Abbreviated Preliminary Assessment for Timberline Solid Waste Landfill

Clearwater County

State of Idaho
Department of Environmental Quality

December 2017

Acknowledgments

DEQ would like to thank Ms. Donita Wilson for permitting access to her property.

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Introduction

This abbreviated preliminary assessment (APA) for the closed Subtitle D Timberline Solid Waste Landfill in Weippe, Clearwater County, Idaho provides the rationale for the No Remedial Action Planned (NRAP) determination that no additional assessments or site inspections are necessary at this time. Section 1 provides the APA checklist (modified from EPA, 1999) filled out by the assessor to determine that an APA was warranted. The following sections contain additional relevant information and evidence to support the APA, including sample locations and current site conditions (Section 2); sample results (Section 3); maps (Section 4); and references (Section 5).

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Date of Site Inspection: 7/18/2017

Site Inspectors: Dana Swift and Don Carpenter, DEQ State Office
Nicolas Hiebert, DEQ Lewiston Regional Office

Site Name: Timberline Solid Waste Landfill

Previous Names (aka): Clearwater County Solid Waste Landfill, Weippe Solid Waste Landfill, AITCO Weippe Solid Waste Landfill

Site Owner: Donita Wilson

Site Location: Approximately 4.5 miles north of Weippe and west of State Hwy 11 on Hjalmar Johnson Road. Parcel RP36N04E257225

Township 36 North, Range 4 East, Section 25

Latitude: 46.427342 **Longitude:** -115.899826

Description of release (or potential release) and its probable nature:

In 1990, a pipe was installed beneath the landfill to serve as a sampling port for leachate collection. In 2013, during expansion to an adjacent Non-Municipal Solid Waste Landfill (operated by Clearwater County), the leachate pipe was discovered to be leaking. The county installed a valve on the end of the pipe and closed the valve; however, leachate began saturating and pooling on the ground around the toe of the closed landfill in 2016. The DEQ Lewiston Regional Office observed continued seepage and pooling of water during site visits in September 2016 and May 2017.

Section 1. APA Checklist

Task 1—Superfund Eligibility Evaluation

Assessor, if all answers are "no," continue to task 2; otherwise, explain any "yes" answers below and then skip to task 3.	**YES**	**NO**
1. Is the site currently in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) or an "alias" of another site?	☐	☒
2. Is the site being addressed by some other remediation program (i.e., federal, state, or tribal)?	☐	☒
3. Are the hazardous substances that may be released from the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the Nuclear Regulatory Commission, Uranium Mill Tailings Radiation Control Act, or Occupational Safety and Health Administration)?	☐	☒
4. Are the hazardous substances that may be released from the site excluded by policy considerations (i.e., deferred to Resource Conservation and Recovery Act corrective action)?	☐	☒
5. Is there sufficient documentation to demonstrate that there is no potential for a release that constitutes risk to human or ecological receptors (e.g., comprehensive remedial investigation equivalent data showing no release above applicable or relevant and appropriate requirements (ARARs), completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA-approved risk assessment)?	☒	☐

Assessor, please explain all "yes" answer(s):

Regarding question 5: A preliminary assessment site visit was conducted on July 18, 2017. Soil and surface water samples were collected to assess the soil exposure and surface water pathways in the immediate vicinity and downgradient of the location where leachate is saturating and pooling on the ground near the toe of the closed landfill. Sample collection details and results are included in Sections 2 and 3. Detected results for soil showed no exceedances of the EPA residential or industrial regional screening levels (RSLs). Also, detected results for surface water showed no exceedances of the maximum contaminant levels (MCLs). In addition, no concerns were identified for the ground water and air pathways at the time of this preliminary assessment; therefore, they were not evaluated during this field event.

Task 2—Initial Site Evaluation

If information is not available to make a "yes" or "no" response below, further investigation may be needed. In these cases, the assessor should determine whether an APA is appropriate.

If the answer is "no" to *any* of questions 1, 2, or 3, proceed directly to task 3.	**YES**	**NO**
1. Does the site have a release or a potential to release?	☐	☒
2. Does the site have uncontained sources containing CERCLA-eligible substances?	☐	☒
3. Does the site have documented on-site, adjacent, or nearby targets?	☒	☐

If the answers to questions 1, 2, and 3 above were *all* "yes," then answer questions 4–7 before proceeding to task 3.	**YES**	**NO**
4. Does documentation indicate that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site?	☐	☐
5. Is there an apparent release at the site with no documentation of exposed targets, but targets are on site or immediately adjacent to the site?	☐	☐
6. Is there an apparent release and no documented on-site targets or targets immediately adjacent to the site, but targets are nearby (e.g., within 1 mile)?	☐	☐
7. Are there uncontained sources containing CERCLA hazardous substances, a potential to release with targets present on site or in proximity to the site, but no indication of a hazardous substance release?	☐	☐

Notes:

At the time of this preliminary assessment, the closest residential dwelling is approximately 0.2 mile west of the landfill, based on ownership and property boundaries obtained from the parcel maps for Clearwater County (Idaho State Tax Commission 2017), and Timberline Junior/Senior High School is located less than a mile northeast of the landfill site. The site is located on private property.

Table 1 parallels the questions above and should be used by the assessor to make decisions during task 3. Table 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. The assessor should use Table 1 in determining the need for further action at the site, based on the answers to the questions in task 2. Assessors should use professional judgment when evaluating a site. An assessor's individual judgment may be different from the general recommendations for a site given below.

Table 1. Site assessment decision guidelines for a site.

Suspected/Documented Site Conditions	EPA-Recommended Site Assessment Activities
1. There are no releases or potential to release.	APA
2. No uncontained sources with CERCLA-eligible substances are present on site.	APA
3. There are no on-site, adjacent, or nearby targets.	APA
4. There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.	APA → SI or PA/SI
5. There is an apparent release at the site with no documentation of exposed targets, but there are targets on site or immediately adjacent to the site.	APA → SI or PA/SI
6. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.	Full PA
7. There is no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site.	Full PA

Task 3—DEQ Site Assessment Decision

When completing task 3, the assessor should use task 2 and Table 1 to select the appropriate decision. For example, if the answer to question 1 in task 2 was "no," then an APA is appropriate and the "NRAP" box below should be checked. Additionally, if the answer to question 4 in task 2 is "yes," then two options are available (as indicated in Table 1): (1) proceed with an APA and check the "Lower Priority SI" or "Higher Priority SI" box below or (2) proceed with a combined PA/SI.

Check the box that applies based on the conclusions of the APA checklist:

- ☒ No Remedial Action Planned (NRAP)
- ☐ Higher Priority SI
- ☐ Lower Priority SI
- ☐ Defer to RCRA Subtitle C
- ☐ Defer to NRC
- ☐ Refer to Removal Program
- ☐ Site is being addressed as part of another CERCLIS site
- ☐ Other: _____

DEQ Preparer:

Dana Swift

Dana Swift

12-01-2017

Date

Please explain the rationale for your decision:

As a result of DEQ's research, site observations, and sampling results, a NRAP designation is recommended for the Timberline Solid Waste Landfill. Supporting information is included in the following sections.

Section 2. Sample Locations and Current Site Conditions

Soil and surface water sampling and laboratory analysis was conducted in accordance with DEQ's Quality Assurance Project Plan (QAPP) for Timberline Solid Waste Landfill (DEQ 2017). All samples were collected, handled, and stored in accordance with the QAPP and submitted to ESC Lab Sciences for analysis.

The location of the Timberline Solid Waste Landfill site is shown in Figure 1 (see Section 4 Maps). Sample collection locations are shown in Figure 2 with current site conditions described in Table 2 and shown in the following photos. Analyte lists included the constituents identified for landfill detection monitoring programs as stated in 40 CFR 258 Appendix I and II. Appendix I includes volatile organic compounds (VOCs) and metals. Appendix II includes VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyl (PCBs), chlorinated acid herbicides, cyanide, sulfide, and metals. A complete list of constituents is included in the laboratory analytical reports (Appendix A).

Table 2. Sample collection locations.

Sample ID	Sample Location	Photos	Matrix	Analytes
TL-LA-SW1 TL-LA-SW2 (duplicate)	Water accumulating on ground near seepage pipe. Sheen observed on top of the water. Absorbent boom placed downgradient of the seepage pipe was torn open by wildlife resulting in spread of this white absorbent material throughout the area.	1, 2, 3	Water	Appendix I and II (all constituents)
TL-LA-SS3 TL-LA-SS4 (duplicate)	Saturated soil downgradient from seepage pipe.	4, 5	Surface soil	Appendix I (metals and VOCs)
TL-LA-SS1	Drainage pathway located on the west side of the stormwater pond.	6, 7, 8	Surface soil	Appendix I (metals and VOCs)
TL-DN-SS2	Drainage pathway to the south of stormwater pond.	9, 10	Surface soil	Appendix I (metals only)
TL-DN-SW3	Drainage pathway from the east side of the stormwater pond.	11, 12	Water	Appendix I (metals and VOCs)
TL-BG-SS5	Background surface soil in the northwest corner of the parcel; outside landfill footprint.	13	Surface soil	Appendix I (metals and VOCs)
TL-FB-SW4	Field blank sample.		Water	Appendix I (metals and VOCs)



Photo 1. Surface water sample location near seepage pipe (TL-LA-SW1 and TL-LA-SW2).



Photo 2. Surface water sample location near seepage pipe with stormwater pond in background.



Photo 3. Surface water sample location near seepage pipe.



Photo 4. Saturated soil sample location (TL-LA-SS3 and TL-LA-SS4).



Photo 5. Saturated soil sample location.



Photo 6. Soil sample location (TL-LA-SS1) near southwest corner of stormwater pond.



Photo 7. Soil sample location (TL-LA-SS1) looking east toward stormwater pond.



Photo 8. Soil sample location (TL-LA-SS1) looking west/southwest.



Photo 9. Soil sample location (TL-DN-SS2) at south end of stormwater pond.



Photo 10. Soil sample location (TL-DN-SS2) looking north toward stormwater pond.



Photo 11. Surface water sample location (TL-DN-SW3) at drainage on southeast side of stormwater pond.



Photo 12. Surface water sample location on east side of stormwater pond.



Photo 13. Background soil sample location (TL-BG-SS5).

Section 3. Sample Results

A summary of constituents with detected results are presented in Tables 3 through 6. The laboratory reports are included as Appendix A. Detected results for soil showed no exceedances of the EPA residential or industrial regional screening levels (RSLs). Also, detected results for surface water showed no exceedances of the maximum contaminant levels (MCLs).

Table 3. Detection of metals in surface soils (all results in milligrams/kilograms [mg/kg]).

Sample Location Description	Sample ID	Mercury	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
South of seepage area	TL-LA-SS3	0.0345	3.72	339	1.63	0.208 J	33.6	29.9	23.2	9.42	29.1	167	94.2
South of seepage area (Duplicate)	TL-LA-SS4	0.0292	8.42 J	447	1.59	U	23.1	**72.1**	22.7	14.4	35.5	152	81.1
Along seepage drainage pathway	TL-LA-SS1	**0.144** J6	3.09	371	1.28	0.418 J	24.0	36.8	**81.0**	11.8	22.5	132	163
Drainage south of stormwater pond	TL-DN-SS2	0.0189 J	5.51	211	0.891	0.133 J	25.1	15.6	10.8	11.2	14.1	71.3	51.2
Background soil	TL-BG-SS5	0.0481	6.22	414	0.989	0.233 J	26.0	14.8	13.7	14.3	19.3	68.1	89.1
EPA RSL for Residential Soil		11	0.68	15,000	160	71	NA	230	3,100	400	NA	390	23,000
EPA RSL for Industrial Soil		46	3	220,000	2,300	980	NA	3,500	47,000	800	NA	5,800	350,000

Notes:

Bold = Three times greater than background.

U = Not detected at the reporting limit (or MDL where applicable).

J = The identification of the analyte is acceptable; the reported value is an estimate.

J6 = The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Table 4. Detection of other analytes in soil samples (all results in mg/kg).

Sample Location Description	Sample ID	Acetone	Benzene	Carbon disulfide	MEK	MIBK
South of seepage area	TL-LA-SS3	0.0579 J	U	U J3	U	U
South of seepage area (Duplicate)	TL-LA-SS4	0.0549 J	U	U J3	U	U
Along seepage drainage pathway	TL-LA-SS1	0.0529 J	U	0.000479 J, J3	0.00512 J	U
Background soil	TL-BG-SS5	0.0757	0.000550 J	U J3	U	0.00399 J
EPA RSL for Residential Soil		61,000	1.2	770	27,000	33,000
EPA RSL for Industrial Soil		670,000	5.1	3,500	195,000	140,000

Notes:

U = Not detected at the reporting limit (or MDL where applicable).

J = The identification of the analyte is acceptable; the reported value is an estimate.

J3 = The associated batch QC was outside the established quality control range for precision.

Table 5. Detection of metals in water samples (all results in milligrams/Liter (mg/L).

Sample Location Description	Sample ID	Arsenic	Barium	Beryllium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Tin	Vanadium	Zinc
Seepage area	TL-LA-SW1	0.00442	1.33	0.000594 J	0.0158	0.0300	0.0139	0.0106	0.0130	0.00106 J	0.00102 J	0.0400	0.0435
Seepage area duplicate	TL-LA-SW2	0.00366	1.32	0.000586 J	0.0155	0.03	0.0121	0.00976	0.0130	0.00106 J	0.00106 J	0.0442	0.0383
Drainage along eastern edge of stormwater pond	TL-DN-SW3	U	0.153	U	U	U	U	U	U	NM	NM	0.00480 BJ	U
Field blank	TL-FB-SW4	U	U	U	U	U	U	U	U	NM	NM	0.00556 BJ	U
EPA MCL		0.010	2	0.004	0.1	NA	1.3	0.015	NA	0.05	NA	NA	5
Notes:													
U = Not detected at the reporting limit (or MDL where applicable).													
B = The same analyte is found in the associated blank.													
J = The identification of the analyte is acceptable; the reported value is an estimate.													
NA= not applicable													
NM = not measured													

Table 6. Detection of other analytes in water samples (all results in mg/L).

Sample Location Description	Sample ID	Cyanide	Benzene	Chloroform	cis-DCE	Di-n-butyl phthalate	Phenol
Seepage area	TL-LA-SW1	0.00362 J	0.000512 J	U	0.000640 J	0.000333 BJ	0.00169 J
Seepage area duplicate	TL-LA-SW2	U	0.000662 J	U	0.000623 J	0.000272 BJ	0.00117 J
Drainage along eastern edge of stormwater	TL-DN-SW3	NM	U	U	U	NM	NM
Field blank	TL-FB-SW4	NM	U	0.000861 J	U	NM	NM
EPA MCL		0.2	0.005	0.07	0.07		
Notes:							
U = Not detected at the reporting limit (or MDL where applicable).							
B = The same analyte is found in the associated blank.							
J = The identification of the analyte is acceptable; the reported value is an estimate.							
NA= not applicable							
NM = not measured							

Section 4. Maps

The purpose of preliminary assessments is to identify if any releases or potential for release are present to pathways and targets. Pathways and exposure routes that may lead to human or ecological receptors include: soil exposure, surface water pathways, ground water pathways, and air pathways. Information supporting pathways and targets for the surface water and ground water pathways are shown in the following maps.

The surface water migration pathway target distance limit (TDL) begins at the probable point of entry (PPE) of surface water runoff from a site to a surface water body and extends downstream for 15 miles. The PPE for this closed landfill begins at the point of the previous break in the leachate pipe which results in leachate saturating near the toe of the landfill. The potential path for the 15-mile TDL follows the runoff drainages toward Grasshopper Creek until it empties into Jim Ford Creek and ends in Jim Ford Creek approximately 12 miles northwest of the confluence of Grasshopper and Jim Ford Creeks (Figure 3).

Within a 4 miles radius of the closed landfill site, there are three public water systems (PWS) and approximately 132 domestic wells (Figure 3). The closest PWS is Timberline High School Wells 1 and 2 located to the northeast of the landfill. The 3 year time of travel does not overlap with the landfill location (Figure 4). The wetlands within the 4 mile radius of the site along with the State of Idaho §305(b)-listed streams are shown in Figure 5.

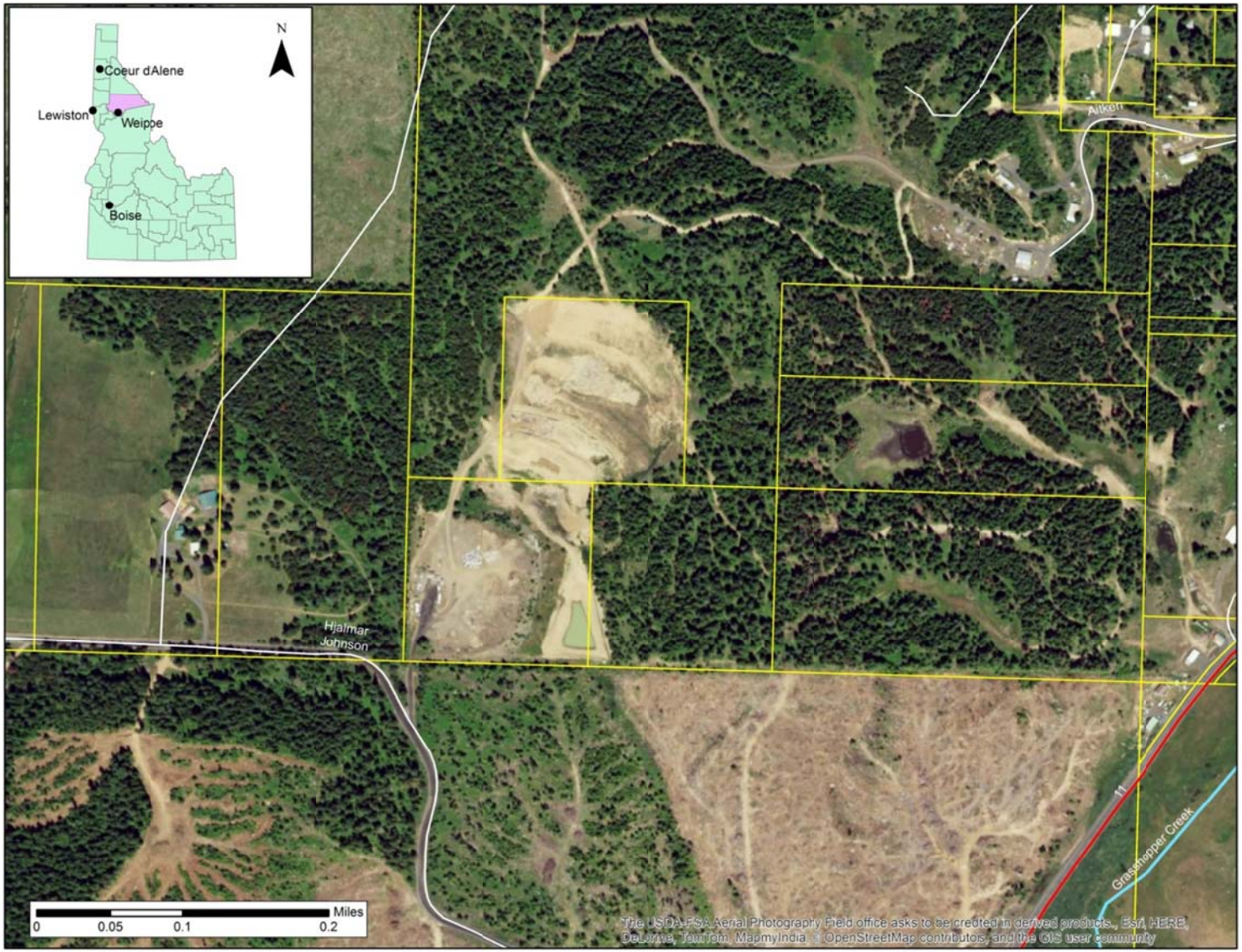


Figure 1. Timberline Solid Waste Landfill site location.

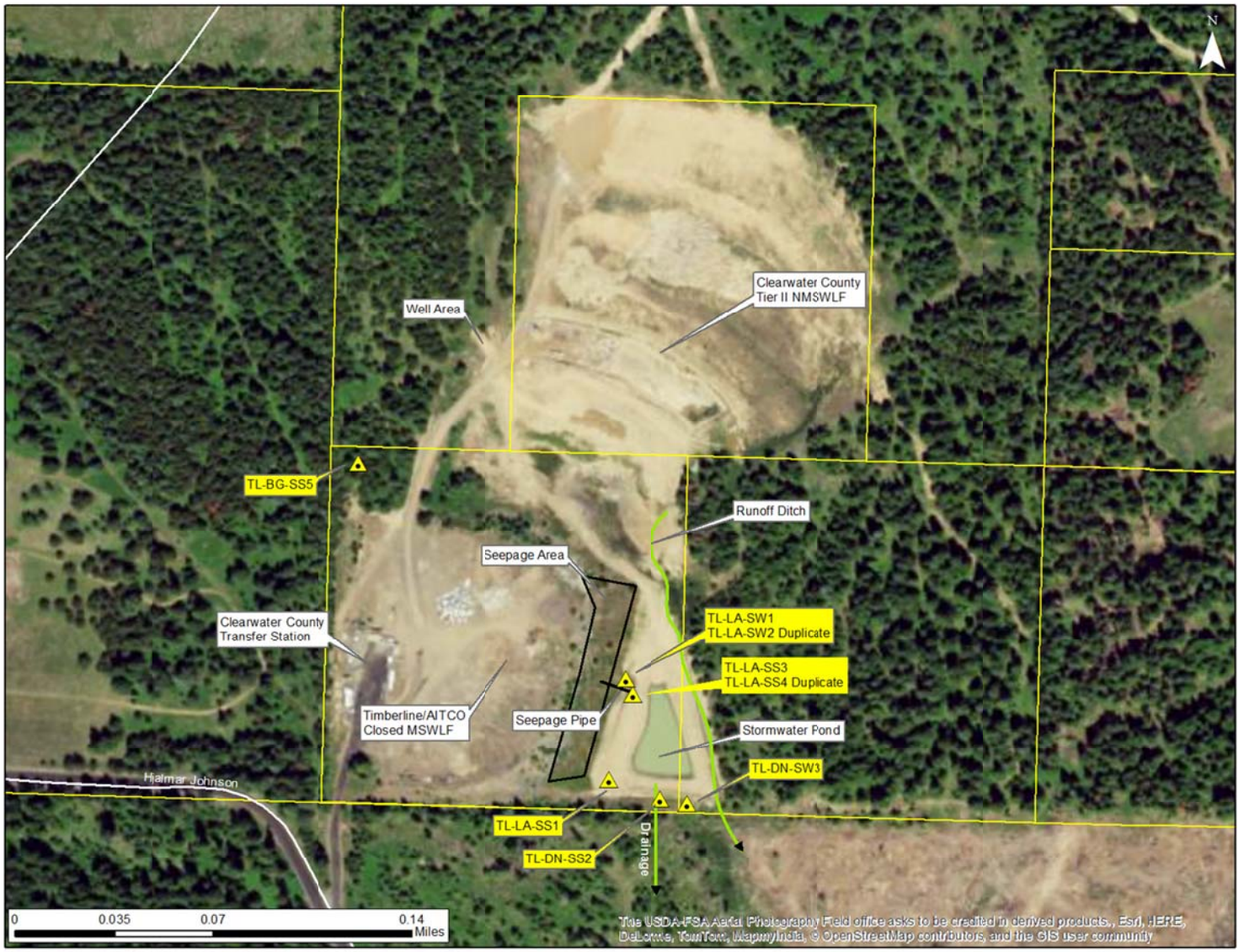


Figure 2. Features and sample locations at the Timberline Solid Waste Landfill site.

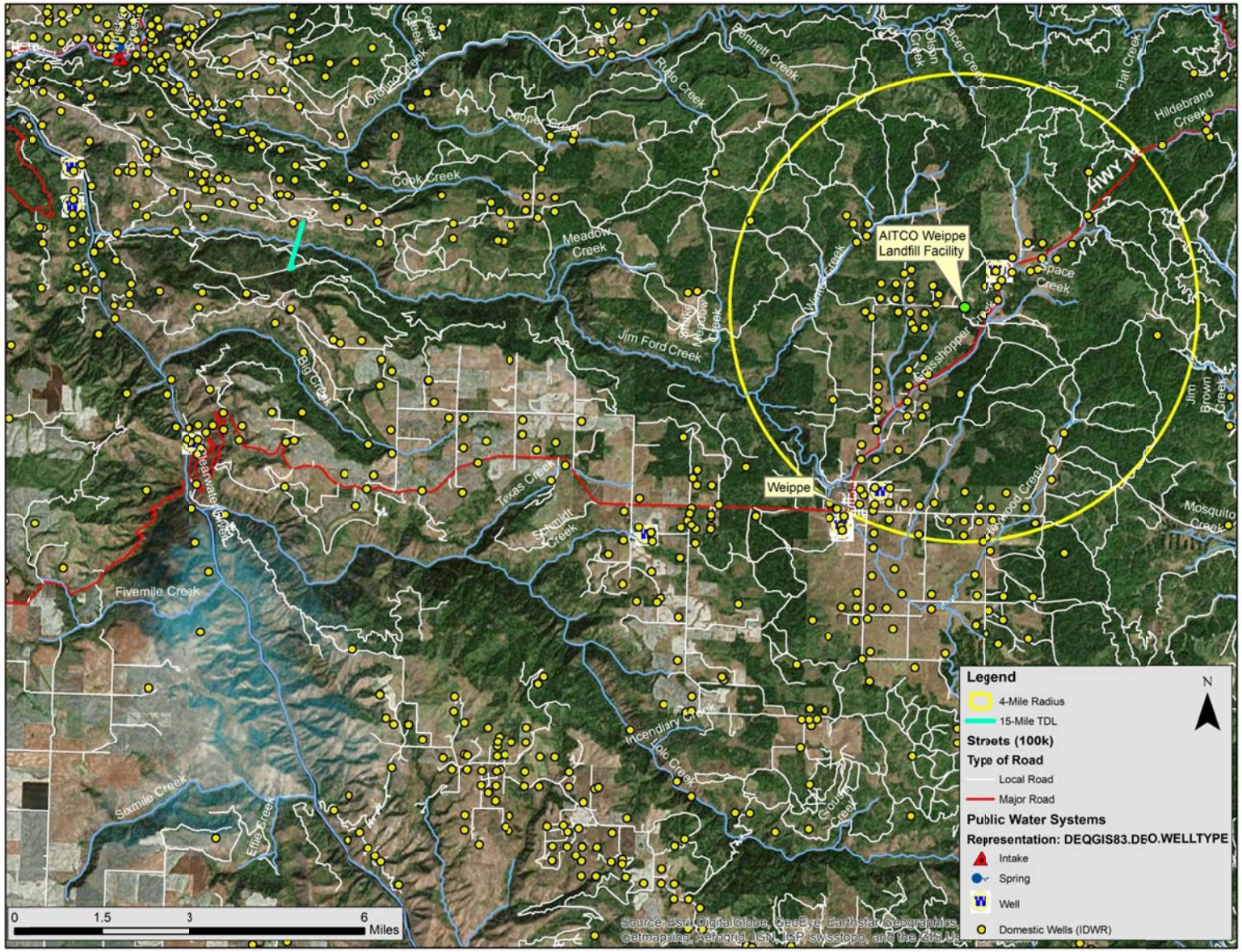


Figure 3. Map of the features supporting evaluation of the surface water and ground water pathways.

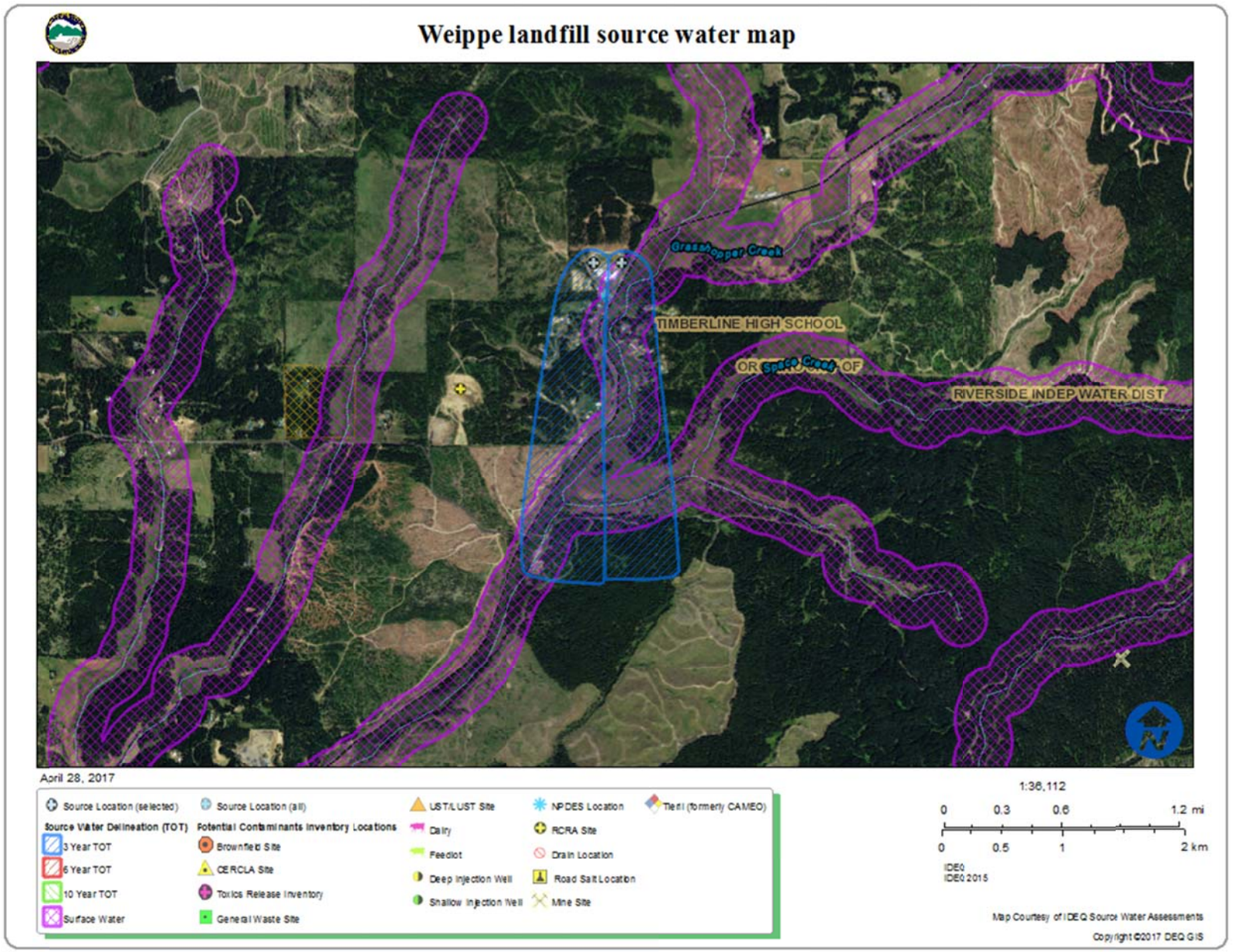


Figure 4. Source water map.

