10		93	70-130	2.2	30
trans-1,2-Dichloroethene	9.244		ug/l	1.0	10		92	70-130	1.1	30
Methylene chloride	9.087		ug/l	1.0	10		91	70-130	1.1	30
Bromoform	10.85		ug/l	1.0	10		109	70-130	10.6	30
Dibromomethane	9.679		ug/l	1.0	10		97	70-130	0.0	30
Dibromochloromethane	10.67		ug/l	0.50	10		107	70-130	6.8	30
cis-1,3-Dichloropropene	9.579		ug/l	0.40	10		96	70-130	1.0	30
cis-1,2-Dichloroethene	9.203		ug/l	1.0	10		92	70-130	1.1	30
Chloromethane	8.668		ug/l	1.0	10		87	40-160	2.3	30
Chloroform	9.468		ug/l	1.0	10		95	70-130	0.0	30
Chloroethane	8.695		ug/l	1.0	10		87	70-130	5.6	30
Chlorobenzene	9.369		ug/l	1.0	10		94	70-130	2.2	30
Carbon tetrachloride	9.940		ug/l	1.0	10		99	70-130	0.0	30
Tetrachloroethene	9.494		ug/l	1.0	10		95	70-130	6.1	30
Surrogate: % 1,2-dichlorobenzene-d4	10.14		ug/l		10		101	70-130		
Surrogate: % Toluene-d8	9.708		ug/l		10		97	70-130		
Surrogate: % Dibromofluoromethane	9.546		ug/l		10		95	70-130		
Surrogate: % Bromofluorobenzene	9.469		ug/l		10		95	70-130		

Batch 454641A - SW8260C

BLK (CB85991-BLK)

Prepared: Analyzed: 02-Nov-18

1,1-Dichloroethene	ND		ug/kg	5.0		ND	-
Vinyl chloride	ND		ug/kg	5.0		ND	-
Bromodichloromethane	ND		ug/kg	5.0		ND	-
Bromobenzene	ND		ug/kg	5.0		ND	-
2,2-Dichloropropane	ND		ug/kg	5.0		ND	-
1,4-Dichlorobenzene	ND		ug/kg	5.0		ND	-
1,3-Dichloropropane	ND		ug/kg	5.0		ND	-
1,3-Dichlorobenzene	ND		ug/kg	5.0		ND	-
1,2-Dichloropropane	ND		ug/kg	5.0		ND	-
Bromoform	ND		ug/kg	5.0		ND	-
1,2-Dichlorobenzene	ND		ug/kg	5.0		ND	-
1,2-Dibromoethane	ND		ug/kg	5.0		ND	-
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0		ND	-
1,2,3-Trichloropropane	ND		ug/kg	5.0		ND	-

