ANALYTICAL REPORT

May 15, 2019

Cardno - Newark, DE

Sample Delivery Group:	L1095644
Samples Received:	05/06/2019
Project Number:	
Description:	
Report To:	Art Saunders 121 Continental Drive Suite 308 Newark, DE 19713

Entire Report Reviewed By:

Jason Romer
Project Manager

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 Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

90004586

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

WW-20190503-002 DAY 5 L1095644-01 WW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1277364	1	05/08/19 10:27	05/08/19 10:27	SDL	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 C-2011	WG1276940	1	05/08/19 10:19	05/08/19 10:45	MMF	Mt. Juliet, TN
Gravimetric Analysis by Method 2540 D-2011	WG1277293	1	05/08/19 08:31	05/08/19 09:28	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1277005	10	05/09/19 01:53	05/09/19 01:53	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1277364	1	05/08/19 08:20	05/08/19 08:20	BRJ	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1277684	1	05/07/19 14:10	05/08/19 10:27	SDL	Mt. Juliet, TN
Wet Chemistry by Method 365.4	WG1277153	1	05/07/19 14:10	05/08/19 11:24	SDL	Mt. Juliet, TN
Wet Chemistry by Method 410.4	WG1277222	1	05/07/19 21:19	05/07/19 22:52	TCC	Mt. Juliet, TN
Wet Chemistry by Method 4500S2 D-2011	WG1276964	1	05/07/19 16:16	05/07/19 16:16	MJA	Mt. Juliet, TN
Wet Chemistry by Method 5310 B-2011	WG1277632	1	05/08/19 11:47	05/08/19 11:47	AKA	Mt. Juliet, TN
Mercury by Method 245.1	WG1279318	1	05/12/19 08:30	05/12/19 14:41	TCT	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1276430	1	05/07/19 07:04	05/08/19 22:45	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 200.8	WG1276430	1	05/07/19 07:04	05/09/19 04:54	LAT	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151	WG1276935	1	05/07/19 07:48	05/08/19 00:45	SAW	Mt. Juliet, TN
Pesticides (GC) by Method EPA 608.3	WG1276791	1.05	05/07/19 06:43	05/07/19 19:56	LEL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method EPA-608.3	WG1276791	1.05	05/07/19 06:43	05/07/19 20:03	NFN	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1276393	1.05	05/07/19 16:46	05/08/19 01:41	AO	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1276393	1.05	05/07/19 16:46	05/08/19 20:01	AO	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 625.1	WG1276393	1.05	05/07/19 16:46	05/09/19 12:51	AO	Mt. Juliet, TN

WW-20190503-002 DAY 5 L1095644-02 WW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 1664A	WG1278123	1	05/09/19 08:54	05/09/19 13:27	DAD	Mt. Juliet, TN
Wet Chemistry by Method 4500CN E-2011	WG1277440	1	05/08/19 08:36	05/08/19 13:39	JER	Mt. Juliet, TN

WW-20190503-002 DAY 5-A L1095644-03 WW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1277073	1	05/07/19 18:22	05/07/19 18:22	JHH	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1276977	1	05/07/19 09:11	05/07/19 23:30	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1276824	1	05/07/19 18:07	05/08/19 01:37	MTJ	Mt. Juliet, TN

WW-20190503-002 DAY 5-B L1095644-04 GW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1277073	1	05/07/19 18:42	05/07/19 18:42	GLN	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1276977	1	05/07/19 09:11	05/07/19 23:42	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1276824	1	05/07/19 18:07	05/08/19 01:55	MTJ	Mt. Juliet, TN

WW-20190503-002 DAY 5-C L1095644-05 WW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1277073	1	05/07/19 19:02	05/07/19 19:02	JHH	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1276977	1	05/07/19 09:11	05/07/19 23:53	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1276824	1	05/07/19 18:07	05/08/19 02:13	MTJ	Mt. Juliet, TN

WW-20190503-002 DAY 5-D L1095644-06 WW

Collected by	Collected date/time	Received date/time
	05/03/19 14:00	05/06/19 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 624.1	WG1277073	1	05/07/19 19:21	05/07/19 19:21	JHH	Mt. Juliet, TN
EDB / DBCP by Method 504.1	WG1276977	1	05/07/19 09:11	05/08/19 00:04	HMH	Mt. Juliet, TN
SVOC-GC-GLYCOLS by Method 8015M	WG1276824	1	05/07/19 18:07	05/08/19 02:31	MTJ	Mt. Juliet, TN

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

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, 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.

Jason Romer
Project Manager

Laboratory Data Package Cover Page

This data package consists of this signature page, the laboratory review checklist, and the following reportable data as applicable:

R1 - Field chain-of-custody documentation;

R2 - Sample identification cross-reference;

R3 - Test reports (analytical data sheets) for each environmental sample that includes:

a. Items consistent with NELAC Chapter 5,

b. dilution factors,

c. preparation methods,

d. cleanup methods, and

e. if required for the project, tentatively identified compounds (TICs).

R4 - Surrogate recovery data including:

a. Calculated recovery (%R), and

b. The laboratory's surrogate QC limits.

R5 - Test reports/summary forms for blank samples;

R6 - Test reports/summary forms for laboratory control samples (LCSs) including:

a. LCS spiking amounts,

b. Calculated %R for each analyte, and

c. The laboratory's LCS QC limits.

R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a. Samples associated with the MS/MSD clearly identified,

b. MS/MSD spiking amounts,

c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d. Calculated %Rs and relative percent differences (RPDs), and

e. The laboratory's MS/MSD QC limits

R8 - Laboratory analytical duplicate (if applicable) recovery and precision:

a. The amount of analyte measured in the duplicate,

b. The calculated RPD, and

c. The laboratory's QC limits for analytical duplicates.

R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.

R10 - Other problems or anomalies.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Jason Romer
Project Manager

Laboratory Review Checklist: Reportable Data

Laboratory Name: Pace Analytical National	LRC Date: 05/15/2019 16:03
Project Name:	Laboratory Job Number: L1095644-01, 02, 03, 04, 05 and 06
Reviewer Name: Jason Romer	Prep Batch Number(s): WG1276964, WG1277222, WG1276791, WG1276393, WG1277073, WG1276824, WG1277364, WG1277684, WG1277153, WG1276935, WG1277440, WG1277293, WG1276977, WG1277632, WG1276430, WG1277005, WG1278123, WG1276940 and WG1279318

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			1
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?		X			4
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			5
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Supporting Data

Laboratory Name: Pace Analytical National	LRC Date: 05/15/2019 16:03
Project Name:	Laboratory Job Number: L1095644-01, 02, 03, 04, 05 and 06
Reviewer Name: Jason Romer	Prep Batch Number(s): WG1276964, WG1277222, WG1276791, WG1276393, WG1277073, WG1276824, WG1277364, WG1277684, WG1277153, WG1276935, WG1277440, WG1277293, WG1276977, WG1277632, WG1276430, WG1277005, WG1278123, WG1276940 and WG1279318

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB):					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC Section 5.5.10)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			6
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chapter 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed	X				

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Laboratory Review Checklist: Exception Reports

Laboratory Name: Pace Analytical National	LRC Date: 05/15/2019 16:03
Project Name:	Laboratory Job Number: L1095644-01, 02, 03, 04, 05 and 06
Reviewer Name: Jason Romer	Prep Batch Number(s): WG1276964, WG1277222, WG1276791, WG1276393, WG1277073, WG1276824, WG1277364, WG1277684, WG1277153, WG1276935, WG1277440, WG1277293, WG1276977, WG1277632, WG1276430, WG1277005, WG1278123, WG1276940 and WG1279318

ER #[1]	Description
1	8151 WG1276935 2,4-Dichlorophenyl Acetic Acid L1095644-01: Percent Recovery is outside of established control limits.
2	8151 WG1276935 2,4,5-TP (Silvex): Percent Recovery is outside of established control limits. 625.1 WG1276393 Benzidine, 2-Chloronaphthalene, Fluorene, Benzoic Acid, Hexachlorophene: Percent Recovery is outside of established control limits.
3	625.1 WG1276393 Benzoic Acid, 2-Chloronaphthalene, Fluorene: Percent Recovery is outside of established control limits.
4	625.1 WG1276393 Benzoic Acid, Benzaldehyde, Benzidine, 2-Chloronaphthalene, 1-Methylnaphthalene, Hexachlorocyclopentadiene: Relative Percent Difference is outside of established control limits.
5	351.2 WG1277153 Phosphorus,Total: Relative Percent Difference is outside of established control limits. 2540 C-2011 WG1276940 Dissolved Solids: Relative Percent Difference is outside of established control limits. 2540 C-2011 WG1277293 Suspended Solids: Relative Percent Difference is outside of established control limits.
6	200.8 WG1276430 Copper: Post Spike Percent Recovery and/or Serial Dilution Relative Percent Difference was outside of established control limits.

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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Calculated Results

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Organic Nitrogen	0.476		0.0317	0.100	0.100	1	05/08/2019 10:27	WG1277364

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1990		14.1	50.0	50.0	1	05/08/2019 10:45	WG1276940

Gravimetric Analysis by Method 2540 D-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Suspended Solids	3.70		0.350	2.50	2.50	1	05/08/2019 09:28	WG1277293

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Chloride	501		0.519	1.00	10.0	10	05/09/2019 01:53	WG1277005

Wet Chemistry by Method 350.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0600	J	0.0317	0.100	0.100	1	05/08/2019 08:20	WG1277364

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	0.536	B	0.0350	0.250	0.250	1	05/08/2019 10:27	WG1277684

Wet Chemistry by Method 365.4

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Phosphorus,Total	U		0.0350	0.100	0.100	1	05/08/2019 11:24	WG1277153

Wet Chemistry by Method 410.4

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
COD	56.3		3.00	10.0	10.0	1	05/07/2019 22:52	WG1277222

Wet Chemistry by Method 4500S2 D-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Sulfide	U		0.00650	0.0500	0.0500	1	05/07/2019 16:16	WG1276964

Wet Chemistry by Method 5310 B-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10.7		0.102	1.00	1.00	1	05/08/2019 11:47	WG1277632

Mercury by Method 245.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.0000490	0.000200	0.000200	1	05/12/2019 14:41	WG1279318

Metals (ICPMS) by Method 200.8

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Antimony	0.00194	J	0.000754	0.00200	0.00200	1	05/08/2019 22:45	WG1276430
Arsenic	0.00335		0.000170	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Cadmium	U		0.000220	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Chromium	U		0.000320	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Cobalt	0.000434	J	0.000270	0.00200	0.00200	1	05/08/2019 22:45	WG1276430
Copper	0.00493		0.000270	0.00100	0.00100	1	05/09/2019 04:54	WG1276430
Lead	U		0.000260	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Nickel	0.00354		0.000320	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Selenium	0.000444	J	0.000320	0.00200	0.00200	1	05/08/2019 22:45	WG1276430
Silver	U		0.000180	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Thallium	U		0.000280	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Tin	U		0.000240	0.00100	0.00100	1	05/08/2019 22:45	WG1276430
Zinc	0.0205		0.00191	0.0100	0.0100	1	05/08/2019 22:45	WG1276430

Chlorinated Acid Herbicides (GC) by Method 8151

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	U	J4	0.000845	0.00200	0.00200	1	05/08/2019 00:45	WG1276935
(S) 2,4-Dichlorophenyl Acetic Acid	*192*	J1			*14.0-158*		*05/08/2019 00:45*	WG1276935

Sample Narrative:

L1095644-01 WG1276935: Recovery buas high, sample is BDL, data not impacted.