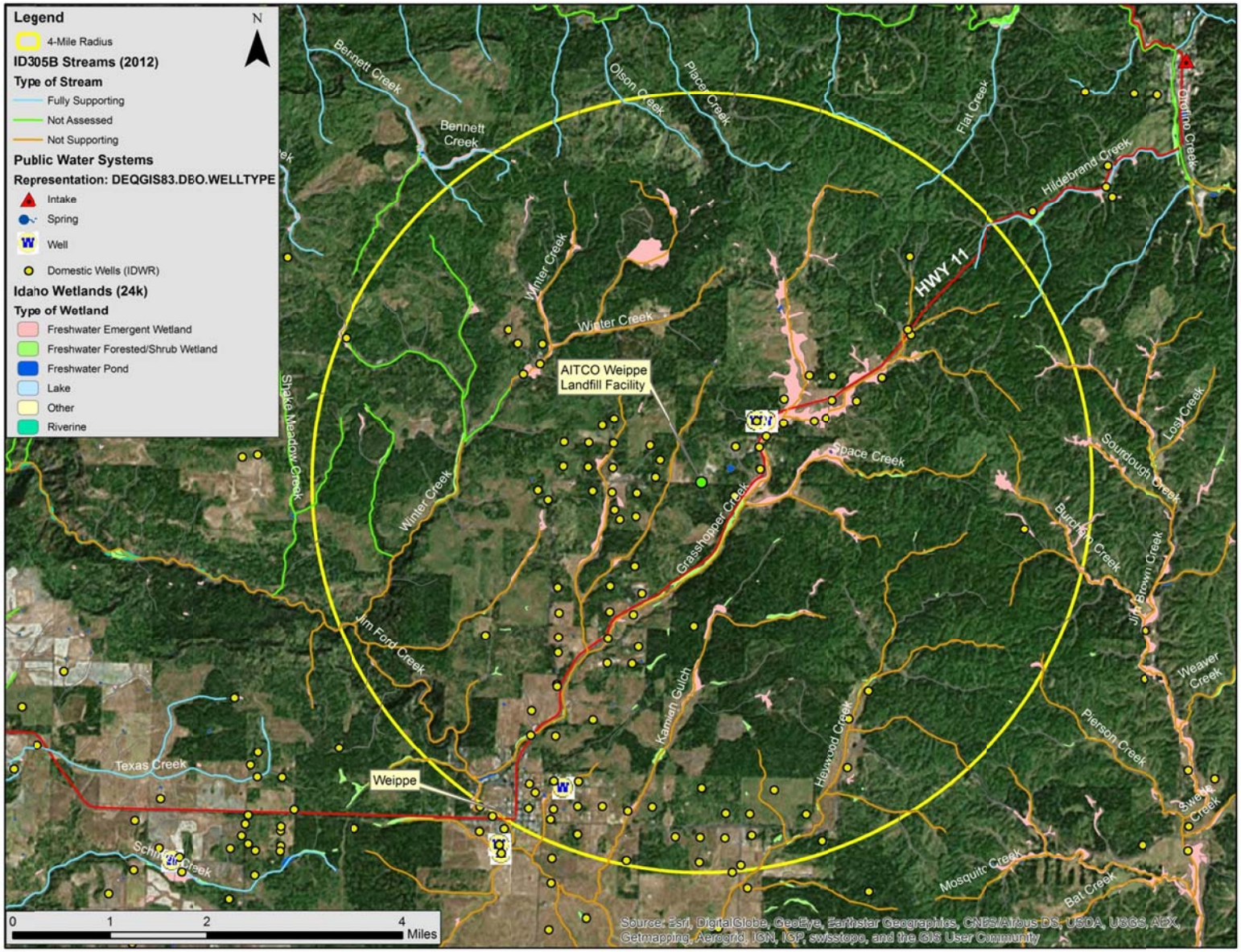


Figure 5. Wetlands and State of Idaho §305(b)-listed streams in the vicinity of the Timberline Solid Waste Landfill site.

Section 5. References

DEQ (Idaho Department of Environmental Quality). 2017. Quality Assurance Project Plan Timberline Solid Waste Landfill. TRIM Record No. 2017CAC11.

Idaho State Tax Commission. GIS/Cartography: County Parcel Maps. Clearwater County. Accessed July 2017. *http://tax.idaho.gov/gis/parcelmaps.cfm*

Appendix A. Analytical Laboratory Report

ANALYTICAL REPORT

July 31, 2017

Idaho Dept of Env. Quality - Boise, ID

Sample Delivery Group:	L923705
Samples Received:	07/20/2017
Project Number:	
Description:	Timberline Solid Waste Landfill
Site:	WEIPPE, IDAHO
Report To:	Dana Swift 1445 N.Orchard Boise, ID 83706

Entire Report Reviewed By:

Shane Gambill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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TL-LA-SW2 L923705-06 11
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Metals (ICPMS) by Method 6020 31
Volatile Organic Compounds (GC/MS) by Method 8260B 32
Chlorinated Acid Herbicides (GC) by Method 8151 43
Gl: Glossary of Terms 44
Al: Accreditations & Locations 45
Sc: Chain of Custody 46

TL-DN-SW3 L923705-01 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 15:00 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1001197	1	07/21/17 09:59	07/21/17 15:14	EL
Metals (ICP) by Method 6010B	WG1001186	1	07/21/17 08:40	07/21/17 16:47	ST
Metals (ICPMS) by Method 6020	WG1001928	1	07/23/17 21:20	07/24/17 20:15	LAT

TL-FB-SW4 L923705-02 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 15:25 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG1001197	1	07/21/17 09:59	07/21/17 15:16	EL
Metals (ICP) by Method 6010B	WG1001186	1	07/21/17 08:40	07/21/17 16:50	ST
Metals (ICPMS) by Method 6020	WG1001928	1	07/23/17 21:20	07/24/17 20:26	LAT

TL-DN-SW3 L923705-03 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 15:00 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001540	1	07/25/17 20:00	07/25/17 20:00	BMB

TL-FB-SW4 L923705-04 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 15:25 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001540	1	07/21/17 22:53	07/21/17 22:53	BMB

TL-LA-SW1 L923705-05 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 13:30 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9040C	WG1000861	1	07/20/17 15:46	07/20/17 15:46	MA
Chlorinated Acid Herbicides (GC) by Method 8151	WG1001264	1	07/21/17 06:40	07/21/17 20:27	KLM

TL-LA-SW2 L923705-06 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 13:40 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 4500S2 D-2011	WG1000798	1	07/20/17 15:35	07/20/17 15:35	MAJ

TL-LA-SW1 L923705-07 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 13:30 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 4500S2 D-2011	WG1000798	1	07/20/17 15:36	07/20/17 15:36	MAJ

TL-DN-SS2 L923705-08 Solid

Collected by: Dana Swift | Collected date/time: 07/18/17 14:52 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1001174	1	07/21/17 15:17	07/21/17 15:25	MLW
Mercury by Method 7471A	WG1001025	1	07/20/17 14:54	07/21/17 16:39	EL
Metals (ICP) by Method 6010B	WG1001164	1	07/21/17 17:50	07/22/17 06:48	CCE

TL-BG-SS5 L923705-09 Solid

Collected by: Dana Swift | Collected date/time: 07/18/17 15:45 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1001174	1	07/21/17 15:17	07/21/17 15:25	MLW
Mercury by Method 7471A	WG1001025	1	07/20/17 14:54	07/21/17 16:41	EL
Metals (ICP) by Method 6010B	WG1001164	1	07/21/17 17:50	07/22/17 06:51	CCE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001689	1	07/22/17 10:04	07/22/17 17:26	ACG

TL-LA-SS1 L923705-10 Solid

Collected by: Dana Swift | Collected date/time: 07/18/17 14:35 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1001174	1	07/21/17 15:17	07/21/17 15:25	MLW
Mercury by Method 7471A	WG1001025	1	07/20/17 14:54	07/21/17 16:17	EL
Metals (ICP) by Method 6010B	WG1001164	1	07/21/17 17:50	07/22/17 06:54	CCE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001689	1	07/22/17 10:04	07/22/17 18:00	ACG

TL-LA-SS3 L923705-11 Solid

Collected by: Dana Swift | Collected date/time: 07/18/17 15:10 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1001174	1	07/21/17 15:17	07/21/17 15:25	MLW
Mercury by Method 7471A	WG1001025	1	07/20/17 14:54	07/21/17 16:43	EL
Metals (ICP) by Method 6010B	WG1001164	1	07/21/17 17:50	07/22/17 06:56	CCE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001689	1	07/22/17 10:04	07/22/17 18:18	ACG

TL-LA-SS4 L923705-12 Solid

Collected by: Dana Swift | Collected date/time: 07/18/17 15:15 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1001174	1	07/21/17 15:17	07/21/17 15:25	MLW
Mercury by Method 7471A	WG1001025	1	07/20/17 14:54	07/21/17 16:46	EL
Metals (ICP) by Method 6010B	WG1001164	5	07/21/17 17:50	07/24/17 09:35	CCE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001689	1	07/22/17 10:04	07/22/17 18:35	ACG

TRIP BLANK L923705-13 GW

Collected by: Dana Swift | Collected date/time: 07/18/17 00:00 | Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1001992	1	07/24/17 10:08	07/24/17 10:08	BMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill
Technical Service Representative

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	1	07/21/2017 15:14	WG1001197

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Arsenic	U		0.00650	0.0100	1	07/21/2017 16:47	WG1001186
Barium	0.153		0.00170	0.00500	1	07/21/2017 16:47	WG1001186
Chromium	U		0.00140	0.0100	1	07/21/2017 16:47	WG1001186
Cobalt	U		0.00230	0.0100	1	07/21/2017 16:47	WG1001186
Nickel	U		0.00490	0.0100	1	07/21/2017 16:47	WG1001186
Silver	U		0.00280	0.00500	1	07/21/2017 16:47	WG1001186
Vanadium	0.00480	B J	0.00240	0.0200	1	07/21/2017 16:47	WG1001186

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Antimony	U		0.000754	0.00200	1	07/24/2017 20:15	WG1001928
Beryllium	U		0.000120	0.00200	1	07/24/2017 20:15	WG1001928
Cadmium	U		0.000160	0.00100	1	07/24/2017 20:15	WG1001928
Copper	U		0.000520	0.00500	1	07/24/2017 20:15	WG1001928
Lead	U		0.000240	0.00200	1	07/24/2017 20:15	WG1001928
Selenium	U		0.000380	0.00200	1	07/24/2017 20:15	WG1001928
Thallium	U		0.000190	0.00200	1	07/24/2017 20:15	WG1001928
Zinc	U		0.00256	0.0250	1	07/24/2017 20:15	WG1001928

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	1	07/21/2017 15:16	WG1001197

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Arsenic	U		0.00650	0.0100	1	07/21/2017 16:50	WG1001186
Barium	U		0.00170	0.00500	1	07/21/2017 16:50	WG1001186
Chromium	U		0.00140	0.0100	1	07/21/2017 16:50	WG1001186
Cobalt	U		0.00230	0.0100	1	07/21/2017 16:50	WG1001186
Nickel	U		0.00490	0.0100	1	07/21/2017 16:50	WG1001186
Silver	U		0.00280	0.00500	1	07/21/2017 16:50	WG1001186
Vanadium	0.00556	B J	0.00240	0.0200	1	07/21/2017 16:50	WG1001186

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Antimony	U		0.000754	0.00200	1	07/24/2017 20:26	WG1001928
Beryllium	U		0.000120	0.00200	1	07/24/2017 20:26	WG1001928
Cadmium	U		0.000160	0.00100	1	07/24/2017 20:26	WG1001928
Copper	U		0.000520	0.00500	1	07/24/2017 20:26	WG1001928
Lead	U		0.000240	0.00200	1	07/24/2017 20:26	WG1001928
Selenium	U		0.000380	0.00200	1	07/24/2017 20:26	WG1001928
Thallium	U		0.000190	0.00200	1	07/24/2017 20:26	WG1001928
Zinc	U		0.00256	0.0250	1	07/24/2017 20:26	WG1001928

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	1	07/25/2017 20:00	WG1001540
Acrylonitrile	U		0.00187	0.0100	1	07/25/2017 20:00	WG1001540
Benzene	U		0.000331	0.00100	1	07/25/2017 20:00	WG1001540
Bromochloromethane	U		0.000520	0.00100	1	07/25/2017 20:00	WG1001540
Bromodichloromethane	U		0.000380	0.00100	1	07/25/2017 20:00	WG1001540
Bromoform	U		0.000469	0.00100	1	07/25/2017 20:00	WG1001540
Bromomethane	U		0.000866	0.00500	1	07/25/2017 20:00	WG1001540
Carbon disulfide	U		0.000275	0.00100	1	07/25/2017 20:00	WG1001540
Carbon tetrachloride	U		0.000379	0.00100	1	07/25/2017 20:00	WG1001540
Chlorobenzene	U		0.000348	0.00100	1	07/25/2017 20:00	WG1001540
Chlorodibromomethane	U		0.000327	0.00100	1	07/25/2017 20:00	WG1001540
Chloroethane	U		0.000453	0.00500	1	07/25/2017 20:00	WG1001540
Chloroform	U		0.000324	0.00500	1	07/25/2017 20:00	WG1001540
Chloromethane	U		0.000276	0.00250	1	07/25/2017 20:00	WG1001540
Dibromomethane	U		0.000346	0.00100	1	07/25/2017 20:00	WG1001540
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/25/2017 20:00	WG1001540
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/25/2017 20:00	WG1001540
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/25/2017 20:00	WG1001540
1,1-Dichloroethane	U		0.000259	0.00100	1	07/25/2017 20:00	WG1001540
1,2-Dichloroethane	U		0.000361	0.00100	1	07/25/2017 20:00	WG1001540
1,1-Dichloroethene	U		0.000398	0.00100	1	07/25/2017 20:00	WG1001540
cis-1,2-Dichloroethene	U		0.000260	0.00100	1	07/25/2017 20:00	WG1001540
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/25/2017 20:00	WG1001540
1,2-Dichloropropane	U		0.000306	0.00100	1	07/25/2017 20:00	WG1001540
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/25/2017 20:00	WG1001540
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/25/2017 20:00	WG1001540
Ethylbenzene	U		0.000384	0.00100	1	07/25/2017 20:00	WG1001540
2-Hexanone	U		0.00382	0.0100	1	07/25/2017 20:00	WG1001540
Iodomethane	U		0.00171	0.0100	1	07/25/2017 20:00	WG1001540
2-Butanone (MEK)	U		0.00393	0.0100	1	07/25/2017 20:00	WG1001540
Methylene Chloride	U		0.00100	0.00500	1	07/25/2017 20:00	WG1001540
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/25/2017 20:00	WG1001540
Styrene	U		0.000307	0.00100	1	07/25/2017 20:00	WG1001540
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/25/2017 20:00	WG1001540
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/25/2017 20:00	WG1001540
Tetrachloroethene	U		0.000372	0.00100	1	07/25/2017 20:00	WG1001540
Toluene	U		0.000412	0.00100	1	07/25/2017 20:00	WG1001540
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/25/2017 20:00	WG1001540
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/25/2017 20:00	WG1001540
Trichloroethene	U		0.000398	0.00100	1	07/25/2017 20:00	WG1001540
Trichlorofluoromethane	U		0.00120	0.00500	1	07/25/2017 20:00	WG1001540
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/25/2017 20:00	WG1001540
Vinyl acetate	U		0.00163	0.0100	1	07/25/2017 20:00	WG1001540
Vinyl chloride	U		0.000259	0.00100	1	07/25/2017 20:00	WG1001540
Xylenes, Total	U		0.00106	0.00300	1	07/25/2017 20:00	WG1001540
(S) Toluene-d8	*103*			*80.0-120*		*07/25/2017 20:00*	WG1001540
(S) Dibromofluoromethane	*98.7*			*76.0-123*		*07/25/2017 20:00*	WG1001540
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*		*07/25/2017 20:00*	WG1001540
(S) 4-Bromofluorobenzene	*118*			*80.0-120*		*07/25/2017 20:00*	WG1001540

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	1	07/21/2017 22:53	WG1001540
Acrylonitrile	U		0.00187	0.0100	1	07/21/2017 22:53	WG1001540
Benzene	U		0.000331	0.00100	1	07/21/2017 22:53	WG1001540
Bromochloromethane	U		0.000520	0.00100	1	07/21/2017 22:53	WG1001540
Bromodichloromethane	U		0.000380	0.00100	1	07/21/2017 22:53	WG1001540
Bromoform	U		0.000469	0.00100	1	07/21/2017 22:53	WG1001540
Bromomethane	U		0.000866	0.00500	1	07/21/2017 22:53	WG1001540
Carbon disulfide	U		0.000275	0.00100	1	07/21/2017 22:53	WG1001540
Carbon tetrachloride	U		0.000379	0.00100	1	07/21/2017 22:53	WG1001540
Chlorobenzene	U		0.000348	0.00100	1	07/21/2017 22:53	WG1001540
Chlorodibromomethane	U		0.000327	0.00100	1	07/21/2017 22:53	WG1001540
Chloroethane	U		0.000453	0.00500	1	07/21/2017 22:53	WG1001540
Chloroform	0.000861	J	0.000324	0.00500	1	07/21/2017 22:53	WG1001540
Chloromethane	U		0.000276	0.00250	1	07/21/2017 22:53	WG1001540
Dibromomethane	U		0.000346	0.00100	1	07/21/2017 22:53	WG1001540
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/21/2017 22:53	WG1001540
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/21/2017 22:53	WG1001540
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/21/2017 22:53	WG1001540
1,1-Dichloroethane	U		0.000259	0.00100	1	07/21/2017 22:53	WG1001540
1,2-Dichloroethane	U		0.000361	0.00100	1	07/21/2017 22:53	WG1001540
1,1-Dichloroethene	U		0.000398	0.00100	1	07/21/2017 22:53	WG1001540
cis-1,2-Dichloroethene	U		0.000260	0.00100	1	07/21/2017 22:53	WG1001540
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/21/2017 22:53	WG1001540
1,2-Dichloropropane	U		0.000306	0.00100	1	07/21/2017 22:53	WG1001540
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/21/2017 22:53	WG1001540
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/21/2017 22:53	WG1001540
Ethylbenzene	U		0.000384	0.00100	1	07/21/2017 22:53	WG1001540
2-Hexanone	U		0.00382	0.0100	1	07/21/2017 22:53	WG1001540
Iodomethane	U		0.00171	0.0100	1	07/21/2017 22:53	WG1001540
2-Butanone (MEK)	U		0.00393	0.0100	1	07/21/2017 22:53	WG1001540
Methylene Chloride	U		0.00100	0.00500	1	07/21/2017 22:53	WG1001540
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/21/2017 22:53	WG1001540
Styrene	U		0.000307	0.00100	1	07/21/2017 22:53	WG1001540
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/21/2017 22:53	WG1001540
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/21/2017 22:53	WG1001540
Tetrachloroethene	U		0.000372	0.00100	1	07/21/2017 22:53	WG1001540
Toluene	U		0.000412	0.00100	1	07/21/2017 22:53	WG1001540
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/21/2017 22:53	WG1001540
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/21/2017 22:53	WG1001540
Trichloroethene	U		0.000398	0.00100	1	07/21/2017 22:53	WG1001540
Trichlorofluoromethane	U		0.00120	0.00500	1	07/21/2017 22:53	WG1001540
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/21/2017 22:53	WG1001540
Vinyl acetate	U		0.00163	0.0100	1	07/21/2017 22:53	WG1001540
Vinyl chloride	U		0.000259	0.00100	1	07/21/2017 22:53	WG1001540
Xylenes, Total	U		0.00106	0.00300	1	07/21/2017 22:53	WG1001540
(S) Toluene-d8	*110*			*80.0-120*		*07/21/2017 22:53*	WG1001540
(S) Dibromofluoromethane	*98.0*			*76.0-123*		*07/21/2017 22:53*	WG1001540
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*		*07/21/2017 22:53*	WG1001540
(S) 4-Bromofluorobenzene	*109*			*80.0-120*		*07/21/2017 22:53*	WG1001540

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	6.91	T8	1	07/20/2017 15:46	WG1000861

Sample Narrative:

L923705-05 WG1000861: 6.91 at 17.9c

Chlorinated Acid Herbicides (GC) by Method 8151

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4-D	U		0.000744	0.00200	1	07/21/2017 20:27	WG1001264
Dalapon	U		0.00104	0.00200	1	07/21/2017 20:27	WG1001264
2,4-DB	U		0.000775	0.00400	1	07/21/2017 20:27	WG1001264
Dicamba	U		0.000813	0.00200	1	07/21/2017 20:27	WG1001264
Dichloroprop	U		0.000778	0.00200	1	07/21/2017 20:27	WG1001264
Dinoseb	U		0.000795	0.00200	1	07/21/2017 20:27	WG1001264
MCPA	U		0.0131	0.200	1	07/21/2017 20:27	WG1001264
MCPP	U		0.00715	0.200	1	07/21/2017 20:27	WG1001264
2,4,5-T	U		0.000843	0.00200	1	07/21/2017 20:27	WG1001264
2,4,5-TP (Silvex)	U		0.000845	0.00200	1	07/21/2017 20:27	WG1001264
(S) 2,4-Dichlorophenyl Acetic Acid	*72.8*			*14.0-158*		*07/21/2017 20:27*	WG1001264

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Sulfide	U		0.00650	0.0500	1	07/20/2017 15:35	WG1000798

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Sulfide	U		0.00650	0.0500	1	07/20/2017 15:36	WG1000798

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.2		1	07/21/2017 15:25	WG1001174

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0189	J	0.00288	0.0206	1	07/21/2017 16:39	WG1001025

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.772	2.06	1	07/22/2017 06:48	WG1001164
Arsenic	5.51		0.669	2.06	1	07/22/2017 06:48	WG1001164
Barium	211		0.175	0.515	1	07/22/2017 06:48	WG1001164
Beryllium	0.891		0.0720	0.206	1	07/22/2017 06:48	WG1001164
Cadmium	0.133	J	0.0720	0.515	1	07/22/2017 06:48	WG1001164
Chromium	25.1		0.144	1.03	1	07/22/2017 06:48	WG1001164
Cobalt	15.6		0.237	1.03	1	07/22/2017 06:48	WG1001164
Copper	10.8		0.545	2.06	1	07/22/2017 06:48	WG1001164
Lead	11.2		0.196	0.515	1	07/22/2017 06:48	WG1001164
Nickel	14.1		0.504	2.06	1	07/22/2017 06:48	WG1001164
Selenium	U		0.762	2.06	1	07/22/2017 06:48	WG1001164
Silver	U		0.288	1.03	1	07/22/2017 06:48	WG1001164
Thallium	U		0.669	2.06	1	07/22/2017 06:48	WG1001164
Vanadium	71.3		0.247	2.06	1	07/22/2017 06:48	WG1001164
Zinc	51.2		0.607	5.15	1	07/22/2017 06:48	WG1001164

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.6		1	07/21/2017 15:25	WG1001174

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0481		0.00352	0.0251	1	07/21/2017 16:41	WG1001025

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.943	2.51	1	07/22/2017 06:51	WG1001164
Arsenic	6.22		0.817	2.51	1	07/22/2017 06:51	WG1001164
Barium	414		0.214	0.628	1	07/22/2017 06:51	WG1001164
Beryllium	0.989		0.0880	0.251	1	07/22/2017 06:51	WG1001164
Cadmium	0.233	J	0.0880	0.628	1	07/22/2017 06:51	WG1001164
Chromium	26.0		0.176	1.26	1	07/22/2017 06:51	WG1001164
Cobalt	14.8		0.289	1.26	1	07/22/2017 06:51	WG1001164
Copper	13.7		0.666	2.51	1	07/22/2017 06:51	WG1001164
Lead	14.3		0.239	0.628	1	07/22/2017 06:51	WG1001164
Nickel	19.3		0.616	2.51	1	07/22/2017 06:51	WG1001164
Selenium	U		0.930	2.51	1	07/22/2017 06:51	WG1001164
Silver	U		0.352	1.26	1	07/22/2017 06:51	WG1001164
Thallium	U		0.817	2.51	1	07/22/2017 06:51	WG1001164
Vanadium	68.1		0.302	2.51	1	07/22/2017 06:51	WG1001164
Zinc	89.1		0.742	6.28	1	07/22/2017 06:51	WG1001164

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0757		0.0126	0.0628	1	07/22/2017 17:26	WG1001689
Acrylonitrile	U		0.00225	0.0126	1	07/22/2017 17:26	WG1001689
Benzene	0.000550	J	0.000339	0.00126	1	07/22/2017 17:26	WG1001689
Bromochloromethane	U		0.000490	0.00126	1	07/22/2017 17:26	WG1001689
Bromodichloromethane	U		0.000319	0.00126	1	07/22/2017 17:26	WG1001689
Bromoform	U		0.000533	0.00126	1	07/22/2017 17:26	WG1001689
Bromomethane	U		0.00168	0.00628	1	07/22/2017 17:26	WG1001689
Carbon disulfide	U	J3	0.000278	0.00126	1	07/22/2017 17:26	WG1001689
Carbon tetrachloride	U		0.000412	0.00126	1	07/22/2017 17:26	WG1001689
Chlorobenzene	U		0.000266	0.00126	1	07/22/2017 17:26	WG1001689
Chlorodibromomethane	U		0.000469	0.00126	1	07/22/2017 17:26	WG1001689
Chloroethane	U		0.00119	0.00628	1	07/22/2017 17:26	WG1001689
Chloroform	U		0.000288	0.00628	1	07/22/2017 17:26	WG1001689
Chloromethane	U		0.000471	0.00314	1	07/22/2017 17:26	WG1001689
Dibromomethane	U		0.000480	0.00126	1	07/22/2017 17:26	WG1001689
1,2-Dichlorobenzene	U		0.000383	0.00126	1	07/22/2017 17:26	WG1001689
1,4-Dichlorobenzene	U		0.000284	0.00126	1	07/22/2017 17:26	WG1001689
trans-1,4-Dichloro-2-butene	U		0.000978	0.00314	1	07/22/2017 17:26	WG1001689
1,1-Dichloroethane	U		0.000250	0.00126	1	07/22/2017 17:26	WG1001689
1,2-Dichloroethane	U		0.000333	0.00126	1	07/22/2017 17:26	WG1001689
1,1-Dichloroethene	U		0.000381	0.00126	1	07/22/2017 17:26	WG1001689
cis-1,2-Dichloroethene	U		0.000295	0.00126	1	07/22/2017 17:26	WG1001689
trans-1,2-Dichloroethene	U		0.000332	0.00126	1	07/22/2017 17:26	WG1001689
1,2-Dichloropropane	U		0.000450	0.00126	1	07/22/2017 17:26	WG1001689
cis-1,3-Dichloropropene	U		0.000329	0.00126	1	07/22/2017 17:26	WG1001689

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
trans-1,3-Dichloropropene	U		0.000336	0.00126	1	07/22/2017 17:26	WG1001689
Ethylbenzene	U		0.000373	0.00126	1	07/22/2017 17:26	WG1001689
2-Hexanone	U		0.00172	0.0126	1	07/22/2017 17:26	WG1001689
Iodomethane	U		0.00318	0.0126	1	07/22/2017 17:26	WG1001689
2-Butanone (MEK)	U		0.00588	0.0126	1	07/22/2017 17:26	WG1001689
Methylene Chloride	U		0.00126	0.00628	1	07/22/2017 17:26	WG1001689
4-Methyl-2-pentanone (MIBK)	0.00399	J	0.00236	0.0126	1	07/22/2017 17:26	WG1001689
Styrene	U		0.000294	0.00126	1	07/22/2017 17:26	WG1001689
1,1,1,2-Tetrachloroethane	U		0.000332	0.00126	1	07/22/2017 17:26	WG1001689
1,1,2,2-Tetrachloroethane	U		0.000459	0.00126	1	07/22/2017 17:26	WG1001689
Tetrachloroethene	U		0.000347	0.00126	1	07/22/2017 17:26	WG1001689
Toluene	U		0.000546	0.00628	1	07/22/2017 17:26	WG1001689
1,1,1-Trichloroethane	U		0.000359	0.00126	1	07/22/2017 17:26	WG1001689
1,1,2-Trichloroethane	U		0.000348	0.00126	1	07/22/2017 17:26	WG1001689
Trichloroethene	U		0.000351	0.00126	1	07/22/2017 17:26	WG1001689
Trichlorofluoromethane	U	J3	0.000480	0.00628	1	07/22/2017 17:26	WG1001689
1,2,3-Trichloropropane	U		0.000931	0.00314	1	07/22/2017 17:26	WG1001689
Vinyl acetate	U		0.00300	0.0126	1	07/22/2017 17:26	WG1001689
Vinyl chloride	U	J3	0.000366	0.00126	1	07/22/2017 17:26	WG1001689
Xylenes, Total	U		0.000877	0.00377	1	07/22/2017 17:26	WG1001689
(S) Toluene-d8	*98.9*			*80.0-120*		*07/22/2017 17:26*	WG1001689
(S) Dibromofluoromethane	*95.1*			*74.0-131*		*07/22/2017 17:26*	WG1001689
(S) a,a,a-Trifluorotoluene	*97.8*			*80.0-120*		*07/22/2017 17:26*	WG1001689
(S) 4-Bromofluorobenzene	*91.7*			*64.0-132*		*07/22/2017 17:26*	WG1001689