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454641A - SW8260C										
BLK (CB85991-BLK)					<u>Prepared: Analyzed: 02-Nov-18</u>					
1,1-Dichloroethane	ND		ug/kg	5.0			ND	-		
1,1,2-Trichloroethane	ND		ug/kg	5.0			ND	-		
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.0			ND	-		
1,1,1-Trichloroethane	ND		ug/kg	5.0			ND	-		
1,1,1,2-Tetrachloroethane	ND		ug/kg	5.0			ND	-		
1,2-Dichloroethane	ND		ug/kg	5.0			ND	-		
Dichlorodifluoromethane	ND		ug/kg	5.0			ND	-		
Trichlorotrifluoroethane	ND		ug/kg	5.0			ND	-		
Trichlorofluoromethane	ND		ug/kg	5.0			ND	-		
Trichloroethene	ND		ug/kg	5.0			ND	-		
trans-1,4-dichloro-2-butene	ND		ug/kg	5.0			ND	-		
trans-1,3-Dichloropropene	ND		ug/kg	5.0			ND	-		
1,1-Dichloropropene	ND		ug/kg	5.0			ND	-		
trans-1,2-Dichloroethene	ND		ug/kg	5.0			ND	-		
Bromomethane	ND		ug/kg	5.0			ND	-		
Methylene chloride	ND		ug/kg	5.0			ND	-		
Dibromomethane	ND		ug/kg	5.0			ND	-		
Dibromochloromethane	ND		ug/kg	3.0			ND	-		
cis-1,3-Dichloropropene	ND		ug/kg	5.0			ND	-		
cis-1,2-Dichloroethene	ND		ug/kg	5.0			ND	-		
Chloromethane	ND		ug/kg	5.0			ND	-		
Chloroform	ND		ug/kg	5.0			ND	-		
Chloroethane	ND		ug/kg	5.0			ND	-		
Chlorobenzene	ND		ug/kg	5.0			ND	-		
Carbon tetrachloride	ND		ug/kg	5.0			ND	-		
Tetrachloroethene	ND		ug/kg	5.0			ND	-		
Surrogate: % Dibromofluoromethane	99		ug/kg		50		99	70-130		
Surrogate: % Bromofluorobenzene	98		ug/kg		50		98	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	100		ug/kg		50		100	70-130		
Surrogate: % Toluene-d8	100		ug/kg		50		100	70-130		
LCS (CB85991-LCS)					<u>Prepared: Analyzed: 01-Nov-18</u>					
1,2-Dibromo-3-chloropropane	59.65		ug/kg	5.0	50		119	70-130		30
Bromobenzene	56.78		ug/kg	5.0	50		114	70-130		30
Vinyl chloride	61.72		ug/kg	5.0	50		123	70-130		30
2,2-Dichloropropane	58.71		ug/kg	5.0	50		117	70-130		30
1,4-Dichlorobenzene	54.82		ug/kg	5.0	50		110	70-130		30
1,3-Dichloropropane	57.63		ug/kg	5.0	50		115	70-130		30
1,3-Dichlorobenzene	55.82		ug/kg	5.0	50		112	70-130		30
1,2-Dichloropropane	58.14		ug/kg	5.0	50		116	70-130		30
1,2-Dichloroethane	60.12		ug/kg	5.0	50		120	70-130		30
1,2-Dibromoethane	58.13		ug/kg	5.0	50		116	70-130		30
1,2,3-Trichloropropane	57.53		ug/kg	5.0	50		115	70-130		30
1,1-Dichloropropene	58.84		ug/kg	5.0	50		118	70-130		30
1,1-Dichloroethene	61.86		ug/kg	5.0	50		124	70-130		30
1,1-Dichloroethane	60.03		ug/kg	5.0	50		120	70-130		30
1,1,2-Trichloroethane	57.26		ug/kg	5.0	50		115	70-130		30
1,1,2,2-Tetrachloroethane	59.61		ug/kg	3.0	50		119	70-130		30
1,1,1-Trichloroethane	57.51		ug/kg	5.0	50		115	70-130		30
1,1,1,2-Tetrachloroethane	57.38		ug/kg	5.0	50		115	70-130		30
Trichlorotrifluoroethane	53.75		ug/kg	5.0	50		107	70-130		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 454641A - SW8260C										
<u>LCS (CB85991-LCS)</u>					<u>Prepared: Analyzed: 01-Nov-18</u>					
1,2-Dichlorobenzene	56.31		ug/kg	5.0	50		113	70-130		30
cis-1,3-Dichloropropene	58.38		ug/kg	5.0	50		117	70-130		30
Bromodichloromethane	58.11		ug/kg	5.0	50		116	70-130		30
Trichloroethene	57.45		ug/kg	5.0	50		115	70-130		30
trans-1,4-dichloro-2-butene	246.0		ug/kg	5.0	250		98	70-130		30
trans-1,3-Dichloropropene	56.95		ug/kg	5.0	50		114	70-130		30
trans-1,2-Dichloroethene	61.25		ug/kg	5.0	50		123	70-130		30
Tetrachloroethene	56.66		ug/kg	5.0	50		113	70-130		30
Methylene chloride	55.22		ug/kg	5.0	50		110	70-130		30
Dichlorodifluoromethane	60.07		ug/kg	5.0	50		120	40-160		30
Dibromochloromethane	59.61		ug/kg	3.0	50		119	70-130		30
Trichlorofluoromethane	59.91		ug/kg	5.0	50		120	70-130		30
cis-1,2-Dichloroethene	59.21		ug/kg	5.0	50		118	70-130		30
Chloromethane	54.99		ug/kg	5.0	50		110	40-160		30
Chloroform	58.11		ug/kg	5.0	50		116	70-130		30
Chloroethane	57.78		ug/kg	5.0	50		116	70-130		30
Chlorobenzene	57.07		ug/kg	5.0	50		114	70-130		30
Carbon tetrachloride	56.61		ug/kg	5.0	50		113	70-130		30
Bromomethane	56.77		ug/kg	5.0	50		114	40-160		30
Bromoform	59.45		ug/kg	5.0	50		119	70-130		30
Dibromomethane	57.26		ug/kg	5.0	50		115	70-130		30
Surrogate: % 1,2-dichlorobenzene-d4	50.15		ug/kg		50		100	70-130		
Surrogate: % Bromofluorobenzene	49.63		ug/kg		50		99	70-130		
Surrogate: % Dibromofluoromethane	50.83		ug/kg		50		102	70-130		
Surrogate: % Toluene-d8	51.01		ug/kg		50		102	70-130		
<u>LCSD (CB85991-LCSD)</u>					<u>Prepared: Analyzed: 02-Nov-18</u>					
Bromomethane	47.42		ug/kg	5.0	50		95	40-160	18.2	30
Carbon tetrachloride	49.54		ug/kg	5.0	50		99	70-130	13.2	30
Chlorobenzene	49.38		ug/kg	5.0	50		99	70-130	14.1	30
Chloroethane	48.48		ug/kg	5.0	50		97	70-130	17.8	30
Chloroform	49.95		ug/kg	5.0	50		100	70-130	14.8	30
Chloromethane	46.48		ug/kg	5.0	50		93	40-160	16.7	30
cis-1,2-Dichloroethene	50.59		ug/kg	5.0	50		101	70-130	15.5	30
cis-1,3-Dichloropropene	50.40		ug/kg	5.0	50		101	70-130	14.7	30
Methylene chloride	48.42		ug/kg	5.0	50		97	70-130	12.6	30
Tetrachloroethene	48.75		ug/kg	5.0	50		98	70-130	14.2	30
trans-1,2-Dichloroethene	52.98		ug/kg	5.0	50		106	70-130	14.8	30
trans-1,3-Dichloropropene	49.57		ug/kg	5.0	50		99	70-130	14.1	30
trans-1,4-dichloro-2-butene	217.0		ug/kg	5.0	250		87	70-130	11.9	30
Trichloroethene	49.26		ug/kg	5.0	50		99	70-130	15.0	30
Trichlorofluoromethane	50.91		ug/kg	5.0	50		102	70-130	16.2	30
Trichlorotrifluoroethane	46.27		ug/kg	5.0	50		93	70-130	14.0	30
1,1-Dichloropropene	50.60		ug/kg	5.0	50		101	70-130	15.5	30
Bromoform	51.54		ug/kg	5.0	50		103	70-130	14.4	30
Dibromomethane	50.06		ug/kg	5.0	50		100	70-130	14.0	30
1,2-Dibromoethane	50.20		ug/kg	5.0	50		100	70-130	14.8	30
1,1,1,2-Tetrachloroethane	49.74		ug/kg	5.0	50		99	70-130	15.0	30
1,1,1-Trichloroethane	48.67		ug/kg	5.0	50		97	70-130	17.0	30
1,1,2,2-Tetrachloroethane	53.55		ug/kg	3.0	50		107	70-130	10.6	30
1,1,2-Trichloroethane	50.04		ug/kg	5.0	50		100	70-130	14.0	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 454641A - SW8260C										
<u>LCSD (CB85991-LCSD)</u>					Prepared: Analyzed: 02-Nov-18					
1,1-Dichloroethane	51.06		ug/kg	5.0	50		102	70-130	16.2	30