Pesticides (GC) by Method EPA 608.3

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Aldrin	U		0.00000854	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Alpha BHC	U		0.0000174	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Beta BHC	U		0.0000193	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Gamma BHC	U		0.0000185	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Chlordane	U		0.000103	0.000500	0.000525	1.05	05/07/2019 19:56	WG1276791
4,4-DDD	U		0.0000179	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
4,4-DDE	U		0.0000172	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
4,4-DDT	U		0.0000186	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Dieldrin	U		0.00000789	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Endosulfan I	U		0.0000188	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Endosulfan II	U		0.0000185	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Endosulfan sulfate	U		0.0000206	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Endrin	U		0.0000198	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Heptachlor	U		0.0000113	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Heptachlor epoxide	U		0.0000184	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Methoxychlor	U		0.0000203	0.0000500	0.0000525	1.05	05/07/2019 19:56	WG1276791
Toxaphene	U		0.000176	0.000500	0.000525	1.05	05/07/2019 19:56	WG1276791
(S) Decachlorobiphenyl	*80.4*				*10.0-144*		*05/07/2019 19:56*	WG1276791
(S) Tetrachloro-m-xylene	*92.2*				*10.0-135*		*05/07/2019 19:56*	WG1276791

Sample Narrative:

L1095644-01 WG1276791: Dilution due to sample volume.

Polychlorinated Biphenyls (GC) by Method EPA-608.3

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
PCB 1016	U		0.000105	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1221	U		0.0000766	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1232	U		0.0000441	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1242	U		0.0000494	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1248	U		0.0000903	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1254	U		0.0000494	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
PCB 1260	U		0.000126	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
Total PCBs	U		0.0000441	0.000500	0.000525	1.05	05/07/2019 20:03	WG1276791
(S) Decachlorobiphenyl	*81.8*				*10.0-144*		*05/07/2019 20:03*	WG1276791
(S) Tetrachloro-m-xylene	*81.7*				*10.0-135*		*05/07/2019 20:03*	WG1276791

Sample Narrative:

L1095644-01 WG1276791: Dilution due to sample volume.

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.000332	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Acenaphthylene	U		0.000324	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Acetophenone	U		0.00285	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Aniline	U		0.00255	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Anthracene	U		0.000306	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Atrazine	U		0.000273	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Benzaldehyde	U		0.00147	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Benzidine	U	J4	0.00454	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Benzo(a)anthracene	U		0.000102	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Benzo(b)fluoranthene	U		0.0000941	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Benzo(k)fluoranthene	U		0.000373	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Benzo(a)pyrene	U		0.000357	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Benzoic acid	U	J4	0.00462	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Benzyl alcohol	U		0.000413	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Biphenyl	U		0.000341	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Bis(2-chlorethoxy)methane	U		0.000345	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Bis(2-chloroethyl)ether	U		0.00170	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Bis(2-chloroisopropyl)ether	U		0.000467	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Caprolactam	U		0.00272	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Carbazole	U		0.000273	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
4-Chloroaniline	U		0.000401	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2-Chloronaphthalene	U	J4	0.000347	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Chrysene	U		0.000349	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
n-Decane	U		0.000626	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Dibenz(a,h)anthracene	U		0.000293	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Dibenzofuran	U		0.000355	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
3,3-Dichlorobenzidine	U		0.00212	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4-Dinitrotoluene	U		0.00173	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,6-Dinitrotoluene	U		0.000293	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
1,2-Diphenylhydrazine	U		0.000334	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Fluoranthene	U		0.000326	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Fluorene	U	J4	0.000339	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Hexachlorobenzene	U		0.000358	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Hexachloro-1,3-butadiene	U		0.000345	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Hexachlorocyclopentadiene	U		0.00245	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Hexachloroethane	U		0.000383	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Indeno(1,2,3-cd)pyrene	U		0.000293	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Isophorone	U		0.000286	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
1-Methylnaphthalene	U		0.000349	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393

Semi Volatile Organic Compounds (GC/MS) by Method 625.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
2-Methylnaphthalene	U		0.000327	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
2-Nitroaniline	U		0.00200	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
3-Nitroaniline	U		0.000323	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
4-Nitroaniline	U		0.000366	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Naphthalene	U		0.000391	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Nitrobenzene	U		0.000385	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
n-Nitrosodimethylamine	U		0.00132	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
n-Nitrosodiphenylamine	U		0.00125	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
n-Nitrosodi-n-propylamine	U		0.000423	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Phenanthrene	U		0.000384	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
Pyridine	U		0.00144	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Benzylbutyl phthalate	U		0.000289	0.00300	0.00315	1.05	05/08/2019 01:41	WG1276393
Bis(2-Ethylhexyl)phthalate	U		0.000744	0.00300	0.00315	1.05	05/08/2019 01:41	WG1276393
Di-n-butyl phthalate	U		0.000279	0.00300	0.00315	1.05	05/08/2019 01:41	WG1276393
Diethyl phthalate	U		0.000296	0.00300	0.00315	1.05	05/08/2019 01:41	WG1276393
Dimethyl phthalate	U		0.000297	0.00300	0.00315	1.05	05/08/2019 01:41	WG1276393
n-Octadecane	U		0.000396	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Pyrene	U		0.000347	0.00100	0.00105	1.05	05/08/2019 01:41	WG1276393
1,2,4,5-Tetrachlorobenzene	U		0.00253	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
4-Chloro-3-methylphenol	U		0.000276	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2-Chlorophenol	U		0.000297	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4-Dichlorophenol	U		0.000298	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4-Dimethylphenol	U		0.000655	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
4,6-Dinitro-2-methylphenol	U		0.00275	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4-Dinitrophenol	U		0.00341	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2-Methylphenol	U		0.000328	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
3&4-Methyl Phenol	U		0.000279	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2-Nitrophenol	U		0.000336	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
4-Nitrophenol	U		0.00211	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Pentachlorophenol	U		0.000329	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Phenol	U		0.000351	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4,5-Trichlorophenol	U		0.000248	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
2,4,6-Trichlorophenol	U		0.000312	0.0100	0.0105	1.05	05/08/2019 01:41	WG1276393
Hexachlorophene	U	J4	0.00151	0.0500	0.0525	1.05	05/09/2019 12:51	WG1276393
n-Nitrosodiethylamine	U		0.000522	0.0100	0.0105	1.05	05/08/2019 20:01	WG1276393
n-Nitrosodi-n-butylamine	U		0.000348	0.0100	0.0105	1.05	05/08/2019 20:01	WG1276393
Pentachlorobenzene	U		0.000387	0.0100	0.0105	1.05	05/08/2019 20:01	WG1276393
(S) 2-Fluorophenol	*24.3*				*10.0-120*		*05/08/2019 01:41*	WG1276393
(S) Phenol-d5	*15.4*				*8.00-424*		*05/08/2019 01:41*	WG1276393
(S) Nitrobenzene-d5	*37.6*				*15.0-314*		*05/08/2019 01:41*	WG1276393
(S) 2-Fluorobiphenyl	*32.4*				*22.0-127*		*05/08/2019 01:41*	WG1276393
(S) 2,4,6-Tribromophenol	*78.6*				*10.0-153*		*05/08/2019 01:41*	WG1276393
(S) p-Terphenyl-d14	*59.6*				*29.0-141*		*05/08/2019 01:41*	WG1276393

Sample Narrative:

L1095644-01 WG1276393: Dilution due to sample volume.

Wet Chemistry by Method 1664A

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	U		1.40	6.02	6.02	1	05/09/2019 13:27	WG1278123

Wet Chemistry by Method 4500CN E-2011

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Cyanide	0.00310	J	0.00180	0.00500	0.00500	1	05/08/2019 13:39	WG1277440

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/07/2019 18:22	WG1277073
Acrylonitrile	U		0.00187	0.0100	0.0100	1	05/07/2019 18:22	WG1277073
Benzene	0.00279		0.000331	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Bromobenzene	U		0.000352	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Bromochloromethane	U		0.000520	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Bromoform	0.00702		0.000469	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Bromomethane	U		0.000866	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
tert-Butylbenzene	U		0.000399	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Chlorodibromomethane	0.000572	J	0.000327	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Chloroethane	U		0.000453	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
Chloroform	U		0.000324	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
Chloromethane	U		0.000276	0.00250	0.00250	1	05/07/2019 18:22	WG1277073
2-Chlorotoluene	U		0.000375	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
4-Chlorotoluene	U		0.000351	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Cyclohexane	U		0.000390	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Dibromomethane	U		0.000346	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2-Dichlorobenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,3-Dichlorobenzene	U		0.000220	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,4-Dichlorobenzene	U		0.000274	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Dichlorodifluoromethane	U		0.000551	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2-Dichloroethane	U		0.000361	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
2,2-Dichloropropane	U		0.000321	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1-Dichloropropene	U		0.000352	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,3-Dichloropropene	U		0.000320	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/07/2019 18:22	WG1277073
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/07/2019 18:22	WG1277073
Methyl Acetate	U		0.00430	0.0200	0.0200	1	05/07/2019 18:22	WG1277073
Methyl Cyclohexane	U		0.000380	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/07/2019 18:22	WG1277073
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Styrene	U		0.000307	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Toluene	0.000589	J	0.000412	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2,3-Trichlorobenzene	U		0.000230	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2,4-Trichlorobenzene	U		0.000355	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/07/2019 18:22	WG1277073

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
Trichlorofluoromethane	U		0.00120	0.00500	0.00500	1	05/07/2019 18:22	WG1277073
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
1,2,3-Trichloropropane	U		0.000807	0.00250	0.00250	1	05/07/2019 18:22	WG1277073
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
o-Xylene	U		0.000341	0.00100	0.00100	1	05/07/2019 18:22	WG1277073
m&p-Xylene	U		0.000719	0.00200	0.00200	1	05/07/2019 18:22	WG1277073
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/07/2019 18:22	WG1277073
(S) Toluene-d8	*95.8*				*80.0-120*		*05/07/2019 18:22*	WG1277073
(S) 1,2-Dichloroethane-d4	*99.4*				*70.0-130*		*05/07/2019 18:22*	WG1277073
(S) 4-Bromofluorobenzene	*94.5*				*80.0-120*		*05/07/2019 18:22*	WG1277073