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	07/21/2017 15:25	WG1001174

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.144	J6	0.00304	0.0217	1	07/21/2017 16:17	WG1001025

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.813	2.17	1	07/22/2017 06:54	WG1001164
Arsenic	3.09		0.705	2.17	1	07/22/2017 06:54	WG1001164
Barium	371		0.184	0.542	1	07/22/2017 06:54	WG1001164
Beryllium	1.28		0.0759	0.217	1	07/22/2017 06:54	WG1001164
Cadmium	0.418	J	0.0759	0.542	1	07/22/2017 06:54	WG1001164
Chromium	24.0		0.152	1.08	1	07/22/2017 06:54	WG1001164
Cobalt	36.8		0.249	1.08	1	07/22/2017 06:54	WG1001164
Copper	81.0		0.575	2.17	1	07/22/2017 06:54	WG1001164
Lead	11.8		0.206	0.542	1	07/22/2017 06:54	WG1001164
Nickel	22.5		0.531	2.17	1	07/22/2017 06:54	WG1001164
Selenium	U		0.802	2.17	1	07/22/2017 06:54	WG1001164
Silver	U		0.304	1.08	1	07/22/2017 06:54	WG1001164
Thallium	U		0.705	2.17	1	07/22/2017 06:54	WG1001164
Vanadium	132		0.260	2.17	1	07/22/2017 06:54	WG1001164
Zinc	163		0.640	5.42	1	07/22/2017 06:54	WG1001164

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0529	J	0.0108	0.0542	1	07/22/2017 18:00	WG1001689
Acrylonitrile	U		0.00194	0.0108	1	07/22/2017 18:00	WG1001689
Benzene	U		0.000293	0.00108	1	07/22/2017 18:00	WG1001689
Bromochloromethane	U		0.000423	0.00108	1	07/22/2017 18:00	WG1001689
Bromodichloromethane	U		0.000275	0.00108	1	07/22/2017 18:00	WG1001689
Bromoform	U		0.000460	0.00108	1	07/22/2017 18:00	WG1001689
Bromomethane	U		0.00145	0.00542	1	07/22/2017 18:00	WG1001689
Carbon disulfide	0.000479	J J3	0.000240	0.00108	1	07/22/2017 18:00	WG1001689
Carbon tetrachloride	U		0.000356	0.00108	1	07/22/2017 18:00	WG1001689
Chlorobenzene	U		0.000230	0.00108	1	07/22/2017 18:00	WG1001689
Chlorodibromomethane	U		0.000404	0.00108	1	07/22/2017 18:00	WG1001689
Chloroethane	U		0.00103	0.00542	1	07/22/2017 18:00	WG1001689
Chloroform	U		0.000248	0.00542	1	07/22/2017 18:00	WG1001689
Chloromethane	U		0.000407	0.00271	1	07/22/2017 18:00	WG1001689
Dibromomethane	U		0.000414	0.00108	1	07/22/2017 18:00	WG1001689
1,2-Dichlorobenzene	U		0.000331	0.00108	1	07/22/2017 18:00	WG1001689
1,4-Dichlorobenzene	U		0.000245	0.00108	1	07/22/2017 18:00	WG1001689
trans-1,4-Dichloro-2-butene	U		0.000844	0.00271	1	07/22/2017 18:00	WG1001689
1,1-Dichloroethane	U		0.000216	0.00108	1	07/22/2017 18:00	WG1001689
1,2-Dichloroethane	U		0.000287	0.00108	1	07/22/2017 18:00	WG1001689
1,1-Dichloroethene	U		0.000329	0.00108	1	07/22/2017 18:00	WG1001689
cis-1,2-Dichloroethene	U		0.000255	0.00108	1	07/22/2017 18:00	WG1001689
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	07/22/2017 18:00	WG1001689
1,2-Dichloropropane	U		0.000388	0.00108	1	07/22/2017 18:00	WG1001689
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	07/22/2017 18:00	WG1001689

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	07/22/2017 18:00	WG1001689
Ethylbenzene	U		0.000322	0.00108	1	07/22/2017 18:00	WG1001689
2-Hexanone	U		0.00149	0.0108	1	07/22/2017 18:00	WG1001689
Iodomethane	U		0.00274	0.0108	1	07/22/2017 18:00	WG1001689
2-Butanone (MEK)	0.00512	J	0.00507	0.0108	1	07/22/2017 18:00	WG1001689
Methylene Chloride	U		0.00108	0.00542	1	07/22/2017 18:00	WG1001689
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	07/22/2017 18:00	WG1001689
Styrene	U		0.000254	0.00108	1	07/22/2017 18:00	WG1001689
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	07/22/2017 18:00	WG1001689
1,1,2,2-Tetrachloroethane	U		0.000396	0.00108	1	07/22/2017 18:00	WG1001689
Tetrachloroethene	U		0.000299	0.00108	1	07/22/2017 18:00	WG1001689
Toluene	U		0.000471	0.00542	1	07/22/2017 18:00	WG1001689
1,1,1-Trichloroethane	U		0.000310	0.00108	1	07/22/2017 18:00	WG1001689
1,1,2-Trichloroethane	U		0.000300	0.00108	1	07/22/2017 18:00	WG1001689
Trichloroethene	U		0.000303	0.00108	1	07/22/2017 18:00	WG1001689
Trichlorofluoromethane	U	J3	0.000414	0.00542	1	07/22/2017 18:00	WG1001689
1,2,3-Trichloropropane	U		0.000803	0.00271	1	07/22/2017 18:00	WG1001689
Vinyl acetate	U		0.00259	0.0108	1	07/22/2017 18:00	WG1001689
Vinyl chloride	U	J3	0.000316	0.00108	1	07/22/2017 18:00	WG1001689
Xylenes, Total	U		0.000757	0.00325	1	07/22/2017 18:00	WG1001689
(S) Toluene-d8	*99.1*			*80.0-120*		*07/22/2017 18:00*	WG1001689
(S) Dibromofluoromethane	*95.6*			*74.0-131*		*07/22/2017 18:00*	WG1001689
(S) α,α,α-Trifluorotoluene	*100*			*80.0-120*		*07/22/2017 18:00*	WG1001689
(S) 4-Bromofluorobenzene	*92.1*			*64.0-132*		*07/22/2017 18:00*	WG1001689

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	69.1		1	07/21/2017 15:25	WG1001174

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0345		0.00405	0.0289	1	07/21/2017 16:43	WG1001025

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		1.09	2.89	1	07/22/2017 06:56	WG1001164
Arsenic	3.72		0.941	2.89	1	07/22/2017 06:56	WG1001164
Barium	339		0.246	0.724	1	07/22/2017 06:56	WG1001164
Beryllium	1.63		0.101	0.289	1	07/22/2017 06:56	WG1001164
Cadmium	0.208	J	0.101	0.724	1	07/22/2017 06:56	WG1001164
Chromium	33.6		0.203	1.45	1	07/22/2017 06:56	WG1001164
Cobalt	29.9		0.333	1.45	1	07/22/2017 06:56	WG1001164
Copper	23.2		0.767	2.89	1	07/22/2017 06:56	WG1001164
Lead	9.42		0.275	0.724	1	07/22/2017 06:56	WG1001164
Nickel	29.1		0.709	2.89	1	07/22/2017 06:56	WG1001164
Selenium	U		1.07	2.89	1	07/22/2017 06:56	WG1001164
Silver	U		0.405	1.45	1	07/22/2017 06:56	WG1001164
Thallium	U		0.941	2.89	1	07/22/2017 06:56	WG1001164
Vanadium	167		0.347	2.89	1	07/22/2017 06:56	WG1001164
Zinc	94.2		0.854	7.24	1	07/22/2017 06:56	WG1001164

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0579	J	0.0145	0.0724	1	07/22/2017 18:18	WG1001689
Acrylonitrile	U		0.00259	0.0145	1	07/22/2017 18:18	WG1001689
Benzene	U		0.000391	0.00145	1	07/22/2017 18:18	WG1001689
Bromochloromethane	U		0.000564	0.00145	1	07/22/2017 18:18	WG1001689
Bromodichloromethane	U		0.000368	0.00145	1	07/22/2017 18:18	WG1001689
Bromoform	U		0.000614	0.00145	1	07/22/2017 18:18	WG1001689
Bromomethane	U		0.00194	0.00724	1	07/22/2017 18:18	WG1001689
Carbon disulfide	U	J3	0.000320	0.00145	1	07/22/2017 18:18	WG1001689
Carbon tetrachloride	U		0.000475	0.00145	1	07/22/2017 18:18	WG1001689
Chlorobenzene	U		0.000307	0.00145	1	07/22/2017 18:18	WG1001689
Chlorodibromomethane	U		0.000540	0.00145	1	07/22/2017 18:18	WG1001689
Chloroethane	U		0.00137	0.00724	1	07/22/2017 18:18	WG1001689
Chloroform	U		0.000331	0.00724	1	07/22/2017 18:18	WG1001689
Chloromethane	U		0.000543	0.00362	1	07/22/2017 18:18	WG1001689
Dibromomethane	U		0.000553	0.00145	1	07/22/2017 18:18	WG1001689
1,2-Dichlorobenzene	U		0.000441	0.00145	1	07/22/2017 18:18	WG1001689
1,4-Dichlorobenzene	U		0.000327	0.00145	1	07/22/2017 18:18	WG1001689
trans-1,4-Dichloro-2-butene	U		0.00113	0.00362	1	07/22/2017 18:18	WG1001689
1,1-Dichloroethane	U		0.000288	0.00145	1	07/22/2017 18:18	WG1001689
1,2-Dichloroethane	U		0.000383	0.00145	1	07/22/2017 18:18	WG1001689
1,1-Dichloroethene	U		0.000438	0.00145	1	07/22/2017 18:18	WG1001689
cis-1,2-Dichloroethene	U		0.000340	0.00145	1	07/22/2017 18:18	WG1001689
trans-1,2-Dichloroethene	U		0.000382	0.00145	1	07/22/2017 18:18	WG1001689
1,2-Dichloropropane	U		0.000518	0.00145	1	07/22/2017 18:18	WG1001689
cis-1,3-Dichloropropene	U		0.000379	0.00145	1	07/22/2017 18:18	WG1001689

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
trans-1,3-Dichloropropene	U		0.000386	0.00145	1	07/22/2017 18:18	WG1001689
Ethylbenzene	U		0.000430	0.00145	1	07/22/2017 18:18	WG1001689
2-Hexanone	U		0.00198	0.0145	1	07/22/2017 18:18	WG1001689
Iodomethane	U		0.00366	0.0145	1	07/22/2017 18:18	WG1001689
2-Butanone (MEK)	U		0.00677	0.0145	1	07/22/2017 18:18	WG1001689
Methylene Chloride	U		0.00145	0.00724	1	07/22/2017 18:18	WG1001689
4-Methyl-2-pentanone (MIBK)	U		0.00272	0.0145	1	07/22/2017 18:18	WG1001689
Styrene	U		0.000339	0.00145	1	07/22/2017 18:18	WG1001689
1,1,1,2-Tetrachloroethane	U		0.000382	0.00145	1	07/22/2017 18:18	WG1001689
1,1,2,2-Tetrachloroethane	U		0.000528	0.00145	1	07/22/2017 18:18	WG1001689
Tetrachloroethene	U		0.000399	0.00145	1	07/22/2017 18:18	WG1001689
Toluene	U		0.000628	0.00724	1	07/22/2017 18:18	WG1001689
1,1,1-Trichloroethane	U		0.000414	0.00145	1	07/22/2017 18:18	WG1001689
1,1,2-Trichloroethane	U		0.000401	0.00145	1	07/22/2017 18:18	WG1001689
Trichloroethene	U		0.000404	0.00145	1	07/22/2017 18:18	WG1001689
Trichlorofluoromethane	U	J3	0.000553	0.00724	1	07/22/2017 18:18	WG1001689
1,2,3-Trichloropropane	U		0.00107	0.00362	1	07/22/2017 18:18	WG1001689
Vinyl acetate	U		0.00346	0.0145	1	07/22/2017 18:18	WG1001689
Vinyl chloride	U	J3	0.000421	0.00145	1	07/22/2017 18:18	WG1001689
Xylenes, Total	U		0.00101	0.00434	1	07/22/2017 18:18	WG1001689
(S) Toluene-d8	*101*			*80.0-120*		*07/22/2017 18:18*	WG1001689
(S) Dibromofluoromethane	*96.0*			*74.0-131*		*07/22/2017 18:18*	WG1001689
(S) a,a,a-Trifluorotoluene	*102*			*80.0-120*		*07/22/2017 18:18*	WG1001689
(S) 4-Bromofluorobenzene	*104*			*64.0-132*		*07/22/2017 18:18*	WG1001689

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.4		1	07/21/2017 15:25	WG1001174

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0292		0.00382	0.0273	1	07/21/2017 16:46	WG1001025

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		5.11	13.6	5	07/24/2017 09:35	WG1001164
Arsenic	8.42	J	4.43	13.6	5	07/24/2017 09:35	WG1001164
Barium	447		1.16	3.41	5	07/24/2017 09:35	WG1001164
Beryllium	1.59		0.477	1.36	5	07/24/2017 09:35	WG1001164
Cadmium	U		0.477	3.41	5	07/24/2017 09:35	WG1001164
Chromium	23.1		0.954	6.82	5	07/24/2017 09:35	WG1001164
Cobalt	72.1		1.57	6.82	5	07/24/2017 09:35	WG1001164
Copper	22.7		3.61	13.6	5	07/24/2017 09:35	WG1001164
Lead	14.4		1.30	3.41	5	07/24/2017 09:35	WG1001164
Nickel	35.5		3.34	13.6	5	07/24/2017 09:35	WG1001164
Selenium	U		5.04	13.6	5	07/24/2017 09:35	WG1001164
Silver	U		1.91	6.82	5	07/24/2017 09:35	WG1001164
Thallium	U		4.43	13.6	5	07/24/2017 09:35	WG1001164
Vanadium	152		1.64	13.6	5	07/24/2017 09:35	WG1001164
Zinc	81.1		4.02	34.1	5	07/24/2017 09:35	WG1001164

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0549	J	0.0136	0.0682	1	07/22/2017 18:35	WG1001689
Acrylonitrile	U		0.00244	0.0136	1	07/22/2017 18:35	WG1001689
Benzene	U		0.000368	0.00136	1	07/22/2017 18:35	WG1001689
Bromochloromethane	U		0.000532	0.00136	1	07/22/2017 18:35	WG1001689
Bromodichloromethane	U		0.000346	0.00136	1	07/22/2017 18:35	WG1001689
Bromoform	U		0.000578	0.00136	1	07/22/2017 18:35	WG1001689
Bromomethane	U		0.00183	0.00682	1	07/22/2017 18:35	WG1001689
Carbon disulfide	U	J3	0.000301	0.00136	1	07/22/2017 18:35	WG1001689
Carbon tetrachloride	U		0.000447	0.00136	1	07/22/2017 18:35	WG1001689
Chlorobenzene	U		0.000289	0.00136	1	07/22/2017 18:35	WG1001689
Chlorodibromomethane	U		0.000508	0.00136	1	07/22/2017 18:35	WG1001689
Chloroethane	U		0.00129	0.00682	1	07/22/2017 18:35	WG1001689
Chloroform	U		0.000312	0.00682	1	07/22/2017 18:35	WG1001689
Chloromethane	U		0.000511	0.00341	1	07/22/2017 18:35	WG1001689
Dibromomethane	U		0.000521	0.00136	1	07/22/2017 18:35	WG1001689
1,2-Dichlorobenzene	U		0.000416	0.00136	1	07/22/2017 18:35	WG1001689
1,4-Dichlorobenzene	U		0.000308	0.00136	1	07/22/2017 18:35	WG1001689
trans-1,4-Dichloro-2-butene	U		0.00106	0.00341	1	07/22/2017 18:35	WG1001689
1,1-Dichloroethane	U		0.000271	0.00136	1	07/22/2017 18:35	WG1001689
1,2-Dichloroethane	U		0.000361	0.00136	1	07/22/2017 18:35	WG1001689
1,1-Dichloroethene	U		0.000413	0.00136	1	07/22/2017 18:35	WG1001689
cis-1,2-Dichloroethene	U		0.000320	0.00136	1	07/22/2017 18:35	WG1001689
trans-1,2-Dichloroethene	U		0.000360	0.00136	1	07/22/2017 18:35	WG1001689
1,2-Dichloropropane	U		0.000488	0.00136	1	07/22/2017 18:35	WG1001689
cis-1,3-Dichloropropene	U		0.000357	0.00136	1	07/22/2017 18:35	WG1001689

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
trans-1,3-Dichloropropene	U		0.000364	0.00136	1	07/22/2017 18:35	WG1001689
Ethylbenzene	U		0.000405	0.00136	1	07/22/2017 18:35	WG1001689
2-Hexanone	U		0.00187	0.0136	1	07/22/2017 18:35	WG1001689
Iodomethane	U		0.00345	0.0136	1	07/22/2017 18:35	WG1001689
2-Butanone (MEK)	U		0.00638	0.0136	1	07/22/2017 18:35	WG1001689
Methylene Chloride	U		0.00136	0.00682	1	07/22/2017 18:35	WG1001689
4-Methyl-2-pentanone (MIBK)	U		0.00256	0.0136	1	07/22/2017 18:35	WG1001689
Styrene	U		0.000319	0.00136	1	07/22/2017 18:35	WG1001689
1,1,1,2-Tetrachloroethane	U		0.000360	0.00136	1	07/22/2017 18:35	WG1001689
1,1,2,2-Tetrachloroethane	U		0.000498	0.00136	1	07/22/2017 18:35	WG1001689
Tetrachloroethene	U		0.000376	0.00136	1	07/22/2017 18:35	WG1001689
Toluene	U		0.000592	0.00682	1	07/22/2017 18:35	WG1001689
1,1,1-Trichloroethane	U		0.000390	0.00136	1	07/22/2017 18:35	WG1001689
1,1,2-Trichloroethane	U		0.000378	0.00136	1	07/22/2017 18:35	WG1001689
Trichloroethene	U		0.000380	0.00136	1	07/22/2017 18:35	WG1001689
Trichlorofluoromethane	U	J3	0.000521	0.00682	1	07/22/2017 18:35	WG1001689
1,2,3-Trichloropropane	U		0.00101	0.00341	1	07/22/2017 18:35	WG1001689
Vinyl acetate	U		0.00326	0.0136	1	07/22/2017 18:35	WG1001689
Vinyl chloride	U	J3	0.000397	0.00136	1	07/22/2017 18:35	WG1001689
Xylenes, Total	U		0.000952	0.00409	1	07/22/2017 18:35	WG1001689
(S) Toluene-d8	*100*			*80.0-120*		*07/22/2017 18:35*	WG1001689
(S) Dibromofluoromethane	*95.6*			*74.0-131*		*07/22/2017 18:35*	WG1001689
(S) α,α,α-Trifluorotoluene	*100*			*80.0-120*		*07/22/2017 18:35*	WG1001689
(S) 4-Bromofluorobenzene	*100*			*64.0-132*		*07/22/2017 18:35*	WG1001689

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	0.0119	J	0.0100	0.0500	1	07/24/2017 10:08	WG1001992
Acrylonitrile	U		0.00187	0.0100	1	07/24/2017 10:08	WG1001992
Benzene	U		0.000331	0.00100	1	07/24/2017 10:08	WG1001992
Bromochloromethane	U		0.000520	0.00100	1	07/24/2017 10:08	WG1001992
Bromodichloromethane	U		0.000380	0.00100	1	07/24/2017 10:08	WG1001992
Bromoform	U		0.000469	0.00100	1	07/24/2017 10:08	WG1001992
Bromomethane	U		0.000866	0.00500	1	07/24/2017 10:08	WG1001992
Carbon disulfide	U		0.000275	0.00100	1	07/24/2017 10:08	WG1001992
Carbon tetrachloride	U		0.000379	0.00100	1	07/24/2017 10:08	WG1001992
Chlorobenzene	U		0.000348	0.00100	1	07/24/2017 10:08	WG1001992
Chlorodibromomethane	U		0.000327	0.00100	1	07/24/2017 10:08	WG1001992
Chloroethane	U		0.000453	0.00500	1	07/24/2017 10:08	WG1001992
Chloroform	U		0.000324	0.00500	1	07/24/2017 10:08	WG1001992
Chloromethane	U		0.000276	0.00250	1	07/24/2017 10:08	WG1001992
Dibromomethane	U		0.000346	0.00100	1	07/24/2017 10:08	WG1001992
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/24/2017 10:08	WG1001992
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/24/2017 10:08	WG1001992
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/24/2017 10:08	WG1001992
1,1-Dichloroethane	U		0.000259	0.00100	1	07/24/2017 10:08	WG1001992
1,2-Dichloroethane	U		0.000361	0.00100	1	07/24/2017 10:08	WG1001992
1,1-Dichloroethene	U		0.000398	0.00100	1	07/24/2017 10:08	WG1001992
cis-1,2-Dichloroethene	U		0.000260	0.00100	1	07/24/2017 10:08	WG1001992
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/24/2017 10:08	WG1001992
1,2-Dichloropropane	U		0.000306	0.00100	1	07/24/2017 10:08	WG1001992
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/24/2017 10:08	WG1001992
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/24/2017 10:08	WG1001992
Ethylbenzene	U		0.000384	0.00100	1	07/24/2017 10:08	WG1001992
2-Hexanone	U		0.00382	0.0100	1	07/24/2017 10:08	WG1001992
Iodomethane	U		0.00171	0.0100	1	07/24/2017 10:08	WG1001992
2-Butanone (MEK)	U		0.00393	0.0100	1	07/24/2017 10:08	WG1001992
Methylene Chloride	U		0.00100	0.00500	1	07/24/2017 10:08	WG1001992
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/24/2017 10:08	WG1001992
Styrene	U		0.000307	0.00100	1	07/24/2017 10:08	WG1001992
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/24/2017 10:08	WG1001992
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/24/2017 10:08	WG1001992
Tetrachloroethene	U		0.000372	0.00100	1	07/24/2017 10:08	WG1001992
Toluene	U		0.000412	0.00100	1	07/24/2017 10:08	WG1001992
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/24/2017 10:08	WG1001992
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/24/2017 10:08	WG1001992
Trichloroethene	U		0.000398	0.00100	1	07/24/2017 10:08	WG1001992
Trichlorofluoromethane	U		0.00120	0.00500	1	07/24/2017 10:08	WG1001992
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/24/2017 10:08	WG1001992
Vinyl acetate	U		0.00163	0.0100	1	07/24/2017 10:08	WG1001992
Vinyl chloride	U		0.000259	0.00100	1	07/24/2017 10:08	WG1001992
Xylenes, Total	U		0.00106	0.00300	1	07/24/2017 10:08	WG1001992
(S) Toluene-d8	*102*			*80.0-120*		*07/24/2017 10:08*	WG1001992
(S) Dibromofluoromethane	*106*			*76.0-123*		*07/24/2017 10:08*	WG1001992
(S) a,a,a-Trifluorotoluene	*99.4*			*80.0-120*		*07/24/2017 10:08*	WG1001992
(S) 4-Bromofluorobenzene	*108*			*80.0-120*		*07/24/2017 10:08*	WG1001992

Method Blank (MB)

(MB) R3235475-1 07/21/17 15:25

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00140			

L923705-12 Original Sample (OS) • Duplicate (DUP)

(OS) L923705-12 07/21/17 15:25 • (DUP) R3235475-3 07/21/17 15:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	73.4	72.6	1	0.965		5

Laboratory Control Sample (LCS)

(LCS) R3235475-2 07/21/17 15:25

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3234899-1 07/20/17 15:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Sulfide	U		0.0065	0.0500

L923466-01 Original Sample (OS) • Duplicate (DUP)

(OS) L923466-01 07/20/17 15:29 • (DUP) R3234899-4 07/20/17 15:29

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Sulfide	U	0.000	1	0		20

L923705-06 Original Sample (OS) • Duplicate (DUP)

(OS) L923705-06 07/20/17 15:35 • (DUP) R3234899-7 07/20/17 15:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Sulfide	U	0.000	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3234899-2 07/20/17 15:28 • (LCSD) R3234899-3 07/20/17 15:28

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Sulfide	0.500	0.551	0.566	110	113	85-115			3	20

L923466-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923466-03 07/20/17 15:30 • (MS) R3234899-5 07/20/17 15:30 • (MSD) R3234899-6 07/20/17 15:31

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Sulfide	1.00	U	1.09	1.09	109	109	1	80-120			0	20

L923466-01 Original Sample (OS) • Duplicate (DUP)

(OS) L923466-01 07/20/17 15:46 • (DUP) WG1000861-3 07/20/17 15:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.29	9.30	1	0.108	T8	1

Sample Narrative:

OS: 9.29 at 10.6c

DUP: 9.30 at 10.6c

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG1000861-1 07/20/17 15:46 • (LCSD) WG1000861-2 07/20/17 15:46

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
pH	6.38	6.48	6.48	102	102	98.4-102			0.000	1

Sample Narrative:

LCS: 6.48 at 22.3c

LCSD: 6.48 at 22.2c

Method Blank (MB)

(MB) R3235280-1 07/21/17 14:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235280-2 07/21/17 14:58 • (LCSD) R3235280-3 07/21/17 15:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	0.00289	0.00294	96	98	80-120			2	20

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/21/17 15:02 • (MS) R3235280-4 07/21/17 15:05 • (MSD) R3235280-5 07/21/17 15:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	ND	0.00326	0.00301	109	100	1	75-125			8	20

Method Blank (MB)

(MB) R3235310-1 07/21/17 16:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235310-2 07/21/17 16:13 • (LCSD) R3235310-3 07/21/17 16:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.299	0.295	100	98	80-120			1	20

L923705-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923705-10 07/21/17 16:17 • (MS) R3235310-4 07/21/17 16:20 • (MSD) R3235310-5 07/21/17 16:22

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.325	0.144	0.356	0.385	65	74	1	75-125	J6	J6	8	20

Method Blank (MB)

(MB) R3235513-1 07/22/17 05:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.75	2.00
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Beryllium	U		0.07	0.200
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Cobalt	U		0.23	1.00
Copper	U		0.53	2.00
Lead	U		0.19	0.500
Nickel	U		0.49	2.00
Selenium	U		0.74	2.00
Silver	U		0.28	1.00
Thallium	U		0.65	2.00
Vanadium	U		0.24	2.00
Zinc	U		0.59	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235513-2 07/22/17 05:45 • (LCSD) R3235513-3 07/22/17 05:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	100	99.3	104	99	104	80-120			5	20
Arsenic	100	97.1	101	97	101	80-120			4	20
Barium	100	101	105	101	105	80-120			4	20
Beryllium	100	102	106	102	106	80-120			4	20
Cadmium	100	97.4	102	97	102	80-120			4	20
Chromium	100	97.6	102	98	102	80-120			5	20
Cobalt	100	99.2	104	99	104	80-120			5	20
Copper	100	100	105	100	105	80-120			5	20
Lead	100	97.4	102	97	102	80-120			5	20
Nickel	100	97.7	103	98	103	80-120			5	20
Selenium	100	97.9	103	98	103	80-120			5	20
Silver	20.0	18.7	19.5	93	97	80-120			4	20
Thallium	100	99.9	105	100	105	80-120			5	20
Vanadium	100	100	105	100	105	80-120			5	20
Zinc	100	97.8	102	98	102	80-120			5	20

L923583-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923583-04 07/22/17 05:50 • (MS) R3235513-6 07/22/17 05:57 • (MSD) R3235513-7 07/22/17 06:00

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	118	ND	111	114	94	97	1	75-125			3	20
Arsenic	118	4.09	124	125	102	103	1	75-125			1	20
Barium	118	16.4	138	141	103	105	1	75-125			2	20
Beryllium	118	ND	121	123	102	104	1	75-125			2	20
Cadmium	118	ND	119	121	101	103	1	75-125			2	20
Chromium	118	6.30	121	124	98	100	1	75-125			2	20
Cobalt	118	3.34	129	129	106	107	1	75-125			1	20
Copper	118	7.00	138	138	111	111	1	75-125			0	20
Lead	118	4.99	127	127	103	103	1	75-125			0	20
Nickel	118	7.79	130	130	104	104	1	75-125			0	20
Selenium	118	ND	119	122	101	103	1	75-125			2	20
Silver	23.6	ND	22.6	23.1	96	98	1	75-125			2	20
Thallium	118	ND	120	122	101	104	1	75-125			2	20
Vanadium	118	10.0	132	134	104	105	1	75-125			1	20
Zinc	118	21.1	145	141	105	101	1	75-125			3	20

Method Blank (MB)