1,1-Dichloroethene	53.18		ug/kg	5.0	50		106	70-130	15.7	30
Dichlorodifluoromethane	49.37		ug/kg	5.0	50		99	40-160	19.2	30
1,2-Dibromo-3-chloropropane	53.23		ug/kg	5.0	50		106	70-130	11.6	30
Vinyl chloride	52.20		ug/kg	5.0	50		104	70-130	16.7	30
Bromodichloromethane	50.02		ug/kg	5.0	50		100	70-130	14.8	30
1,2-Dichlorobenzene	49.50		ug/kg	5.0	50		99	70-130	13.2	30
1,2-Dichloroethane	51.24		ug/kg	5.0	50		102	70-130	16.2	30
1,2-Dichloropropane	50.34		ug/kg	5.0	50		101	70-130	13.8	30
1,3-Dichlorobenzene	48.92		ug/kg	5.0	50		98	70-130	13.3	30
1,3-Dichloropropane	50.27		ug/kg	5.0	50		101	70-130	13.0	30
1,4-Dichlorobenzene	48.33		ug/kg	5.0	50		97	70-130	12.6	30
2,2-Dichloropropane	49.96		ug/kg	5.0	50		100	70-130	15.7	30
Bromobenzene	49.41		ug/kg	5.0	50		99	70-130	14.1	30
1,2,3-Trichloropropane	51.61		ug/kg	5.0	50		103	70-130	11.0	30
Dibromochloromethane	51.88		ug/kg	3.0	50		104	70-130	13.5	30
Surrogate: % Dibromofluoromethane	50.27		ug/kg		50		101	70-130		
Surrogate: % Bromofluorobenzene	49.98		ug/kg		50		100	70-130		
Surrogate: % Toluene-d8	50.30		ug/kg		50		101	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	49.69		ug/kg		50		99	70-130		
<u>MS (CB85991-MS)</u>					Source: CB85991 Prepared: Analyzed: 02-Nov-18					
1,1-Dichloroethene	54.33		ug/kg	5.0	50		109	70-130		30
1,4-Dichlorobenzene	59.44		ug/kg	5.0	50		119	70-130		30
1,3-Dichloropropane	57.88		ug/kg	5.0	50		116	70-130		30
1,3-Dichlorobenzene	59.60		ug/kg	5.0	50		119	70-130		30
1,2-Dichloropropane	59.85		ug/kg	5.0	50		120	70-130		30
1,2-Dichloroethane	59.94		ug/kg	5.0	50		120	70-130		30
1,2-Dichlorobenzene	60.18		ug/kg	5.0	50		120	70-130		30
1,2-Dibromoethane	57.69		ug/kg	5.0	50		115	70-130		30
1,2-Dibromo-3-chloropropane	54.64		ug/kg	5.0	50		109	70-130		30
2,2-Dichloropropane	54.81		ug/kg	5.0	50		110	70-130		30
1,1-Dichloropropene	60.75		ug/kg	5.0	50		121	70-130		30
Trichlorofluoromethane	54.30		ug/kg	5.0	50		109	70-130		30
1,1-Dichloroethane	60.54		ug/kg	5.0	50		121	70-130		30
1,1,2-Trichloroethane	57.72		ug/kg	5.0	50		115	70-130		30
1,1,2,2-Tetrachloroethane	63.29		ug/kg	3.0	50		127	70-130		30
1,1,1-Trichloroethane	56.71		ug/kg	5.0	50		113	70-130		30
1,1,1,2-Tetrachloroethane	56.78		ug/kg	5.0	50		114	70-130		30
Vinyl chloride	77.48	m	ug/kg	5.0	50		155	70-130		30
Trichlorotrifluoroethane	49.69		ug/kg	5.0	50		99	70-130		30
1,2,3-Trichloropropane	58.72		ug/kg	5.0	50		117	70-130		30
Tetrachloroethene	59.03		ug/kg	5.0	50		118	70-130		30
Bromobenzene	58.30		ug/kg	5.0	50		117	70-130		30
Trichloroethene	58.65		ug/kg	5.0	50		117	70-130		30
trans-1,3-Dichloropropene	55.34		ug/kg	5.0	50		111	70-130		30
Chloroethane	52.75		ug/kg	5.0	50		106	70-130		30
trans-1,2-Dichloroethene	62.90		ug/kg	5.0	50		126	70-130		30
trans-1,4-dichloro-2-butene	230.9		ug/kg	5.0	250		92	70-130		30
Methylene chloride	56.48		ug/kg	5.0	50		113	70-130		30
Dichlorodifluoromethane	67.02		ug/kg	5.0	50		134	40-160		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454641A - SW8260C										
MS (CB85991-MS)	Source: CB85991				Prepared: Analyzed: 02-Nov-18					
Dibromomethane	57.21		ug/kg	5.0	50		114	70-130		30
Dibromochloromethane	57.97		ug/kg	3.0	50		116	70-130		30
Bromomethane	39.00		ug/kg	5.0	50		73	40-160		30
cis-1,2-Dichloroethene	61.96		ug/kg	5.0	50		124	70-130		30
Bromoform	56.32		ug/kg	5.0	50		113	70-130		30
Chloromethane	58.75		ug/kg	5.0	50		118	40-160		30
Chloroform	58.42		ug/kg	5.0	50		117	70-130		30
Chlorobenzene	58.67		ug/kg	5.0	50		117	70-130		30
Carbon tetrachloride	55.68		ug/kg	5.0	50		111	70-130		30
Bromodichloromethane	57.65		ug/kg	5.0	50		115	70-130		30
cis-1,3-Dichloropropene	57.33		ug/kg	5.0	50		115	70-130		30
Surrogate: % Toluene-d8	50.78		ug/kg		50		102	70-130		
Surrogate: % Dibromofluoromethane	48.10		ug/kg		50		96	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	50.72		ug/kg		50		101	70-130		
Surrogate: % Bromofluorobenzene	49.59		ug/kg		50		99	70-130		
MSD (CB85991-MSD)	Source: CB85991				Prepared: Analyzed: 02-Nov-18					
Chloromethane	49.39		ug/kg	5.0	50		99	40-160	17.5	30
Bromodichloromethane	49.76		ug/kg	5.0	50		100	70-130	14.0	30
cis-1,3-Dichloropropene	49.22		ug/kg	5.0	50		98	70-130	16.0	30
cis-1,2-Dichloroethene	51.54		ug/kg	5.0	50		103	70-130	18.5	30
Chloroform	50.70		ug/kg	5.0	50		101	70-130	14.7	30
Chlorobenzene	51.02		ug/kg	5.0	50		102	70-130	13.7	30
Carbon tetrachloride	48.23		ug/kg	5.0	50		96	70-130	14.5	30
Bromoform	47.82		ug/kg	5.0	50		96	70-130	16.3	30
Bromomethane	35.30		ug/kg	5.0	50		65	40-160	11.6	30
Dibromochloromethane	49.56		ug/kg	3.0	50		99	70-130	15.8	30
Dibromomethane	48.84		ug/kg	5.0	50		98	70-130	15.1	30
Dichlorodifluoromethane	58.24		ug/kg	5.0	50		116	40-160	14.4	30
Methylene chloride	48.49		ug/kg	5.0	50		97	70-130	15.2	30
Tetrachloroethene	50.99		ug/kg	5.0	50		102	70-130	14.5	30
trans-1,2-Dichloroethene	55.16		ug/kg	5.0	50		110	70-130	13.6	30
trans-1,3-Dichloropropene	46.64		ug/kg	5.0	50		93	70-130	17.6	30
Bromobenzene	51.21		ug/kg	5.0	50		102	70-130	13.7	30
Trichloroethene	50.85		ug/kg	5.0	50		102	70-130	13.7	30
1,1-Dichloroethane	51.79		ug/kg	5.0	50		104	70-130	15.1	30
trans-1,4-dichloro-2-butene	194.7		ug/kg	5.0	250		78	70-130	16.5	30
1,2,3-Trichloropropane	50.13		ug/kg	5.0	50		100	70-130	15.7	30
Trichlorotrifluoroethane	43.38		ug/kg	5.0	50		87	70-130	12.9	30
Trichlorofluoromethane	61.99		ug/kg	5.0	50		124	70-130	12.9	30
Chloroethane	61.16		ug/kg	5.0	50		122	70-130	14.0	30
Vinyl chloride	66.79	m	ug/kg	5.0	50		134	70-130	14.5	30
1,1,1,2-Tetrachloroethane	49.80		ug/kg	5.0	50		100	70-130	13.1	30
1,1,1-Trichloroethane	49.58		ug/kg	5.0	50		99	70-130	13.2	30
1,1,2,2-Tetrachloroethane	53.12		ug/kg	3.0	50		106	70-130	18.0	30
1,1-Dichloropropene	52.54		ug/kg	5.0	50		105	70-130	14.2	30
1,1-Dichloroethene	47.14		ug/kg	5.0	50		94	70-130	14.8	30
2,2-Dichloropropane	47.99		ug/kg	5.0	50		96	70-130	13.6	30
1,2-Dibromo-3-chloropropane	45.63		ug/kg	5.0	50		91	70-130	18.0	30
1,2-Dibromoethane	48.89		ug/kg	5.0	50		98	70-130	16.0	30
1,2-Dichlorobenzene	52.62		ug/kg	5.0	50		105	70-130	13.3	30