EDB / DBCP by Method 504.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00000240	0.0000100	0.0000100	1	05/07/2019 23:30	WG1276977
1,2-Dibromo-3-Chloropropane	U		0.00000430	0.0000200	0.0000200	1	05/07/2019 23:30	WG1276977

SVOC-GC-GLYCOLS by Method 8015M

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene glycol	U		0.492	5.00	5.00	1	05/08/2019 01:37	WG1276824
(S) 1,3-Propanediol	*74.8*				*28.0-145*		*05/08/2019 01:37*	WG1276824

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/07/2019 18:42	WG1277073
Acrylonitrile	0.0194		0.00187	0.0100	0.0100	1	05/07/2019 18:42	WG1277073
Benzene	0.00392		0.000331	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Bromobenzene	U		0.000352	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Bromochloromethane	U		0.000520	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
Bromodichloromethane	0.000712	J	0.000380	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Bromoform	0.00571		0.000469	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Bromomethane	U		0.000866	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
tert-Butylbenzene	U		0.000399	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Chlorodibromomethane	0.000845	J	0.000327	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Chloroethane	U		0.000453	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
Chloroform	U		0.000324	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
Chloromethane	U		0.000276	0.00250	0.00250	1	05/07/2019 18:42	WG1277073
2-Chlorotoluene	U		0.000375	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
4-Chlorotoluene	U		0.000351	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Cyclohexane	U		0.000390	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Dibromomethane	U		0.000346	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2-Dichlorobenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,3-Dichlorobenzene	U		0.000220	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,4-Dichlorobenzene	U		0.000274	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Dichlorodifluoromethane	U		0.000551	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2-Dichloroethane	0.00109		0.000361	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
2,2-Dichloropropane	U		0.000321	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1-Dichloropropene	U		0.000352	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,3-Dichloropropene	U		0.000320	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/07/2019 18:42	WG1277073
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/07/2019 18:42	WG1277073
Methyl Acetate	U		0.00430	0.0200	0.0200	1	05/07/2019 18:42	WG1277073
Methyl Cyclohexane	U		0.000380	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/07/2019 18:42	WG1277073
Methyl tert-butyl ether	U		0.000367	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Styrene	U		0.000307	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Toluene	0.000523	J	0.000412	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2,3-Trichlorobenzene	U		0.000230	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2,4-Trichlorobenzene	U		0.000355	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/07/2019 18:42	WG1277073

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
Trichlorofluoromethane	U		0.00120	0.00500	0.00500	1	05/07/2019 18:42	WG1277073
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
1,2,3-Trichloropropane	U		0.000807	0.00250	0.00250	1	05/07/2019 18:42	WG1277073
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
o-Xylene	U		0.000341	0.00100	0.00100	1	05/07/2019 18:42	WG1277073
m&p-Xylene	U		0.000719	0.00200	0.00200	1	05/07/2019 18:42	WG1277073
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/07/2019 18:42	WG1277073
(S) Toluene-d8	*96.8*				*80.0-120*		*05/07/2019 18:42*	WG1277073
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*05/07/2019 18:42*	WG1277073
(S) 4-Bromofluorobenzene	*94.6*				*80.0-120*		*05/07/2019 18:42*	WG1277073

EDB / DBCP by Method 504.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00000240	0.0000100	0.0000100	1	05/07/2019 23:42	WG1276977
1,2-Dibromo-3-Chloropropane	U		0.00000430	0.0000200	0.0000200	1	05/07/2019 23:42	WG1276977

SVOC-GC-GLYCOLS by Method 8015M

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene glycol	U		0.492	5.00	5.00	1	05/08/2019 01:55	WG1276824
(S) 1,3-Propanediol	*75.7*				*28.0-145*		*05/08/2019 01:55*	WG1276824

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/07/2019 19:02	WG1277073
Acrylonitrile	U		0.00187	0.0100	0.0100	1	05/07/2019 19:02	WG1277073
Benzene	0.0153		0.000331	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Bromobenzene	U		0.000352	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Bromochloromethane	U		0.000520	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Bromoform	0.00560		0.000469	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Bromomethane	U		0.000866	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
tert-Butylbenzene	U		0.000399	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Chlorodibromomethane	0.000938	J	0.000327	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Chloroethane	U		0.000453	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
Chloroform	U		0.000324	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
Chloromethane	U		0.000276	0.00250	0.00250	1	05/07/2019 19:02	WG1277073
2-Chlorotoluene	U		0.000375	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
4-Chlorotoluene	U		0.000351	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Cyclohexane	U		0.000390	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Dibromomethane	U		0.000346	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2-Dichlorobenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,3-Dichlorobenzene	U		0.000220	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,4-Dichlorobenzene	U		0.000274	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Dichlorodifluoromethane	U		0.000551	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2-Dichloroethane	0.00146		0.000361	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
2,2-Dichloropropane	U		0.000321	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1-Dichloropropene	U		0.000352	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,3-Dichloropropene	U		0.000320	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/07/2019 19:02	WG1277073
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/07/2019 19:02	WG1277073
Methyl Acetate	U		0.00430	0.0200	0.0200	1	05/07/2019 19:02	WG1277073
Methyl Cyclohexane	U		0.000380	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/07/2019 19:02	WG1277073
Methyl tert-butyl ether	0.000649	J	0.000367	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Styrene	U		0.000307	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Toluene	0.00329		0.000412	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2,3-Trichlorobenzene	U		0.000230	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2,4-Trichlorobenzene	U		0.000355	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/07/2019 19:02	WG1277073

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
Trichlorofluoromethane	U		0.00120	0.00500	0.00500	1	05/07/2019 19:02	WG1277073
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
1,2,3-Trichloropropane	U		0.000807	0.00250	0.00250	1	05/07/2019 19:02	WG1277073
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
o-Xylene	U		0.000341	0.00100	0.00100	1	05/07/2019 19:02	WG1277073
m&p-Xylene	U		0.000719	0.00200	0.00200	1	05/07/2019 19:02	WG1277073
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/07/2019 19:02	WG1277073
(S) Toluene-d8	*95.5*				*80.0-120*		*05/07/2019 19:02*	WG1277073
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*05/07/2019 19:02*	WG1277073
(S) 4-Bromofluorobenzene	*95.2*				*80.0-120*		*05/07/2019 19:02*	WG1277073

EDB / DBCP by Method 504.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00000240	0.0000100	0.0000100	1	05/07/2019 23:53	WG1276977
1,2-Dibromo-3-Chloropropane	U		0.00000430	0.0000200	0.0000200	1	05/07/2019 23:53	WG1276977

SVOC-GC-GLYCOLS by Method 8015M

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene glycol	U		0.492	5.00	5.00	1	05/08/2019 02:13	WG1276824
(S) 1,3-Propanediol	*78.8*				*28.0-145*		*05/08/2019 02:13*	WG1276824

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0100	0.0500	0.0500	1	05/07/2019 19:21	WG1277073
Acrylonitrile	U		0.00187	0.0100	0.0100	1	05/07/2019 19:21	WG1277073
Benzene	0.0115		0.000331	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Bromobenzene	U		0.000352	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Bromochloromethane	U		0.000520	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
Bromodichloromethane	U		0.000380	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Bromoform	0.0130		0.000469	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Bromomethane	U		0.000866	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
n-Butylbenzene	U		0.000361	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
sec-Butylbenzene	U		0.000365	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
tert-Butylbenzene	U		0.000399	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Carbon disulfide	U		0.000275	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Carbon tetrachloride	U		0.000379	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Chlorobenzene	U		0.000348	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Chlorodibromomethane	0.00199		0.000327	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Chloroethane	U		0.000453	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
Chloroform	U		0.000324	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
Chloromethane	U		0.000276	0.00250	0.00250	1	05/07/2019 19:21	WG1277073
2-Chlorotoluene	U		0.000375	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
4-Chlorotoluene	U		0.000351	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Cyclohexane	U		0.000390	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Dibromomethane	U		0.000346	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2-Dichlorobenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,3-Dichlorobenzene	U		0.000220	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,4-Dichlorobenzene	U		0.000274	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Dichlorodifluoromethane	U		0.000551	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
1,1-Dichloroethane	U		0.000259	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2-Dichloroethane	0.00115		0.000361	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1-Dichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
cis-1,2-Dichloroethene	U		0.000260	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
trans-1,2-Dichloroethene	U		0.000396	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2-Dichloropropane	U		0.000306	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
2,2-Dichloropropane	U		0.000321	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1-Dichloropropene	U		0.000352	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,3-Dichloropropene	U		0.000320	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
cis-1,3-Dichloropropene	U		0.000418	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
trans-1,3-Dichloropropene	U		0.000419	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Ethylbenzene	U		0.000384	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
2-Hexanone	U		0.00382	0.0100	0.0100	1	05/07/2019 19:21	WG1277073
Isopropylbenzene	U		0.000326	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
p-Isopropyltoluene	U		0.000350	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
2-Butanone (MEK)	U		0.00393	0.0100	0.0100	1	05/07/2019 19:21	WG1277073
Methyl Acetate	U		0.00430	0.0200	0.0200	1	05/07/2019 19:21	WG1277073
Methyl Cyclohexane	U		0.000380	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Methylene Chloride	U		0.00100	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100	0.0100	1	05/07/2019 19:21	WG1277073
Methyl tert-butyl ether	0.000385	J	0.000367	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
n-Propylbenzene	U		0.000349	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Styrene	U		0.000307	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Tetrachloroethene	U		0.000372	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Toluene	0.00310		0.000412	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2,3-Trichlorobenzene	U		0.000230	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2,4-Trichlorobenzene	U		0.000355	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2,4-Trimethylbenzene	U		0.000373	0.00100	0.00100	1	05/07/2019 19:21	WG1277073

Volatile Organic Compounds (GC/MS) by Method 624.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
1,3,5-Trimethylbenzene	U		0.000387	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1,1-Trichloroethane	U		0.000319	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,1,2-Trichloroethane	U		0.000383	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Trichloroethene	U		0.000398	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
Trichlorofluoromethane	U		0.00120	0.00500	0.00500	1	05/07/2019 19:21	WG1277073
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
1,2,3-Trichloropropane	U		0.000807	0.00250	0.00250	1	05/07/2019 19:21	WG1277073
Vinyl chloride	U		0.000259	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
o-Xylene	U		0.000341	0.00100	0.00100	1	05/07/2019 19:21	WG1277073
m&p-Xylene	U		0.000719	0.00200	0.00200	1	05/07/2019 19:21	WG1277073
Xylenes, Total	U		0.00106	0.00300	0.00300	1	05/07/2019 19:21	WG1277073
(S) Toluene-d8	*95.1*				*80.0-120*		*05/07/2019 19:21*	WG1277073
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*05/07/2019 19:21*	WG1277073
(S) 4-Bromofluorobenzene	*93.1*				*80.0-120*		*05/07/2019 19:21*	WG1277073

EDB / DBCP by Method 504.1

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00000240	0.0000100	0.0000100	1	05/08/2019 00:04	WG1276977
1,2-Dibromo-3-Chloropropane	U		0.00000430	0.0000200	0.0000200	1	05/08/2019 00:04	WG1276977