(MB) R3235257-1 07/21/17 13:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.0065	0.0100
Barium	U		0.0017	0.00500
Chromium	U		0.0014	0.0100
Cobalt	U		0.0023	0.0100
Nickel	U		0.0049	0.0100
Silver	U		0.0028	0.00500
Vanadium	0.00427	J	0.0024	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235257-2 07/21/17 13:56 • (LCSD) R3235257-3 07/21/17 13:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	1.01	1.02	101	102	80-120			1	20
Barium	1.00	1.03	1.03	103	103	80-120			0	20
Chromium	1.00	1.02	1.04	102	104	80-120			2	20
Cobalt	1.00	1.04	1.04	104	104	80-120			0	20
Nickel	1.00	1.03	1.03	103	103	80-120			0	20
Silver	0.200	0.195	0.199	98	99	80-120			2	20
Vanadium	1.00	1.03	1.05	103	105	80-120			2	20

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/21/17 14:02 • (MS) R3235257-5 07/21/17 14:09 • (MSD) R3235257-6 07/21/17 14:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	ND	1.03	1.03	103	103	1	75-125			0	20
Barium	1.00	0.0396	1.06	1.07	102	103	1	75-125			1	20
Chromium	1.00	ND	1.01	1.03	101	103	1	75-125			2	20
Cobalt	1.00	ND	1.03	1.05	103	105	1	75-125			1	20
Nickel	1.00	ND	1.02	1.03	102	103	1	75-125			1	20
Silver	0.200	ND	0.195	0.197	97	98	1	75-125			1	20
Vanadium	1.00	ND	1.03	1.03	103	103	1	75-125			0	20

Method Blank (MB)

(MB) R3235787-7 07/24/17 19:44

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.000754	0.00200
Beryllium	U		0.00012	0.00200
Cadmium	U		0.00016	0.00100
Copper	U		0.00052	0.00500
Lead	U		0.00024	0.00200
Selenium	U		0.00038	0.00200
Thallium	U		0.00019	0.00200
Zinc	U		0.00256	0.0250

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235787-8 07/24/17 19:47 • (LCSD) R3235787-9 07/24/17 19:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	0.0501	0.0493	100	99	80-120			2	20
Beryllium	0.0500	0.0458	0.0441	92	88	80-120			4	20
Cadmium	0.0500	0.0491	0.0474	98	95	80-120			3	20
Copper	0.0500	0.0495	0.0489	99	98	80-120			2	20
Lead	0.0500	0.0487	0.0478	97	96	80-120			2	20
Selenium	0.0500	0.0489	0.0497	98	99	80-120			2	20
Thallium	0.0500	0.0482	0.0473	96	95	80-120			2	20
Zinc	0.0500	0.0457	0.0465	91	93	80-120			2	20

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/24/17 19:54 • (MS) R3235787-11 07/24/17 20:01 • (MSD) R3235787-12 07/24/17 20:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	ND	0.0489	0.0498	98	100	1	75-125			2	20
Beryllium	0.0500	ND	0.0450	0.0443	90	89	1	75-125			2	20
Cadmium	0.0500	ND	0.0474	0.0492	95	98	1	75-125			4	20
Copper	0.0500	ND	0.0473	0.0481	93	95	1	75-125			1	20
Lead	0.0500	ND	0.0479	0.0488	94	96	1	75-125			2	20
Selenium	0.0500	ND	0.0477	0.0484	95	97	1	75-125			1	20
Thallium	0.0500	ND	0.0473	0.0476	95	95	1	75-125			1	20
Zinc	0.0500	ND	0.0495	0.0510	90	93	1	75-125			3	20

Method Blank (MB)

(MB) R3235980-3 07/21/17 16:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromochloromethane	U		0.000520	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Iodomethane	U		0.00171	0.0100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100

Method Blank (MB)

(MB) R3235980-3 07/21/17 16:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
Vinyl acetate	U		0.00163	0.0100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*104*			*80.0-120*
(S) Dibromofluoromethane	*103*			*76.0-123*
(S) a,a,a-Trifluorotoluene	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*106*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235980-1 07/21/17 15:05 • (LCSD) R3235980-2 07/21/17 15:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.114	0.115	91.3	91.9	10.0-160			0.630	23
Acrylonitrile	0.125	0.129	0.121	103	96.8	60.0-142			6.61	20
Benzene	0.0250	0.0232	0.0232	92.6	92.7	69.0-123			0.0700	20
Bromodichloromethane	0.0250	0.0229	0.0224	91.7	89.6	76.0-120			2.32	20
Bromochloromethane	0.0250	0.0239	0.0237	95.8	94.9	76.0-122			0.880	20
Bromoform	0.0250	0.0248	0.0231	99.3	92.3	67.0-132			7.29	20
Bromomethane	0.0250	0.0236	0.0231	94.5	92.5	18.0-160			2.20	20
Carbon disulfide	0.0250	0.0231	0.0233	92.4	93.2	55.0-127			0.930	20
Carbon tetrachloride	0.0250	0.0239	0.0236	95.7	94.5	63.0-122			1.29	20
Chlorobenzene	0.0250	0.0246	0.0244	98.3	97.5	79.0-121			0.790	20
Chlorodibromomethane	0.0250	0.0240	0.0236	96.1	94.3	75.0-125			1.81	20
Chloroethane	0.0250	0.0222	0.0219	88.7	87.7	47.0-152			1.11	20
Chloroform	0.0250	0.0240	0.0236	96.0	94.4	72.0-121			1.67	20
Chloromethane	0.0250	0.0229	0.0227	91.5	90.9	48.0-139			0.560	20
Dibromomethane	0.0250	0.0229	0.0218	91.7	87.0	78.0-120			5.16	20
1,2-Dichlorobenzene	0.0250	0.0233	0.0226	93.4	90.4	80.0-120			3.20	20
1,4-Dichlorobenzene	0.0250	0.0228	0.0228	91.3	91.2	77.0-120			0.130	20
trans-1,4-Dichloro-2-butene	0.0250	0.0242	0.0218	96.6	87.1	55.0-134			10.3	20
1,1-Dichloroethane	0.0250	0.0240	0.0233	96.1	93.3	70.0-126			3.02	20
1,2-Dichloroethane	0.0250	0.0237	0.0233	95.0	93.1	67.0-126			1.99	20
1,1-Dichloroethene	0.0250	0.0258	0.0257	103	103	64.0-129			0.370	20
cis-1,2-Dichloroethene	0.0250	0.0222	0.0218	88.7	87.4	73.0-120			1.56	20
trans-1,2-Dichloroethene	0.0250	0.0223	0.0225	89.4	90.1	71.0-121			0.860	20
1,2-Dichloropropane	0.0250	0.0240	0.0230	96.1	91.9	75.0-125			4.46	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235980-1 07/21/17 15:05 • (LCSD) R3235980-2 07/21/17 15:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0252	0.0242	101	97.0	79.0-123			3.80	20
trans-1,3-Dichloropropene	0.0250	0.0237	0.0231	94.9	92.4	74.0-127			2.68	20
Ethylbenzene	0.0250	0.0242	0.0245	96.8	97.8	77.0-120			1.08	20
2-Hexanone	0.125	0.123	0.118	98.3	94.6	58.0-147			3.82	20
Iodomethane	0.125	0.116	0.116	93.2	93.1	57.0-140			0.130	20
2-Butanone (MEK)	0.125	0.124	0.117	99.5	93.2	37.0-158			6.51	20
Methylene Chloride	0.0250	0.0228	0.0225	91.0	89.8	66.0-121			1.37	20
4-Methyl-2-pentanone (MIBK)	0.125	0.136	0.128	109	103	59.0-143			5.76	20
Styrene	0.0250	0.0246	0.0236	98.4	94.5	78.0-124			4.10	20
1,1,1,2-Tetrachloroethane	0.0250	0.0230	0.0223	91.9	89.0	75.0-122			3.17	20
1,1,2,2-Tetrachloroethane	0.0250	0.0254	0.0232	102	93.0	71.0-122			8.99	20
Tetrachloroethene	0.0250	0.0243	0.0243	97.1	97.2	70.0-127			0.0700	20
Toluene	0.0250	0.0238	0.0233	95.0	93.1	77.0-120			2.10	20
1,1,1-Trichloroethane	0.0250	0.0243	0.0238	97.0	95.2	68.0-122			1.90	20
1,1,2-Trichloroethane	0.0250	0.0248	0.0239	99.3	95.6	78.0-120			3.81	20
Trichloroethene	0.0250	0.0246	0.0239	98.6	95.5	78.0-120			3.21	20
Trichlorofluoromethane	0.0250	0.0244	0.0247	97.4	98.7	56.0-137			1.29	20
1,2,3-Trichloropropane	0.0250	0.0250	0.0235	100	94.0	72.0-124			6.21	20
Vinyl acetate	0.125	0.124	0.115	98.9	92.3	46.0-160			6.91	20
Vinyl chloride	0.0250	0.0241	0.0247	96.4	98.6	64.0-133			2.29	20
Xylenes, Total	0.0750	0.0737	0.0727	98.3	96.9	77.0-120			1.37	20
(S) Toluene-d8				*105*	*105*	*80.0-120*				
(S) Dibromofluoromethane				*101*	*102*	*76.0-123*				
(S) α,α,α-Trifluorotoluene				*104*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*105*	*104*	*80.0-120*				

Method Blank (MB)

(MB) R3235773-3 07/24/17 09:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromochloromethane	U		0.000520	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Iodomethane	U		0.00171	0.0100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100

Method Blank (MB)

(MB) R3235773-3 07/24/17 09:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
Vinyl acetate	U		0.00163	0.0100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*102*			*80.0-120*
(S) Dibromofluoromethane	*106*			*76.0-123*
(S) a,a,a-Trifluorotoluene	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*110*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235773-1 07/24/17 09:01 • (LCSD) R3235773-2 07/24/17 09:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.113	0.110	90.4	88.2	10.0-160			2.48	23
Acrylonitrile	0.125	0.151	0.126	120	101	60.0-142			17.5	20
Benzene	0.0250	0.0286	0.0272	115	109	69.0-123			5.02	20
Bromodichloromethane	0.0250	0.0255	0.0242	102	97.0	76.0-120			5.16	20
Bromochloromethane	0.0250	0.0265	0.0251	106	100	76.0-122			5.32	20
Bromoform	0.0250	0.0263	0.0248	105	99.3	67.0-132			5.67	20
Bromomethane	0.0250	0.0275	0.0261	110	105	18.0-160			5.00	20
Carbon disulfide	0.0250	0.0297	0.0281	119	113	55.0-127			5.53	20
Carbon tetrachloride	0.0250	0.0264	0.0256	105	102	63.0-122			2.99	20
Chlorobenzene	0.0250	0.0248	0.0231	99.0	92.6	79.0-121			6.75	20
Chlorodibromomethane	0.0250	0.0249	0.0234	99.5	93.5	75.0-125			6.22	20
Chloroethane	0.0250	0.0273	0.0259	109	104	47.0-152			5.15	20
Chloroform	0.0250	0.0283	0.0266	113	106	72.0-121			6.09	20
Chloromethane	0.0250	0.0283	0.0271	113	108	48.0-139			4.59	20
Dibromomethane	0.0250	0.0250	0.0243	99.9	97.1	78.0-120			2.92	20
1,2-Dichlorobenzene	0.0250	0.0251	0.0244	100	97.6	80.0-120			2.95	20
1,4-Dichlorobenzene	0.0250	0.0255	0.0242	102	96.7	77.0-120			5.18	20
trans-1,4-Dichloro-2-butene	0.0250	0.0237	0.0219	94.6	87.5	55.0-134			7.80	20
1,1-Dichloroethane	0.0250	0.0285	0.0271	114	108	70.0-126			4.90	20
1,2-Dichloroethane	0.0250	0.0264	0.0255	106	102	67.0-126			3.50	20
1,1-Dichloroethene	0.0250	0.0288	0.0276	115	111	64.0-129			4.09	20
cis-1,2-Dichloroethene	0.0250	0.0271	0.0257	108	103	73.0-120			5.42	20
trans-1,2-Dichloroethene	0.0250	0.0291	0.0270	117	108	71.0-121			7.61	20
1,2-Dichloropropane	0.0250	0.0271	0.0257	108	103	75.0-125			5.43	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235773-1 07/24/17 09:01 • (LCSD) R3235773-2 07/24/17 09:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0261	0.0248	104	99.0	79.0-123			5.15	20
trans-1,3-Dichloropropene	0.0250	0.0255	0.0240	102	96.1	74.0-127			6.03	20
Ethylbenzene	0.0250	0.0256	0.0235	103	94.0	77.0-120			8.66	20
2-Hexanone	0.125	0.126	0.117	101	93.6	58.0-147			7.59	20
Iodomethane	0.125	0.135	0.128	108	102	57.0-140			5.57	20
2-Butanone (MEK)	0.125	0.123	0.115	98.3	91.6	37.0-158			7.04	20
Methylene Chloride	0.0250	0.0275	0.0260	110	104	66.0-121			5.43	20
4-Methyl-2-pentanone (MIBK)	0.125	0.124	0.116	98.9	92.6	59.0-143			6.53	20
Styrene	0.0250	0.0274	0.0262	109	105	78.0-124			4.22	20
1,1,1,2-Tetrachloroethane	0.0250	0.0228	0.0215	91.3	86.1	75.0-122			5.91	20
1,1,2,2-Tetrachloroethane	0.0250	0.0276	0.0264	111	106	71.0-122			4.57	20
Tetrachloroethene	0.0250	0.0234	0.0221	93.4	88.3	70.0-127			5.69	20
Toluene	0.0250	0.0254	0.0238	101	95.4	77.0-120			6.19	20
1,1,1-Trichloroethane	0.0250	0.0274	0.0265	110	106	68.0-122			3.48	20
1,1,2-Trichloroethane	0.0250	0.0242	0.0228	96.7	91.3	78.0-120			5.69	20
Trichloroethene	0.0250	0.0246	0.0232	98.5	92.8	78.0-120			5.94	20
Trichlorofluoromethane	0.0250	0.0294	0.0273	118	109	56.0-137			7.38	20
1,2,3-Trichloropropane	0.0250	0.0258	0.0246	103	98.5	72.0-124			4.58	20
Vinyl acetate	0.125	0.169	0.164	135	131	46.0-160			3.17	20
Vinyl chloride	0.0250	0.0271	0.0258	108	103	64.0-133			4.87	20
Xylenes, Total	0.0750	0.0768	0.0721	102	96.1	77.0-120			6.31	20
(S) Toluene-d8				*100*	*99.5*	*80.0-120*				
(S) Dibromofluoromethane				*107*	*106*	*76.0-123*				
(S) α,α,α-Trifluorotoluene				*97.5*	*97.6*	*80.0-120*				
(S) 4-Bromofluorobenzene				*107*	*108*	*80.0-120*				

Method Blank (MB)

(MB) R3235432-3 07/22/17 12:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
Iodomethane	U		0.00253	0.0100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100

Method Blank (MB)

(MB) R3235432-3 07/22/17 12:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*101*			*80.0-120*
(S) Dibromofluoromethane	*93.4*			*74.0-131*
(S) a,a,a-Trifluorotoluene	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*64.0-132*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235432-1 07/22/17 11:02 • (LCSD) R3235432-2 07/22/17 11:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0426	0.0484	34.1	38.7	11.0-160			12.9	23
Acrylonitrile	0.125	0.0819	0.0923	65.5	73.9	61.0-143			12.0	20
Benzene	0.0250	0.0195	0.0218	77.9	87.2	71.0-124			11.2	20
Bromodichloromethane	0.0250	0.0194	0.0217	77.4	87.0	75.0-120			11.6	20
Bromochloromethane	0.0250	0.0231	0.0259	92.4	104	80.0-121			11.5	20
Bromoform	0.0250	0.0231	0.0252	92.5	101	65.0-133			8.72	20
Bromomethane	0.0250	0.0253	0.0297	101	119	26.0-160			15.9	20
Carbon disulfide	0.0250	0.0147	0.0180	58.7	72.0	53.0-130		J3	20.4	20
Carbon tetrachloride	0.0250	0.0207	0.0241	83.0	96.4	66.0-123			15.0	20
Chlorobenzene	0.0250	0.0262	0.0272	105	109	79.0-121			3.96	20
Chlorodibromomethane	0.0250	0.0237	0.0255	94.8	102	74.0-128			7.34	20
Chloroethane	0.0250	0.0220	0.0257	88.1	103	51.0-147			15.6	20
Chloroform	0.0250	0.0198	0.0232	79.3	92.9	73.0-123			15.8	20
Chloromethane	0.0250	0.0188	0.0224	75.2	89.6	51.0-138			17.5	20
Dibromomethane	0.0250	0.0219	0.0231	87.6	92.5	79.0-120			5.48	20
1,2-Dichlorobenzene	0.0250	0.0220	0.0244	88.1	97.4	80.0-120			10.1	20
1,4-Dichlorobenzene	0.0250	0.0224	0.0245	89.4	98.2	77.0-120			9.30	20
trans-1,4-Dichloro-2-butene	0.0250	0.0192	0.0211	76.6	84.4	68.0-126			9.64	20
1,1-Dichloroethane	0.0250	0.0179	0.0209	71.5	83.6	70.0-128			15.6	20
1,2-Dichloroethane	0.0250	0.0201	0.0230	80.5	91.9	69.0-128			13.3	20
1,1-Dichloroethene	0.0250	0.0194	0.0231	77.5	92.4	63.0-131			17.5	20
cis-1,2-Dichloroethene	0.0250	0.0200	0.0237	80.0	94.8	74.0-123			16.9	20
trans-1,2-Dichloroethene	0.0250	0.0193	0.0227	77.3	90.9	72.0-122			16.3	20
1,2-Dichloropropane	0.0250	0.0202	0.0223	80.9	89.4	75.0-126			10.0	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235432-1 07/22/17 11:02 • (LCSD) R3235432-2 07/22/17 11:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	0.0250	0.0202	0.0220	80.8	88.2	80.0-125			8.77	20
trans-1,3-Dichloropropene	0.0250	0.0214	0.0232	85.4	93.0	75.0-129			8.47	20
Ethylbenzene	0.0250	0.0247	0.0271	98.7	108	77.0-120			9.33	20
2-Hexanone	0.125	0.0907	0.0944	72.6	75.5	61.0-143			3.97	20
Iodomethane	0.125	0.0981	0.113	78.5	90.7	67.0-132			14.4	20
2-Butanone (MEK)	0.125	0.0654	0.0742	52.3	59.4	37.0-159			12.6	20
Methylene Chloride	0.0250	0.0188	0.0210	75.2	84.0	67.0-123			11.0	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0792	0.0851	63.4	68.1	60.0-144			7.20	20
Styrene	0.0250	0.0252	0.0270	101	108	78.0-124			6.69	20
1,1,1,2-Tetrachloroethane	0.0250	0.0241	0.0261	96.5	104	74.0-124			7.90	20
1,1,2,2-Tetrachloroethane	0.0250	0.0236	0.0245	94.5	97.9	73.0-120			3.51	20
Tetrachloroethene	0.0250	0.0273	0.0295	109	118	70.0-127			7.56	20
Toluene	0.0250	0.0207	0.0237	82.7	94.7	77.0-120			13.5	20
1,1,1-Trichloroethane	0.0250	0.0204	0.0244	81.7	97.5	69.0-125			17.7	20
1,1,2-Trichloroethane	0.0250	0.0258	0.0251	103	100	78.0-120			2.74	20
Trichloroethene	0.0250	0.0229	0.0258	91.4	103	79.0-120			12.2	20
Trichlorofluoromethane	0.0250	0.0233	0.0296	93.1	118	59.0-136		J3	23.8	20
1,2,3-Trichloropropane	0.0250	0.0242	0.0254	96.9	102	73.0-124			4.75	20
Vinyl acetate	0.125	0.0826	0.0906	66.1	72.5	58.0-156			9.24	20
Vinyl chloride	0.0250	0.0213	0.0261	85.1	104	63.0-134		J3	20.5	20
Xylenes, Total	0.0750	0.0731	0.0792	97.5	106	77.0-120			8.01	20
(S) Toluene-d8				*99.7*	*101*	*80.0-120*				
(S) Dibromofluoromethane				*91.2*	*95.2*	*74.0-131*				
(S) α,α,α-Trifluorotoluene				*102*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*105*	*99.0*	*64.0-132*				

L923422-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923422-08 07/22/17 20:02 • (MS) R3235432-4 07/22/17 20:20 • (MSD) R3235432-5 07/22/17 20:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.149	ND	0.654	0.674	17.5	18.0	25	10.0-160			2.94	36
Acrylonitrile	0.149	ND	1.14	1.03	30.6	27.5	25	14.0-160			10.9	33
Benzene	0.0299	ND	0.284	0.280	38.0	37.5	25	13.0-146			1.50	27
Bromodichloromethane	0.0299	ND	0.271	0.284	36.3	38.0	25	15.0-142			4.63	28
Bromochloromethane	0.0299	ND	0.339	0.323	45.4	43.2	25	24.0-146			4.97	27
Bromoform	0.0299	ND	0.320	0.285	42.9	38.2	25	10.0-147			11.6	31
Bromomethane	0.0299	ND	0.255	0.259	34.1	34.6	25	10.0-160			1.59	32
Carbon disulfide	0.0299	ND	0.159	0.149	21.3	19.9	25	10.0-141			7.09	30

L923422-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923422-08 07/22/17 20:02 • (MS) R3235432-4 07/22/17 20:20 • (MSD) R3235432-5 07/22/17 20:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0299	ND	0.290	0.286	38.8	38.2	25	13.0-140			1.35	30
Chlorobenzene	0.0299	ND	0.357	0.346	47.7	46.3	25	10.0-149			3.06	31
Chlorodibromomethane	0.0299	ND	0.325	0.313	43.4	41.9	25	12.0-147			3.61	29
Chloroethane	0.0299	ND	0.165	0.156	22.1	20.9	25	10.0-159			5.84	33
Chloroform	0.0299	ND	0.302	0.289	40.4	38.7	25	18.0-148			4.30	28
Chloromethane	0.0299	ND	0.222	0.213	29.8	28.5	25	10.0-146			4.17	29
Dibromomethane	0.0299	ND	0.320	0.303	42.9	40.5	25	18.0-144			5.63	27
1,2-Dichlorobenzene	0.0299	ND	0.329	0.318	44.0	42.6	25	10.0-153			3.31	34
1,4-Dichlorobenzene	0.0299	ND	0.325	0.319	43.5	42.7	25	10.0-148			1.90	34
trans-1,4-Dichloro-2-butene	0.0299	ND	0.304	0.273	40.6	36.5	25	10.0-160			10.6	40
1,1-Dichloroethane	0.0299	ND	0.273	0.271	36.5	36.2	25	19.0-148			0.700	28
1,2-Dichloroethane	0.0299	ND	0.307	0.305	41.1	40.8	25	17.0-147			0.710	27
1,1-Dichloroethene	0.0299	ND	0.213	0.201	28.5	26.9	25	10.0-150			5.78	31
cis-1,2-Dichloroethene	0.0299	ND	0.309	0.297	41.3	39.7	25	16.0-145			3.83	28
trans-1,2-Dichloroethene	0.0299	ND	0.288	0.281	38.6	37.6	25	11.0-142			2.51	29
1,2-Dichloropropane	0.0299	ND	0.306	0.291	41.0	38.9	25	17.0-148			5.15	28
cis-1,3-Dichloropropene	0.0299	ND	0.321	0.315	43.0	42.1	25	13.0-150			2.10	28
trans-1,3-Dichloropropene	0.0299	ND	0.322	0.336	43.1	44.9	25	10.0-152			4.25	29
Ethylbenzene	0.0299	0.560	0.355	0.337	0.000	0.000	25	10.0-147	J6	J6	5.30	31
2-Hexanone	0.149	ND	1.49	1.54	39.9	41.1	25	12.0-158			3.04	30
Iodomethane	0.149	ND	1.56	1.51	41.8	40.3	25	10.0-157			3.56	34
2-Butanone (MEK)	0.149	ND	1.03	1.04	27.5	27.8	25	10.0-160			1.36	33
Methylene Chloride	0.0299	ND	0.299	0.287	40.0	38.4	25	16.0-139			4.04	29
4-Methyl-2-pentanone (MIBK)	0.149	ND	1.39	1.40	37.2	37.4	25	12.0-160			0.730	32
Styrene	0.0299	ND	0.381	0.360	51.0	48.2	25	10.0-155			5.74	34
1,1,1,2-Tetrachloroethane	0.0299	ND	0.348	0.325	46.6	43.4	25	10.0-147			7.04	30
1,1,2,2-Tetrachloroethane	0.0299	ND	0.287	0.261	38.4	34.9	25	10.0-155			9.46	31
Tetrachloroethene	0.0299	ND	0.367	0.349	49.1	46.7	25	10.0-144			5.15	32
Toluene	0.0299	ND	0.312	0.315	39.7	40.1	25	10.0-144			0.940	28
1,1,1-Trichloroethane	0.0299	ND	0.298	0.289	39.8	38.7	25	18.0-145			3.01	29
1,1,2-Trichloroethane	0.0299	ND	0.350	0.331	46.8	44.2	25	12.0-151			5.60	28
Trichloroethene	0.0299	ND	0.377	0.385	50.5	51.6	25	11.0-148			2.11	29
Trichlorofluoromethane	0.0299	ND	0.286	0.274	38.3	36.6	25	10.0-157			4.44	34
1,2,3-Trichloropropane	0.0299	ND	0.358	0.327	47.9	43.8	25	10.0-154			8.97	32
Vinyl acetate	0.149	ND	0.152	0.142	4.07	3.79	25	10.0-160	J6	J6	7.11	40
Vinyl chloride	0.0299	ND	0.254	0.246	34.0	32.9	25	10.0-150			3.43	29
Xylenes, Total	0.0897	1.31	1.10	1.03	0.000	0.000	25	10.0-150	J6	J6	6.86	31
(S) Toluene-d8					*99.3*	*104*		*80.0-120*				
(S) Dibromofluoromethane					*90.0*	*89.0*		*74.0-131*				

L923422-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923422-08 07/22/17 20:02 • (MS) R3235432-4 07/22/17 20:20 • (MSD) R3235432-5 07/22/17 20:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) a,a,a-Trifluorotoluene					*106*	*105*		*80.0-120*				
(S) 4-Bromofluorobenzene					*101*	*101*		*64.0-132*				

Method Blank (MB)

(MB) R3235322-1 07/21/17 17:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
2,4-D	U		0.000744	0.00200
Dalapon	U		0.00104	0.00200
2,4-DB	U		0.000775	0.00400
Dicamba	U		0.000813	0.00200
Dichloroprop	U		0.000778	0.00200
Dinoseb	U		0.000795	0.00200
MCPA	U		0.0131	0.200
MCPP	U		0.00715	0.200
2,4,5-T	U		0.000843	0.00200
2,4,5-TP (Silvex)	U		0.000845	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*77.7*			*14.0-158*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235322-2 07/21/17 17:40 • (LCSD) R3235322-3 07/21/17 17:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,4-D	0.00500	0.00426	0.00455	85.1	90.9	56.0-120			6.55	20
Dalapon	0.00500	0.00409	0.00412	81.8	82.4	33.0-120			0.710	20
2,4-DB	0.00500	0.00513	0.00353	103	70.5	40.0-143		J3	37.2	20
Dicamba	0.00500	0.00373	0.00378	74.5	75.6	57.0-121			1.37	20
Dichloroprop	0.00500	0.00414	0.00415	82.8	83.1	59.0-122			0.370	20
Dinoseb	0.00500	0.00383	0.00371	76.6	74.3	22.0-120			3.13	20
MCPA	0.0500	0.0411	0.0354	82.2	70.9	46.0-137			14.8	20
MCPP	0.0500	0.0505	0.0739	101	148	38.0-131		J3 J4	37.5	22
2,4,5-T	0.00500	0.00391	0.00399	78.1	79.8	56.0-122			2.15	20
2,4,5-TP (Silvex)	0.00500	0.00409	0.00409	81.8	81.8	55.0-120			0.0200	20
(S) 2,4-Dichlorophenyl Acetic Acid				*78.2*	*78.1*	*14.0-158*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL (dry)	Reported Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

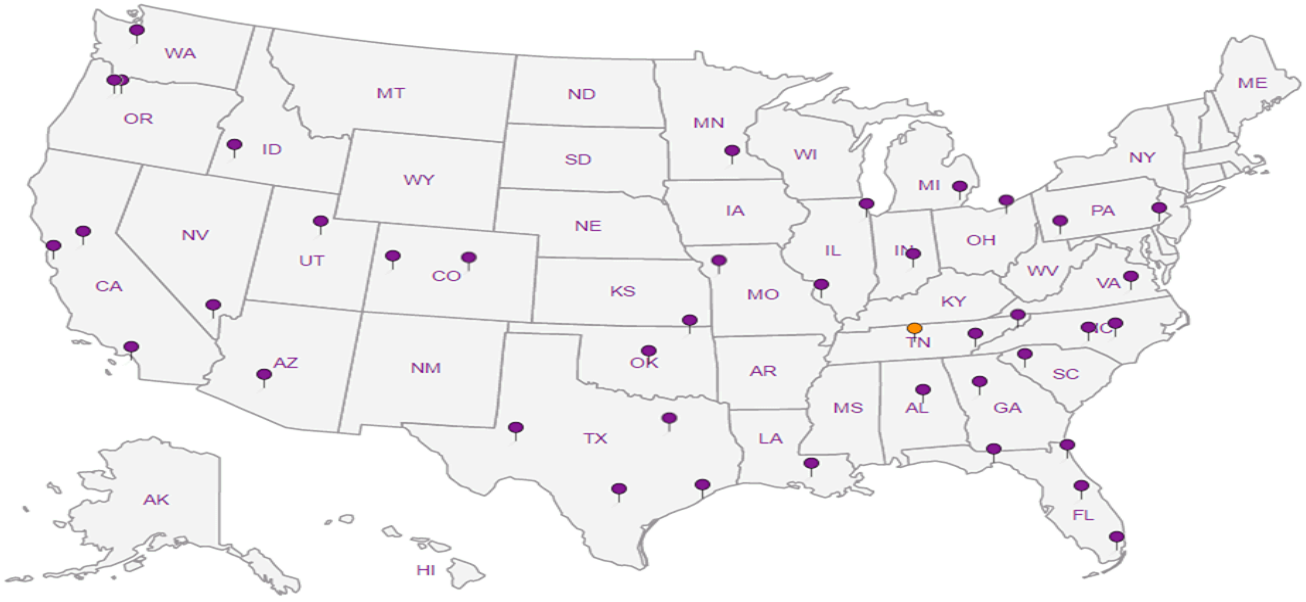
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Idaho Dept of Env. Quality - Boise, ID