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Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454641A - SW8260C										
MSD (CB85991-MSD)				Source: CB85991				Prepared: Analyzed: 02-Nov-18		
1,2-Dichloroethane	50.99		ug/kg	5.0	50		102	70-130	16.2	30
1,2-Dichloropropane	51.83		ug/kg	5.0	50		104	70-130	14.3	30
1,3-Dichlorobenzene	51.88		ug/kg	5.0	50		104	70-130	13.5	30
1,3-Dichloropropane	49.59		ug/kg	5.0	50		99	70-130	15.8	30
1,4-Dichlorobenzene	51.89		ug/kg	5.0	50		104	70-130	13.5	30
1,1,2-Trichloroethane	48.91		ug/kg	5.0	50		98	70-130	16.0	30
Surrogate: % Toluene-d8	50.07		ug/kg		50		100	70-130		
Surrogate: % Bromofluorobenzene	49.58		ug/kg		50		99	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	50.76		ug/kg		50		102	70-130		
Surrogate: % Dibromofluoromethane	48.93		ug/kg		50		98	70-130		
Batch 454848A - SW8260C										
BLK (CB87810-BLK)								Prepared: Analyzed: 03-Nov-18		
Bromobenzene	ND		ug/kg	5.0			ND	-		
1,2,3-Trichloropropane	ND		ug/kg	5.0			ND	-		
2,2-Dichloropropane	ND		ug/kg	5.0			ND	-		
Bromoform	ND		ug/kg	5.0			ND	-		
1,3-Dichloropropane	ND		ug/kg	5.0			ND	-		
1,3-Dichlorobenzene	ND		ug/kg	5.0			ND	-		
1,2-Dichloropropane	ND		ug/kg	5.0			ND	-		
1,2-Dichloroethane	ND		ug/kg	5.0			ND	-		
1,2-Dichlorobenzene	ND		ug/kg	5.0			ND	-		
Vinyl chloride	ND		ug/kg	5.0			ND	-		
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0			ND	-		
Bromodichloromethane	ND		ug/kg	5.0			ND	-		
1,1-Dichloropropene	ND		ug/kg	5.0			ND	-		
1,1-Dichloroethene	ND		ug/kg	5.0			ND	-		
1,1-Dichloroethane	ND		ug/kg	5.0			ND	-		
1,1,2-Trichloroethane	ND		ug/kg	5.0			ND	-		
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.0			ND	-		
1,1,1-Trichloroethane	ND		ug/kg	5.0			ND	-		
1,1,1,2-Tetrachloroethane	ND		ug/kg	5.0			ND	-		
1,2-Dibromoethane	ND		ug/kg	5.0			ND	-		
Methylene chloride	ND		ug/kg	5.0			ND	-		
Trichlorotrifluoroethane	ND		ug/kg	5.0			ND	-		
Trichlorofluoromethane	ND		ug/kg	5.0			ND	-		
Trichloroethene	ND		ug/kg	5.0			ND	-		
trans-1,4-dichloro-2-butene	ND		ug/kg	5.0			ND	-		
trans-1,3-Dichloropropene	ND		ug/kg	5.0			ND	-		
1,4-Dichlorobenzene	ND		ug/kg	5.0			ND	-		
Tetrachloroethene	ND		ug/kg	5.0			ND	-		
Bromomethane	ND		ug/kg	5.0			ND	-		
Dichlorodifluoromethane	ND		ug/kg	5.0			ND	-		
Dibromomethane	ND		ug/kg	5.0			ND	-		
Dibromochloromethane	ND		ug/kg	3.0			ND	-		
cis-1,3-Dichloropropene	ND		ug/kg	5.0			ND	-		
cis-1,2-Dichloroethene	ND		ug/kg	5.0			ND	-		
Chloromethane	ND		ug/kg	5.0			ND	-		
Chloroform	ND		ug/kg	5.0			ND	-		
Chloroethane	ND		ug/kg	5.0			ND	-		
Chlorobenzene	ND		ug/kg	5.0			ND	-		