SVOC-GC-GLYCOLS by Method 8015M

Analyte	Result mg/l	Qualifier	SDL mg/l	Unadj. MQL mg/l	MQL mg/l	Dilution	Analysis date / time	Batch
Ethylene glycol	U		0.492	5.00	5.00	1	05/08/2019 02:31	WG1276824
(S) 1,3-Propanediol	*78.3*				*28.0-145*		*05/08/2019 02:31*	WG1276824

Method Blank (MB)

(MB) R3409834-1 05/08/19 10:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L1093616-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093616-01 05/08/19 10:45 • (DUP) R3409834-3 05/08/19 10:45

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	333	100	1	108	J3	5

Laboratory Control Sample (LCS)

(LCS) R3409834-2 05/08/19 10:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8500	96.6	85.0-115	

Method Blank (MB)

(MB) R3409366-1 05/08/19 09:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Suspended Solids	U		0.350	2.50

L1093133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093133-01 05/08/19 09:28 • (DUP) R3409366-3 05/08/19 09:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Suspended Solids	33.0	36.0	1	8.70	P1	5

Laboratory Control Sample (LCS)

(LCS) R3409366-2 05/08/19 09:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Suspended Solids	773	780	101	85.0-115	

Method Blank (MB)

(MB) R3409766-1 05/09/19 13:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Oil & Grease (Hexane Extr)	U		1.16	5.00

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

(LCS) R3409766-2 05/09/19 13:27 • (LCSD) R3409766-3 05/09/19 13:27

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 %
Oil & Grease (Hexane Extr)	40.0	35.3	35.7	88.3	89.3	78.0-114			1.13	20

Method Blank (MB)

(MB) R3409516-1 05/08/19 14:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.0519	1.00

L1094935-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1094935-01 05/08/19 16:46 • (DUP) R3409516-3 05/08/19 17:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9.01	8.99	1	0.189		20

L1095642-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095642-01 05/09/19 01:24 • (DUP) R3409516-7 05/09/19 01:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	462	480	10	3.72		20

Laboratory Control Sample (LCS)

(LCS) R3409516-2 05/08/19 15:13

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.6	99.0	90.0-110	

L1094935-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094935-01 05/08/19 16:46 • (MS) R3409516-4 05/08/19 17:14 • (MSD) R3409516-5 05/08/19 17:29

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 %
Chloride	50.0	9.01	58.6	58.6	99.1	99.2	1	80.0-120			0.0596	20

L1095167-11 Original Sample (OS) • Matrix Spike (MS)

(OS) L1095167-11 05/09/19 00:27 • (MS) R3409516-6 05/09/19 00:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	16.2	65.0	97.5	1	80.0-120	

Method Blank (MB)

(MB) R3409234-1 05/08/19 07:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	U		0.0317	0.100

L1093570-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1093570-03 05/08/19 07:33 • (DUP) R3409234-3 05/08/19 07:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	ND	0.000	1	0.000		10

L1094764-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1094764-06 05/08/19 07:58 • (DUP) R3409234-6 05/08/19 08:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.405	0.405	1	0.000		10

Laboratory Control Sample (LCS)

(LCS) R3409234-2 05/08/19 07:31

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7.50	7.54	101	90.0-110	

L1094617-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094617-01 05/08/19 07:36 • (MS) R3409234-4 05/08/19 07:37 • (MSD) R3409234-5 05/08/19 07:39

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 %
Ammonia Nitrogen	5.00	1.14	6.26	6.43	102	106	1	90.0-110			2.62	10

L1094764-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1094764-07 05/08/19 08:01 • (MS) R3409234-7 05/08/19 08:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	5.00	ND	5.03	101	1	90.0-110	

Method Blank (MB)

(MB) R3409248-1 05/08/19 10:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Kjeldahl Nitrogen, TKN	0.235	J	0.0350	0.250

L1095167-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1095167-02 05/08/19 10:09 • (DUP) R3409248-5 05/08/19 10:10

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Kjeldahl Nitrogen, TKN	ND	0.212	1	0.000		20

L1095789-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095789-01 05/08/19 10:24 • (DUP) R3409248-7 05/08/19 10:25

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Kjeldahl Nitrogen, TKN	0.835	0.717	1	15.2		20

Laboratory Control Sample (LCS)

(LCS) R3409248-2 05/08/19 10:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Kjeldahl Nitrogen, TKN	10.0	10.8	108	90.0-110	

L1095167-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095167-01 05/08/19 10:05 • (MS) R3409248-3 05/08/19 10:06 • (MSD) R3409248-4 05/08/19 10:07

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 %
Kjeldahl Nitrogen, TKN	5.00	ND	5.47	5.40	106	105	1	90.0-110			1.29	20

L1095644-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1095644-01 05/08/19 10:27 • (MS) R3409248-6 05/08/19 10:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Kjeldahl Nitrogen, TKN	5.00	0.536	5.75	104	1	90.0-110	

Method Blank (MB)

(MB) R3409251-1 05/08/19 10:50

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Phosphorus,Total	U		0.0350	0.100

L1095167-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1095167-02 05/08/19 11:01 • (DUP) R3409251-5 05/08/19 11:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	ND	0.000	1	0.000		20

L1095789-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095789-01 05/08/19 11:26 • (DUP) R3409251-7 05/08/19 11:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Phosphorus,Total	0.291	0.216	1	29.6	P1	20

Laboratory Control Sample (LCS)

(LCS) R3409251-2 05/08/19 10:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phosphorus,Total	2.00	1.83	91.5	90.0-110	

L1095167-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095167-01 05/08/19 10:57 • (MS) R3409251-3 05/08/19 10:58 • (MSD) R3409251-4 05/08/19 10:59

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 %
Phosphorus,Total	2.50	ND	2.53	2.54	101	102	1	90.0-110			0.394	20

L1095644-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1095644-01 05/08/19 11:24 • (MS) R3409251-6 05/08/19 11:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Phosphorus,Total	2.50	U	2.65	106	1	90.0-110	

Method Blank (MB)

(MB) R3409047-1 05/07/19 22:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
COD	U		3.00	10.0

L1094326-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1094326-01 05/07/19 22:46 • (DUP) R3409047-3 05/07/19 22:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	75.0	74.7	1	0.437		20

L1095644-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095644-01 05/07/19 22:52 • (DUP) R3409047-6 05/07/19 22:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	56.3	56.1	1	0.217		20

Laboratory Control Sample (LCS)

(LCS) R3409047-2 05/07/19 22:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
COD	222	203	91.3	90.0-110	

L1094764-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094764-03 05/07/19 22:49 • (MS) R3409047-4 05/07/19 22:49 • (MSD) R3409047-5 05/07/19 22:50

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 %
COD	400	ND	380	380	95.1	95.0	1	80.0-120			0.0447	20

Method Blank (MB)

(MB) R3409307-1 05/08/19 13:02

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	U		0.00180	0.00500

L1094136-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1094136-22 05/08/19 13:07 • (DUP) R3409307-3 05/08/19 13:08

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

L1094608-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1094608-05 05/08/19 13:29 • (DUP) R3409307-8 05/08/19 13:30

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

Laboratory Control Sample (LCS)

(LCS) R3409307-2 05/08/19 13:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cyanide	0.100	0.107	107	85.0-115	

L1094479-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094479-01 05/08/19 13:18 • (MS) R3409307-4 05/08/19 13:19 • (MSD) R3409307-5 05/08/19 13:20

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 %
Cyanide	0.100	ND	0.0897	0.0957	89.7	95.7	1	75.0-125			6.47	20

L1094479-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094479-04 05/08/19 13:23 • (MS) R3409307-6 05/08/19 13:24 • (MSD) R3409307-7 05/08/19 13:27

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 %
Cyanide	0.100	ND	0.0926	0.0942	92.6	94.2	1	75.0-125			1.71	20

Method Blank (MB)

(MB) R3408969-1 05/07/19 16:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfide	U		0.00650	0.0500

L1094688-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1094688-01 05/07/19 16:11 • (DUP) R3408969-3 05/07/19 16:11

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

L1095642-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095642-01 05/07/19 16:16 • (DUP) R3408969-6 05/07/19 16:16

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

Laboratory Control Sample (LCS)

(LCS) R3408969-2 05/07/19 16:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfide	0.500	0.449	89.8	85.0-115	

L1095592-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095592-01 05/07/19 16:14 • (MS) R3408969-4 05/07/19 16:15 • (MSD) R3408969-5 05/07/19 16:15

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 %
Sulfide	1.00	U	0.871	0.871	87.1	87.1	1	80.0-120			0.000	20

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

Method Blank (MB)

(MB) R3409439-1 05/08/19 10:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TOC (Total Organic Carbon)	0.174	J	0.102	1.00

L1095644-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095644-01 05/08/19 11:47 • (DUP) R3409439-3 05/08/19 12:01

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	10.7	10.7	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3409439-2 05/08/19 11:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC	75.0	78.6	105	85.0-115	

L1095805-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095805-01 05/08/19 12:27 • (MS) R3409439-4 05/08/19 12:44 • (MSD) R3409439-5 05/08/19 13:00

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 %
TOC	50.0	2.29	61.6	61.4	119	118	1	80.0-120			0.423	20

Method Blank (MB)

(MB) R3410474-1 05/12/19 14:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	U		0.0000490	0.000200

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

(LCS) R3410474-2 05/12/19 14:29 • (LCSD) R3410474-3 05/12/19 14:32

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	0.00276	0.00294	92.0	98.0	85.0-115			6.29	20

L1095642-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095642-01 05/12/19 14:34 • (MS) R3410474-4 05/12/19 14:37 • (MSD) R3410474-5 05/12/19 14:39

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	0.00348	0.00342	116	114	1	70.0-130			1.75	20

Method Blank (MB)

(MB) R3409469-1 05/08/19 21:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.000754	0.00200
Arsenic	U		0.000170	0.00100
Cadmium	U		0.000220	0.00100
Chromium	U		0.000320	0.00100
Cobalt	U		0.000270	0.00200
Lead	U		0.000260	0.00100
Nickel	U		0.000320	0.00100
Selenium	U		0.000320	0.00200
Silver	U		0.000180	0.00100
Thallium	U		0.000280	0.00100
Tin	U		0.000240	0.00100
Zinc	U		0.00191	0.0100

Method Blank (MB)