1445 N.Orchard
Boise, ID 83706

Billing Information:
Project Manager - P034
1445 N.Orchard
Boise, ID 83706

Report to: Dana Swift

Email To: dana.swift@deq.idaho.gov

Project Description: Timberline Solid Waste Landfill

City/State Collected: Weippe, Idaho

Phone: 208-373-0510
Fax: 208-373-0287

Client Project #

Lab Project # IDENVBID-TIMBERLINE

Collected by (print): Dana Swift

Collected by (signature): Dana Swift

Immediately Packed on Ice N ___ Y X

Site/Facility ID # WEIPPE, IDAHO

P.O. #

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	M6010AP1 250mlHDPE-HNO3	M6010AP1 8ozCir-NoPres	V8260AP1 40mlAmb-HCl	V8260AP1 4ozCir-NoPres	App II Herb 8151	App II Sulfide	App I Metals 6010	App I VOCs	Remarks	Sample # (lab only)
TL-DN-SW3	Grab	~~GW~~ SW	N/A	7/18/17	3:00	1	X									-01
TL-FB-SW4		GW SW			3:25	1	X									-02
TL-DN-SW3		~~GW~~ SW			3:00	3			X							-03
TL-FB-SW4		~~SS~~ SW			3:25	3			X							-04
TL-LA-SW1		~~SS~~ SW			1:30	2					X					-05
TL-LA-SW2		~~SS~~ SW			1:40	1						X				-06
TL-LA-SW1		SW			1:30	1						X				-07
TL-DN-SS2		SS			2:52	1							X			-08
TL-BG-SS5		SS			3:45	2							X	X		-09
TL-LA-SS1	↓	SS	↓	↓	2:35	2							X	X		-10

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: SW = surface water

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier ____

Tracking # 712426642693

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Dana Swift	7/19/17	12:54	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Date: 7/19/17 Time: 6245

Trip Blank Received: Yes / No
1 HCL / MeoH TBR

Temp: 1.9 SW 11 °C Bottles Received: 21

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Chain of Custody Page 1 of 2

ESC LABORATORIES
a subsidiary of Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L923705

Table # G141

Acctnum: IDENVBID
Template: T125606
Prelogin: P610495
TSR: 728 - Shane Gambill
PB:
Shipped Via: FedEx Ground

Idaho Dept of Env. Quality - Boise, ID

1445 N.Orchard
Boise, ID 83706

Billing Information:
Project Manager - P034
1445 N.Orchard
Boise, ID 83706

Report to: Dana Swift

Email To: dana.swift@deq.idaho.gov

Project Description: Timberline Solid Waste Landfill

City/State Collected: Weippe, Idaho

Phone: 208-373-0510
Fax: 208-373-0287

Client Project #

Lab Project # IDENVBID-TIMBERLINE

Collected by (print): Dana Swift

Collected by (signature): Donald Swift

Immediately Packed on Ice N ___ Y X

Site/Facility ID # WEIPPE, IDAHO

P.O. #

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	M6010AP1 8ozClr-NoPres	V8260AP1 4ozClr-NoPres	App I VOCs 8260	App I Metals 6010 VOCs	Remarks	Sample # (lab only)
TL-LA-553	Grab	SS	N/A	7/18/17	310	2			X	X		-11
TL-LA-554	↓	SS	N/A	7/18/17	315	2			X	X		-12
Trip Blank	↓	~~SS~~ OT	↓	↓		1				X		-13
		SS										
		SS										

Donald Swift

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Donald Swift	7/19/17	12:54	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 1.9 °C Bottles Received: 21

Date: 7/19/17 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Chain of Custody Page 2 of 2

ESC LAB SCIENCES
a subsidiary of Accutest

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L923705

Table #

Acctnum: IDENVBID
Template: T125608
Prelogin: P610499
TSR: 728 - Shane Gambill
PB:

Shipped Via: FedEx Ground

ANALYTICAL REPORT

August 03, 2017

Idaho Dept of Env. Quality - Boise, ID

Sample Delivery Group:	L923828
Samples Received:	07/20/2017
Project Number:	
Description:	Timberline Solid Waste Landfill
Site:	WEIPPE, IDAHO
Report To:	Dana Swift 1445 N.Orchard Boise, ID 83706

Entire Report Reviewed By:

Shane Gambill
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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TL-LA-SW2 L923828-01 GW

Collected by: Dana Swift
Collected date/time: 07/18/17 13:40
Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 4500CN E-2011	WG1001310	1	07/21/17 14:26	07/21/17 21:50	ASK
Wet Chemistry by Method 9040C	WG1001054	1	07/21/17 11:37	07/21/17 11:37	MA
Mercury by Method 7470A	WG1002270	1	07/25/17 08:53	07/25/17 23:54	EL
Metals (ICP) by Method 6010B	WG1002166	1	07/25/17 18:02	07/27/17 10:04	CCE
Metals (ICPMS) by Method 6020	WG1002149	1	07/24/17 17:41	07/26/17 15:06	LAT
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1002009	1	07/24/17 11:55	07/24/17 11:55	JHH
Chlorinated Acid Herbicides (GC) by Method 8151	WG1001264	1	07/21/17 06:40	07/21/17 20:41	KLM
Pesticides (GC) by Method 8081	WG1001118	1	07/21/17 01:11	07/21/17 15:26	VKS
Polychlorinated Biphenyls (GC) by Method 8082	WG1001118	1	07/21/17 01:11	07/21/17 12:55	JNS
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1001908	1	07/25/17 09:10	07/26/17 16:33	JF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1001908	1	07/25/17 09:10	07/31/17 20:01	ADF

TL-LA-SW1 L923828-02 GW

Collected by: Dana Swift
Collected date/time: 07/18/17 13:30
Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 4500CN E-2011	WG1001310	1	07/21/17 14:26	07/21/17 21:51	ASK
Wet Chemistry by Method 9040C	WG1001054	1	07/21/17 11:37	07/21/17 11:37	MA
Mercury by Method 7470A	WG1002270	1	07/25/17 08:53	07/25/17 23:57	EL
Metals (ICP) by Method 6010B	WG1002166	1	07/25/17 18:02	07/27/17 10:07	CCE
Metals (ICPMS) by Method 6020	WG1002149	1	07/24/17 17:41	07/26/17 15:09	LAT
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1002009	1	07/24/17 16:40	07/24/17 16:40	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1002009	1	07/26/17 18:05	07/26/17 18:05	BMB
Pesticides (GC) by Method 8081	WG1001118	1	07/21/17 01:11	07/21/17 15:38	VKS
Polychlorinated Biphenyls (GC) by Method 8082	WG1001118	1	07/21/17 01:11	07/21/17 13:08	JNS
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1001908	1	07/25/17 09:10	07/26/17 16:57	JF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1001908	1	07/25/17 09:10	07/31/17 20:18	ADF

TRIP BLANK L923828-03 GW

Collected by: Dana Swift
Collected date/time: 07/18/17 00:00
Received date/time: 07/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1002009	1	07/24/17 10:41	07/24/17 10:41	JHH

All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Shane Gambill
Technical Service Representative

Sample Handling and Receiving

The analysis for 2-Chloroethyl Vinyl Ether was conducted from a chemically preserved container.

ESC Sample ID	Project Sample ID	Method
L923828-01	TL-LA-SW2	8260B
L923828-02	TL-LA-SW1	8260B
L923828-03	TRIP BLANK	8260B

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Cyanide	U		0.00180	0.00500	1	07/21/2017 21:50	WG1001310

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	6.94	T8	1	07/21/2017 11:37	WG1001054

Sample Narrative:

L923828-01 WG1001054: 6.94 at 17.8c

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	1	07/25/2017 23:54	WG1002270

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium	1.32		0.00170	0.00500	1	07/27/2017 10:04	WG1002166
Chromium	0.0155		0.00140	0.0100	1	07/27/2017 10:04	WG1002166
Cobalt	0.0295		0.00230	0.0100	1	07/27/2017 10:04	WG1002166
Nickel	0.0130		0.00490	0.0100	1	07/27/2017 10:04	WG1002166
Silver	U		0.00280	0.00500	1	07/27/2017 10:04	WG1002166
Vanadium	0.0442		0.00240	0.0200	1	07/27/2017 10:04	WG1002166

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Antimony	U		0.000754	0.00200	1	07/26/2017 15:06	WG1002149
Arsenic	0.00366		0.000250	0.00200	1	07/26/2017 15:06	WG1002149
Beryllium	0.000586	J	0.000120	0.00200	1	07/26/2017 15:06	WG1002149
Cadmium	U		0.000160	0.00100	1	07/26/2017 15:06	WG1002149
Copper	0.0121		0.000520	0.00500	1	07/26/2017 15:06	WG1002149
Lead	0.00976		0.000240	0.00200	1	07/26/2017 15:06	WG1002149
Selenium	0.00106	J	0.000380	0.00200	1	07/26/2017 15:06	WG1002149
Thallium	U		0.000190	0.00200	1	07/26/2017 15:06	WG1002149
Tin	0.00106	J	0.000300	0.00200	1	07/26/2017 15:06	WG1002149
Zinc	0.0383		0.00256	0.0250	1	07/26/2017 15:06	WG1002149

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	1	07/24/2017 11:55	WG1002009
Acrolein	U	J3	0.00887	0.0500	1	07/24/2017 11:55	WG1002009
Acrylonitrile	U		0.00187	0.0100	1	07/24/2017 11:55	WG1002009
Benzene	0.000662	J	0.000331	0.00100	1	07/24/2017 11:55	WG1002009
Bromodichloromethane	U		0.000380	0.00100	1	07/24/2017 11:55	WG1002009
Bromochloromethane	U		0.000520	0.00100	1	07/24/2017 11:55	WG1002009
Bromoform	U		0.000469	0.00100	1	07/24/2017 11:55	WG1002009
Bromomethane	U		0.000866	0.00500	1	07/24/2017 11:55	WG1002009
Carbon disulfide	U		0.000275	0.00100	1	07/24/2017 11:55	WG1002009
Carbon tetrachloride	U		0.000379	0.00100	1	07/24/2017 11:55	WG1002009
Chlorobenzene	U		0.000348	0.00100	1	07/24/2017 11:55	WG1002009

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chlorodibromomethane	U		0.000327	0.00100	1	07/24/2017 11:55	WG1002009
Chloroethane	U		0.000453	0.00500	1	07/24/2017 11:55	WG1002009
2-Chloroethyl vinyl ether	U	J4	0.00301	0.0500	1	07/24/2017 11:55	WG1002009
Chloroform	U		0.000324	0.00500	1	07/24/2017 11:55	WG1002009
Chloromethane	U		0.000276	0.00250	1	07/24/2017 11:55	WG1002009
1,2-Dibromoethane	U		0.000381	0.00100	1	07/24/2017 11:55	WG1002009
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500	1	07/24/2017 11:55	WG1002009
Dibromomethane	U		0.000346	0.00100	1	07/24/2017 11:55	WG1002009
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/24/2017 11:55	WG1002009
1,3-Dichlorobenzene	U		0.000220	0.00100	1	07/24/2017 11:55	WG1002009
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/24/2017 11:55	WG1002009
Dichlorodifluoromethane	U		0.000551	0.00500	1	07/24/2017 11:55	WG1002009
1,1-Dichloroethane	U		0.000259	0.00100	1	07/24/2017 11:55	WG1002009
1,2-Dichloroethane	U		0.000361	0.00100	1	07/24/2017 11:55	WG1002009
1,1-Dichloroethene	U		0.000398	0.00100	1	07/24/2017 11:55	WG1002009
cis-1,2-Dichloroethene	0.000623	J	0.000260	0.00100	1	07/24/2017 11:55	WG1002009
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/24/2017 11:55	WG1002009
1,2-Dichloropropane	U		0.000306	0.00100	1	07/24/2017 11:55	WG1002009
1,3-Dichloropropane	U		0.000366	0.00100	1	07/24/2017 11:55	WG1002009
2,2-Dichloropropane	U		0.000321	0.00100	1	07/24/2017 11:55	WG1002009
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/24/2017 11:55	WG1002009
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/24/2017 11:55	WG1002009
1,1-Dichloropropene	U		0.000352	0.00100	1	07/24/2017 11:55	WG1002009
Ethylbenzene	U		0.000384	0.00100	1	07/24/2017 11:55	WG1002009
2-Hexanone	U		0.00382	0.0100	1	07/24/2017 11:55	WG1002009
Iodomethane	U		0.00171	0.0100	1	07/24/2017 11:55	WG1002009
2-Butanone (MEK)	U		0.00393	0.0100	1	07/24/2017 11:55	WG1002009
Methylene Chloride	U		0.00100	0.00500	1	07/24/2017 11:55	WG1002009
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/24/2017 11:55	WG1002009
Styrene	U		0.000307	0.00100	1	07/24/2017 11:55	WG1002009
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/24/2017 11:55	WG1002009
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/24/2017 11:55	WG1002009
Tetrachloroethene	U		0.000372	0.00100	1	07/24/2017 11:55	WG1002009
Toluene	U		0.000412	0.00100	1	07/24/2017 11:55	WG1002009
1,2,4-Trichlorobenzene	U		0.000355	0.00100	1	07/24/2017 11:55	WG1002009
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/24/2017 11:55	WG1002009
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/24/2017 11:55	WG1002009
Trichloroethene	U		0.000398	0.00100	1	07/24/2017 11:55	WG1002009
Trichlorofluoromethane	U		0.00120	0.00500	1	07/24/2017 11:55	WG1002009
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/24/2017 11:55	WG1002009
Vinyl acetate	U		0.00163	0.0100	1	07/24/2017 11:55	WG1002009
Vinyl chloride	U		0.000259	0.00100	1	07/24/2017 11:55	WG1002009
Xylenes, Total	U		0.00106	0.00300	1	07/24/2017 11:55	WG1002009
Acetonitrile	U		0.0150	0.0500	1	07/24/2017 11:55	WG1002009
Allyl chloride	U		0.00170	0.00500	1	07/24/2017 11:55	WG1002009
Chloroprene	U		0.00170	0.0500	1	07/24/2017 11:55	WG1002009
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/24/2017 11:55	WG1002009
Ethyl methacrylate	U		0.00140	0.00500	1	07/24/2017 11:55	WG1002009
Isobutanol	U		0.0390	0.100	1	07/24/2017 11:55	WG1002009
Methacrylonitrile	U		0.0130	0.0500	1	07/24/2017 11:55	WG1002009
Methyl methacrylate	U		0.00120	0.0500	1	07/24/2017 11:55	WG1002009
Propionitrile	U		0.0130	0.0500	1	07/24/2017 11:55	WG1002009
(S) Toluene-d8	*106*			*80.0-120*		*07/24/2017 11:55*	WG1002009
(S) Dibromofluoromethane	*96.7*			*76.0-123*		*07/24/2017 11:55*	WG1002009
(S) a,a,a-Trifluorotoluene	*102*			*80.0-120*		*07/24/2017 11:55*	WG1002009
(S) 4-Bromofluorobenzene	*110*			*80.0-120*		*07/24/2017 11:55*	WG1002009

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Chlorinated Acid Herbicides (GC) by Method 8151

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
2,4-D	U		0.000744	0.00200	1	07/21/2017 20:41	WG1001264
Dalapon	U		0.00104	0.00200	1	07/21/2017 20:41	WG1001264
2,4-DB	U		0.000775	0.00400	1	07/21/2017 20:41	WG1001264
Dicamba	U		0.000813	0.00200	1	07/21/2017 20:41	WG1001264
Dichloroprop	U		0.000778	0.00200	1	07/21/2017 20:41	WG1001264
Dinoseb	U		0.000795	0.00200	1	07/21/2017 20:41	WG1001264
MCPA	U		0.0131	0.200	1	07/21/2017 20:41	WG1001264
MCPP	U		0.00715	0.200	1	07/21/2017 20:41	WG1001264
2,4,5-T	U		0.000843	0.00200	1	07/21/2017 20:41	WG1001264
2,4,5-TP (Silvex)	U		0.000845	0.00200	1	07/21/2017 20:41	WG1001264
(S) 2,4-Dichlorophenyl Acetic Acid	*75.1*			*14.0-158*		*07/21/2017 20:41*	WG1001264

Pesticides (GC) by Method 8081

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aldrin	U		0.00000813	0.0000500	1	07/21/2017 15:26	WG1001118
Alpha BHC	U		0.0000166	0.0000500	1	07/21/2017 15:26	WG1001118
Beta BHC	U		0.0000184	0.0000500	1	07/21/2017 15:26	WG1001118
Delta BHC	U		0.0000197	0.0000500	1	07/21/2017 15:26	WG1001118
Gamma BHC	U		0.0000176	0.0000500	1	07/21/2017 15:26	WG1001118
Chlordane	U		0.0000977	0.000500	1	07/21/2017 15:26	WG1001118
4,4-DDD	U		0.0000170	0.0000500	1	07/21/2017 15:26	WG1001118
4,4-DDE	U		0.0000164	0.0000500	1	07/21/2017 15:26	WG1001118
4,4-DDT	U		0.0000177	0.0000500	1	07/21/2017 15:26	WG1001118
Dieldrin	U		0.00000751	0.0000500	1	07/21/2017 15:26	WG1001118
Endosulfan I	U		0.0000179	0.0000500	1	07/21/2017 15:26	WG1001118
Endosulfan II	U		0.0000176	0.0000500	1	07/21/2017 15:26	WG1001118
Endosulfan sulfate	U		0.0000196	0.0000500	1	07/21/2017 15:26	WG1001118
Endrin	U		0.0000189	0.0000500	1	07/21/2017 15:26	WG1001118
Endrin aldehyde	U		0.0000142	0.0000500	1	07/21/2017 15:26	WG1001118
Endrin ketone	U		0.0000170	0.0000500	1	07/21/2017 15:26	WG1001118
Heptachlor	U		0.0000108	0.0000500	1	07/21/2017 15:26	WG1001118
Heptachlor epoxide	U		0.0000175	0.0000500	1	07/21/2017 15:26	WG1001118
Hexachlorobenzene	U		0.0000134	0.0000500	1	07/21/2017 15:26	WG1001118
Methoxychlor	U		0.0000193	0.0000500	1	07/21/2017 15:26	WG1001118
Toxaphene	U		0.000168	0.000500	1	07/21/2017 15:26	WG1001118
(S) Decachlorobiphenyl	*36.5*			*10.0-144*		*07/21/2017 15:26*	WG1001118
(S) Tetrachloro-m-xylene	*61.6*			*10.0-135*		*07/21/2017 15:26*	WG1001118

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
PCB 1016	U		0.000100	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1221	U		0.0000730	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1232	U		0.0000420	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1242	U		0.0000470	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1248	U		0.0000860	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1254	U		0.0000470	0.000500	1	07/21/2017 12:55	WG1001118
PCB 1260	U		0.000120	0.000500	1	07/21/2017 12:55	WG1001118
(S) Decachlorobiphenyl	*45.2*			*10.0-144*		*07/21/2017 12:55*	WG1001118
(S) Tetrachloro-m-xylene	*66.5*			*10.0-135*		*07/21/2017 12:55*	WG1001118

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acenaphthene	U		0.000316	0.00100	1	07/26/2017 16:33	WG1001908
Acenaphthylene	U	J3	0.000309	0.00100	1	07/26/2017 16:33	WG1001908
Anthracene	U		0.000291	0.00100	1	07/26/2017 16:33	WG1001908
Benzo(a)anthracene	U		0.0000975	0.00100	1	07/26/2017 16:33	WG1001908
Benzo(b)fluoranthene	U		0.0000896	0.00100	1	07/26/2017 16:33	WG1001908
Benzo(k)fluoranthene	U		0.000355	0.00100	1	07/26/2017 16:33	WG1001908
Benzo(g,h,i)perylene	U		0.000161	0.00100	1	07/26/2017 16:33	WG1001908
Benzo(a)pyrene	U		0.000340	0.00100	1	07/26/2017 16:33	WG1001908
Benzyl alcohol	U	J3	0.000393	0.0100	1	07/26/2017 16:33	WG1001908
Bis(2-chlorethoxy)methane	U	J3	0.000329	0.0100	1	07/26/2017 16:33	WG1001908
Bis(2-chloroethyl)ether	U	J3	0.00162	0.0100	1	07/26/2017 16:33	WG1001908
Bis(2-chloroisopropyl)ether	U	J3 J4	0.000445	0.0100	1	07/26/2017 16:33	WG1001908
4-Bromophenyl-phenylether	U		0.000335	0.0100	1	07/26/2017 16:33	WG1001908
4-Chloroaniline	U	J3	0.000382	0.0100	1	07/26/2017 16:33	WG1001908
2-Chloronaphthalene	U	J3	0.000330	0.00100	1	07/26/2017 16:33	WG1001908
4-Chlorophenyl-phenylether	U		0.000303	0.0100	1	07/26/2017 16:33	WG1001908
Chrysene	U		0.000332	0.00100	1	07/26/2017 16:33	WG1001908
Dibenz(a,h)anthracene	U		0.000279	0.00100	1	07/26/2017 16:33	WG1001908
Dibenzofuran	U		0.000338	0.0100	1	07/26/2017 16:33	WG1001908
3,3-Dichlorobenzidine	U		0.00202	0.0100	1	07/26/2017 16:33	WG1001908
2,4-Dinitrotoluene	U		0.00165	0.0100	1	07/26/2017 16:33	WG1001908
2,6-Dinitrotoluene	U		0.000279	0.0100	1	07/26/2017 16:33	WG1001908
Fluoranthene	U		0.000310	0.00100	1	07/26/2017 16:33	WG1001908
Fluorene	U		0.000323	0.00100	1	07/26/2017 16:33	WG1001908
Hexachlorobenzene	U		0.000341	0.00100	1	07/26/2017 16:33	WG1001908
Hexachloro-1,3-butadiene	U	J3 J4	0.000329	0.0100	1	07/26/2017 16:33	WG1001908
Hexachlorocyclopentadiene	U	J3	0.00233	0.0100	1	07/26/2017 16:33	WG1001908
Hexachloroethane	U	J3 J4	0.000365	0.0100	1	07/26/2017 16:33	WG1001908
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/26/2017 16:33	WG1001908
Isophorone	U	J3	0.000272	0.0100	1	07/26/2017 16:33	WG1001908
2-Methylnaphthalene	U	J3 J4	0.000311	0.00100	1	07/26/2017 16:33	WG1001908
Naphthalene	U	J3 J4	0.000372	0.00100	1	07/26/2017 16:33	WG1001908
2-Nitroaniline	U		0.00190	0.0100	1	07/26/2017 16:33	WG1001908
3-Nitroaniline	U		0.000308	0.0100	1	07/26/2017 16:33	WG1001908
4-Nitroaniline	U		0.000349	0.0100	1	07/26/2017 16:33	WG1001908
Nitrobenzene	U	J3 J4	0.000367	0.0100	1	07/26/2017 16:33	WG1001908
n-Nitrosodiphenylamine	U		0.000304	0.0100	1	07/26/2017 16:33	WG1001908
n-Nitrosodi-n-propylamine	U	J3	0.000403	0.0100	1	07/26/2017 16:33	WG1001908
Phenanthrene	U		0.000366	0.00100	1	07/26/2017 16:33	WG1001908
Benzylbutyl phthalate	U		0.000275	0.00300	1	07/26/2017 16:33	WG1001908
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300	1	07/26/2017 16:33	WG1001908
Di-n-butyl phthalate	0.000272	B J	0.000266	0.00300	1	07/26/2017 16:33	WG1001908
Diethyl phthalate	U		0.000282	0.00300	1	07/26/2017 16:33	WG1001908
Dimethyl phthalate	U		0.000283	0.00300	1	07/26/2017 16:33	WG1001908
Di-n-octyl phthalate	U		0.000278	0.00300	1	07/26/2017 16:33	WG1001908
Pyrene	U		0.000330	0.00100	1	07/26/2017 16:33	WG1001908
1,2,4-Trichlorobenzene	U	J3 J4	0.000355	0.0100	1	07/26/2017 16:33	WG1001908
4-Chloro-3-methylphenol	U		0.000263	0.0100	1	07/26/2017 16:33	WG1001908
2-Chlorophenol	U	J3 J4	0.000283	0.0100	1	07/26/2017 16:33	WG1001908
2-Methylphenol	U	J3	0.000312	0.0100	1	07/26/2017 16:33	WG1001908
3&4-Methyl Phenol	U	J3	0.000266	0.0100	1	07/26/2017 16:33	WG1001908
2,4-Dichlorophenol	U	J3 J4	0.000284	0.0100	1	07/26/2017 16:33	WG1001908
2,4-Dimethylphenol	U	J3	0.000624	0.0100	1	07/26/2017 16:33	WG1001908
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100	1	07/26/2017 16:33	WG1001908
2,4-Dinitrophenol	U		0.00325	0.0100	1	07/26/2017 16:33	WG1001908
2-Nitrophenol	U	J3 J4	0.000320	0.0100	1	07/26/2017 16:33	WG1001908

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
4-Nitrophenol	U		0.00201	0.0100	1	07/26/2017 16:33	WG1001908
Pentachlorophenol	U		0.000313	0.00100	1	07/26/2017 16:33	WG1001908
Phenol	0.00117	J	0.000334	0.0100	1	07/26/2017 16:33	WG1001908
2,4,5-Trichlorophenol	U		0.000236	0.0100	1	07/26/2017 16:33	WG1001908
2,4,6-Trichlorophenol	U		0.000297	0.0100	1	07/26/2017 16:33	WG1001908
Acetophenone	U	J3	0.00271	0.0100	1	07/26/2017 16:33	WG1001908
2-Acetylaminofluorene	U		0.000253	0.0100	1	07/31/2017 20:01	WG1001908
4-Aminobiphenyl	U		0.000461	0.0100	1	07/31/2017 20:01	WG1001908
Chlorobenzilate	U		0.00133	0.0500	1	07/31/2017 20:01	WG1001908
Diallate	U		0.000524	0.0100	1	07/31/2017 20:01	WG1001908
Dinoseb	U		0.0179	0.0500	1	07/31/2017 20:01	WG1001908
Ethyl methanesulfonate	U		0.000326	0.0100	1	07/31/2017 20:01	WG1001908
Famphur	U		0.00106	0.0200	1	07/31/2017 20:01	WG1001908
Hexachloropropene	U		0.000149	0.0500	1	07/31/2017 20:01	WG1001908
Isodrin	U		0.000293	0.0100	1	07/31/2017 20:01	WG1001908
Isosafrole	U		0.000409	0.0100	1	07/31/2017 20:01	WG1001908
Kepone	U		0.00188	0.0200	1	07/31/2017 20:01	WG1001908
Methapyrilene	U		0.00425	0.0500	1	07/31/2017 20:01	WG1001908
3-Methylcholanthrene	U		0.000164	0.0100	1	07/31/2017 20:01	WG1001908
Methyl methanesulfonate	U		0.000647	0.0500	1	07/31/2017 20:01	WG1001908
Methyl parathion	U		0.000213	0.0100	1	07/31/2017 20:01	WG1001908
1,4-Naphthoquinone	U	J4	0.00556	0.0500	1	07/31/2017 20:01	WG1001908
1-Naphthylamine	U		0.000289	0.0100	1	07/31/2017 20:01	WG1001908
2-Naphthylamine	U		0.000195	0.0100	1	07/31/2017 20:01	WG1001908
n-Nitrosodi-n-butylamine	U		0.000331	0.0100	1	07/31/2017 20:01	WG1001908
n-Nitrosodiethylamine	U		0.000497	0.0100	1	07/31/2017 20:01	WG1001908
n-Nitrosodimethylamine	U	J3	0.00126	0.0100	1	07/26/2017 16:33	WG1001908
n-Nitrosomethylethylamine	U		0.00171	0.0100	1	07/31/2017 20:01	WG1001908
N-Nitrosomorpholine	U		0.00180	0.0100	1	07/31/2017 20:01	WG1001908
n-Nitrosopiperidine	U		0.000268	0.0100	1	07/31/2017 20:01	WG1001908
n-Nitrosopyrrolidine	U		0.00255	0.0100	1	07/31/2017 20:01	WG1001908
5-Nitro-o-toluidine	U		0.00199	0.0100	1	07/31/2017 20:01	WG1001908
Ethyl Parathion	U		0.000379	0.0100	1	07/31/2017 20:01	WG1001908
Pentachlorobenzene	U		0.000369	0.0100	1	07/31/2017 20:01	WG1001908
Pentachloronitrobenzene	U		0.000327	0.0100	1	07/31/2017 20:01	WG1001908
Phenacetin	U		0.000262	0.0100	1	07/31/2017 20:01	WG1001908
p-Phenylenediamine	U	J4	0.387	6.90	1	07/31/2017 20:01	WG1001908
Phorate	U		0.000382	0.0500	1	07/31/2017 20:01	WG1001908
Pronamide	U		0.000265	0.0100	1	07/31/2017 20:01	WG1001908
Dimethoate	U		0.00144	0.0500	1	07/31/2017 20:01	WG1001908
P-(Dimethylamino) Azobenzene	U		0.000208	0.0100	1	07/31/2017 20:01	WG1001908
Dimethylbenz (A) Anthracene	U		0.00171	0.0100	1	07/31/2017 20:01	WG1001908
3,3-Dimethylbenzidine	U		0.00339	0.0100	1	07/31/2017 20:01	WG1001908
1,3-Dinitrobenzene	U		0.000359	0.0100	1	07/31/2017 20:01	WG1001908
Diphenylamine	U		0.000284	0.0100	1	07/31/2017 20:01	WG1001908
Disulfoton	U		0.000267	0.0100	1	07/31/2017 20:01	WG1001908
Safrole	U		0.000259	0.0100	1	07/31/2017 20:01	WG1001908
Thionazin	U		0.000204	0.0100	1	07/31/2017 20:01	WG1001908
o-Toluidine	U		0.000362	0.0100	1	07/31/2017 20:01	WG1001908
O,O,O-Triethyl phosphorothioate	U		0.000537	0.0100	1	07/31/2017 20:01	WG1001908
1,3,5-Trinitrobenzene	U		0.00132	0.0100	1	07/31/2017 20:01	WG1001908
1,2,4,5-Tetrachlorobenzene	U	J3	0.00241	0.0100	1	07/26/2017 16:33	WG1001908
2,6-Dichlorophenol	U		0.00277	0.0100	1	07/31/2017 20:01	WG1001908
2,3,4,6-Tetrachlorophenol	U		0.00200	0.0100	1	07/26/2017 16:33	WG1001908
(S) 2-Fluorophenol	*11.5*			*10.0-120*		*07/26/2017 16:33*	WG1001908
(S) Phenol-d5	*12.8*			*10.0-120*		*07/26/2017 16:33*	WG1001908