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454848A - SW8260C										
BLK (CB87810-BLK)					Prepared: Analyzed: 03-Nov-18					
Carbon tetrachloride	ND		ug/kg	5.0			ND	-		
trans-1,2-Dichloroethene	ND		ug/kg	5.0			ND	-		
Surrogate: % Toluene-d8	93		ug/kg		50		93	70-130		
Surrogate: % Dibromofluoromethane	104		ug/kg		50		104	70-130		
Surrogate: % Bromofluorobenzene	98		ug/kg		50		98	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	99		ug/kg		50		99	70-130		
LCS (CB87810-LCS)					Prepared: Analyzed: 03-Nov-18					
1,1-Dichloroethene	46.56		ug/kg	5.0	50		93	70-130		30
Trichlorofluoromethane	42.74		ug/kg	5.0	50		85	70-130		30
1,3-Dichlorobenzene	43.11		ug/kg	5.0	50		86	70-130		30
1,2-Dichloropropane	39.60		ug/kg	5.0	50		79	70-130		30
1,2-Dichloroethane	45.13		ug/kg	5.0	50		90	70-130		30
1,2-Dichlorobenzene	42.80		ug/kg	5.0	50		86	70-130		30
1,2-Dibromoethane	43.51		ug/kg	5.0	50		87	70-130		30
1,2-Dibromo-3-chloropropane	47.57		ug/kg	5.0	50		95	70-130		30
1,4-Dichlorobenzene	43.10		ug/kg	5.0	50		86	70-130		30
1,1-Dichloropropene	43.30		ug/kg	5.0	50		87	70-130		30
2,2-Dichloropropane	45.70		ug/kg	5.0	50		91	70-130		30
1,1-Dichloroethane	40.16		ug/kg	5.0	50		80	70-130		30
1,1,2-Trichloroethane	40.59		ug/kg	5.0	50		81	70-130		30
1,1,2,2-Tetrachloroethane	40.93		ug/kg	3.0	50		82	70-130		30
1,1,1-Trichloroethane	45.58		ug/kg	5.0	50		91	70-130		30
1,1,1,2-Tetrachloroethane	47.31		ug/kg	5.0	50		95	70-130		30
trans-1,4-dichloro-2-butene	270.0		ug/kg	5.0	250		108	70-130		30
trans-1,3-Dichloropropene	45.17		ug/kg	5.0	50		90	70-130		30
1,2,3-Trichloropropane	38.94		ug/kg	5.0	50		78	70-130		30
Chloroform	39.77		ug/kg	5.0	50		80	70-130		30
trans-1,2-Dichloroethene	47.26		ug/kg	5.0	50		95	70-130		30
Tetrachloroethene	45.79		ug/kg	5.0	50		92	70-130		30
Methylene chloride	54.79		ug/kg	5.0	50		110	70-130		30
Dichlorodifluoromethane	37.52		ug/kg	5.0	50		75	40-160		30
Dibromomethane	43.02		ug/kg	5.0	50		86	70-130		30
Dibromochloromethane	52.25		ug/kg	3.0	50		104	70-130		30
cis-1,3-Dichloropropene	44.02		ug/kg	5.0	50		88	70-130		30
1,3-Dichloropropane	41.58		ug/kg	5.0	50		83	70-130		30
Chloromethane	31.12		ug/kg	5.0	50		62	40-160		30
Vinyl chloride	41.06		ug/kg	5.0	50		82	70-130		30
Chloroethane	46.02		ug/kg	5.0	50		92	70-130		30
Chlorobenzene	41.91		ug/kg	5.0	50		84	70-130		30
Carbon tetrachloride	47.21		ug/kg	5.0	50		94	70-130		30
Bromomethane	42.81		ug/kg	5.0	50		86	40-160		30
Bromoform	49.98		ug/kg	5.0	50		100	70-130		30
Bromodichloromethane	47.96		ug/kg	5.0	50		96	70-130		30
Bromobenzene	43.43		ug/kg	5.0	50		87	70-130		30
cis-1,2-Dichloroethene	40.93		ug/kg	5.0	50		82	70-130		30
Trichloroethene	43.43		ug/kg	5.0	50		87	70-130		30
Trichlorotrifluoroethane	49.35		ug/kg	5.0	50		99	70-130		30
Surrogate: % 1,2-dichlorobenzene-d4	50.42		ug/kg		50		101	70-130		
Surrogate: % Bromofluorobenzene	50.35		ug/kg		50		101	70-130		
Surrogate: % Dibromofluoromethane	50.57		ug/kg		50		101	70-130		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454848A - SW8260C										
LCS (CB87810-LCS)					Prepared: Analyzed: 03-Nov-18					
Surrogate: % Toluene-d8	48.78		ug/kg		50		98	70-130		
LCSD (CB87810-LCSD)					Prepared: Analyzed: 03-Nov-18					
trans-1,2-Dichloroethene	54.45		ug/kg	5.0	50		109	70-130	13.7	30
Chlorobenzene	47.94		ug/kg	5.0	50		96	70-130	13.3	30
Chloroethane	53.17		ug/kg	5.0	50		106	70-130	14.1	30
Chloroform	46.16		ug/kg	5.0	50		92	70-130	14.0	30
Chloromethane	35.15		ug/kg	5.0	50		70	40-160	12.1	30
cis-1,2-Dichloroethene	46.37		ug/kg	5.0	50		93	70-130	12.6	30
cis-1,3-Dichloropropene	51.53		ug/kg	5.0	50		103	70-130	15.7	30
Dibromochloromethane	59.72		ug/kg	3.0	50		119	70-130	13.5	30
Dibromomethane	49.29		ug/kg	5.0	50		99	70-130	14.1	30
Dichlorodifluoromethane	40.31		ug/kg	5.0	50		81	40-160	7.7	30
Carbon tetrachloride	54.63		ug/kg	5.0	50		109	70-130	14.8	30
Tetrachloroethene	50.60		ug/kg	5.0	50		101	70-130	9.3	30
trans-1,3-Dichloropropene	51.11		ug/kg	5.0	50		102	70-130	12.5	30
trans-1,4-dichloro-2-butene	316.7		ug/kg	5.0	250		127	70-130	16.2	30
Trichloroethene	50.20		ug/kg	5.0	50		100	70-130	13.9	30
Trichlorofluoromethane	46.90		ug/kg	5.0	50		94	70-130	10.1	30
Trichlorotrifluoroethane	55.15		ug/kg	5.0	50		110	70-130	10.5	30
Vinyl chloride	47.56		ug/kg	5.0	50		95	70-130	14.7	30
Methylene chloride	61.52		ug/kg	5.0	50		123	70-130	11.2	30
1,2-Dibromoethane	49.73		ug/kg	5.0	50		99	70-130	12.9	30
1,1,1,2-Tetrachloroethane	54.36		ug/kg	5.0	50		109	70-130	13.7	30
Bromobenzene	47.66		ug/kg	5.0	50		95	70-130	8.8	30
1,1,2,2-Tetrachloroethane	47.13		ug/kg	3.0	50		94	70-130	13.6	30
1,1,2-Trichloroethane	48.26		ug/kg	5.0	50		97	70-130	18.0	30
1,1-Dichloroethane	47.29		ug/kg	5.0	50		95	70-130	17.1	30
1,1-Dichloroethene	53.90		ug/kg	5.0	50		108	70-130	14.9	30
1,1-Dichloropropene	48.79		ug/kg	5.0	50		98	70-130	11.9	30
Bromodichloromethane	54.77		ug/kg	5.0	50		110	70-130	13.6	30
1,2-Dibromo-3-chloropropane	55.21		ug/kg	5.0	50		110	70-130	14.6	30