(MB) R3409566-1 05/09/19 03:18

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Copper	U		0.000270	0.00100

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

(LCS) R3409469-2 05/08/19 21:39 • (LCSD) R3409469-3 05/08/19 21:44

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	0.0517	0.0519	103	104	85.0-115			0.302	20
Arsenic	0.0500	0.0502	0.0520	100	104	85.0-115			3.48	20
Cadmium	0.0500	0.0549	0.0571	110	114	85.0-115			3.92	20
Chromium	0.0500	0.0498	0.0519	99.7	104	85.0-115			4.09	20
Cobalt	0.0500	0.0516	0.0530	103	106	85.0-115			2.77	20
Lead	0.0500	0.0497	0.0515	99.5	103	85.0-115			3.50	20
Nickel	0.0500	0.0517	0.0527	103	105	85.0-115			1.91	20
Selenium	0.0500	0.0539	0.0541	108	108	85.0-115			0.317	20
Silver	0.0500	0.0533	0.0540	107	108	85.0-115			1.29	20
Thallium	0.0500	0.0485	0.0505	97.0	101	85.0-115			4.14	20
Tin	0.0500	0.0497	0.0498	99.4	99.6	85.0-115			0.123	20
Zinc	0.0500	0.0498	0.0507	99.5	101	85.0-115			1.93	20

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

(LCS) R3409566-2 05/09/19 03:23 • (LCSD) R3409566-3 05/09/19 03:27

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 %
Copper	0.0500	0.0442	0.0446	88.3	89.2	85.0-115			1.04	20

L1094844-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094844-01 05/08/19 21:49 • (MS) R3409469-5 05/08/19 21:58 • (MSD) R3409469-6 05/08/19 22:02

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 %
Antimony	0.0500	ND	0.0535	0.0526	107	105	1	70.0-130			1.71	20
Arsenic	0.0500	ND	0.0496	0.0506	98.1	100	1	70.0-130			1.92	20
Cadmium	0.0500	ND	0.0583	0.0579	117	116	1	70.0-130			0.693	20
Chromium	0.0500	ND	0.0478	0.0493	94.6	97.5	1	70.0-130			2.98	20
Cobalt	0.0500	0.00260	0.0521	0.0523	99.1	99.4	1	70.0-130			0.356	20
Lead	0.0500	0.00970	0.0616	0.0608	104	102	1	70.0-130			1.30	20
Nickel	0.0500	0.140	0.184	0.188	89.1	97.5	1	70.0-130			2.27	20
Selenium	0.0500	ND	0.0561	0.0561	111	110	1	70.0-130			0.112	20
Silver	0.0500	ND	0.0547	0.0542	109	108	1	70.0-130			0.843	20
Thallium	0.0500	ND	0.0479	0.0495	95.9	98.9	1	70.0-130			3.09	20
Tin	0.0500	0.00177	0.0509	0.0496	98.3	95.6	1	70.0-130			2.67	20
Zinc	0.0500	0.215	0.253	0.258	75.4	86.0	1	70.0-130			2.08	20

L1095123-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095123-08 05/08/19 22:07 • (MS) R3409469-7 05/08/19 22:11 • (MSD) R3409469-8 05/08/19 22:16

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	U	0.0540	0.0523	108	105	1	70.0-130			3.19	20
Arsenic	0.0500	0.000699	0.0541	0.0517	107	102	1	70.0-130			4.57	20
Cadmium	0.0500	U	0.0573	0.0559	115	112	1	70.0-130			2.46	20
Chromium	0.0500	0.000441	0.0512	0.0501	102	99.3	1	70.0-130			2.14	20
Cobalt	0.0500	0.00115	0.0533	0.0516	104	101	1	70.0-130			3.24	20
Lead	0.0500	0.000427	0.0521	0.0507	103	101	1	70.0-130			2.62	20
Nickel	0.0500	0.00176	0.0542	0.0523	105	101	1	70.0-130			3.54	20
Selenium	0.0500	U	0.0561	0.0543	112	109	1	70.0-130			3.21	20
Silver	0.0500	U	0.0547	0.0529	109	106	1	70.0-130			3.35	20
Thallium	0.0500	U	0.0512	0.0486	102	97.2	1	70.0-130			5.30	20
Tin	0.0500	U	0.0507	0.0509	101	102	1	70.0-130			0.573	20
Zinc	0.0500	0.0116	0.0627	0.0589	102	94.4	1	70.0-130			6.34	20

L1094844-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094844-01 05/09/19 03:32 • (MS) R3409566-5 05/09/19 03:41 • (MSD) R3409566-6 05/09/19 03:45

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 %
Copper	0.0500	0.0825	0.128	0.128	91.1	91.8	1	70.0-130			0.253	20

L1095123-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095123-08 05/09/19 03:50 • (MS) R3409566-7 05/09/19 03:55 • (MSD) R3409566-8 05/09/19 03:59

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 %
Copper	0.0500	0.00132	0.0446	0.0432	86.5	83.8	1	70.0-130			3.05	20

Method Blank (MB)

(MB) R3409140-3 05/07/19 09:47

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
Bromobenzene	U		0.000352	0.00100
Bromochloromethane	U		0.000520	0.00500
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
Carbon disulfide	U		0.000275	0.00100
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	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
Cyclohexane	U		0.000390	0.00100
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	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
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
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
Methyl Acetate	U		0.00430	0.0200
Isopropylbenzene	U		0.000326	0.00100

Method Blank (MB)

(MB) R3409140-3 05/07/19 09:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methyl Cyclohexane	U		0.000380	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
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
Methyl tert-butyl ether	U		0.000367	0.00100
n-Propylbenzene	U		0.000349	0.00100
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
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	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
1,2,4-Trimethylbenzene	U		0.000373	0.00100
o-Xylene	U		0.000341	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
m&p-Xylene	U		0.000719	0.00200
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
1,3-Dichloropropene	U		0.000320	0.00100
(S) Toluene-d8	*95.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*95.3*			*80.0-120*
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3409140-1 05/07/19 08:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromochloromethane	0.0250	0.0281	112	76.0-122	
Carbon disulfide	0.0250	0.0252	101	55.0-127	
Acetone	0.125	0.120	95.9	10.0-160	

Laboratory Control Sample (LCS)

(LCS) R3409140-1 05/07/19 08:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	0.125	0.108	86.0	60.0-140	
Benzene	0.0250	0.0266	106	65.0-135	
Bromobenzene	0.0250	0.0236	94.3	79.0-120	
Bromodichloromethane	0.0250	0.0254	102	70.0-135	
Bromoform	0.0250	0.0240	96.1	70.0-130	
Bromomethane	0.0250	0.0262	105	15.0-185	
n-Butylbenzene	0.0250	0.0240	96.1	72.0-126	
sec-Butylbenzene	0.0250	0.0244	97.7	74.0-121	
tert-Butylbenzene	0.0250	0.0251	100	75.0-122	
Carbon tetrachloride	0.0250	0.0260	104	70.0-130	
Chlorobenzene	0.0250	0.0265	106	65.0-135	
Chlorodibromomethane	0.0250	0.0250	100	70.0-135	
Chloroethane	0.0250	0.0286	114	40.0-160	
Chloroform	0.0250	0.0264	105	70.0-135	
Chloromethane	0.0250	0.0238	95.1	0.100-205	
2-Chlorotoluene	0.0250	0.0248	99.1	74.0-122	
4-Chlorotoluene	0.0250	0.0241	96.6	79.0-120	
Dibromomethane	0.0250	0.0268	107	78.0-120	
1,2-Dichlorobenzene	0.0250	0.0242	96.7	65.0-135	
1,3-Dichlorobenzene	0.0250	0.0242	96.8	70.0-130	
1,4-Dichlorobenzene	0.0250	0.0239	95.8	65.0-135	
2-Hexanone	0.125	0.118	94.1	58.0-147	
Dichlorodifluoromethane	0.0250	0.0277	111	49.0-155	
1,1-Dichloroethane	0.0250	0.0273	109	70.0-130	
1,2-Dichloroethane	0.0250	0.0250	100	70.0-130	
1,1-Dichloroethene	0.0250	0.0266	106	50.0-150	
cis-1,2-Dichloroethene	0.0250	0.0273	109	73.0-120	
trans-1,2-Dichloroethene	0.0250	0.0288	115	70.0-130	
1,2-Dichloropropane	0.0250	0.0279	112	35.0-165	
1,1-Dichloropropene	0.0250	0.0266	106	71.0-129	
cis-1,3-Dichloropropene	0.0250	0.0256	102	25.0-175	
trans-1,3-Dichloropropene	0.0250	0.0239	95.5	50.0-150	
2,2-Dichloropropane	0.0250	0.0262	105	60.0-125	
Ethylbenzene	0.0250	0.0268	107	60.0-140	
Isopropylbenzene	0.0250	0.0250	99.9	75.0-120	
p-Isopropyltoluene	0.0250	0.0253	101	74.0-126	
2-Butanone (MEK)	0.125	0.114	91.2	37.0-158	
Methylene Chloride	0.0250	0.0285	114	60.0-140	
4-Methyl-2-pentanone (MIBK)	0.125	0.108	86.1	59.0-143	
Methyl tert-butyl ether	0.0250	0.0258	103	64.0-123	

Laboratory Control Sample (LCS)

(LCS) R3409140-1 05/07/19 08:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
o-Xylene	0.0250	0.0255	102	78.0-120	
m&p-Xylene	0.0500	0.0522	104	77.0-120	
n-Propylbenzene	0.0250	0.0244	97.7	79.0-120	
Styrene	0.0250	0.0253	101	78.0-124	
1,3-Dichloropropene	0.0500	0.0495	99.0	25.0-175	
1,1,1,2-Tetrachloroethane	0.0250	0.0252	101	75.0-122	
1,1,2,2-Tetrachloroethane	0.0250	0.0221	88.4	60.0-140	
Tetrachloroethene	0.0250	0.0268	107	70.0-130	
Toluene	0.0250	0.0242	96.9	70.0-130	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0273	109	61.0-136	
1,2,3-Trichlorobenzene	0.0250	0.0237	94.9	61.0-133	
1,2,4-Trichlorobenzene	0.0250	0.0245	97.9	69.0-129	
1,1,1-Trichloroethane	0.0250	0.0255	102	70.0-130	
1,1,2-Trichloroethane	0.0250	0.0262	105	70.0-130	
Trichloroethene	0.0250	0.0282	113	65.0-135	
Trichlorofluoromethane	0.0250	0.0261	104	50.0-150	
1,2,3-Trichloropropane	0.0250	0.0232	93.0	72.0-124	
1,2,4-Trimethylbenzene	0.0250	0.0241	96.3	75.0-120	
1,3,5-Trimethylbenzene	0.0250	0.0235	94.1	75.0-120	
Vinyl chloride	0.0250	0.0296	118	5.00-195	
Xylenes, Total	0.0750	0.0777	104	77.0-120	
(S) Toluene-d8			*94.4*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.8*	*80.0-120*	
(S) 1,2-Dichloroethane-d4			*97.0*	*70.0-130*	

Method Blank (MB)

(MB) R3409429-1 05/07/19 19:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ethylene Dibromide	U		0.00000240	0.0000100
1,2-Dibromo-3-Chloropropane	U		0.00000430	0.0000200

L1095441-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1095441-10 05/07/19 20:10 • (DUP) R3409429-3 05/07/19 19:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	ND	0.000	1	0.000		20
1,2-Dibromo-3-Chloropropane	ND	0.000	1	0.000		20