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
(S) Nitrobenzene-d5	*16.2*			*10.0-126*		*07/26/2017 16:33*	WG1001908
(S) 2-Fluorobiphenyl	*30.1*			*22.0-127*		*07/26/2017 16:33*	WG1001908
(S) 2,4,6-Tribromophenol	*66.4*			*10.0-153*		*07/26/2017 16:33*	WG1001908
(S) p-Terphenyl-d14	*56.1*			*29.0-141*		*07/26/2017 16:33*	WG1001908

Wet Chemistry by Method 4500CN E-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Cyanide	0.00362	J	0.00180	0.00500	1	07/21/2017 21:51	WG1001310

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	6.95	T8	1	07/21/2017 11:37	WG1001054

Sample Narrative:

L923828-02 WG1001054: 6.95 at 17.5c

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Mercury	U		0.0000490	0.000200	1	07/25/2017 23:57	WG1002270

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium	1.33		0.00170	0.00500	1	07/27/2017 10:07	WG1002166
Chromium	0.0158		0.00140	0.0100	1	07/27/2017 10:07	WG1002166
Cobalt	0.0300		0.00230	0.0100	1	07/27/2017 10:07	WG1002166
Nickel	0.0130		0.00490	0.0100	1	07/27/2017 10:07	WG1002166
Silver	U		0.00280	0.00500	1	07/27/2017 10:07	WG1002166
Vanadium	0.0400		0.00240	0.0200	1	07/27/2017 10:07	WG1002166

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Antimony	U		0.000754	0.00200	1	07/26/2017 15:09	WG1002149
Arsenic	0.00442		0.000250	0.00200	1	07/26/2017 15:09	WG1002149
Beryllium	0.000594	J	0.000120	0.00200	1	07/26/2017 15:09	WG1002149
Cadmium	U		0.000160	0.00100	1	07/26/2017 15:09	WG1002149
Copper	0.0139		0.000520	0.00500	1	07/26/2017 15:09	WG1002149
Lead	0.0106		0.000240	0.00200	1	07/26/2017 15:09	WG1002149
Selenium	0.00106	J	0.000380	0.00200	1	07/26/2017 15:09	WG1002149
Thallium	U		0.000190	0.00200	1	07/26/2017 15:09	WG1002149
Tin	0.00102	J	0.000300	0.00200	1	07/26/2017 15:09	WG1002149
Zinc	0.0435		0.00256	0.0250	1	07/26/2017 15:09	WG1002149

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	1	07/24/2017 16:40	WG1002009
Acrolein	U	J3	0.00887	0.0500	1	07/24/2017 16:40	WG1002009
Acrylonitrile	U		0.00187	0.0100	1	07/24/2017 16:40	WG1002009
Benzene	0.000512	J	0.000331	0.00100	1	07/26/2017 18:05	WG1002009
Bromodichloromethane	U		0.000380	0.00100	1	07/24/2017 16:40	WG1002009
Bromochloromethane	U		0.000520	0.00100	1	07/24/2017 16:40	WG1002009
Bromoform	U		0.000469	0.00100	1	07/24/2017 16:40	WG1002009
Bromomethane	U		0.000866	0.00500	1	07/24/2017 16:40	WG1002009
Carbon disulfide	U		0.000275	0.00100	1	07/24/2017 16:40	WG1002009
Carbon tetrachloride	U		0.000379	0.00100	1	07/24/2017 16:40	WG1002009
Chlorobenzene	U		0.000348	0.00100	1	07/24/2017 16:40	WG1002009

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chlorodibromomethane	U		0.000327	0.00100	1	07/24/2017 16:40	WG1002009
Chloroethane	U		0.000453	0.00500	1	07/24/2017 16:40	WG1002009
2-Chloroethyl vinyl ether	U	J4	0.00301	0.0500	1	07/24/2017 16:40	WG1002009
Chloroform	U		0.000324	0.00500	1	07/24/2017 16:40	WG1002009
Chloromethane	U		0.000276	0.00250	1	07/24/2017 16:40	WG1002009
1,2-Dibromoethane	U		0.000381	0.00100	1	07/24/2017 16:40	WG1002009
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500	1	07/24/2017 16:40	WG1002009
Dibromomethane	U		0.000346	0.00100	1	07/24/2017 16:40	WG1002009
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/24/2017 16:40	WG1002009
1,3-Dichlorobenzene	U		0.000220	0.00100	1	07/24/2017 16:40	WG1002009
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/24/2017 16:40	WG1002009
Dichlorodifluoromethane	U		0.000551	0.00500	1	07/24/2017 16:40	WG1002009
1,1-Dichloroethane	U		0.000259	0.00100	1	07/24/2017 16:40	WG1002009
1,2-Dichloroethane	U		0.000361	0.00100	1	07/24/2017 16:40	WG1002009
1,1-Dichloroethene	U		0.000398	0.00100	1	07/24/2017 16:40	WG1002009
cis-1,2-Dichloroethene	0.000640	J	0.000260	0.00100	1	07/24/2017 16:40	WG1002009
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/24/2017 16:40	WG1002009
1,2-Dichloropropane	U		0.000306	0.00100	1	07/24/2017 16:40	WG1002009
1,3-Dichloropropane	U		0.000366	0.00100	1	07/24/2017 16:40	WG1002009
2,2-Dichloropropane	U		0.000321	0.00100	1	07/24/2017 16:40	WG1002009
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/24/2017 16:40	WG1002009
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/24/2017 16:40	WG1002009
1,1-Dichloropropene	U		0.000352	0.00100	1	07/24/2017 16:40	WG1002009
Ethylbenzene	U		0.000384	0.00100	1	07/26/2017 18:05	WG1002009
2-Hexanone	U		0.00382	0.0100	1	07/24/2017 16:40	WG1002009
Iodomethane	U		0.00171	0.0100	1	07/24/2017 16:40	WG1002009
2-Butanone (MEK)	U		0.00393	0.0100	1	07/24/2017 16:40	WG1002009
Methylene Chloride	U		0.00100	0.00500	1	07/24/2017 16:40	WG1002009
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/24/2017 16:40	WG1002009
Styrene	U		0.000307	0.00100	1	07/24/2017 16:40	WG1002009
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/24/2017 16:40	WG1002009
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/24/2017 16:40	WG1002009
Tetrachloroethene	U		0.000372	0.00100	1	07/24/2017 16:40	WG1002009
Toluene	U		0.000412	0.00100	1	07/24/2017 16:40	WG1002009
1,2,4-Trichlorobenzene	U		0.000355	0.00100	1	07/24/2017 16:40	WG1002009
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/24/2017 16:40	WG1002009
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/24/2017 16:40	WG1002009
Trichloroethene	U		0.000398	0.00100	1	07/24/2017 16:40	WG1002009
Trichlorofluoromethane	U		0.00120	0.00500	1	07/24/2017 16:40	WG1002009
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/24/2017 16:40	WG1002009
Vinyl acetate	U		0.00163	0.0100	1	07/24/2017 16:40	WG1002009
Vinyl chloride	U		0.000259	0.00100	1	07/24/2017 16:40	WG1002009
Xylenes, Total	U		0.00106	0.00300	1	07/26/2017 18:05	WG1002009
Acetonitrile	U		0.0150	0.0500	1	07/24/2017 16:40	WG1002009
Allyl chloride	U		0.00170	0.00500	1	07/24/2017 16:40	WG1002009
Chloroprene	U		0.00170	0.0500	1	07/24/2017 16:40	WG1002009
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/24/2017 16:40	WG1002009
Ethyl methacrylate	U		0.00140	0.00500	1	07/24/2017 16:40	WG1002009
Isobutanol	U		0.0390	0.100	1	07/24/2017 16:40	WG1002009
Methacrylonitrile	U		0.0130	0.0500	1	07/24/2017 16:40	WG1002009
Methyl methacrylate	U		0.00120	0.0500	1	07/24/2017 16:40	WG1002009
Propionitrile	U		0.0130	0.0500	1	07/24/2017 16:40	WG1002009
(S) Toluene-d8	*102*			*80.0-120*		*07/26/2017 18:05*	WG1002009
(S) Toluene-d8	*108*			*80.0-120*		*07/24/2017 16:40*	WG1002009
(S) Dibromofluoromethane	*95.2*			*76.0-123*		*07/24/2017 16:40*	WG1002009
(S) Dibromofluoromethane	*107*			*76.0-123*		*07/26/2017 18:05*	WG1002009

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
(S) a,a,a-Trifluorotoluene	*100*			*80.0-120*		*07/24/2017 16:40*	WG1002009
(S) a,a,a-Trifluorotoluene	*105*			*80.0-120*		*07/26/2017 18:05*	WG1002009
(S) 4-Bromofluorobenzene	*101*			*80.0-120*		*07/26/2017 18:05*	WG1002009
(S) 4-Bromofluorobenzene	*114*			*80.0-120*		*07/24/2017 16:40*	WG1002009

Pesticides (GC) by Method 8081

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Aldrin	U		0.00000813	0.0000500	1	07/21/2017 15:38	WG1001118
Alpha BHC	U		0.0000166	0.0000500	1	07/21/2017 15:38	WG1001118
Beta BHC	U		0.0000184	0.0000500	1	07/21/2017 15:38	WG1001118
Delta BHC	U		0.0000197	0.0000500	1	07/21/2017 15:38	WG1001118
Gamma BHC	U		0.0000176	0.0000500	1	07/21/2017 15:38	WG1001118
Chlordane	U		0.0000977	0.000500	1	07/21/2017 15:38	WG1001118
4,4-DDD	U		0.0000170	0.0000500	1	07/21/2017 15:38	WG1001118
4,4-DDE	U		0.0000164	0.0000500	1	07/21/2017 15:38	WG1001118
4,4-DDT	U		0.0000177	0.0000500	1	07/21/2017 15:38	WG1001118
Dieldrin	U		0.00000751	0.0000500	1	07/21/2017 15:38	WG1001118
Endosulfan I	U		0.0000179	0.0000500	1	07/21/2017 15:38	WG1001118
Endosulfan II	U		0.0000176	0.0000500	1	07/21/2017 15:38	WG1001118
Endosulfan sulfate	U		0.0000196	0.0000500	1	07/21/2017 15:38	WG1001118
Endrin	U		0.0000189	0.0000500	1	07/21/2017 15:38	WG1001118
Endrin aldehyde	U		0.0000142	0.0000500	1	07/21/2017 15:38	WG1001118
Endrin ketone	U		0.0000170	0.0000500	1	07/21/2017 15:38	WG1001118
Heptachlor	U		0.0000108	0.0000500	1	07/21/2017 15:38	WG1001118
Heptachlor epoxide	U		0.0000175	0.0000500	1	07/21/2017 15:38	WG1001118
Hexachlorobenzene	U		0.0000134	0.0000500	1	07/21/2017 15:38	WG1001118
Methoxychlor	U		0.0000193	0.0000500	1	07/21/2017 15:38	WG1001118
Toxaphene	U		0.000168	0.000500	1	07/21/2017 15:38	WG1001118
(S) Decachlorobiphenyl	*55.7*			*10.0-144*		*07/21/2017 15:38*	WG1001118
(S) Tetrachloro-m-xylene	*68.7*			*10.0-135*		*07/21/2017 15:38*	WG1001118

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
PCB 1016	U		0.000100	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1221	U		0.0000730	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1232	U		0.0000420	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1242	U		0.0000470	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1248	U		0.0000860	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1254	U		0.0000470	0.000500	1	07/21/2017 13:08	WG1001118
PCB 1260	U		0.000120	0.000500	1	07/21/2017 13:08	WG1001118
(S) Decachlorobiphenyl	*65.6*			*10.0-144*		*07/21/2017 13:08*	WG1001118
(S) Tetrachloro-m-xylene	*77.0*			*10.0-135*		*07/21/2017 13:08*	WG1001118

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acenaphthene	U		0.000316	0.00100	1	07/26/2017 16:57	WG1001908
Acenaphthylene	U	J3	0.000309	0.00100	1	07/26/2017 16:57	WG1001908
Anthracene	U		0.000291	0.00100	1	07/26/2017 16:57	WG1001908
Benzo(a)anthracene	U		0.0000975	0.00100	1	07/26/2017 16:57	WG1001908
Benzo(b)fluoranthene	U		0.0000896	0.00100	1	07/26/2017 16:57	WG1001908
Benzo(k)fluoranthene	U		0.000355	0.00100	1	07/26/2017 16:57	WG1001908
Benzo(g,h,i)perylene	U		0.000161	0.00100	1	07/26/2017 16:57	WG1001908

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzo(a)pyrene	U		0.000340	0.00100	1	07/26/2017 16:57	WG1001908
Benzyl alcohol	U	J3	0.000393	0.0100	1	07/26/2017 16:57	WG1001908
Bis(2-chlorethoxy)methane	U	J3	0.000329	0.0100	1	07/26/2017 16:57	WG1001908
Bis(2-chloroethyl)ether	U	J3	0.00162	0.0100	1	07/26/2017 16:57	WG1001908
Bis(2-chloroisopropyl)ether	U	J3 J4	0.000445	0.0100	1	07/26/2017 16:57	WG1001908
4-Bromophenyl-phenylether	U		0.000335	0.0100	1	07/26/2017 16:57	WG1001908
4-Chloroaniline	U	J3	0.000382	0.0100	1	07/26/2017 16:57	WG1001908
2-Chloronaphthalene	U	J3	0.000330	0.00100	1	07/26/2017 16:57	WG1001908
4-Chlorophenyl-phenylether	U		0.000303	0.0100	1	07/26/2017 16:57	WG1001908
Chrysene	U		0.000332	0.00100	1	07/26/2017 16:57	WG1001908
Dibenz(a,h)anthracene	U		0.000279	0.00100	1	07/26/2017 16:57	WG1001908
Dibenzofuran	U		0.000338	0.0100	1	07/26/2017 16:57	WG1001908
3,3-Dichlorobenzidine	U		0.00202	0.0100	1	07/26/2017 16:57	WG1001908
2,4-Dinitrotoluene	U		0.00165	0.0100	1	07/26/2017 16:57	WG1001908
2,6-Dinitrotoluene	U		0.000279	0.0100	1	07/26/2017 16:57	WG1001908
Fluoranthene	U		0.000310	0.00100	1	07/26/2017 16:57	WG1001908
Fluorene	U		0.000323	0.00100	1	07/26/2017 16:57	WG1001908
Hexachlorobenzene	U		0.000341	0.00100	1	07/26/2017 16:57	WG1001908
Hexachloro-1,3-butadiene	U	J3 J4	0.000329	0.0100	1	07/26/2017 16:57	WG1001908
Hexachlorocyclopentadiene	U	J3	0.00233	0.0100	1	07/26/2017 16:57	WG1001908
Hexachloroethane	U	J3 J4	0.000365	0.0100	1	07/26/2017 16:57	WG1001908
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100	1	07/26/2017 16:57	WG1001908
Isophorone	U	J3	0.000272	0.0100	1	07/26/2017 16:57	WG1001908
2-Methylnaphthalene	U	J3 J4	0.000311	0.00100	1	07/26/2017 16:57	WG1001908
Naphthalene	U	J3 J4	0.000372	0.00100	1	07/26/2017 16:57	WG1001908
2-Nitroaniline	U		0.00190	0.0100	1	07/26/2017 16:57	WG1001908
3-Nitroaniline	U		0.000308	0.0100	1	07/26/2017 16:57	WG1001908
4-Nitroaniline	U		0.000349	0.0100	1	07/26/2017 16:57	WG1001908
Nitrobenzene	U	J3 J4	0.000367	0.0100	1	07/26/2017 16:57	WG1001908
n-Nitrosodiphenylamine	U		0.000304	0.0100	1	07/26/2017 16:57	WG1001908
n-Nitrosodi-n-propylamine	U	J3	0.000403	0.0100	1	07/26/2017 16:57	WG1001908
Phenanthrene	U		0.000366	0.00100	1	07/26/2017 16:57	WG1001908
Benzylbutyl phthalate	U		0.000275	0.00300	1	07/26/2017 16:57	WG1001908
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300	1	07/26/2017 16:57	WG1001908
Di-n-butyl phthalate	0.000333	B J	0.000266	0.00300	1	07/26/2017 16:57	WG1001908
Diethyl phthalate	U		0.000282	0.00300	1	07/26/2017 16:57	WG1001908
Dimethyl phthalate	U		0.000283	0.00300	1	07/26/2017 16:57	WG1001908
Di-n-octyl phthalate	U		0.000278	0.00300	1	07/26/2017 16:57	WG1001908
Pyrene	U		0.000330	0.00100	1	07/26/2017 16:57	WG1001908
1,2,4-Trichlorobenzene	U	J3 J4	0.000355	0.0100	1	07/26/2017 16:57	WG1001908
4-Chloro-3-methylphenol	U		0.000263	0.0100	1	07/26/2017 16:57	WG1001908
2-Chlorophenol	U	J3 J4	0.000283	0.0100	1	07/26/2017 16:57	WG1001908
2-Methylphenol	U	J3	0.000312	0.0100	1	07/26/2017 16:57	WG1001908
3&4-Methyl Phenol	U	J3	0.000266	0.0100	1	07/26/2017 16:57	WG1001908
2,4-Dichlorophenol	U	J3 J4	0.000284	0.0100	1	07/26/2017 16:57	WG1001908
2,4-Dimethylphenol	U	J3	0.000624	0.0100	1	07/26/2017 16:57	WG1001908
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100	1	07/26/2017 16:57	WG1001908
2,4-Dinitrophenol	U		0.00325	0.0100	1	07/26/2017 16:57	WG1001908
2-Nitrophenol	U	J3 J4	0.000320	0.0100	1	07/26/2017 16:57	WG1001908
4-Nitrophenol	U		0.00201	0.0100	1	07/26/2017 16:57	WG1001908
Pentachlorophenol	U		0.000313	0.00100	1	07/26/2017 16:57	WG1001908
Phenol	0.00169	J	0.000334	0.0100	1	07/26/2017 16:57	WG1001908
2,4,5-Trichlorophenol	U		0.000236	0.0100	1	07/26/2017 16:57	WG1001908
2,4,6-Trichlorophenol	U		0.000297	0.0100	1	07/26/2017 16:57	WG1001908
Acetophenone	U	J3	0.00271	0.0100	1	07/26/2017 16:57	WG1001908
2-Acetylaminofluorene	U		0.000253	0.0100	1	07/31/2017 20:18	WG1001908

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
4-Aminobiphenyl	U		0.000461	0.0100	1	07/31/2017 20:18	WG1001908
Chlorobenzilate	U		0.00133	0.0500	1	07/31/2017 20:18	WG1001908
Diallate	U		0.000524	0.0100	1	07/31/2017 20:18	WG1001908
Dinoseb	U		0.0179	0.0500	1	07/31/2017 20:18	WG1001908
Ethyl methanesulfonate	U		0.000326	0.0100	1	07/31/2017 20:18	WG1001908
Famphur	U		0.00106	0.0200	1	07/31/2017 20:18	WG1001908
Hexachloropropene	U		0.000149	0.0500	1	07/31/2017 20:18	WG1001908
Isodrin	U		0.000293	0.0100	1	07/31/2017 20:18	WG1001908
Isosafrole	U		0.000409	0.0100	1	07/31/2017 20:18	WG1001908
Kepone	U		0.00188	0.0200	1	07/31/2017 20:18	WG1001908
Methapyrilene	U		0.00425	0.0500	1	07/31/2017 20:18	WG1001908
3-Methylcholanthrene	U		0.000164	0.0100	1	07/31/2017 20:18	WG1001908
Methyl methanesulfonate	U		0.000647	0.0500	1	07/31/2017 20:18	WG1001908
Methyl parathion	U		0.000213	0.0100	1	07/31/2017 20:18	WG1001908
1,4-Naphthoquinone	U	J4	0.00556	0.0500	1	07/31/2017 20:18	WG1001908
1-Naphthylamine	U		0.000289	0.0100	1	07/31/2017 20:18	WG1001908
2-Naphthylamine	U		0.000195	0.0100	1	07/31/2017 20:18	WG1001908
n-Nitrosodi-n-butylamine	U		0.000331	0.0100	1	07/31/2017 20:18	WG1001908
n-Nitrosodiethylamine	U		0.000497	0.0100	1	07/31/2017 20:18	WG1001908
n-Nitrosodimethylamine	U	J3	0.00126	0.0100	1	07/26/2017 16:57	WG1001908
n-Nitrosomethylethylamine	U		0.00171	0.0100	1	07/31/2017 20:18	WG1001908
N-Nitrosomorpholine	U		0.00180	0.0100	1	07/31/2017 20:18	WG1001908
n-Nitrosopiperidine	U		0.000268	0.0100	1	07/31/2017 20:18	WG1001908
n-Nitrosopyrrolidine	U		0.00255	0.0100	1	07/31/2017 20:18	WG1001908
5-Nitro-o-toluidine	U		0.00199	0.0100	1	07/31/2017 20:18	WG1001908
Ethyl Parathion	U		0.000379	0.0100	1	07/31/2017 20:18	WG1001908
Pentachlorobenzene	U		0.000369	0.0100	1	07/31/2017 20:18	WG1001908
Pentachloronitrobenzene	U		0.000327	0.0100	1	07/31/2017 20:18	WG1001908
Phenacetin	U		0.000262	0.0100	1	07/31/2017 20:18	WG1001908
p-Phenylenediamine	U	J4	0.387	6.90	1	07/31/2017 20:18	WG1001908
Phorate	U		0.000382	0.0500	1	07/31/2017 20:18	WG1001908
Pronamide	U		0.000265	0.0100	1	07/31/2017 20:18	WG1001908
Dimethoate	U		0.00144	0.0500	1	07/31/2017 20:18	WG1001908
P-(Dimethylamino) Azobenzene	U		0.000208	0.0100	1	07/31/2017 20:18	WG1001908
Dimethylbenz (A) Anthracene	U		0.00171	0.0100	1	07/31/2017 20:18	WG1001908
3,3-Dimethylbenzidine	U		0.00339	0.0100	1	07/31/2017 20:18	WG1001908
1,3-Dinitrobenzene	U		0.000359	0.0100	1	07/31/2017 20:18	WG1001908
Diphenylamine	U		0.000284	0.0100	1	07/31/2017 20:18	WG1001908
Disulfoton	U		0.000267	0.0100	1	07/31/2017 20:18	WG1001908
Safrole	U		0.000259	0.0100	1	07/31/2017 20:18	WG1001908
Thionazin	U		0.000204	0.0100	1	07/31/2017 20:18	WG1001908
o-Toluidine	U		0.000362	0.0100	1	07/31/2017 20:18	WG1001908
O,O,O-Triethyl phosphorothioate	U		0.000537	0.0100	1	07/31/2017 20:18	WG1001908
1,3,5-Trinitrobenzene	U		0.00132	0.0100	1	07/31/2017 20:18	WG1001908
1,2,4,5-Tetrachlorobenzene	U	J3	0.00241	0.0100	1	07/26/2017 16:57	WG1001908
2,6-Dichlorophenol	U		0.00277	0.0100	1	07/31/2017 20:18	WG1001908
2,3,4,6-Tetrachlorophenol	U		0.00200	0.0100	1	07/26/2017 16:57	WG1001908
(S) 2-Fluorophenol	*14.7*			*10.0-120*		*07/26/2017 16:57*	WG1001908
(S) Phenol-d5	*14.7*			*10.0-120*		*07/26/2017 16:57*	WG1001908
(S) Nitrobenzene-d5	*24.8*			*10.0-126*		*07/26/2017 16:57*	WG1001908
(S) 2-Fluorobiphenyl	*44.4*			*22.0-127*		*07/26/2017 16:57*	WG1001908
(S) 2,4,6-Tribromophenol	*74.3*			*10.0-153*		*07/26/2017 16:57*	WG1001908
(S) p-Terphenyl-d14	*63.3*			*29.0-141*		*07/26/2017 16:57*	WG1001908

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Acetone	U		0.0100	0.0500	1	07/24/2017 10:41	WG1002009
Acrolein	U	J3	0.00887	0.0500	1	07/24/2017 10:41	WG1002009
Acrylonitrile	U		0.00187	0.0100	1	07/24/2017 10:41	WG1002009
Benzene	U		0.000331	0.00100	1	07/24/2017 10:41	WG1002009
Bromodichloromethane	U		0.000380	0.00100	1	07/24/2017 10:41	WG1002009
Bromochloromethane	U		0.000520	0.00100	1	07/24/2017 10:41	WG1002009
Bromoform	U		0.000469	0.00100	1	07/24/2017 10:41	WG1002009
Bromomethane	U		0.000866	0.00500	1	07/24/2017 10:41	WG1002009
Carbon disulfide	U		0.000275	0.00100	1	07/24/2017 10:41	WG1002009
Carbon tetrachloride	U		0.000379	0.00100	1	07/24/2017 10:41	WG1002009
Chlorobenzene	U		0.000348	0.00100	1	07/24/2017 10:41	WG1002009
Chlorodibromomethane	U		0.000327	0.00100	1	07/24/2017 10:41	WG1002009
Chloroethane	U		0.000453	0.00500	1	07/24/2017 10:41	WG1002009
2-Chloroethyl vinyl ether	U	J4	0.00301	0.0500	1	07/24/2017 10:41	WG1002009
Chloroform	U		0.000324	0.00500	1	07/24/2017 10:41	WG1002009
Chloromethane	U		0.000276	0.00250	1	07/24/2017 10:41	WG1002009
1,2-Dibromoethane	U		0.000381	0.00100	1	07/24/2017 10:41	WG1002009
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500	1	07/24/2017 10:41	WG1002009
Dibromomethane	U		0.000346	0.00100	1	07/24/2017 10:41	WG1002009
1,2-Dichlorobenzene	U		0.000349	0.00100	1	07/24/2017 10:41	WG1002009
1,3-Dichlorobenzene	U		0.000220	0.00100	1	07/24/2017 10:41	WG1002009
1,4-Dichlorobenzene	U		0.000274	0.00100	1	07/24/2017 10:41	WG1002009
Dichlorodifluoromethane	U		0.000551	0.00500	1	07/24/2017 10:41	WG1002009
1,1-Dichloroethane	U		0.000259	0.00100	1	07/24/2017 10:41	WG1002009
1,2-Dichloroethane	U		0.000361	0.00100	1	07/24/2017 10:41	WG1002009
1,1-Dichloroethene	U		0.000398	0.00100	1	07/24/2017 10:41	WG1002009
cis-1,2-Dichloroethene	U		0.000260	0.00100	1	07/24/2017 10:41	WG1002009
trans-1,2-Dichloroethene	U		0.000396	0.00100	1	07/24/2017 10:41	WG1002009
1,2-Dichloropropane	U		0.000306	0.00100	1	07/24/2017 10:41	WG1002009
1,3-Dichloropropane	U		0.000366	0.00100	1	07/24/2017 10:41	WG1002009
2,2-Dichloropropane	U		0.000321	0.00100	1	07/24/2017 10:41	WG1002009
cis-1,3-Dichloropropene	U		0.000418	0.00100	1	07/24/2017 10:41	WG1002009
trans-1,3-Dichloropropene	U		0.000419	0.00100	1	07/24/2017 10:41	WG1002009
1,1-Dichloropropene	U		0.000352	0.00100	1	07/24/2017 10:41	WG1002009
Ethylbenzene	U		0.000384	0.00100	1	07/24/2017 10:41	WG1002009
2-Hexanone	U		0.00382	0.0100	1	07/24/2017 10:41	WG1002009
Iodomethane	U		0.00171	0.0100	1	07/24/2017 10:41	WG1002009
2-Butanone (MEK)	U		0.00393	0.0100	1	07/24/2017 10:41	WG1002009
Methylene Chloride	U		0.00100	0.00500	1	07/24/2017 10:41	WG1002009
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	1	07/24/2017 10:41	WG1002009
Styrene	U		0.000307	0.00100	1	07/24/2017 10:41	WG1002009
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	1	07/24/2017 10:41	WG1002009
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	1	07/24/2017 10:41	WG1002009
Tetrachloroethene	U		0.000372	0.00100	1	07/24/2017 10:41	WG1002009
Toluene	U		0.000412	0.00100	1	07/24/2017 10:41	WG1002009
1,2,4-Trichlorobenzene	U		0.000355	0.00100	1	07/24/2017 10:41	WG1002009
1,1,1-Trichloroethane	U		0.000319	0.00100	1	07/24/2017 10:41	WG1002009
1,1,2-Trichloroethane	U		0.000383	0.00100	1	07/24/2017 10:41	WG1002009
Trichloroethene	U		0.000398	0.00100	1	07/24/2017 10:41	WG1002009
Trichlorofluoromethane	U		0.00120	0.00500	1	07/24/2017 10:41	WG1002009
1,2,3-Trichloropropane	U		0.000807	0.00250	1	07/24/2017 10:41	WG1002009
Vinyl acetate	U		0.00163	0.0100	1	07/24/2017 10:41	WG1002009
Vinyl chloride	U		0.000259	0.00100	1	07/24/2017 10:41	WG1002009
Xylenes, Total	U		0.00106	0.00300	1	07/24/2017 10:41	WG1002009
Acetonitrile	U		0.0150	0.0500	1	07/24/2017 10:41	WG1002009
Allyl chloride	U		0.00170	0.00500	1	07/24/2017 10:41	WG1002009