Bromomethane	47.64		ug/kg	5.0	50		95	40-160	9.9	30
1,2-Dichlorobenzene	47.42		ug/kg	5.0	50		95	70-130	9.9	30
1,2-Dichloroethane	51.20		ug/kg	5.0	50		102	70-130	12.5	30
1,2-Dichloropropane	44.62		ug/kg	5.0	50		89	70-130	11.9	30
1,3-Dichlorobenzene	46.65		ug/kg	5.0	50		93	70-130	7.8	30
1,3-Dichloropropane	47.15		ug/kg	5.0	50		94	70-130	12.4	30
1,4-Dichlorobenzene	46.17		ug/kg	5.0	50		92	70-130	6.7	30
1,1,1-Trichloroethane	52.43		ug/kg	5.0	50		105	70-130	14.3	30
2,2-Dichloropropane	53.52		ug/kg	5.0	50		107	70-130	16.2	30
1,2,3-Trichloropropane	45.06		ug/kg	5.0	50		90	70-130	14.3	30
Bromoform	58.82		ug/kg	5.0	50		118	70-130	16.5	30
Surrogate: % 1,2-dichlorobenzene-d4	50.76		ug/kg		50		102	70-130		
Surrogate: % Bromofluorobenzene	49.74		ug/kg		50		99	70-130		
Surrogate: % Dibromofluoromethane	52.09		ug/kg		50		104	70-130		
Surrogate: % Toluene-d8	49.55		ug/kg		50		99	70-130		
MS (CB87810-MS)				Source: CB87810		Prepared: Analyzed: 03-Nov-18				
Vinyl chloride	43.81		ug/kg	5.0	50		88	70-130		30
Chlorobenzene	44.88		ug/kg	5.0	50		90	70-130		30
Chloroethane	51.86		ug/kg	5.0	50		104	70-130		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454848A - SW8260C										
MS (CB87810-MS)	Source: CB87810				Prepared: Analyzed: 03-Nov-18					
Chloroform	44.06		ug/kg	5.0	50		88	70-130		30
Chloromethane	31.94		ug/kg	5.0	50		64	40-160		30
cis-1,2-Dichloroethene	45.08		ug/kg	5.0	50		90	70-130		30
cis-1,3-Dichloropropene	44.65		ug/kg	5.0	50		89	70-130		30
Dibromochloromethane	52.88		ug/kg	3.0	50		106	70-130		30
Bromomethane	44.58		ug/kg	5.0	50		89	40-160		30
Methylene chloride	51.59		ug/kg	5.0	50		103	70-130		30
Bromoform	49.34		ug/kg	5.0	50		99	70-130		30
trans-1,2-Dichloroethene	50.75		ug/kg	5.0	50		101	70-130		30
trans-1,3-Dichloropropene	42.45		ug/kg	5.0	50		85	70-130		30
Trichloroethene	46.55		ug/kg	5.0	50		93	70-130		30
Trichlorofluoromethane	44.47		ug/kg	5.0	50		89	70-130		30
Trichlorotrifluoroethane	52.89		ug/kg	5.0	50		106	70-130		30
Dibromomethane	46.84		ug/kg	5.0	50		94	70-130		30
1,1,2-Trichloroethane	44.26		ug/kg	5.0	50		89	70-130		30
1,1,2,2-Tetrachloroethane	42.22		ug/kg	3.0	50		84	70-130		30
1,2,3-Trichloropropane	41.97		ug/kg	5.0	50		84	70-130		30
1,2-Dibromo-3-chloropropane	45.90		ug/kg	5.0	50		92	70-130		30
1,2-Dichlorobenzene	44.71		ug/kg	5.0	50		89	70-130		30
1,3-Dichlorobenzene	45.48		ug/kg	5.0	50		91	70-130		30
1,4-Dichlorobenzene	43.79		ug/kg	5.0	50		88	70-130		30
Bromobenzene	44.99		ug/kg	5.0	50		90	70-130		30
trans-1,4-dichloro-2-butene	258.1		ug/kg	5.0	250		103	70-130		30
Carbon tetrachloride	49.69		ug/kg	5.0	50		99	70-130		30
1,1,1-Trichloroethane	48.59		ug/kg	5.0	50		97	70-130		30
Tetrachloroethene	48.22		ug/kg	5.0	50		96	70-130		30
1,1-Dichloroethane	45.21		ug/kg	5.0	50		90	70-130		30
1,1-Dichloroethene	52.25		ug/kg	5.0	50		104	70-130		30
1,1-Dichloropropene	45.73		ug/kg	5.0	50		91	70-130		30
1,2-Dibromoethane	47.61		ug/kg	5.0	50		95	70-130		30
1,2-Dichloroethane	47.53		ug/kg	5.0	50		95	70-130		30
1,2-Dichloropropane	42.86		ug/kg	5.0	50		86	70-130		30
1,3-Dichloropropane	44.92		ug/kg	5.0	50		90	70-130		30
2,2-Dichloropropane	46.75		ug/kg	5.0	50		94	70-130		30
Bromodichloromethane	48.82		ug/kg	5.0	50		98	70-130		30
1,1,1,2-Tetrachloroethane	50.50		ug/kg	5.0	50		101	70-130		30
Dichlorodifluoromethane	34.16		ug/kg	5.0	50		68	40-160		30
Surrogate: % Dibromofluoromethane	50.74		ug/kg		50		101	70-130		
Surrogate: % Toluene-d8	49.01		ug/kg		50		98	70-130		
Surrogate: % Bromofluorobenzene	49.12		ug/kg		50		98	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	49.90		ug/kg		50		100	70-130		
MSD (CB87810-MSD)	Source: CB87810				Prepared: Analyzed: 03-Nov-18					
Trichlorofluoromethane	43.90		ug/kg	5.0	50		88	70-130	1.1	30
Bromomethane	45.20		ug/kg	5.0	50		90	40-160	1.1	30
Carbon tetrachloride	48.92		ug/kg	5.0	50		98	70-130	1.0	30
Chlorobenzene	45.15		ug/kg	5.0	50		90	70-130	0.0	30
Chloroethane	51.84		ug/kg	5.0	50		104	70-130	0.0	30
Chloroform	43.65		ug/kg	5.0	50		87	70-130	1.1	30
Chloromethane	32.84		ug/kg	5.0	50		66	40-160	3.1	30
cis-1,2-Dichloroethene	44.67		ug/kg	5.0	50		89	70-130	1.1	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454848A - SW8260C										
MSD (CB87810-MSD)				Source: CB87810			Prepared: Analyzed: 03-Nov-18			
Bromoform	53.30		ug/kg	5.0	50		107	70-130	7.8	30
Dichlorodifluoromethane	35.11		ug/kg	5.0	50		70	40-160	2.9	30
Trichloroethene	47.15		ug/kg	5.0	50		94	70-130	1.1	30
Trichlorotrifluoroethane	52.42		ug/kg	5.0	50		105	70-130	0.9	30
cis-1,3-Dichloropropene	45.22		ug/kg	5.0	50		90	70-130	1.1	30
Methylene chloride	49.76		ug/kg	5.0	50		100	70-130	3.0	30
Tetrachloroethene	47.50		ug/kg	5.0	50		95	70-130	1.0	30
trans-1,2-Dichloroethene	50.04		ug/kg	5.0	50		100	70-130	1.0	30
trans-1,3-Dichloropropene	44.72		ug/kg	5.0	50		89	70-130	4.6	30
Vinyl chloride	44.19		ug/kg	5.0	50		88	70-130	0.0	30
Dibromochloromethane	54.92		ug/kg	3.0	50		110	70-130	3.7	30