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

(LCS) R3409429-4 05/07/19 22:08 • (LCSD) R3409429-5 05/08/19 00:27

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 %
Ethylene Dibromide	0.000250	0.000291	0.000295	116	118	70.0-130			1.37	20
1,2-Dibromo-3-Chloropropane	0.000250	0.000294	0.000293	118	117	70.0-130			0.341	20

L1095441-13 Original Sample (OS) • Matrix Spike (MS)

(OS) L1095441-13 05/07/19 19:48 • (MS) R3409429-2 05/07/19 19:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.000100	ND	0.000113	113	1	70.0-130	
1,2-Dibromo-3-Chloropropane	0.000100	ND	0.000108	108	1	70.0-130	

Method Blank (MB)

(MB) R3409191-1 05/07/19 22:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ethylene glycol	U		0.492	5.00
(S) 1,3-Propanediol	*78.0*			*28.0-145*

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

(LCS) R3409191-2 05/07/19 23:14 • (LCSD) R3409191-3 05/07/19 23:32

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 %
Ethylene glycol	90.0	93.2	94.7	104	105	80.0-120			1.60	20
(S) 1,3-Propanediol				*73.0*	*78.4*	*28.0-145*				

L1095789-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095789-06 05/08/19 04:36 • (MS) R3409191-4 05/08/19 04:53 • (MSD) R3409191-5 05/08/19 05:11

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 %
Ethylene glycol	90.0	U	92.4	96.5	103	107	1	62.0-136			4.34	20
(S) 1,3-Propanediol					*80.4*	*83.6*		*28.0-145*				

Method Blank (MB)

(MB) R3409299-1 05/07/19 23:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
2,4,5-TP (Silvex)	U		0.000845	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	*109*			*14.0-158*

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

(LCS) R3409299-2 05/08/19 00:05 • (LCSD) R3409299-3 05/08/19 00:18

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 %
2,4,5-TP (Silvex)	0.00500	0.00657	0.00622	131	124	50.0-125	J4		5.47	20
(S) 2,4-Dichlorophenyl Acetic Acid				*123*	*123*	*14.0-158*				

Method Blank (MB)

(MB) R3409102-2 05/07/19 16:38

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
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
Heptachlor	U		0.0000108	0.0000500
Heptachlor epoxide	U		0.0000175	0.0000500
Methoxychlor	U		0.0000193	0.0000500
Chlordane	U		0.0000977	0.000500
Toxaphene	U		0.000168	0.000500
(S) Decachlorobiphenyl	*95.8*			*10.0-144*
(S) Tetrachloro-m-xylene	*97.3*			*10.0-135*

Laboratory Control Sample (LCS)

(LCS) R3409102-1 05/07/19 16:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.00100	0.000856	85.6	42.0-140	
Alpha BHC	0.00100	0.000984	98.4	37.0-140	
Beta BHC	0.00100	0.00101	101	17.0-147	
Gamma BHC	0.00100	0.000988	98.8	32.0-140	
4,4-DDD	0.00100	0.00108	108	31.0-141	
4,4-DDE	0.00100	0.00107	107	30.0-145	
4,4-DDT	0.00100	0.00109	109	25.0-160	
Dieldrin	0.00100	0.00108	108	36.0-146	
Endosulfan I	0.00100	0.00107	107	45.0-153	
Endosulfan II	0.00100	0.00105	105	1.00-202	
Endosulfan sulfate	0.00100	0.00106	106	26.0-144	
Endrin	0.00100	0.00106	106	30.0-147	
Heptachlor	0.00100	0.000941	94.1	34.0-140	
Heptachlor epoxide	0.00100	0.00106	106	37.0-142	

Laboratory Control Sample (LCS)

(LCS) R3409102-1 05/07/19 16:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methoxychlor	0.00100	0.00100	100	44.0-160	
(S) Decachlorobiphenyl			*88.3*	*10.0-144*	
(S) Tetrachloro-m-xylene			*80.2*	*10.0-135*	

L1095395-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1095395-01 05/07/19 16:50 • (MS) R3409102-3 05/07/19 17:02 • (MSD) R3409102-4 05/07/19 17:15

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	0.000937	0.000905	93.7	90.5	1	42.0-140			3.47	35
Alpha BHC	0.00100	ND	0.00107	0.00109	107	109	1	37.0-140			1.85	36
Beta BHC	0.00100	ND	0.00104	0.00110	104	110	1	17.0-147			5.61	44
Gamma BHC	0.00100	ND	0.00105	0.00108	105	108	1	32.0-140			2.82	39
4,4-DDD	0.00100	ND	0.00110	0.00117	110	117	1	31.0-141			6.17	39
4,4-DDE	0.00100	ND	0.00108	0.00114	108	114	1	30.0-145			5.41	35
4,4-DDT	0.00100	ND	0.00111	0.00120	111	120	1	25.0-160			7.79	42
Dieldrin	0.00100	ND	0.00114	0.00121	114	121	1	36.0-146			5.96	49
Endosulfan I	0.00100	ND	0.00110	0.00116	110	116	1	45.0-153			5.31	28
Endosulfan II	0.00100	ND	0.00107	0.00114	107	114	1	1.00-202			6.33	53
Endosulfan sulfate	0.00100	ND	0.00107	0.00115	107	115	1	26.0-144			7.21	38
Endrin	0.00100	ND	0.00111	0.00118	111	118	1	30.0-147			6.11	48
Heptachlor	0.00100	ND	0.000990	0.00102	99.0	102	1	34.0-140			2.99	43
Heptachlor epoxide	0.00100	ND	0.00108	0.00114	108	114	1	37.0-142			5.41	26
Methoxychlor	0.00100	ND	0.00102	0.00108	102	108	1	44.0-160			5.71	22
(S) Decachlorobiphenyl					*86.3*	*89.3*		*10.0-144*				
(S) Tetrachloro-m-xylene					*90.4*	*84.1*		*10.0-135*				

Method Blank (MB)

(MB) R3409250-1 05/07/19 18:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL 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
Total PCBs	U		0.0000420	0.000500
(S) Decachlorobiphenyl	*106*			*10.0-144*
(S) Tetrachloro-m-xylene	*83.1*			*10.0-135*

Laboratory Control Sample (LCS)

(LCS) R3409250-2 05/07/19 18:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1260	0.00250	0.00189	75.6	8.00-140	
PCB 1016	0.00250	0.00167	66.8	50.0-140	
(S) Decachlorobiphenyl			*84.5*	*10.0-144*	
(S) Tetrachloro-m-xylene			*66.5*	*10.0-135*	

Method Blank (MB)

(MB) R3409130-2 05/08/19 00:39

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
Aniline	U		0.00243	0.0100
Anthracene	U		0.000291	0.00100
Azobenzene	U		0.000318	0.0100
Atrazine	U		0.000260	0.0100
Benzaldehyde	U		0.00140	0.0100
Benzidine	U		0.00432	0.0100
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(a)pyrene	U		0.000340	0.00100
Biphenyl	U		0.000325	0.0100
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
Caprolactam	U		0.00259	0.0100
Carbazole	U		0.000260	0.0100
4-Chloroaniline	U		0.000382	0.0100
2-Chloronaphthalene	U		0.000330	0.00100
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

Method Blank (MB)

(MB) R3409130-2 05/08/19 00:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzoic Acid	U		0.00440	0.0100
Nitrobenzene	U		0.000367	0.0100
n-Nitrosodimethylamine	U		0.00126	0.0100
n-Nitrosodiphenylamine	U		0.00119	0.0100
n-Nitrosodi-n-propylamine	U		0.000403	0.0100
Phenanthrene	U		0.000366	0.00100
Benzylbutyl phthalate	U		0.000275	0.00300
Bis(2-ethylhexyl)phthalate	U		0.000709	0.00300
Di-n-butyl phthalate	U		0.000266	0.00300
Diethyl phthalate	U		0.000282	0.00300
Dimethyl phthalate	U		0.000283	0.00300
Pyrene	U		0.000330	0.00100
Pyridine	U		0.00137	0.0100
n-Decane	U		0.000596	0.0100
n-Octadecane	U		0.000377	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	0.0100
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
1-Methylnaphthalene	U		0.000332	0.00100
(S) Nitrobenzene-d5	*61.1*			*15.0-314*
(S) 2-Fluorobiphenyl	*67.8*			*22.0-127*
(S) p-Terphenyl-d14	*70.3*			*29.0-141*
(S) Phenol-d5	*24.3*			*8.00-424*
(S) 2-Fluorophenol	*40.4*			*10.0-120*
(S) 2,4,6-Tribromophenol	*53.5*			*10.0-153*

Method Blank (MB)

(MB) R3409650-2 05/08/19 16:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Pentachlorobenzene	U		0.000369	0.0100
n-Nitrosodiethylamine	U		0.000497	0.0100
Hexachlorophene	U		0.00144	0.0500
n-Nitrosodi-n-butylamine	U		0.000331	0.0100

Laboratory Control Sample (LCS)

(LCS) R3409130-1 05/08/19 00:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0500	0.0268	53.6	47.0-145	
Acenaphthylene	0.0500	0.0292	58.4	33.0-145	
Acetophenone	0.0500	0.0281	56.2	28.0-120	
Aniline	0.0500	0.0137	27.4	10.0-120	
Anthracene	0.0500	0.0281	56.2	27.0-133	
Azobenzene	0.0500	0.0291	58.2	37.0-125	
Atrazine	0.0500	0.0283	56.6	39.0-141	
Benzaldehyde	0.0500	0.0375	75.0	10.0-160	
Benzidine	0.100	ND	0.000	1.00-120	J4
Benzo(a)anthracene	0.0500	0.0306	61.2	33.0-143	
Benzo(b)fluoranthene	0.0500	0.0296	59.2	24.0-159	
Benzo(k)fluoranthene	0.0500	0.0291	58.2	11.0-162	
Benzo(a)pyrene	0.0500	0.0270	54.0	17.0-163	
Biphenyl	0.0500	0.0263	52.6	37.0-120	
Bis(2-chlorethoxy)methane	0.0500	0.0238	47.6	1.00-219	
Bis(2-chloroethyl)ether	0.0500	0.0253	50.6	33.0-185	
Bis(2-chloroisopropyl)ether	0.0500	0.0252	50.4	36.0-166	
Caprolactam	0.0500	0.0104	20.8	10.0-120	
Carbazole	0.0500	0.0290	58.0	45.0-121	
4-Chloroaniline	0.0500	0.0229	45.8	23.0-120	
2-Chloronaphthalene	0.0500	0.0269	53.8	60.0-120	J4
Chrysene	0.0500	0.0282	56.4	17.0-168	
Dibenz(a,h)anthracene	0.0500	0.0307	61.4	1.00-227	
Dibenzofuran	0.0500	0.0281	56.2	42.0-120	
3,3-Dichlorobenzidine	0.100	0.0520	52.0	1.00-262	
2,4-Dinitrotoluene	0.0500	0.0281	56.2	39.0-139	
2,6-Dinitrotoluene	0.0500	0.0273	54.6	50.0-158	
Fluoranthene	0.0500	0.0306	61.2	26.0-137	
Fluorene	0.0500	0.0282	56.4	59.0-121	J4