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloroprene	U		0.00170	0.0500	1	07/24/2017 10:41	WG1002009
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250	1	07/24/2017 10:41	WG1002009
Ethyl methacrylate	U		0.00140	0.00500	1	07/24/2017 10:41	WG1002009
Isobutanol	U		0.0390	0.100	1	07/24/2017 10:41	WG1002009
Methacrylonitrile	U		0.0130	0.0500	1	07/24/2017 10:41	WG1002009
Methyl methacrylate	U		0.00120	0.0500	1	07/24/2017 10:41	WG1002009
Propionitrile	U		0.0130	0.0500	1	07/24/2017 10:41	WG1002009
(S) Toluene-d8	*107*			*80.0-120*		*07/24/2017 10:41*	WG1002009
(S) Dibromofluoromethane	*94.4*			*76.0-123*		*07/24/2017 10:41*	WG1002009
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*		*07/24/2017 10:41*	WG1002009
(S) 4-Bromofluorobenzene	*113*			*80.0-120*		*07/24/2017 10:41*	WG1002009

Method Blank (MB)

(MB) R3235346-1 07/21/17 21:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Cyanide	U		0.0018	0.00500

L923771-01 Original Sample (OS) • Duplicate (DUP)

(OS) L923771-01 07/21/17 21:29 • (DUP) R3235346-4 07/21/17 21:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Cyanide	ND	0.000	1	0		20

L923828-02 Original Sample (OS) • Duplicate (DUP)

(OS) L923828-02 07/21/17 21:51 • (DUP) R3235346-7 07/21/17 21:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Cyanide	0.00362	0.00302	1	18	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235346-2 07/21/17 21:21 • (LCSD) R3235346-3 07/21/17 21:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Cyanide	0.100	0.0935	0.0918	94	92	85-115			2	20

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/21/17 21:34 • (MS) R3235346-5 07/21/17 21:35 • (MSD) R3235346-6 07/21/17 21:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Cyanide	0.100	ND	0.0862	0.0866	86	87	1	75-125			0	20

L923427-01 Original Sample (OS) • Duplicate (DUP)

(OS) L923427-01 07/21/17 11:37 • (DUP) WG1001054-3 07/21/17 11:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.14	7.15	1	0.140	T8	1

Sample Narrative:

OS: 7.14 at 19.1c

DUP: 7.15 at 19.0c

L923890-02 Original Sample (OS) • Duplicate (DUP)

(OS) L923890-02 07/21/17 11:37 • (DUP) WG1001054-4 07/21/17 11:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.71	7.70	1	0.130	T8	1

Sample Narrative:

OS: 7.71 at 19.5c

DUP: 7.70 at 19.5c

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG1001054-1 07/21/17 11:37 • (LCSD) WG1001054-2 07/21/17 11:37

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
pH	6.38	6.48	6.48	102	102	98.4-102			0.000	1

Sample Narrative:

LCS: 6.48 at 22.3c

LCSD: 6.48 at 22.2c

Method Blank (MB)

(MB) R3236119-7 07/25/17 23:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.000049	0.000200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236119-8 07/25/17 23:41 • (LCSD) R3236119-9 07/25/17 23:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	0.00272	0.00272	91	91	80-120			0	20

L924361-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L924361-01 07/25/17 23:45 • (MS) R3236119-10 07/25/17 23:47 • (MSD) R3236119-11 07/25/17 23:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00300	U	0.00278	0.00273	93	91	1	75-125			2	20

Method Blank (MB)

(MB) R3236616-1 07/27/17 01:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Barium	U		0.0017	0.00500
Chromium	U		0.0014	0.0100
Cobalt	U		0.0023	0.0100
Nickel	U		0.0049	0.0100
Silver	U		0.0028	0.00500
Vanadium	U		0.0024	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236616-2 07/27/17 01:38 • (LCSD) R3236616-3 07/27/17 01:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Barium	1.00	1.04	1.05	104	105	80-120			1	20
Chromium	1.00	1.02	1.03	102	103	80-120			1	20
Cobalt	1.00	1.04	1.05	104	105	80-120			0	20
Nickel	1.00	1.03	1.03	103	103	80-120			0	20
Silver	0.200	0.195	0.194	97	97	80-120			0	20
Vanadium	1.00	1.04	1.05	104	105	80-120			1	20

L923460-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923460-13 07/27/17 01:44 • (MS) R3236616-5 07/27/17 01:51 • (MSD) R3236616-6 07/27/17 01:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	1.00	U	1.11	1.11	103	103	1	75-125			0	20
Chromium	1.00	U	1.01	1.02	101	102	1	75-125			1	20
Cobalt	1.00	U	1.05	1.05	105	105	1	75-125			0	20
Nickel	1.00	U	1.03	1.03	103	103	1	75-125			0	20
Silver	0.200	U	0.193	0.195	96	97	1	75-125			1	20
Vanadium	1.00	U	1.04	1.04	104	104	1	75-125			0	20

Method Blank (MB)

(MB) R3236408-1 07/26/17 14:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Antimony	U		0.000754	0.00200
Arsenic	U		0.00025	0.00200
Beryllium	U		0.00012	0.00200
Cadmium	U		0.00016	0.00100
Copper	U		0.00052	0.00500
Lead	U		0.00024	0.00200
Selenium	U		0.00038	0.00200
Thallium	U		0.00019	0.00200
Tin	U		0.0003	0.00200
Zinc	U		0.00256	0.0250

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236408-2 07/26/17 14:45 • (LCSD) R3236408-3 07/26/17 14:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Antimony	0.0500	0.0498	0.0504	100	101	80-120			1	20
Arsenic	0.0500	0.0512	0.0512	102	102	80-120			0	20
Beryllium	0.0500	0.0461	0.0461	92	92	80-120			0	20
Cadmium	0.0500	0.0522	0.0512	104	102	80-120			2	20
Copper	0.0500	0.0486	0.0490	97	98	80-120			5	20
Lead	0.0500	0.0474	0.0477	95	95	80-120			0	20
Selenium	0.0500	0.0504	0.0494	101	99	80-120			2	20
Thallium	0.0500	0.0490	0.0490	98	98	80-120			0	20
Tin	0.0500	0.0456	0.0465	91	93	80-120			2	20
Zinc	0.0500	0.0487	0.0500	97	100	80-120			3	20

L923860-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923860-14 07/26/17 14:52 • (MS) R3236408-5 07/26/17 14:59 • (MSD) R3236408-6 07/26/17 15:02

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Antimony	0.0500	ND	0.0528	0.0512	106	102	1	75-125			3	20
Arsenic	0.0500	ND	0.0497	0.0510	99	102	1	75-125			2	20
Beryllium	0.0500	ND	0.0466	0.0464	93	93	1	75-125			0	20
Cadmium	0.0500	ND	0.0519	0.0523	104	105	1	75-125			1	20
Copper	0.0500	ND	0.0455	0.0458	91	92	1	75-125			5	20
Lead	0.0500	ND	0.0479	0.0481	96	96	1	75-125			0	20
Selenium	0.0500	ND	0.0498	0.0527	100	105	1	75-125			6	20

L923860-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923860-14 07/26/17 14:52 • (MS) R3236408-5 07/26/17 14:59 • (MSD) R3236408-6 07/26/17 15:02

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Thallium	0.0500	ND	0.0472	0.0471	94	94	1	75-125			0	20
Tin	0.0500	ND	0.0469	0.0468	93	93	1	75-125			0	20
Zinc	0.0500	ND	0.0493	0.0486	99	97	1	75-125			2	20

Method Blank (MB)

(MB) R3236259-4 07/24/17 10:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromochloromethane	U		0.000520	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon disulfide	U		0.000275	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
trans-1,4-Dichloro-2-butene	U		0.000866	0.00250
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Ethylbenzene	U		0.000384	0.00100
2-Hexanone	U		0.00382	0.0100
Iodomethane	U		0.00171	0.0100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500

Method Blank (MB)

(MB) R3236259-4 07/24/17 10:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
Vinyl acetate	U		0.00163	0.0100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
Allyl Chloride	U		0.00170	0.00500
Acetonitrile	U		0.0150	0.0500
Chloroprene	U		0.00170	0.0500
Ethyl methacrylate	U		0.00140	0.00500
Isobutanol	U		0.0390	0.100
Methacrylonitrile	U		0.0130	0.0500
Methyl methacrylate	U		0.00120	0.0500
Propionitrile	U		0.0130	0.0500
(S) Toluene-d8	*107*			*80.0-120*
(S) Dibromofluoromethane	*94.8*			*76.0-123*
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*113*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236259-1 07/24/17 09:12 • (LCSD) R3236259-2 07/24/17 09:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0883	0.0879	70.7	70.3	10.0-160			0.470	23
Acrolein	0.125	0.0671	0.0534	53.7	42.7	10.0-160		J3	22.9	20
Acrylonitrile	0.125	0.108	0.109	86.4	87.0	60.0-142			0.670	20
Benzene	0.0250	0.0229	0.0225	91.7	89.8	69.0-123			2.08	20
Bromodichloromethane	0.0250	0.0216	0.0213	86.6	85.1	76.0-120			1.64	20
Bromochloromethane	0.0250	0.0213	0.0210	85.4	83.8	76.0-122			1.79	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236259-1 07/24/17 09:12 • (LCSD) R3236259-2 07/24/17 09:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	0.0221	0.0220	88.3	88.1	67.0-132			0.140	20
Bromomethane	0.0250	0.0240	0.0229	96.0	91.5	18.0-160			4.70	20
Carbon disulfide	0.0250	0.0221	0.0219	88.3	87.5	55.0-127			0.940	20
Carbon tetrachloride	0.0250	0.0207	0.0204	82.8	81.5	63.0-122			1.61	20
Chlorobenzene	0.0250	0.0228	0.0230	91.2	92.2	79.0-121			1.10	20
Chlorodibromomethane	0.0250	0.0213	0.0214	85.4	85.4	75.0-125			0.0300	20
Chloroethane	0.0250	0.0215	0.0217	85.9	86.8	47.0-152			1.06	20
2-Chloroethyl vinyl ether	0.125	0.199	0.209	159	167	10.0-160		J4	4.94	22
Chloroform	0.0250	0.0219	0.0216	87.7	86.4	72.0-121			1.47	20
Chloromethane	0.0250	0.0211	0.0208	84.4	83.3	48.0-139			1.30	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0200	0.0204	79.9	81.8	64.0-127			2.28	20
1,2-Dibromoethane	0.0250	0.0224	0.0227	89.8	90.8	77.0-123			1.08	20
Dibromomethane	0.0250	0.0220	0.0220	88.0	88.0	78.0-120			0.100	20
1,2-Dichlorobenzene	0.0250	0.0235	0.0235	94.2	93.9	80.0-120			0.270	20
1,3-Dichlorobenzene	0.0250	0.0237	0.0234	94.6	93.7	72.0-123			0.970	20
1,4-Dichlorobenzene	0.0250	0.0235	0.0235	94.0	94.0	77.0-120			0.0600	20
trans-1,4-Dichloro-2-butene	0.0250	0.0180	0.0164	72.2	65.7	55.0-134			9.38	20
Dichlorodifluoromethane	0.0250	0.0203	0.0202	81.2	80.7	49.0-155			0.590	20
1,1-Dichloroethane	0.0250	0.0227	0.0222	90.8	88.7	70.0-126			2.28	20
1,2-Dichloroethane	0.0250	0.0218	0.0213	87.1	85.0	67.0-126			2.40	20
1,1-Dichloroethene	0.0250	0.0217	0.0217	86.9	86.8	64.0-129			0.0600	20
cis-1,2-Dichloroethene	0.0250	0.0218	0.0217	87.3	86.9	73.0-120			0.470	20
trans-1,2-Dichloroethene	0.0250	0.0223	0.0221	89.3	88.4	71.0-121			0.950	20
1,2-Dichloropropane	0.0250	0.0232	0.0231	92.8	92.5	75.0-125			0.280	20
1,1-Dichloropropene	0.0250	0.0230	0.0223	91.8	89.2	71.0-129			2.94	20
1,3-Dichloropropane	0.0250	0.0234	0.0238	93.6	95.3	80.0-121			1.89	20
cis-1,3-Dichloropropene	0.0250	0.0227	0.0231	90.8	92.3	79.0-123			1.64	20
trans-1,3-Dichloropropene	0.0250	0.0218	0.0220	87.3	87.9	74.0-127			0.640	20
2,2-Dichloropropane	0.0250	0.0217	0.0219	86.9	87.7	60.0-125			0.890	20
Ethylbenzene	0.0250	0.0234	0.0233	93.6	93.3	77.0-120			0.330	20
2-Hexanone	0.125	0.116	0.117	93.2	93.4	58.0-147			0.230	20
Iodomethane	0.125	0.107	0.107	85.8	85.8	57.0-140			0.0700	20
2-Butanone (MEK)	0.125	0.0995	0.100	79.6	80.2	37.0-158			0.700	20
Methylene Chloride	0.0250	0.0220	0.0220	88.2	87.9	66.0-121			0.380	20
4-Methyl-2-pentanone (MIBK)	0.125	0.113	0.115	90.5	92.3	59.0-143			1.99	20
Styrene	0.0250	0.0261	0.0264	105	106	78.0-124			0.920	20
1,1,1,2-Tetrachloroethane	0.0250	0.0213	0.0214	85.3	85.7	75.0-122			0.490	20
1,1,2,2-Tetrachloroethane	0.0250	0.0247	0.0245	98.7	97.8	71.0-122			0.860	20
Tetrachloroethene	0.0250	0.0211	0.0216	84.5	86.4	70.0-127			2.19	20
Toluene	0.0250	0.0236	0.0236	94.3	94.5	77.0-120			0.110	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236259-1 07/24/17 09:12 • (LCSD) R3236259-2 07/24/17 09:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	0.0250	0.0211	0.0214	84.2	85.7	69.0-129			1.75	20
1,1,1-Trichloroethane	0.0250	0.0223	0.0220	89.3	88.1	68.0-122			1.33	20
1,1,2-Trichloroethane	0.0250	0.0222	0.0228	88.9	91.2	78.0-120			2.51	20
Trichloroethene	0.0250	0.0224	0.0220	89.5	87.9	78.0-120			1.87	20
Trichlorofluoromethane	0.0250	0.0215	0.0214	86.2	85.4	56.0-137			0.900	20
1,2,3-Trichloropropane	0.0250	0.0251	0.0243	100	97.2	72.0-124			3.30	20
Vinyl acetate	0.125	0.110	0.112	88.4	89.3	46.0-160			1.00	20
Vinyl chloride	0.0250	0.0211	0.0210	84.4	84.0	64.0-133			0.520	20
Xylenes, Total	0.0750	0.0697	0.0700	92.9	93.3	77.0-120			0.430	20
(S) Toluene-d8				*104*	*105*	*80.0-120*				
(S) Dibromofluoromethane				*97.1*	*95.2*	*76.0-123*				
(S) a,a,a-Trifluorotoluene				*99.7*	*98.7*	*80.0-120*				
(S) 4-Bromofluorobenzene				*111*	*113*	*80.0-120*				

Laboratory Control Sample (LCS)

(LCS) R3236259-3 07/24/17 09:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetonitrile	0.500	0.621	124	50.0-150	
Chloroprene	0.0500	0.0531	106	50.0-150	
Ethyl methacrylate	0.0500	0.0508	102	50.0-150	
Isobutanol	1.00	1.27	127	50.0-150	
Methacrylonitrile	0.500	0.480	96.0	50.0-150	
Methyl methacrylate	0.0500	0.0477	95.4	50.0-150	
Propionitrile	0.500	0.565	113	50.0-150	
(S) Toluene-d8			*106*	*80.0-120*	
(S) Dibromofluoromethane			*92.9*	*76.0-123*	
(S) a,a,a-Trifluorotoluene			*99.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*116*	*80.0-120*	

Method Blank (MB)

(MB) R3235322-1 07/21/17 17:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
2,4-D	U		0.000744	0.00200
Dalapon	U		0.00104	0.00200
2,4-DB	U		0.000775	0.00400
Dicamba	U		0.000813	0.00200
Dichloroprop	U		0.000778	0.00200
Dinoseb	U		0.000795	0.00200
MCPA	U		0.0131	0.200
MCPP	U		0.00715	0.200
2,4,5-T	U		0.000843	0.00200
2,4,5-TP (Silvex)	U		0.000845	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*77.7*			*14.0-158*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235322-2 07/21/17 17:40 • (LCSD) R3235322-3 07/21/17 17:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,4-D	0.00500	0.00426	0.00455	85.1	90.9	56.0-120			6.55	20
Dalapon	0.00500	0.00409	0.00412	81.8	82.4	33.0-120			0.710	20
2,4-DB	0.00500	0.00513	0.00353	103	70.5	40.0-143		J3	37.2	20
Dicamba	0.00500	0.00373	0.00378	74.5	75.6	57.0-121			1.37	20
Dichloroprop	0.00500	0.00414	0.00415	82.8	83.1	59.0-122			0.370	20
Dinoseb	0.00500	0.00383	0.00371	76.6	74.3	22.0-120			3.13	20
MCPA	0.0500	0.0411	0.0354	82.2	70.9	46.0-137			14.8	20
MCPP	0.0500	0.0505	0.0739	101	148	38.0-131		J3 J4	37.5	22
2,4,5-T	0.00500	0.00391	0.00399	78.1	79.8	56.0-122			2.15	20
2,4,5-TP (Silvex)	0.00500	0.00409	0.00409	81.8	81.8	55.0-120			0.0200	20
(S) 2,4-Dichlorophenyl Acetic Acid				*78.2*	*78.1*	*14.0-158*				

Method Blank (MB)

(MB) R3235213-3 07/21/17 11:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aldrin	U		0.00000813	0.0000500
Alpha BHC	U		0.0000166	0.0000500
Beta BHC	U		0.0000184	0.0000500
Delta BHC	U		0.0000197	0.0000500
Gamma BHC	U		0.0000176	0.0000500
4,4-DDD	U		0.0000170	0.0000500
4,4-DDE	U		0.0000164	0.0000500
4,4-DDT	U		0.0000177	0.0000500
Dieldrin	U		0.00000751	0.0000500
Endosulfan I	U		0.0000179	0.0000500
Endosulfan II	U		0.0000176	0.0000500
Endosulfan sulfate	U		0.0000196	0.0000500
Endrin	U		0.0000189	0.0000500
Endrin aldehyde	U		0.0000142	0.0000500
Endrin ketone	U		0.0000170	0.0000500
Heptachlor	U		0.0000108	0.0000500
Heptachlor epoxide	U		0.0000175	0.0000500
Hexachlorobenzene	U		0.0000134	0.0000500
Methoxychlor	U		0.0000193	0.0000500
Chlordane	U		0.0000977	0.000500
Toxaphene	U		0.000168	0.000500
(S) Decachlorobiphenyl	*77.1*			*10.0-144*
(S) Tetrachloro-m-xylene	*64.7*			*10.0-135*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235213-1 07/21/17 10:37 • (LCSD) R3235213-2 07/21/17 10:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aldrin	0.00100	0.000783	0.000769	78.3	76.9	35.0-126			1.75	24
Alpha BHC	0.00100	0.000807	0.000796	80.7	79.6	55.0-133			1.40	20
Beta BHC	0.00100	0.000778	0.000782	77.8	78.2	59.0-131			0.480	20
Delta BHC	0.00100	0.000804	0.000823	80.4	82.3	61.0-134			2.39	20
Gamma BHC	0.00100	0.000814	0.000805	81.4	80.5	56.0-133			1.06	20
4,4-DDD	0.00100	0.000817	0.000850	81.7	85.0	59.0-138			3.94	20
4,4-DDE	0.00100	0.000798	0.000822	79.8	82.2	58.0-131			2.89	20
4,4-DDT	0.00100	0.000753	0.000787	75.3	78.7	43.0-147			4.49	20
Dieldrin	0.00100	0.000836	0.000858	83.6	85.8	62.0-136			2.61	20
Endosulfan I	0.00100	0.000817	0.000828	81.7	82.8	62.0-137			1.35	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235213-1 07/21/17 10:37 • (LCSD) R3235213-2 07/21/17 10:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Endosulfan II	0.00100	0.000808	0.000835	80.8	83.5	62.0-136			3.24	20
Endosulfan sulfate	0.00100	0.000806	0.000839	80.6	83.9	60.0-139			3.93	20
Endrin	0.00100	0.000894	0.000922	89.4	92.2	58.0-135			3.12	20
Endrin aldehyde	0.00100	0.000732	0.000775	73.2	77.5	56.0-128			5.71	20
Endrin ketone	0.00100	0.000924	0.000984	92.4	98.4	54.0-142			6.21	20
Heptachlor	0.00100	0.000788	0.000771	78.8	77.1	37.0-134			2.09	24
Heptachlor epoxide	0.00100	0.000806	0.000814	80.6	81.4	60.0-132			1.01	20
Hexachlorobenzene	0.00100	0.000714	0.000699	71.4	69.9	35.0-120			2.10	25
Methoxychlor	0.00100	0.000899	0.000942	89.9	94.2	44.0-160			4.64	22
(S) Decachlorobiphenyl				*72.8*	*75.4*	*10.0-144*				
(S) Tetrachloro-m-xylene				*57.1*	*57.2*	*10.0-135*				

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/21/17 14:23 • (MS) R3235213-4 07/21/17 14:36 • (MSD) R3235213-5 07/21/17 14:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.00100	ND	0.000865	0.000917	86.5	91.7	1	35.0-126			5.78	24
Alpha BHC	0.00100	ND	0.000902	0.000947	90.2	94.7	1	55.0-133			4.82	20
Beta BHC	0.00100	ND	0.000864	0.000912	86.4	91.2	1	59.0-131			5.44	20
Delta BHC	0.00100	ND	0.000887	0.000932	88.7	93.2	1	61.0-134			4.93	20
Gamma BHC	0.00100	ND	0.000915	0.000955	91.5	95.5	1	56.0-133			4.26	20
4,4-DDD	0.00100	ND	0.000920	0.000974	92.0	97.4	1	59.0-138			5.66	20
4,4-DDE	0.00100	ND	0.000872	0.000923	87.2	92.3	1	58.0-131			5.68	20
4,4-DDT	0.00100	ND	0.000836	0.000867	83.6	86.7	1	43.0-147			3.64	20
Dieldrin	0.00100	ND	0.000914	0.000968	91.4	96.8	1	62.0-136			5.76	20
Endosulfan I	0.00100	ND	0.000877	0.000932	87.7	93.2	1	62.0-137			6.00	20
Endosulfan II	0.00100	ND	0.000867	0.000924	86.7	92.4	1	62.0-136			6.34	20
Endosulfan sulfate	0.00100	ND	0.000883	0.000938	88.3	93.8	1	60.0-139			6.07	20
Endrin	0.00100	ND	0.00102	0.00107	102	107	1	58.0-135			4.34	20
Endrin aldehyde	0.00100	ND	0.000794	0.000853	79.4	85.3	1	56.0-128			7.24	20
Endrin ketone	0.00100	ND	0.00102	0.00109	102	109	1	54.0-142			6.38	20
Heptachlor	0.00100	ND	0.000934	0.000970	93.4	97.0	1	37.0-134			3.78	24
Heptachlor epoxide	0.00100	ND	0.000887	0.000931	88.7	93.1	1	60.0-132			4.94	20
Hexachlorobenzene	0.00100	ND	0.000798	0.000857	79.8	85.7	1	35.0-120			7.07	25
Methoxychlor	0.00100	ND	0.000980	0.00103	98.0	103	1	44.0-160			4.59	22
(S) Decachlorobiphenyl					*71.1*	*78.1*		*10.0-144*				
(S) Tetrachloro-m-xylene					*65.3*	*70.8*		*10.0-135*				

Method Blank (MB)

(MB) R3235888-1 07/21/17 09:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
PCB 1260	U		0.000120	0.000500
PCB 1016	U		0.000100	0.000500
PCB 1221	U		0.0000730	0.000500
PCB 1232	U		0.0000420	0.000500
PCB 1242	U		0.0000470	0.000500
PCB 1248	U		0.0000860	0.000500
PCB 1254	U		0.0000470	0.000500
(S) Decachlorobiphenyl	*87.5*			*10.0-144*
(S) Tetrachloro-m-xylene	*75.7*			*10.0-135*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3235888-2 07/21/17 09:34 • (LCSD) R3235888-3 07/21/17 09:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
PCB 1260	0.00250	0.00191	0.00188	76.5	75.3	45.0-142			1.58	24
PCB 1016	0.00250	0.00178	0.00157	71.0	62.7	41.0-134			12.4	23
(S) Decachlorobiphenyl				*79.4*	*75.7*	*10.0-144*				
(S) Tetrachloro-m-xylene				*59.5*	*58.0*	*10.0-135*				

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/21/17 10:49 • (MS) R3235888-4 07/21/17 11:02 • (MSD) R3235888-5 07/21/17 11:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
PCB 1260	0.00250	ND	0.00231	0.00219	92.5	87.7	1	45.0-142			5.34	24
PCB 1016	0.00250	ND	0.00199	0.00203	79.7	81.4	1	41.0-134			2.11	23
(S) Decachlorobiphenyl					*95.6*	*86.8*		*10.0-144*				
(S) Tetrachloro-m-xylene					*84.9*	*79.5*		*10.0-135*				

Method Blank (MB)

(MB) R3236649-3 07/26/17 11:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acenaphthene	U		0.000316	0.00100
Acenaphthylene	U		0.000309	0.00100
Acetophenone	U		0.00271	0.0100
Anthracene	U		0.000291	0.00100
Benzo(a)anthracene	U		0.0000975	0.00100
Benzo(b)fluoranthene	U		0.0000896	0.00100
Benzo(k)fluoranthene	U		0.000355	0.00100
Benzo(g,h,i)perylene	U		0.000161	0.00100
Benzo(a)pyrene	U		0.000340	0.00100
Bis(2-chlorethoxy)methane	U		0.000329	0.0100
Bis(2-chloroethyl)ether	U		0.00162	0.0100
Bis(2-chloroisopropyl)ether	U		0.000445	0.0100
4-Bromophenyl-phenylether	U		0.000335	0.0100
4-Chloroaniline	U		0.000382	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
4-Chlorophenyl-phenylether	U		0.000303	0.0100
Chrysene	U		0.000332	0.00100
Dibenz(a,h)anthracene	U		0.000279	0.00100
Dibenzofuran	U		0.000338	0.0100
3,3-Dichlorobenzidine	U		0.00202	0.0100
2,4-Dinitrotoluene	U		0.00165	0.0100
2,6-Dinitrotoluene	U		0.000279	0.0100
Fluoranthene	U		0.000310	0.00100
Fluorene	U		0.000323	0.00100
Hexachlorobenzene	U		0.000341	0.00100
Hexachloro-1,3-butadiene	U		0.000329	0.0100
Hexachlorocyclopentadiene	U		0.00233	0.0100
Hexachloroethane	U		0.000365	0.0100
Indeno(1,2,3-cd)pyrene	U		0.000279	0.00100
Isophorone	U		0.000272	0.0100
2-Methylnaphthalene	U		0.000311	0.00100
Naphthalene	U		0.000372	0.00100
2-Nitroaniline	U		0.00190	0.0100
3-Nitroaniline	U		0.000308	0.0100
4-Nitroaniline	U		0.000349	0.0100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
n-Nitrosodiphenylamine	U		0.000304	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100

Method Blank (MB)

(MB) R3236649-3 07/26/17 11:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	0.000268	J	0.000266	0.00300
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Di-n-octyl phthalate	U		0.000278	0.00300
Pyrene	U		0.000330	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.0100
Benzyl Alcohol	U		0.000393	0.0100
4-Chloro-3-methylphenol	U		0.000263	0.0100
2-Chlorophenol	U		0.000283	0.0100
2-Methylphenol	U		0.000312	0.0100
3&4-Methyl Phenol	U		0.000266	0.0100
2,4-Dichlorophenol	U		0.000284	0.0100
2,4-Dimethylphenol	U		0.000624	0.0100
4,6-Dinitro-2-methylphenol	U		0.00262	0.0100
2,4-Dinitrophenol	U		0.00325	0.0100
2-Nitrophenol	U		0.000320	0.0100
4-Nitrophenol	U		0.00201	0.0100
Pentachlorophenol	U		0.000313	0.00100
2,3,4,6-Tetrachlorophenol	U		0.00200	0.0100
Phenol	U		0.000334	0.0100
1,2,4,5-Tetrachlorobenzene	U		0.00241	0.0100
2,4,5-Trichlorophenol	U		0.000236	0.0100
2,4,6-Trichlorophenol	U		0.000297	0.0100
(S) Nitrobenzene-d5	*43.7*			*10.0-126*
(S) 2-Fluorobiphenyl	*60.6*			*22.0-127*
(S) p-Terphenyl-d14	*66.1*			*29.0-141*
(S) Phenol-d5	*21.1*			*10.0-120*
(S) 2-Fluorophenol	*25.5*			*10.0-120*
(S) 2,4,6-Tribromophenol	*61.7*			*10.0-153*