1,2-Dibromo-3-chloropropane	51.87		ug/kg	5.0	50		104	70-130	12.2	30
Dibromomethane	45.36		ug/kg	5.0	50		91	70-130	3.2	30
1,2,3-Trichloropropane	42.64		ug/kg	5.0	50		85	70-130	1.2	30
Bromodichloromethane	48.62		ug/kg	5.0	50		97	70-130	1.0	30
1,2-Dichlorobenzene	47.10		ug/kg	5.0	50		94	70-130	5.5	30
1,3-Dichlorobenzene	48.21		ug/kg	5.0	50		96	70-130	5.3	30
1,4-Dichlorobenzene	46.83		ug/kg	5.0	50		94	70-130	6.6	30
Bromobenzene	47.04		ug/kg	5.0	50		94	70-130	4.3	30
trans-1,4-dichloro-2-butene	270.3		ug/kg	5.0	250		108	70-130	4.7	30
1,1,1,2-Tetrachloroethane	50.25		ug/kg	5.0	50		101	70-130	0.0	30
1,1,1-Trichloroethane	47.47		ug/kg	5.0	50		95	70-130	2.1	30
1,3-Dichloropropane	45.50		ug/kg	5.0	50		91	70-130	1.1	30
1,1,2,2-Tetrachloroethane	44.29		ug/kg	3.0	50		89	70-130	5.8	30
1,1,2-Trichloroethane	44.58		ug/kg	5.0	50		89	70-130	0.0	30
2,2-Dichloropropane	46.64		ug/kg	5.0	50		93	70-130	1.1	30
1,2-Dichloropropane	43.37		ug/kg	5.0	50		87	70-130	1.2	30
1,2-Dichloroethane	46.73		ug/kg	5.0	50		93	70-130	2.1	30
1,2-Dibromoethane	47.14		ug/kg	5.0	50		94	70-130	1.1	30
1,1-Dichloroethene	51.58		ug/kg	5.0	50		103	70-130	1.0	30
1,1-Dichloroethane	45.24		ug/kg	5.0	50		90	70-130	0.0	30
1,1-Dichloropropene	46.04		ug/kg	5.0	50		92	70-130	1.1	30
Surrogate: % Toluene-d8	48.18		ug/kg		50		96	70-130		
Surrogate: % Dibromofluoromethane	50.42		ug/kg		50		101	70-130		
Surrogate: % Bromofluorobenzene	49.31		ug/kg		50		99	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	50.27		ug/kg		50		101	70-130		
Batch 454850A - SW8260C										
BLK (CB85996-BLK)							Prepared: Analyzed: 02-Nov-18			
1,2-Dichloroethane	ND		ug/l	1.0			ND	-		
1,2-Dichloropropane	ND		ug/l	1.0			ND	-		
1,3-Dichlorobenzene	ND		ug/l	1.0			ND	-		
1,3-Dichloropropane	ND		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	ND		ug/l	1.0			ND	-		
Bromobenzene	ND		ug/l	1.0			ND	-		
1,2-Dichlorobenzene	ND		ug/l	1.0			ND	-		
Bromodichloromethane	ND		ug/l	0.50			ND	-		
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50			ND	-		
2,2-Dichloropropane	ND		ug/l	1.0			ND	-		
1,2-Dibromoethane	ND		ug/l	1.0			ND	-		
1,2-Dibromo-3-chloropropane	ND		ug/l	1.0			ND	-		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW8260C</u>										
Batch 454850A - SW8260C										
<u>BLK (CB85996-BLK)</u>	Prepared: Analyzed: 02-Nov-18									
1,2,3-Trichloropropane	ND		ug/l	1.0			ND	-		
1,1-Dichloropropene	ND		ug/l	1.0			ND	-		
1,1-Dichloroethene	ND		ug/l	1.0			ND	-		
1,1,2-Trichloroethane	ND		ug/l	1.0			ND	-		
1,1,1-Trichloroethane	ND		ug/l	1.0			ND	-		
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0			ND	-		
Carbon tetrachloride	ND		ug/l	1.0			ND	-		
1,1-Dichloroethane	ND		ug/l	1.0			ND	-		
Dichlorodifluoromethane	ND		ug/l	1.0			ND	-		
Bromoform	ND		ug/l	1.0			ND	-		
Vinyl chloride	ND		ug/l	1.0			ND	-		
Trichlorotrifluoroethane	ND		ug/l	1.0			ND	-		
Trichlorofluoromethane	ND		ug/l	1.0			ND	-		
Trichloroethene	ND		ug/l	1.0			ND	-		
trans-1,4-dichloro-2-butene	ND		ug/l	5.0			ND	-		
trans-1,3-Dichloropropene	ND		ug/l	0.40			ND	-		
trans-1,2-Dichloroethene	ND		ug/l	1.0			ND	-		
Methylene chloride	ND		ug/l	1.0			ND	-		
Dibromomethane	ND		ug/l	1.0			ND	-		
Dibromochloromethane	ND		ug/l	0.50			ND	-		
cis-1,3-Dichloropropene	ND		ug/l	0.40			ND	-		
cis-1,2-Dichloroethene	ND		ug/l	1.0			ND	-		
Chloromethane	ND		ug/l	1.0			ND	-		
Chloroform	ND		ug/l	1.0			ND	-		
Chloroethane	ND		ug/l	1.0			ND	-		
Chlorobenzene	ND		ug/l	1.0			ND	-		
Bromomethane	ND		ug/l	1.0			ND	-		
Tetrachloroethene	ND		ug/l	1.0			ND	-		
Surrogate: % Toluene-d8	99		ug/l		10		99	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	102		ug/l		10		102	70-130		
Surrogate: % Dibromofluoromethane	87		ug/l		10		87	70-130		
Surrogate: % Bromofluorobenzene	91		ug/l		10		91	70-130		
<u>LCS (CB85996-LCS)</u>	Prepared: Analyzed: 02-Nov-18									
1,1,1,2-Tetrachloroethane	10.55		ug/l	1.0	10		106	70-130		30
Bromobenzene	10.28		ug/l	1.0	10		103	70-130		30
Vinyl chloride	9.900		ug/l	1.0	10		99	70-130		30
2,2-Dichloropropane	9.758		ug/l	1.0	10		98	70-130		30
1,4-Dichlorobenzene	10.23		ug/l	1.0	10		102	70-130		30
1,3-Dichloropropane	10.61		ug/l	1.0	10		106	70-130		30
1,3-Dichlorobenzene	10.22		ug/l	1.0	10		102	70-130		30
1,2-Dichloropropane	10.60		ug/l	1.0	10		106	70-130		30
1,2-Dichloroethane	11.06		ug/l	1.0	10		111	70-130		30
1,2-Dibromoethane	10.62		ug/l	1.0	10		106	70-130		30
Bromodichloromethane	10.79		ug/l	0.50	10		108	70-130		30
1,2,3-Trichloropropane	11.13		ug/l	1.0	10		111	70-130		30
1,2-Dibromo-3-chloropropane	11.28		ug/l	1.0	10		113	70-130		30
1,1-Dichloroethene	9.409		ug/l	1.0	10		94	70-130		30
1,1-Dichloroethane	8.774		ug/l	1.0	10		88	70-130		30
1,1,2-Trichloroethane	10.24		ug/l	1.0	10		102	70-130		30
1,1,2,2-Tetrachloroethane	11.08		ug/l	0.50	10		111	70-130		30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454850A - SW8260C										
LCS (CB85996-LCS)					Prepared: Analyzed: 02-Nov-18					