Laboratory Control Sample (LCS)

(LCS) R3409130-1 05/08/19 00:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexachlorobenzene	0.0500	0.0289	57.8	1.00-152	
Hexachloro-1,3-butadiene	0.0500	0.0270	54.0	24.0-120	
Hexachlorocyclopentadiene	0.0500	0.0225	45.0	10.0-120	
Hexachloroethane	0.0500	0.0255	51.0	40.0-120	
Indeno(1,2,3-cd)pyrene	0.0500	0.0305	61.0	1.00-171	
Isophorone	0.0500	0.0265	53.0	21.0-196	
1-Methylnaphthalene	0.0500	0.0246	49.2	33.0-120	
2-Methylnaphthalene	0.0500	0.0249	49.8	35.0-120	
Naphthalene	0.0500	0.0252	50.4	21.0-133	
2-Nitroaniline	0.0500	0.0294	58.8	43.0-120	
3-Nitroaniline	0.0500	0.0274	54.8	35.0-123	
4-Nitroaniline	0.0500	0.0283	56.6	23.0-160	
Nitrobenzene	0.0500	0.0260	52.0	35.0-180	
n-Nitrosodimethylamine	0.0500	0.0190	38.0	10.0-120	
n-Nitrosodiphenylamine	0.0500	0.0266	53.2	44.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0269	53.8	1.00-230	
Phenanthrene	0.0500	0.0276	55.2	54.0-120	
Benzylbutyl phthalate	0.0500	0.0267	53.4	1.00-152	
Bis(2-ethylhexyl)phthalate	0.0500	0.0267	53.4	8.00-158	
Di-n-butyl phthalate	0.0500	0.0290	58.0	1.00-120	
Diethyl phthalate	0.0500	0.0277	55.4	1.00-120	
Dimethyl phthalate	0.0500	0.0286	57.2	1.00-120	
Pyrene	0.0500	0.0289	57.8	52.0-120	
Pyridine	0.0500	0.00746	14.9	10.0-120	
Benzoic Acid	0.100	ND	0.000	10.0-120	J4
Benzyl Alcohol	0.0500	0.0223	44.6	20.0-120	
4-Chloro-3-methylphenol	0.0500	0.0271	54.2	22.0-147	
2-Chlorophenol	0.0500	0.0259	51.8	23.0-134	
2-Methylphenol	0.0500	0.0234	46.8	26.0-120	
3&4-Methyl Phenol	0.0500	0.0249	49.8	27.0-120	
2,4-Dichlorophenol	0.0500	0.0270	54.0	39.0-135	
2,4-Dimethylphenol	0.0500	0.0259	51.8	32.0-120	
4,6-Dinitro-2-methylphenol	0.0500	0.0294	58.8	1.00-181	
2,4-Dinitrophenol	0.0500	0.0186	37.2	1.00-191	
2-Nitrophenol	0.0500	0.0273	54.6	29.0-182	
4-Nitrophenol	0.0500	0.0114	22.8	1.00-132	
Pentachlorophenol	0.0500	0.0185	37.0	14.0-176	
Phenol	0.0500	0.0124	24.8	5.00-120	
1,2,4,5-Tetrachlorobenzene	0.0500	0.0301	60.2	31.0-120	
2,4,5-Trichlorophenol	0.0500	0.0302	60.4	44.0-124	

Laboratory Control Sample (LCS)

(LCS) R3409130-1 05/08/19 00:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2,4,6-Trichlorophenol	0.0500	0.0294	58.8	37.0-144	
n-Decane	0.0500	0.0259	51.8	10.0-127	
n-Octadecane	0.0500	0.0254	50.8	17.0-126	
(S) Nitrobenzene-d5			*45.5*	*15.0-314*	
(S) 2-Fluorobiphenyl			*54.3*	*22.0-127*	
(S) p-Terphenyl-d14			*52.8*	*29.0-141*	
(S) Phenol-d5			*22.6*	*8.00-424*	
(S) 2-Fluorophenol			*35.9*	*10.0-120*	
(S) 2,4,6-Tribromophenol			*53.5*	*10.0-153*	

Laboratory Control Sample (LCS)

(LCS) R3409650-1 05/08/19 16:18

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Pentachlorobenzene	0.0500	0.0405	81.0	10.0-151	
n-Nitrosodiethylamine	0.0500	0.0313	62.6	10.0-142	
n-Nitrosodi-n-butylamine	0.0500	0.0386	77.2	39.0-127	
Hexachlorophene	0.100	0.00876	8.76	50.0-150	J4

L1094651-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094651-03 05/08/19 01:21 • (MS) R3409130-3 05/08/19 01:42 • (MSD) R3409130-4 05/08/19 02:03

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 %
n-Decane	0.0500	U	0.0323	0.0233	64.6	46.6	1	10.0-127			32.4	37
n-Octadecane	0.0500	U	0.0311	0.0263	62.2	52.6	1	17.0-126			16.7	23
Acenaphthene	0.0500	U	0.0331	0.0271	66.2	54.2	1	47.0-145			19.9	48
Benzoic Acid	0.100	U	0.00516	ND	5.16	0.000	1	10.0-120	J6	J3 J6	200	40
Acenaphthylene	0.0500	U	0.0364	0.0292	72.8	58.4	1	33.0-145			22.0	74
Acetophenone	0.0500	U	0.0362	0.0285	72.4	57.0	1	10.0-139			23.8	35
Aniline	0.0500	U	0.0186	0.0165	37.2	33.0	1	10.0-120			12.0	25
Anthracene	0.0500	U	0.0343	0.0292	68.6	58.4	1	27.0-133			16.1	66
Azobenzene	0.0500	U	0.0363	0.0312	72.6	62.4	1	18.0-156			15.1	34
Atrazine	0.0500	U	0.0350	0.0305	70.0	61.0	1	39.0-130			13.7	30
Benzaldehyde	0.0500	U	0.0472	0.0347	94.4	69.4	1	10.0-160		J3	30.5	30
Benzidine	0.100	U	0.0115	0.00495	11.5	4.95	1	1.00-120		J3	79.6	40
Benzo(a)anthracene	0.0500	U	0.0371	0.0319	74.2	63.8	1	33.0-143			15.1	53
Benzo(b)fluoranthene	0.0500	U	0.0366	0.0311	73.2	62.2	1	24.0-159			16.2	71

L1094651-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094651-03 05/08/19 01:21 • (MS) R3409130-3 05/08/19 01:42 • (MSD) R3409130-4 05/08/19 02:03

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 %
Benzo(k)fluoranthene	0.0500	U	0.0360	0.0309	72.0	61.8	1	11.0-162			15.2	63
Benzo(a)pyrene	0.0500	U	0.0331	0.0277	66.2	55.4	1	17.0-163			17.8	72
Biphenyl	0.0500	U	0.0328	0.0261	65.6	52.2	1	23.0-130			22.8	27
Bis(2-chlorethoxy)methane	0.0500	U	0.0289	0.0254	57.8	50.8	1	33.0-184			12.9	54
Bis(2-chloroethyl)ether	0.0500	U	0.0324	0.0249	64.8	49.8	1	12.0-158			26.2	108
Bis(2-chloroisopropyl)ether	0.0500	U	0.0317	0.0234	63.4	46.8	1	36.0-166			30.1	76
Caprolactam	0.0500	U	0.0109	0.0113	21.8	22.6	1	10.0-120			3.60	30
Carbazole	0.0500	U	0.0361	0.0318	72.2	63.6	1	23.0-158			12.7	26
4-Chloroaniline	0.0500	U	0.0271	0.0277	54.2	55.4	1	10.0-137			2.19	33
2-Chloronaphthalene	0.0500	U	0.0335	0.0262	67.0	52.4	1	60.0-120		J3 J6	24.5	24
Chrysene	0.0500	U	0.0346	0.0298	69.2	59.6	1	17.0-168			14.9	87
Dibenz(a,h)anthracene	0.0500	U	0.0371	0.0321	74.2	64.2	1	1.00-227			14.5	126
Dibenzofuran	0.0500	U	0.0342	0.0286	68.4	57.2	1	17.0-150			17.8	27
1-Methylnaphthalene	0.0500	U	0.0299	0.0237	59.8	47.4	1	33.0-120		J3	23.1	23
3,3-Dichlorobenzidine	0.100	U	0.0672	0.0550	67.2	55.0	1	1.00-262			20.0	108
2,4-Dinitrotoluene	0.0500	U	0.0352	0.0308	70.4	61.6	1	39.0-139			13.3	42
2,6-Dinitrotoluene	0.0500	U	0.0334	0.0288	66.8	57.6	1	50.0-158			14.8	48
Fluoranthene	0.0500	U	0.0371	0.0323	74.2	64.6	1	26.0-137			13.8	66
Fluorene	0.0500	U	0.0351	0.0290	70.2	58.0	1	59.0-121		J6	19.0	38
Hexachlorobenzene	0.0500	U	0.0352	0.0292	70.4	58.4	1	1.00-152			18.6	55
Hexachloro-1,3-butadiene	0.0500	U	0.0329	0.0239	65.8	47.8	1	24.0-120			31.7	62
Hexachlorocyclopentadiene	0.0500	U	0.0270	0.0190	54.0	38.0	1	10.0-146		J3	34.8	34
Hexachloroethane	0.0500	U	0.0323	0.0223	64.6	44.6	1	40.0-120			36.6	52
Indeno(1,2,3-cd)pyrene	0.0500	U	0.0361	0.0314	72.2	62.8	1	1.00-171			13.9	99
Isophorone	0.0500	U	0.0323	0.0276	64.6	55.2	1	21.0-196			15.7	93
2-Methylnaphthalene	0.0500	U	0.0302	0.0239	60.4	47.8	1	13.0-142			23.3	29
Naphthalene	0.0500	U	0.0308	0.0238	61.6	47.6	1	21.0-133			25.6	65
2-Nitroaniline	0.0500	U	0.0361	0.0320	72.2	64.0	1	13.0-160			12.0	27
3-Nitroaniline	0.0500	U	0.0313	0.0295	62.6	59.0	1	10.0-160			5.92	26
4-Nitroaniline	0.0500	U	0.0334	0.0296	66.8	59.2	1	17.0-160			12.1	29
Nitrobenzene	0.0500	U	0.0321	0.0254	64.2	50.8	1	35.0-180			23.3	62
n-Nitrosodimethylamine	0.0500	U	0.0237	0.0199	47.4	39.8	1	10.0-120			17.4	40
n-Nitrosodiphenylamine	0.0500	U	0.0327	0.0273	65.4	54.6	1	16.0-160			18.0	28
n-Nitrosodi-n-propylamine	0.0500	U	0.0341	0.0284	68.2	56.8	1	1.00-230			18.2	87
Phenanthrene	0.0500	U	0.0341	0.0291	68.2	58.2	1	54.0-120			15.8	39
Benzylbutyl phthalate	0.0500	U	0.0334	0.0285	66.8	57.0	1	1.00-152			15.8	60
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0326	0.0281	65.2	56.2	1	8.00-158			14.8	82
Di-n-butyl phthalate	0.0500	U	0.0358	0.0304	71.6	60.8	1	1.00-120			16.3	47
Diethyl phthalate	0.0500	U	0.0342	0.0299	68.4	59.8	1	1.00-120			13.4	100
Dimethyl phthalate	0.0500	U	0.0348	0.0308	69.6	61.6	1	1.00-120			12.2	183