Method Blank (MB)

(MB) R3237522-2 07/31/17 18:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Safrole	U		0.000259	0.0100
Thionazin	U		0.000204	0.0100

Method Blank (MB)

(MB) R3237522-2 07/31/17 18:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
o-Toluidine	U		0.000362	0.0100
O,O,O-Triethyl Phosphorothioate	U		0.000537	0.0100
1,3,5-Trinitrobenzene	U		0.00132	0.0100
Pentachlorobenzene	U		0.000369	0.0100
Pentachloronitrobenzene	U		0.000327	0.0100
Phenacetin	U		0.000262	0.0100
p-Phenylenediamine	U		0.387	6.90
Phorate	U		0.000382	0.0500
Pronamide	U		0.000265	0.0100
5-Nitro-o-toluidine	U		0.00199	0.0100
n-Nitrosodiethylamine	U		0.000497	0.0100
n-Nitrosodi-n-butylamine	U		0.000331	0.0100
n-Nitrosomethylethylamine	U		0.00171	0.0100
n-Nitrosomorpholine	U		0.00180	0.0100
n-Nitrosopiperidine	U		0.000268	0.0100
n-Nitrosopyrrolidine	U		0.00255	0.0100
Kepone	U		0.00188	0.0200
Methapyrilene	U		0.00425	0.0500
3-Methylcholanthrene	U		0.000164	0.0100
Methyl methanesulfonate	U		0.000647	0.0500
Methyl parathion	U		0.000213	0.0100
1,4-Naphthoquinone	U		0.00556	0.0500
1-Naphthylamine	U		0.000289	0.0100
2-Naphthylamine	U		0.000195	0.0100
Ethyl methanesulfonate	U		0.000326	0.0100
Ethyl Parathion	U		0.000379	0.0100
Famphur	U		0.00106	0.0200
Hexachloropropene	U		0.000149	0.0500
Isodrin	U		0.000293	0.0100
Isosafrole	U		0.000409	0.0100
Dimethylbenz (A) Anthracene	U		0.00171	0.0100
3,3-Dimethylbenzidine	U		0.00339	0.0100
1,3-Dinitrobenzene	U		0.000359	0.0100
Diphenylamine	U		0.000284	0.0100
Dinoseb	U		0.0179	0.0500
Disulfoton	U		0.000267	0.0100
2-Acetylaminofluorene	U		0.000253	0.0100
4-Aminobiphenyl	U		0.000461	0.0100
Chlorobenzilate	U		0.00133	0.0500

Method Blank (MB)

(MB) R3237522-2 07/31/17 18:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Diallate	U		0.000524	0.0100
2,6-Dichlorophenol	U		0.00277	0.0100
Dimethoate	U		0.00144	0.0500
P-(Dimethylamino) Azobenzene	U		0.000208	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236649-1 07/26/17 10:24 • (LCSD) R3236649-2 07/26/17 10:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	0.0361	0.0294	72.3	58.9	42.0-120			20.4	22
Acenaphthylene	0.0500	0.0397	0.0312	79.4	62.4	43.0-120		J3	23.9	22
Acetophenone	0.0500	0.0298	0.0176	59.7	35.2	28.0-120		J3	51.7	27
Anthracene	0.0500	0.0403	0.0387	80.6	77.4	44.0-120			3.96	20
Benzo(a)anthracene	0.0500	0.0387	0.0387	77.4	77.5	44.0-120			0.0400	20
Benzo(b)fluoranthene	0.0500	0.0394	0.0383	78.7	76.5	40.0-120			2.79	21
Benzo(k)fluoranthene	0.0500	0.0390	0.0412	78.1	82.4	41.0-120			5.33	22
Benzo(g,h,i)perylene	0.0500	0.0436	0.0435	87.1	87.0	45.0-121			0.190	20
Benzo(a)pyrene	0.0500	0.0396	0.0389	79.2	77.7	41.0-120			1.85	20
Bis(2-chlorethoxy)methane	0.0500	0.0288	0.0201	57.7	40.3	36.0-120		J3	35.5	25
Bis(2-chloroethyl)ether	0.0500	0.0234	0.0126	46.8	25.2	24.0-120		J3	60.0	29
Bis(2-chloroisopropyl)ether	0.0500	0.0248	0.0144	49.6	28.9	32.0-120		J3 J4	52.8	29
4-Bromophenyl-phenylether	0.0500	0.0413	0.0386	82.6	77.1	42.0-121			6.92	21
4-Chloroaniline	0.0500	0.0278	0.0196	55.6	39.2	23.0-120		J3	34.4	28
2-Chloronaphthalene	0.0500	0.0314	0.0231	62.9	46.2	37.0-120		J3	30.5	24
4-Chlorophenyl-phenylether	0.0500	0.0390	0.0346	78.1	69.2	44.0-120			12.1	21
Chrysene	0.0500	0.0400	0.0408	80.0	81.7	45.0-120			2.11	20
Dibenz(a,h)anthracene	0.0500	0.0442	0.0439	88.5	87.8	44.0-121			0.690	21
Dibenzofuran	0.0500	0.0366	0.0312	73.1	62.4	42.0-120			15.9	21
3,3-Dichlorobenzidine	0.0500	0.0429	0.0410	85.7	82.1	29.0-153			4.36	23
2,4-Dinitrotoluene	0.0500	0.0451	0.0443	90.1	88.7	47.0-127			1.62	21
2,6-Dinitrotoluene	0.0500	0.0406	0.0379	81.3	75.7	42.0-120			7.09	22
Fluoranthene	0.0500	0.0426	0.0415	85.2	82.9	46.0-121			2.75	20
Fluorene	0.0500	0.0396	0.0359	79.3	71.9	45.0-120			9.82	21
Hexachlorobenzene	0.0500	0.0424	0.0399	84.7	79.8	41.0-124			5.98	21
Hexachloro-1,3-butadiene	0.0500	0.0194	0.0106	38.8	21.2	26.0-120		J3 J4	58.7	31
Hexachlorocyclopentadiene	0.0500	0.0258	0.0153	51.7	30.6	10.0-120		J3	51.3	31
Hexachloroethane	0.0500	0.0174	0.00724	34.8	14.5	22.0-120		J3 J4	82.5	34
Indeno(1,2,3-cd)pyrene	0.0500	0.0439	0.0438	87.7	87.6	45.0-123			0.120	21

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236649-1 07/26/17 10:24 • (LCSD) R3236649-2 07/26/17 10:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Isophorone	0.0500	0.0327	0.0256	65.4	51.1	37.0-120		J3	24.5	24
2-Methylnaphthalene	0.0500	0.0259	0.0168	51.8	33.5	35.0-120		J3 J4	42.8	25
Naphthalene	0.0500	0.0224	0.0126	44.9	25.2	33.0-120		J3 J4	56.1	28
2-Nitroaniline	0.0500	0.0411	0.0392	82.1	78.5	43.0-120			4.59	23
3-Nitroaniline	0.0500	0.0439	0.0410	87.8	81.9	35.0-123			6.95	25
4-Nitroaniline	0.0500	0.0506	0.0501	101	100	23.0-160			1.17	26
Nitrobenzene	0.0500	0.0239	0.0136	47.8	27.3	31.0-120		J3 J4	54.5	28
n-Nitrosodimethylamine	0.0500	0.0126	0.00804	25.1	16.1	10.0-120		J3	43.9	34
n-Nitrosodiphenylamine	0.0500	0.0376	0.0362	75.3	72.4	44.0-120			3.93	21
n-Nitrosodi-n-propylamine	0.0500	0.0322	0.0224	64.4	44.9	29.0-120		J3	35.7	27
Phenanthrene	0.0500	0.0398	0.0375	79.5	75.1	42.0-120			5.78	20
Benzylbutyl phthalate	0.0500	0.0440	0.0454	88.0	90.7	36.0-123			2.99	22
Bis(2-ethylhexyl)phthalate	0.0500	0.0440	0.0436	88.0	87.1	37.0-121			0.970	21
Di-n-butyl phthalate	0.0500	0.0447	0.0438	89.5	87.6	43.0-122			2.10	21
Diethyl phthalate	0.0500	0.0438	0.0436	87.6	87.2	48.0-123			0.460	20
Dimethyl phthalate	0.0500	0.0415	0.0406	83.0	81.3	47.0-120			2.08	20
Di-n-octyl phthalate	0.0500	0.0459	0.0457	91.8	91.3	38.0-120			0.530	22
Pyrene	0.0500	0.0409	0.0402	81.8	80.4	43.0-120			1.66	21
1,2,4-Trichlorobenzene	0.0500	0.0205	0.0114	41.0	22.9	29.0-120		J3 J4	56.8	29
Benzyl Alcohol	0.0500	0.0239	0.0176	47.8	35.1	20.0-120		J3	30.6	22
4-Chloro-3-methylphenol	0.0500	0.0315	0.0266	63.0	53.2	39.0-120			16.9	22
2-Chlorophenol	0.0500	0.0201	0.0107	40.3	21.4	28.0-120		J3 J4	61.1	29
2-Methylphenol	0.0500	0.0216	0.0132	43.1	26.4	26.0-120		J3	48.1	27
3&4-Methyl Phenol	0.0500	0.0252	0.0176	50.3	35.2	27.0-120		J3	35.3	28
2,4-Dichlorophenol	0.0500	0.0264	0.0175	52.9	34.9	37.0-120		J3 J4	40.8	26
2,4-Dimethylphenol	0.0500	0.0260	0.0187	52.1	37.4	35.0-120		J3	32.8	25
4,6-Dinitro-2-methylphenol	0.0500	0.0423	0.0394	84.6	78.8	34.0-125			7.06	27
2,4-Dinitrophenol	0.0500	0.0234	0.0196	46.9	39.3	10.0-120			17.6	40
2-Nitrophenol	0.0500	0.0278	0.0168	55.6	33.5	35.0-120		J3 J4	49.5	28
4-Nitrophenol	0.0500	0.0209	0.0186	41.9	37.3	10.0-120			11.6	35
Pentachlorophenol	0.0500	0.0365	0.0321	73.0	64.2	20.0-126			12.9	32
Phenol	0.0500	0.0114	0.00812	22.8	16.2	10.0-120			33.4	34
1,2,4,5-Tetrachlorobenzene	0.0500	0.0316	0.0206	63.2	41.3	31.0-120		J3	41.9	26
2,4,5-Trichlorophenol	0.0500	0.0383	0.0334	76.7	66.8	44.0-124			13.8	24
2,4,6-Trichlorophenol	0.0500	0.0370	0.0307	73.9	61.4	40.0-122			18.5	24
2,3,4,6-Tetrachlorophenol	0.0500	0.0444	0.0407	88.8	81.4	39.0-122			8.77	28
(S) Nitrobenzene-d5				*53.0*	*29.3*	*10.0-126*				
(S) 2-Fluorobiphenyl				*70.4*	*51.7*	*22.0-127*				
(S) p-Terphenyl-d14				*64.9*	*65.9*	*29.0-141*				
(S) Phenol-d5				*22.7*	*15.8*	*10.0-120*				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3236649-1 07/26/17 10:24 • (LCSD) R3236649-2 07/26/17 10:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 2-Fluorophenol				*29.8*	*17.0*	*10.0-120*				
(S) 2,4,6-Tribromophenol				*98.1*	*88.5*	*10.0-153*				

Laboratory Control Sample (LCS)

(LCS) R3237522-1 07/31/17 18:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Safrole	0.0500	0.0253	50.6	20.0-120	
Thionazin	0.0500	0.0405	81.0	36.0-127	
o-Toluidine	0.0500	0.0209	41.8	10.0-132	
O,O,O-Triethyl Phosphorothioate	0.0500	0.0333	66.6	34.0-127	
1,3,5-Trinitrobenzene	0.0500	0.0380	76.0	18.0-150	
Pentachlorobenzene	0.0500	0.0272	54.4	10.0-151	
Pentachloronitrobenzene	0.0500	0.0364	72.8	10.0-160	
Phenacetin	0.0500	0.0416	83.3	19.0-141	
p-Phenylenediamine	0.0500	ND	0.000	50.0-150	J4
Phorate	0.0500	0.0466	93.2	10.0-149	
Pronamide	0.0500	0.0419	83.7	22.0-135	
5-Nitro-o-toluidine	0.0500	0.0384	76.7	29.0-145	
n-Nitrosodiethylamine	0.0500	0.0177	35.4	10.0-142	
n-Nitrosodi-n-butylamine	0.0500	0.0426	85.3	39.0-127	
n-Nitrosomethylethylamine	0.0500	0.0169	33.7	10.0-125	
n-Nitrosomorpholine	0.0500	0.0419	83.8	10.0-139	
n-Nitrosopiperidine	0.0500	0.0532	106	24.0-129	
n-Nitrosopyrrolidine	0.0500	0.0410	82.0	10.0-145	
Kepone	0.0500	0.00569	11.4	10.0-120	
Methapyrilene	0.0500	0.0280	55.9	10.0-128	
3-Methylcholanthrene	0.0500	0.0482	96.5	31.0-143	
Methyl methanesulfonate	0.0500	0.0149	29.8	10.0-120	
Methyl parathion	0.0500	0.0481	96.2	33.0-136	
1,4-Naphthoquinone	0.0500	ND	0.000	20.0-120	J4
1-Naphthylamine	0.0500	0.0335	67.0	26.0-126	
2-Naphthylamine	0.0500	0.0283	56.6	10.0-120	
Ethyl methanesulfonate	0.0500	0.0244	48.8	10.0-125	
Ethyl Parathion	0.0500	0.0491	98.3	36.0-138	
Famphur	0.0500	0.0365	72.9	29.0-120	
Hexachloropropene	0.0500	0.0110	22.0	10.0-120	
Isodrin	0.0500	0.0477	95.3	19.0-132	

Laboratory Control Sample (LCS)

(LCS) R3237522-1 07/31/17 18:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Isosafrole	0.0500	0.0354	70.8	24.0-131	
Dimethylbenz (A) Anthracene	0.0500	0.0353	70.5	18.0-137	
3,3-Dimethylbenzidine	0.0500	0.0282	56.4	22.0-120	
1,3-Dinitrobenzene	0.0500	0.0360	72.0	32.0-150	
Diphenylamine	0.0500	0.0327	65.5	38.0-129	
Dinoseb	0.0500	0.0258	51.5	36.0-138	
Disulfoton	0.0500	0.0429	85.7	22.0-126	
2-Acetylaminofluorene	0.0500	0.0382	76.4	32.0-136	
4-Aminobiphenyl	0.0500	0.0338	67.6	26.0-120	
Chlorobenzilate	0.0500	0.0388	77.5	28.0-138	
Diallate	0.0500	0.0381	76.2	13.0-146	
2,6-Dichlorophenol	0.0500	0.0344	68.8	26.0-120	
Dimethoate	0.0500	0.0397	79.4	10.0-127	
P-(Dimethylamino) Azobenzene	0.0500	0.0373	74.5	27.0-136	

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/26/17 13:42 • (MS) R3236649-4 07/26/17 14:07 • (MSD) R3236649-5 07/26/17 14:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0500	ND	0.0333	0.0246	66.6	49.3	1	25.0-143		J3	30.0	29
Acenaphthylene	0.0500	ND	0.0355	0.0256	71.0	51.2	1	24.0-149		J3	32.4	29
Acetophenone	0.0500	ND	0.0272	0.0137	54.3	27.5	1	10.0-139		J3	65.6	35
Anthracene	0.0500	ND	0.0358	0.0328	71.6	65.7	1	27.0-145			8.62	30
Benzo(a)anthracene	0.0500	ND	0.0351	0.0332	70.3	66.5	1	30.0-138			5.56	26
Benzo(b)fluoranthene	0.0500	ND	0.0355	0.0345	70.9	69.0	1	28.0-140			2.69	31
Benzo(k)fluoranthene	0.0500	ND	0.0348	0.0329	69.6	65.8	1	28.0-140			5.66	31
Benzo(g,h,i)perylene	0.0500	ND	0.0392	0.0374	78.4	74.8	1	26.0-149			4.65	27
Benzo(a)pyrene	0.0500	ND	0.0351	0.0332	70.3	66.4	1	28.0-139			5.64	29
Bis(2-chlorethoxy)methane	0.0500	ND	0.0269	0.0171	53.7	34.2	1	19.0-135		J3	44.5	30
Bis(2-chloroethyl)ether	0.0500	ND	0.0223	0.00958	44.6	19.2	1	10.0-126		J3	79.9	34
Bis(2-chloroisopropyl)ether	0.0500	ND	0.0248	0.0111	49.5	22.1	1	18.0-128		J3	76.5	35
4-Bromophenyl-phenylether	0.0500	ND	0.0366	0.0322	73.2	64.5	1	28.0-146			12.6	30
4-Chloroaniline	0.0500	ND	0.0251	0.0168	50.1	33.6	1	10.0-137		J3	39.6	33
2-Chloronaphthalene	0.0500	ND	0.0292	0.0193	58.3	38.6	1	23.0-134		J3	40.7	32
4-Chlorophenyl-phenylether	0.0500	ND	0.0350	0.0291	69.9	58.2	1	32.0-142			18.3	29
Chrysene	0.0500	ND	0.0359	0.0351	71.8	70.3	1	32.0-144			2.24	27
Dibenz(a,h)anthracene	0.0500	ND	0.0400	0.0378	80.0	75.6	1	22.0-149			5.70	29
Dibenzofuran	0.0500	ND	0.0332	0.0265	66.5	53.0	1	17.0-150			22.5	27

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/26/17 13:42 • (MS) R3236649-4 07/26/17 14:07 • (MSD) R3236649-5 07/26/17 14:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
3,3-Dichlorobenzidine	0.0500	ND	0.0396	0.0353	79.3	70.6	1	10.0-160			11.6	34
2,4-Dinitrotoluene	0.0500	ND	0.0399	0.0372	79.8	74.5	1	30.0-156			6.93	29
2,6-Dinitrotoluene	0.0500	ND	0.0357	0.0325	71.4	64.9	1	28.0-143			9.45	30
Fluoranthene	0.0500	ND	0.0377	0.0359	75.4	71.7	1	31.0-146			4.91	30
Fluorene	0.0500	ND	0.0360	0.0296	72.0	59.3	1	29.0-143			19.4	31
Hexachlorobenzene	0.0500	ND	0.0374	0.0337	74.9	67.3	1	29.0-144			10.6	33
Hexachloro-1,3-butadiene	0.0500	ND	0.0194	0.00778	38.9	15.6	1	18.0-122		J3 J6	85.7	35
Hexachlorocyclopentadiene	0.0500	ND	0.0246	0.0122	49.3	24.4	1	10.0-146		J3	67.7	34
Hexachloroethane	0.0500	ND	0.0158	0.00461	31.7	9.21	1	12.0-120		J3 J6	110	36
Indeno(1,2,3-cd)pyrene	0.0500	ND	0.0398	0.0376	79.7	75.2	1	24.0-151			5.79	28
Isophorone	0.0500	ND	0.0291	0.0203	58.2	40.6	1	22.0-141		J3	35.7	29
2-Methylnaphthalene	0.0500	ND	0.0238	0.0139	47.7	27.9	1	13.0-142		J3	52.5	29
Naphthalene	0.0500	ND	0.0210	0.0101	42.1	20.3	1	19.0-125		J3	69.9	32
2-Nitroaniline	0.0500	ND	0.0372	0.0327	74.4	65.4	1	13.0-160			12.9	27
3-Nitroaniline	0.0500	ND	0.0389	0.0348	77.8	69.5	1	10.0-160			11.3	26
4-Nitroaniline	0.0500	ND	0.0457	0.0421	91.5	84.3	1	17.0-160			8.22	29
Nitrobenzene	0.0500	ND	0.0229	0.0110	45.9	22.0	1	14.0-134		J3	70.3	32
n-Nitrosodimethylamine	0.0500	ND	0.0107	0.00569	21.5	11.4	1	10.0-120		J3	61.5	40
n-Nitrosodiphenylamine	0.0500	ND	0.0360	0.0312	72.1	62.4	1	16.0-160			14.4	28
n-Nitrosodi-n-propylamine	0.0500	ND	0.0297	0.0176	59.4	35.2	1	16.0-136		J3	51.2	30
Phenanthrene	0.0500	ND	0.0347	0.0316	69.4	63.2	1	27.0-137			9.43	28
Benzylbutyl phthalate	0.0500	ND	0.0396	0.0378	79.3	75.5	1	30.0-147			4.84	27
Bis(2-ethylhexyl)phthalate	0.0500	ND	0.0394	0.0375	78.8	75.0	1	25.0-140			4.96	26
Di-n-butyl phthalate	0.0500	ND	0.0393	0.0385	78.6	77.0	1	32.0-146			2.02	27
Diethyl phthalate	0.0500	ND	0.0397	0.0374	79.3	74.9	1	34.0-149			5.75	26
Dimethyl phthalate	0.0500	ND	0.0374	0.0345	74.9	68.9	1	29.0-147			8.32	27
Di-n-octyl phthalate	0.0500	ND	0.0413	0.0391	82.6	78.2	1	24.0-146			5.48	29
Pyrene	0.0500	ND	0.0358	0.0340	71.7	68.0	1	34.0-140			5.28	27
1,2,4-Trichlorobenzene	0.0500	ND	0.0199	0.00849	39.8	17.0	1	19.0-120		J3 J6	80.3	33
Benzyl Alcohol	0.0500	ND	0.0217	0.0143	43.4	28.5	1	17.0-120		J3	41.4	40
4-Chloro-3-methylphenol	0.0500	ND	0.0299	0.0237	59.7	47.5	1	20.0-138			22.8	28
2-Chlorophenol	0.0500	ND	0.0186	0.00860	37.2	17.2	1	11.0-120		J3	73.5	33
2-Methylphenol	0.0500	ND	0.0203	0.0114	40.7	22.8	1	14.0-120		J3	56.4	29
3&4-Methyl Phenol	0.0500	ND	0.0229	0.0152	45.8	30.3	1	13.0-124		J3	40.7	26
2,4-Dichlorophenol	0.0500	ND	0.0233	0.0145	46.7	29.0	1	19.0-135		J3	46.8	32
2,4-Dimethylphenol	0.0500	ND	0.0237	0.0147	47.4	29.4	1	18.0-127		J3	46.8	31
4,6-Dinitro-2-methylphenol	0.0500	ND	0.0307	0.0280	61.4	56.1	1	10.0-160			9.11	38
2,4-Dinitrophenol	0.0500	ND	0.0179	0.0107	35.8	21.4	1	10.0-137		J3	50.4	36
2-Nitrophenol	0.0500	ND	0.0234	0.0122	46.7	24.5	1	15.0-143		J3	62.6	33
4-Nitrophenol	0.0500	ND	0.0151	0.0134	30.1	26.9	1	10.0-120			11.3	31

L923771-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L923771-03 07/26/17 13:42 • (MS) R3236649-4 07/26/17 14:07 • (MSD) R3236649-5 07/26/17 14:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Pentachlorophenol	0.0500	ND	0.0200	0.0182	40.1	36.4	1	10.0-160			9.75	40
Phenol	0.0500	ND	0.0126	0.00786	22.9	13.4	1	10.0-120		J3	46.3	34
1,2,4,5-Tetrachlorobenzene	0.0500	ND	0.0287	0.0171	57.4	34.2	1	10.0-147		J3	50.8	34
2,4,5-Trichlorophenol	0.0500	ND	0.0324	0.0259	64.8	51.7	1	15.0-160			22.5	27
2,4,6-Trichlorophenol	0.0500	ND	0.0277	0.0208	55.5	41.6	1	10.0-153			28.5	29
2,3,4,6-Tetrachlorophenol	0.0500	ND	0.0312	0.0275	62.4	55.1	1	10.0-160			12.4	40
(S) Nitrobenzene-d5					*49.7*	*23.1*		*10.0-126*				
(S) 2-Fluorobiphenyl					*67.8*	*47.6*		*22.0-127*				
(S) p-Terphenyl-d14					*61.2*	*58.8*		*29.0-141*				
(S) Phenol-d5					*22.1*	*15.3*		*10.0-120*				
(S) 2-Fluorophenol					*27.4*	*16.5*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*79.0*	*69.3*		*10.0-153*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

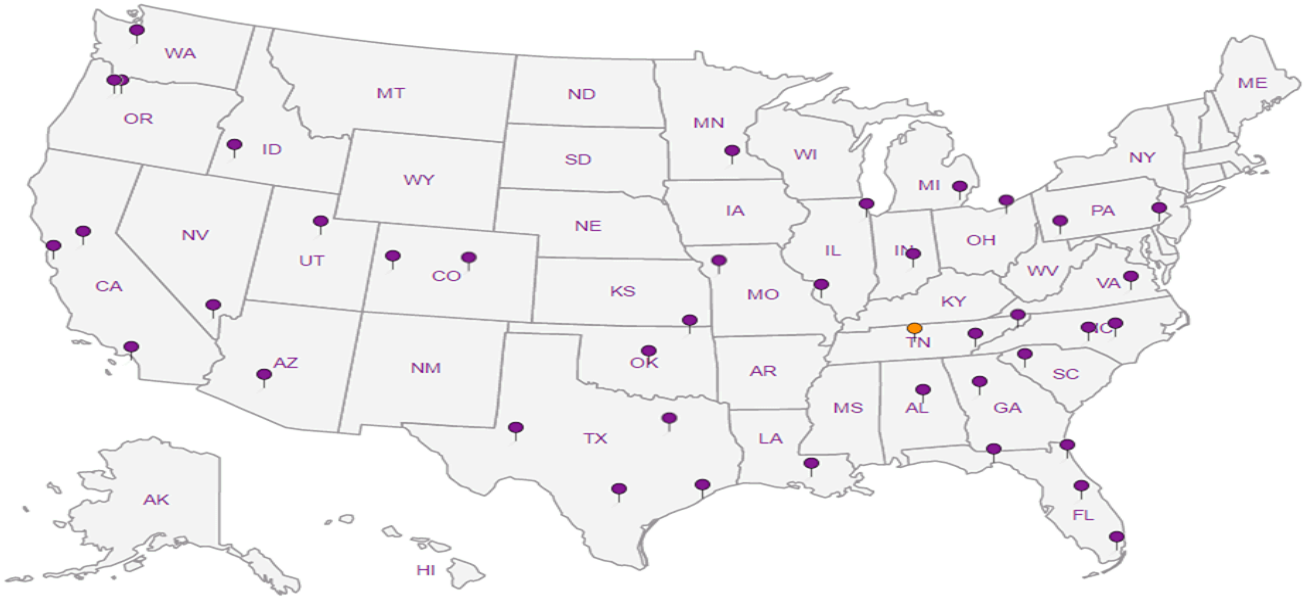
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Idaho Dept of Env. Quality - Boise, ID

1445 N.Orchard
Boise, ID 83706

Billing Information:
Project Manager - P034
1445 N.Orchard
Boise, ID 83706

Report to: Dana Swift

Email To: dana.swift@deq.idaho.gov

Project Description: Timberline Solid Waste Landfill

City/State Collected: Weippe, Idaho

Phone: 208-373-0510
Fax: 208-373-0287

Client Project #

Lab Project # IDENVBID-TIMBERLINE

Collected by (print): Dana Swift

Collected by (signature): Dana Swift

Immediately Packed on Ice N ___ Y X

Site/Facility ID # WEIPPE, IDAHO

P.O. #

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
TL-LA-SW2	Grab	~~GW~~SW	N/A	7/18/17	1:40	15
TL-LA-SW1	↓	~~GW~~SW	↓	7/18/17	1:30	13
~~FL-LA-DS~~		GW				
Trip Blank		~~SS~~OT	NA	7/18/17		1
		SS				
		SS				

Analysis / Container / Preservative

Sample ID	8081/8082 100ml Amb-NoPres Pest/PCBs (2)	8260,8270,Sulfide 8ozClr-NoPres	8270AP2 100ml Amb NoPres SVOCs (2)	CN,SV8081,SV8082,SV8 8ozClr-NoPres	CYANIDE 250mlHDPEAmb-NaOH 7/2	M6010AP2 250mlHDPE-HNO3 App I Metals (2) <2	M6010AP2 8ozClr-NoPres	SULFIDE 125mlAmb-S-NaOH+ZnAc	SV8151 1L-Amb-No Pres Herb (2)	V8260AP2 40mlAmb-HCl VOCs	Remarks	Sample # (lab only)
TL-LA-SW2	X		X		X	X			X	X		-01
TL-LA-SW1	X		X		X	X				X		-02
~~FL-LA-DS~~												
Trip Blank										X		-03

Dana Swift 7/19/17

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
a subsidiary of Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L923828

E005

Acctnum: IDENVBID
Template: T125607
Prelogin: P610497
TSR: 728 - Shane Gambill
PB:
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7136 2664 2682

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Dana Swift	7-19-17	1354	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 3.5 NT °C Bottles Received: 28

Date: 7/20/17 Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Andy Vann

ESC Lab Sciences
Non-Conformance Form

Login #: L923828	Client: IDENVBID	Date: 7/20/17	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type	X	Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Couri
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Client is requesting M6010AP1 and M6010AP2. What metals are needed?

Client informed by:		Call		Email	x	Voice Mail		Date: 07/24/17	Time:
TSR Initials: CSG	Client Contact: Dana Swift								

Login Instructions:

Please analyze for M6010AP2

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