1,1,1-Trichloroethane	9.123		ug/l	1.0	10		91	70-130		30
1,2-Dichlorobenzene	10.33		ug/l	1.0	10		103	70-130		30
Dibromomethane	10.23		ug/l	1.0	10		102	70-130		30
Bromoform	11.00		ug/l	1.0	10		110	70-130		30
1,1-Dichloropropene	10.93		ug/l	1.0	10		109	70-130		30
Trichlorotrifluoroethane	8.569		ug/l	1.0	10		86	70-130		30
Trichlorofluoromethane	9.042		ug/l	1.0	10		90	70-130		30
Trichloroethene	10.60		ug/l	1.0	10		106	70-130		30
trans-1,4-dichloro-2-butene	48.22		ug/l	5.0	50		96	70-130		30
trans-1,3-Dichloropropene	10.70		ug/l	0.40	10		107	70-130		30
trans-1,2-Dichloroethene	9.101		ug/l	1.0	10		91	70-130		30
Tetrachloroethene	10.35		ug/l	1.0	10		103	70-130		30
Dichlorodifluoromethane	9.537		ug/l	1.0	10		95	40-160		30
Dibromochloromethane	11.40		ug/l	0.50	10		114	70-130		30
cis-1,3-Dichloropropene	11.29		ug/l	0.40	10		113	70-130		30
cis-1,2-Dichloroethene	8.723		ug/l	1.0	10		87	70-130		30
Chloromethane	8.525		ug/l	1.0	10		85	40-160		30
Chloroform	8.934		ug/l	1.0	10		89	70-130		30
Chloroethane	8.716		ug/l	1.0	10		87	70-130		30
Chlorobenzene	10.36		ug/l	1.0	10		104	70-130		30
Carbon tetrachloride	9.237		ug/l	1.0	10		92	70-130		30
Bromomethane	9.109		ug/l	1.0	10		91	40-160		30
Methylene chloride	8.747		ug/l	1.0	10		87	70-130		30
Surrogate: % 1,2-dichlorobenzene-d4	9.982		ug/l		10		100	70-130		
Surrogate: % Toluene-d8	10.59		ug/l		10		106	70-130		
Surrogate: % Bromofluorobenzene	10.29		ug/l		10		103	70-130		
Surrogate: % Dibromofluoromethane	8.456		ug/l		10		85	70-130		
LCSD (CB85996-LCSD)					Prepared: Analyzed: 02-Nov-18					
1,4-Dichlorobenzene	10.08		ug/l	1.0	10		101	70-130	1.0	30
1,3-Dichloropropane	10.34		ug/l	1.0	10		103	70-130	2.9	30
1,3-Dichlorobenzene	10.34		ug/l	1.0	10		103	70-130	1.0	30
1,2-Dichloropropane	9.871		ug/l	1.0	10		99	70-130	6.8	30
1,2-Dichloroethane	9.843		ug/l	1.0	10		98	70-130	12.4	30
1,2-Dichlorobenzene	10.16		ug/l	1.0	10		102	70-130	1.0	30
cis-1,3-Dichloropropene	10.56		ug/l	0.40	10		106	70-130	6.4	30
1,2-Dibromo-3-chloropropane	10.51		ug/l	1.0	10		105	70-130	7.3	30
2,2-Dichloropropane	9.238		ug/l	1.0	10		92	70-130	6.3	30
1,2,3-Trichloropropane	10.72		ug/l	1.0	10		107	70-130	3.7	30
1,1-Dichloropropene	10.62		ug/l	1.0	10		106	70-130	2.8	30
1,1-Dichloroethene	9.314		ug/l	1.0	10		93	70-130	1.1	30
1,1-Dichloroethane	8.797		ug/l	1.0	10		88	70-130	0.0	30
1,1,2-Trichloroethane	10.15		ug/l	1.0	10		101	70-130	1.0	30
1,1,2,2-Tetrachloroethane	10.86		ug/l	0.50	10		109	70-130	1.8	30
1,1,1-Trichloroethane	8.820		ug/l	1.0	10		88	70-130	3.4	30
1,1,1,2-Tetrachloroethane	10.21		ug/l	1.0	10		102	70-130	3.8	30
1,2-Dibromoethane	10.23		ug/l	1.0	10		102	70-130	3.8	30
Methylene chloride	8.630		ug/l	1.0	10		86	70-130	1.2	30
Vinyl chloride	9.753		ug/l	1.0	10		98	70-130	1.0	30
Trichlorotrifluoroethane	8.696		ug/l	1.0	10		87	70-130	1.2	30
Trichlorofluoromethane	9.299		ug/l	1.0	10		93	70-130	3.3	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 454850A - SW8260C										
LCSD (CB85996-LCSD)					Prepared: Analyzed: 02-Nov-18					
Trichloroethene	10.35		ug/l	1.0	10		104	70-130	1.9	30
trans-1,4-dichloro-2-butene	47.02		ug/l	5.0	50		94	70-130	2.1	30
trans-1,3-Dichloropropene	10.40		ug/l	0.40	10		104	70-130	2.8	30
Chloromethane	8.567		ug/l	1.0	10		86	40-160	1.2	30
Tetrachloroethene	9.697		ug/l	1.0	10		97	70-130	6.0	30
Bromobenzene	10.35		ug/l	1.0	10		104	70-130	1.0	30
Dichlorodifluoromethane	9.783		ug/l	1.0	10		98	40-160	3.1	30
Dibromomethane	10.16		ug/l	1.0	10		102	70-130	0.0	30
Dibromochloromethane	11.16		ug/l	0.50	10		112	70-130	1.8	30
cis-1,2-Dichloroethene	8.802		ug/l	1.0	10		88	70-130	1.1	30
Chloroform	9.082		ug/l	1.0	10		91	70-130	2.2	30
Chloroethane	9.140		ug/l	1.0	10		91	70-130	4.5	30
Chlorobenzene	10.20		ug/l	1.0	10		102	70-130	1.9	30
Carbon tetrachloride	9.208		ug/l	1.0	10		92	70-130	0.0	30
Bromomethane	8.569		ug/l	1.0	10		86	40-160	5.6	30
Bromoform	10.68		ug/l	1.0	10		107	70-130	2.8	30
Bromodichloromethane	10.27		ug/l	0.50	10		103	70-130	4.7	30
trans-1,2-Dichloroethene	8.955		ug/l	1.0	10		90	70-130	1.1	30
Surrogate: % Toluene-d8	9.758		ug/l		10		98	70-130		
Surrogate: % Dibromofluoromethane	8.515		ug/l		10		85	70-130		
Surrogate: % Bromofluorobenzene	10.35		ug/l		10		103	70-130		
Surrogate: % 1,2-dichlorobenzene-d4	9.964		ug/l		10		100	70-130		

Notes and Definitions

m	This parameter is outside laboratory ms/msd specified recovery limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Batch Summary

'[none]'

Subcontracted Analyses

SC51532-01 (MR-SED)

454607A

Subcontracted Analyses

CB85994-BLK

CB85994-LCS

CB85994-LCSD

SC51532-02 (MR-SW)

SC51532-05 (TB-1)

454641A

Subcontracted Analyses

CB85991-BLK

CB85991-LCS

CB85991-LCSD

CB85991-MS

CB85991-MSD

SC51532-06 (TB-2)

454848A

Subcontracted Analyses

CB87810-BLK

CB87810-LCS

CB87810-LCSD

CB87810-MS

CB87810-MSD

SC51532-01 (MR-SED)

454850A

Subcontracted Analyses

CB85996-BLK

CB85996-LCS

CB85996-LCSD

SC51532-03 (PZ-1)

SC51532-04 (MW-E)