L1094651-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094651-03 05/08/19 01:21 • (MS) R3409130-3 05/08/19 01:42 • (MSD) R3409130-4 05/08/19 02:03

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 %
Pyrene	0.0500	U	0.0350	0.0304	70.0	60.8	1	52.0-120			14.1	49
Pyridine	0.0500	U	0.0130	0.0120	26.0	24.0	1	10.0-120			8.00	40
Benzyl Alcohol	0.0500	U	0.0273	0.0227	54.6	45.4	1	17.0-120			18.4	40
4-Chloro-3-methylphenol	0.0500	U	0.0322	0.0283	64.4	56.6	1	22.0-147			12.9	73
2-Chlorophenol	0.0500	U	0.0320	0.0238	64.0	47.6	1	23.0-134			29.4	61
2-Methylphenol	0.0500	U	0.0288	0.0233	57.6	46.6	1	14.0-120			21.1	29
3&4-Methyl Phenol	0.0500	U	0.0311	0.0255	62.2	51.0	1	13.0-124			19.8	26
2,4-Dichlorophenol	0.0500	U	0.0327	0.0265	65.4	53.0	1	39.0-135			20.9	50
2,4-Dimethylphenol	0.0500	U	0.0314	0.0264	62.8	52.8	1	32.0-120			17.3	58
4,6-Dinitro-2-methylphenol	0.0500	U	0.0360	0.0312	72.0	62.4	1	1.00-181			14.3	203
2,4-Dinitrophenol	0.0500	U	0.0236	0.0235	47.2	47.0	1	1.00-191			0.425	132
2-Nitrophenol	0.0500	U	0.0333	0.0269	66.6	53.8	1	29.0-182			21.3	55
4-Nitrophenol	0.0500	U	0.0138	0.0117	27.6	23.4	1	1.00-132			16.5	131
Pentachlorophenol	0.0500	U	0.0255	0.0224	51.0	44.8	1	14.0-176			12.9	86
Phenol	0.0500	U	0.0150	0.0124	30.0	24.8	1	5.00-120			19.0	64
1,2,4,5-Tetrachlorobenzene	0.0500	U	0.0369	0.0281	73.8	56.2	1	10.0-147			27.1	34
2,4,5-Trichlorophenol	0.0500	U	0.0369	0.0317	73.8	63.4	1	15.0-160			15.2	27
2,4,6-Trichlorophenol	0.0500	U	0.0361	0.0307	72.2	61.4	1	37.0-144			16.2	58
(S) Nitrobenzene-d5					*56.8*	*43.4*		*15.0-314*				
(S) 2-Fluorobiphenyl					*67.5*	*53.4*		*22.0-127*				
(S) p-Terphenyl-d14					*64.5*	*55.3*		*29.0-141*				
(S) Phenol-d5					*28.2*	*22.7*		*8.00-424*				
(S) 2-Fluorophenol					*44.3*	*33.2*		*10.0-120*				
(S) 2,4,6-Tribromophenol					*65.0*	*55.0*		*10.0-153*				

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

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
(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.
U	Not detected at the Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

Pace National 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.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

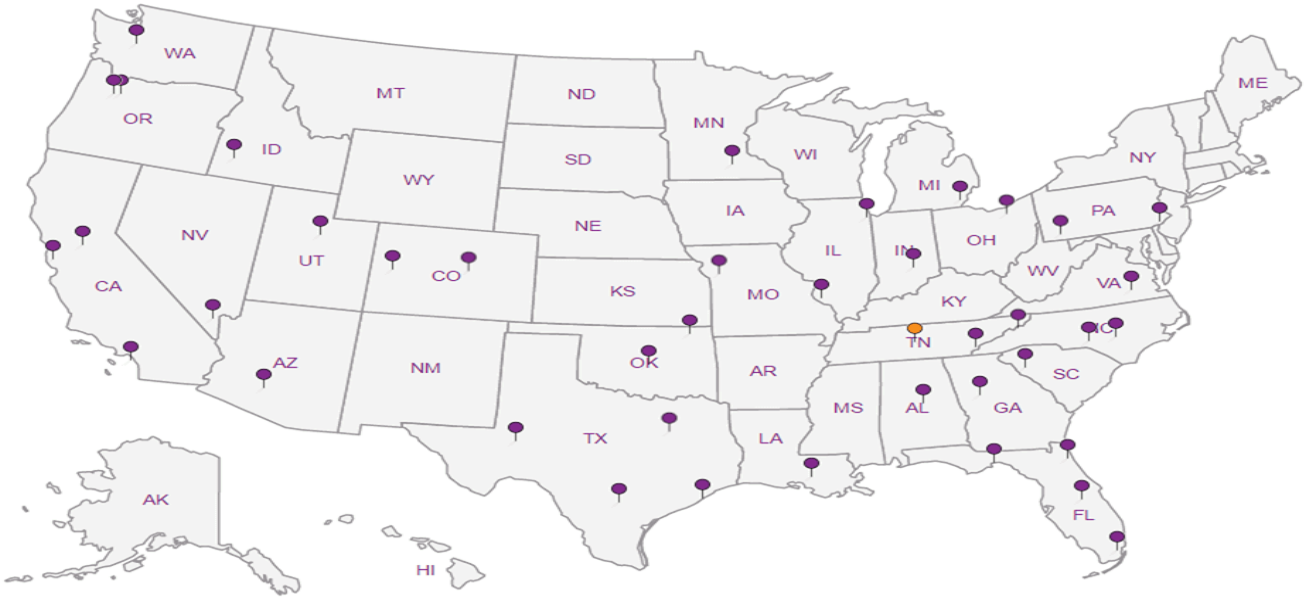
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National 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. Pace National performs all testing at our central laboratory.



Cardno - Newark, DE

121 Continental Drive Suite 308
Newark, DE 19713

Billing Information:
Accounts Payable
121 Continental Drive Suite 308
Newark, DE 19713

Report to: Art Saunders

Email To: Art.Saunders@cardno.com

Project Description:

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

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

Quote #

Date Results Needed

Chain of Custody Page 1 of 3

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L# 109 5644

Table #

Acctnum: CARDNONDE

Template: T149278

Prelogin: P704877

TSR: 034 - Craig Cothron

PB:

Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Extra Volume 40mlAmb-NoPres	Metals 250mlHDPE-HNO3	OGHEX 1L-Clr-Add HCl	PFAS/PFOS- ~~Sub 1L~~ 250ML HDPE-NoPres	SV8151 1L-Amb-No Pres	SV8290 1L-Amb-NoPres	Sulfide 125mlAmb-S-NaOH+ZnAc	TOC 250mlAmb-HCl	TSS 1L-HDPE-NoPres	Total Cyanide 250mlHDPEAmb-NaOH	Remarks	Sample # (lab only)
~~WW-20190502-002-Day4~~	~~Comp~~	~~WW~~		~~5/2/19~~	~~14:10~~	~~36~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
WW-20190503-002-Day5	Comp	WW		5/3/19	14:00	10		X		X	X	X	X	X	X			01
WW-20190503-002-Day5	Grab	WW		5/3/19	14:00	2			X							X		02

* 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 #

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)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	5/3/19	0955			
Relinquished by : (Signature)	Date: 5/5/19	Time: 1930	Received by: (Signature)	Temp: °C 4.2, 0, 4.2	Bottles Received: 24
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/6/19	Time: 0845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Cardno - Newark, DE

121 Continental Drive Suite 308
Newark, DE 19713

Billing Information:
Accounts Payable
121 Continental Drive Suite 308
Newark, DE 19713

Pres Chk

Report to: Art Saunders

Email To: Art.Saunders@cardno.com

Project Description:

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 2 of 3

Pace Analytical® National Center for Testing & Innovation

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

L# 1095444

Table #

Acctnum: CARDNONDE
Template: T149278
Prelogin: P704877
TSR: 034 - Craig Cothron
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	***CBOD*** 500mlHDPE-NoPres	***CR6, TDS*** 250mlHDPE-NoPres	8081/8082 100ml Amb-NoPres	8141 100ml Amb NoPres	8270AP9 100ml Amb NoPres	COD, NH3, PT, TKN 250mlHDPE-H2SO4	COLILERT Microbiological	Chloride, pH, CHLORR 250mlHDPE-NoPres	Ethylene Glycol 40mlAmb-NoPres	Extra Volume 1L-Amb-No Pres	Remarks	Sample # (lab only)
~~GW~~						~~36~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
WW-20190503-002-DAYS	Comp	WW		5/3/19	14:00	10		X	X	X	X	X		X				61

* 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 #

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)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	5/4/19	0955			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
	5/5/19	1930		4.2 24	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: / Condition: NCF / OK
				5/6/19 0945	

Cardno - Newark, DE

121 Continental Drive Suite 308
Newark, DE 19713

Billing Information:
Accounts Payable
121 Continental Drive Suite 308
Newark, DE 19713

Pres Chk

Report to: Art Saunders

Email To: Art.Saunders@cardno.com

Project Description:

City/State Collected:

Phone: 610-220-3957
Fax:

Client Project #

Lab Project # CARDNONDE-ITC

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ____

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 3 of 3

Pace Analytical® National Center for Testing & Innovation

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

L# 1095644

Table #

Acctnum: CARDNONDE
Template: T149278
Prelogin: P704877
TSR: 034 - Craig Cothron
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260AP9 40mlAmb-HCl	Ethylene Glycol 40mL Amb No PRES	1,2-Dibromoethane, 8011 40mL Amb No PRES							Remarks	Sample # (lab only)
		GW				36	X										
WW-20190503-002-Day5-A	Comp	WW		5/3/19	14:00	3	X	X	X								03
WW-20190503-002-Day5-B	Comp	WW		5/3/19	14:00	3	X	X	X								04
WW-20190503-002-Day5-C	Comp	WW		5/3/19	14:00	3	X	X	X								05
WW-20190503-002-Day5-D	Comp	WW		5/3/19	14:00	3	X	X	X								06

* 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 #

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: 5/6/19	Time: 0955	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date: 5/5/19	Time: 1930	Received by: (Signature)	Temp: 4.2 °C Bottles Received: 24	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 5/6/19 Time: 0945	Hold: Condition: NCF / OK